Report on the sanitary condition of the Borough of Bermondsey for the year 1902.

Metropolitan Borough of Bermondsey.

REPORT

ON THE

SANITARY CONDITION

OF THE

BOROUGH OF BERMONDSEY,

For the Year 1902.

BY

R. K. BROWN,

B.A., M.D., B.Ch., B.A.O. (R.U.I.), D.P.H. (Lond.)

(Fellow of the Royal Institute of Public Health.)
(Fellow of the Incorporated Society of Medical Officers of Health.)

Medical Officer of Health for the Metropolitan Borough of Bermondsey.

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TABLE OF CONTENTS.

Metropolitan Borough of Bermondsey.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH.

To the Mayor, Aldermen, and Councillors of the Metropolitan Borough of Bermondsey.

Gentlemen,

I have the honour to submit to you my Second Annual Report on the Sanitary condition of the Metropolitan Borough of Bermondsey during the year 1902. It deals with the 53 weeks ending January 3rd, 1903. For convenience the subject matter will be treated under the following heads :—

I.—Vital Statistics.
II.—Infectious Diseases and Notification.
III.—Sanitary Work.
IV.—Factory and Workshops Act, 1901.

Owing to the Factory and Workshops Act coming into force since the last Report it is necessary to make special reference to that Act in this report. In the Appendix will be found a summary of the inspections and proceedings taken by the Department, also a summary of the amount of food which comes into the district through the Port of London, and the amount seized or destroyed by mutual consent.

I again desire to express my appreciation of the courtesy and assistance always rendered by the Chairman and Members of the Public Health Committee, and to say that my thanks are due to the Chief Inspector and the other members of this department for their cordial co-operation.

I am, gentlemen,
Your obedient servant,
R. K. BROWN.

VITAL STATISTICS.

Population.

The population of the Metropolitan Borough of Bermondsey, according to the Census of 1891, was 136,660. This included 84,682 for Bermondsey, 39,255 for Rotherhithe, and 12,723 for St. Olave's. In 1896, according to the Census of the London County Council, the total population for the Borough was 137,585, including 85,475 for Bermondsey, 40,379 for Rotherhithe, and 11,731 for St. Olave's.

As pointed out in the last Report, there was an increase of about 1,000 inhabitants in the whole Borough from 1891 to 1896; from 1896 to 1901, there was a decrease of about 7,000. Various reasons were suggested for the cause of this decrease, the principal of which were :—

The widening of the South Eastern Railway.

The enlargement of the Depôt at Bricklayer's Arms, in which part of Rolls Road was involved.

The enlargement of the Depôt of the London, Brighton and South Coast Railway, involving the pulling down of parts of Lynton and Alderminster Roads.

The clearing of the site of the Tower Bridge Road and Approach.

Since that date a good many houses have been closed in Rotherhithe in preparation for building the new Thames Tunnel. Provision, however, has been made for the re-housing of the people thus displaced, by the London County Council, who have erected two large blocks of model dwellings in Swan Lane. The number of tenements is as follows :—

Erected in Swan Lane by the London County Council ...	255	tenements
Erected in Tower Bridge Road and Abbey Street by the South-Eastern Railway Co.	129	,,
Total	384	,,

In estimating the population, I have followed the method of the Registrar General, who assumes that the population continues to increase or decrease in the same ratio as it did during the last inter-censal period. Taking therefore the census populations of 1896 and 1901, and calculating the population by this method to the middle of 1902, the estimate will show a population of 129,136, a further decrease on the population of 1901. This is probably, if anything, an under estimate owing to the provision for the re-housing of those displaced, so that I am inclined to think that the population of Bermondsey is at a standstill.

The above estimate gives populations for the three divisions of the Borough as follows :—

Bermondsey	81,752
Rotherhithe	37,995
St. Olave's	9,389

The age and sex distribution for the Borough, and the different Wards for 1901, is shown in Table V. of Appendix, which was obtained from the Registrar General by special arrangement.

Births.

The total number of births registered in the Borough for the 53 weeks ending January 3rd, 1903, was 4,346, which is 449 below the average for the previous ten years.

This number includes 2,855 for Bermondsey, being 65 below that for 1901 and 240 below the average for the last ten years; 1,170 for Rotherhithe, being 50 below the number for 1901 and 123 below the average for the last ten years; 321 for St. Olave's, being two higher than the year 1901 and 86 below the average for the last ten years.

In Table II. of Appendix will be seen the particulars of these numbers for the last ten years in the three registration sub-districts, and in Table I. figures for the whole Borough. The birth rate for 1902 is 33·6 per thousand persons living, which is 1·8 below the average for the last ten years and ·6 below that for 1901. Particulars of the birth-rate will be found in annexed Table A. The birth rate for London is included for purpose of comparison:—

TABLE A.—BIRTH RATES.

Year.	Bermondsey.	Rotherhithe.	St. Olave's.	Whole Borough.	London.
1892	37·43	33·33	37·13	36·2	30·9
1893	37·53	34·68	33·50	36·3	31·0
1894	36·31	33·83	39·77	35·9	30·1
1895	37·63	32·43	36·04	35·9	30·5
1896	37·53	33·41	36·03	36·2	30·2
1897	37·48	31·53	38·68	35·8	30·0
1898	36·73	32·85	32·97	35·3	29·5
1899	36·67	32·38	34·55	35·2	29·4
1900	34·07	30·56	39·67	33·5	28·6
1901	35·46	31·79	32·79	34·2	29·0
Average for years 1892–1901	36·68	32·68	36·11	35·4	29·9
1902	34·92	30·79	34·19	33·6	29·0

It will be seen from this table that, while the birth rate showed a slight rise in 1901, a decline in 1902 is again manifest. It is evident from these figures that there is a tendency to a decline in the birth rate, which is noticeable both in London and in the country generally.

The causes of this decline have been attributed to (1) postponement of marriage to later age. This would certainly apply to the middle and upper classes. (2) In some countries, such as France and certain parts of America, where divorce can be most easily obtained, and (3) desire on the part of the parents to avoid the responsibility of a family. Among the poorer classes in Bermondsey there is certainly a premium, as far as housing is concerned, on the smallness of the family. On inquiry into overcrowding one is met with the universal statement that landlords refuse rooms to those with large families, the number of refusals being in about direct proportion to the number of children, those who have none at all being most easily accommodated. Landlords, no doubt, do this in self-protection, since children, unless under strict control, are most destructive to property. The question of the size of families is intimately bound up with the housing question.

Marriages.

The marriage rate for the Borough in 1902 was 17.39.

In Table VII. of Appendix will be found the number of marriages in the Borough and its divisions in 1902 and the previous ten years. I am indebted for these figures to the Superintendent Registrar of St. Olave's Registration District.

Deaths.

The total number of deaths registered in the Borough was 2,323, and when this figure is corrected by the exclusion of deaths of non-parishioners occurring in the district and the inclusion of deaths of parishioners occurring outside the district, the number is raised to 2,756. This is 37 more than the number in 1901, but 217 less than the average for the last ten years. The annexed table shows the distribution of deaths in quarters. As usual, the largest number of deaths occurred in the winter quarters.

TABLE B.—DEATHS.

Quarter.	Bermondsey.	Rotherhithe.	St. Olave's.	Whole Borough.
First	488	212	64	764
Second	394	160	44	598
Third	390	156	51	597
Fourth	510	213	74	797
Total Deaths	1782	741	233	2756

The death rate for the Borough in 1902, was 21·3 per 1,000 living inhabitants, being ·5 above that for 1901, and ·7 below the average for the last ten years. The cause of this increase may be almost entirely traced to an epidemic of measles, which visited the Borough in 1902, and brought the deaths from that disease up to double the number for the previous year, and also to the cold wet summer which made some increase in the deaths from respiratory diseases. This, however, was largely compensated by the fewer number of deaths from summer diarrhœa. The rate is highest in St. Olave's, but, as pointed out last year, owing to the smallness of the numbers, this cannot be accepted as proof of more insanitary conditions than the rest of the Borough. Bermondsey is a little higher than Rotherhithe, viz.: 21·8, against 19·5, and in this case probably depends on the greater density of population in the former.

There were 63 deaths of non-parishioners registered as occurring in the district in 1902. The slight increase on the average for the last ten years is purely accidental.

In Col. 1, at the foot of Table I. of Appendix will be found a list of places where the deaths of non-parishioners occurred in the district. 32 such deaths took place at the South Wharf where patients died on their way to the Hospital Ships; 13 occurred in the Infirmary, and 12 in the River Thames; 4 in Surrey Commercial Docks; 1 in Tunnel Road, and 1 in Croft Street. 496 parishioners belonging to this Borough died in outlying institutions. The names of the various places where the deaths occurred will be found in Cols. II. and III. at foot of Table I. of Appendix. The numbers for the previous ten years will be found in Table I., and it will be seen that though they vary considerably during that period, they show on the whole a tendency to increase. This is probably due to the fact that, especially as regards infectious diseases, there are now a greater number of people availing themselves of hospital treatment than formerly.

TABLE C.—DEATH RATE.

Year.	Bermondsey.	Rotherhithe.	St. Olave's.	Whole Borough.	London.
1892	22·79	21·39	27·67	22·8	20·3
1893	23·56	23·31	25·37	23·6	21·0
1894	20·35	19·10	22·20	20·1	17·4
1895	21·89	19·47	26·44	21·6	19·4
1896	21·95	20·70	22·44	21·6	18·2
1897	22·22	19·20	22·54	21·4	17·7
1898	21·05	19·56	21·42	20·6	18·3
1899	24·70	22·11	26·42	24·1	19·3
1900	23·49	22·79	22·91	23·2	18·3
1901	21·47	19·47	20·97	20·8	17·1
Average for years 1892–1901	22·35	20·71	23·84	22·0	19·0
1902	21·80	19·50	24·82	21·3	17·5

Infantile Mortality.

While the general mortality has been steadily decreasing, unfortunately the infantile mortality shows no appreciable decline of late years. With a steadily diminishing birth-rate this becomes a subject of vital importance to the community. In commenting on this subject in last year's Report, I mentioned some seven causes of infantile mortality. Some of the causes are much more important than others, so much so that they might almost be reduced to two, viz., improper feeding, and insanitary surroundings, and of these two the first cause is the principal. The more one considers the subject the more importance does improper feeding assume in infantile mortality. In looking at Table IV. of Appendix it will be seen that in deaths under one year of age, gastro-intestinal diseases (including tubercular diseases) and respiratory diseases account for the majority. But these do not quite represent the true state of matters, for improper feeding, when not giving rise to distinct intestinal disorders, undoubtedly paves the way for many of the deaths from respiratory and other diseases by weakening and undermining the system, so that I am inclined to give it a much more important rôle than a glance at this Table would suggest. Improper feeding is due mainly to poverty, ignorance, and actual carelessness on the part of parents with regard to the feeding of their infants. On making enquiries on this matter I have been greatly struck by the want of knowledge among mothers respecting the methods of infant feeding. Improper feeding takes two forms, and consists (1) of not feeding children on their mother's milk, and (2) giving unsuitable artificial food.

For infants under one year the staple, and for at least the first six months, the only food should be milk of some form. If the child cannot have mother's milk, cow's milk diluted is the best substitute. As the greater number of children in Bermondsey, either from choice on the part of the mother or of necessity, owing to her having to go to work, are artificially fed, it becomes of prime importance to see that the cow's milk supplied to the people is pure, of good quality, and fresh. From special enquiries made into 2,150 cases of infectious disease during 1901 and 1902, it appears that about 57 per cent. of the families used condensed milk, and in the large majority of cases, cheap condensed "skimmed" or "separated milk." Having got the milk pure the next step would be to teach the mothers how to keep it so till the infant has it. There

seems to be a general impression that condensed milk is purer and less easily contaminated when opened than cow's milk, but this is not so, and I do not consider it an adequate substitute for fresh cow's milk.

From these remarks it will be seen that the question of infantile mortality is very closely bound up with our milk supply. This will be adverted to later. Even in those cases in which children are nursed by the mothers, the milk which the latter can give is often of poor quality owing to bad and improper living. There is an old idea that mothers nursing should consume a quantity of stout and similar alcoholic drinks, and in consequence of this they frequently live on these to the neglect of better food, the result being that both mother and infant suffer. The sooner this idea is exploded the better, and no one is better able to do this than the general practitioner, who, I hope, will advise against this pernicious habit.

TABLE D.—INFANTILE MORTALITY.

Year.	Bermondsey.*		Rotherhithe.		St. Olave.		Whole Borough.		London.	
	No. of Deaths.	Rate per 1000 Births.	No. of Deaths.	Rate per 1000 Births.	No. of Deaths.	Rate per 1000 Births.	No. of Deaths.	Rate per 1000 Births.	No. of Deaths.	Rate per 1000 Births.
1892	516	162	198	150	85	183	799	161	20,282	154
1893	537	168	227	165	58	141	822	165	21,746	164
1894	451	146	218	161	55	114	724	147	18,604	143
1895	520	162	193	148	88	205	801	162	22,013	165
1896	513	160	214	159	64	153	791	159	21,695	160
1897	605	190	219	174	67	154	891	183	21,106	158
1898	485	157	220	169	47	132	752	158	21,931	166
1899	574	187	215	169	53	147	842	180	22,129	166
1900	526	186	243	205	48	120	817	185	20,730	158
1901	497	170	215	176	42	132	754	169	19,412	148
Average for years 1892 to 1901.	522	169	216	168	61	148	799	167	20,965	158
1902	455	159	174	149	49	153	678	156	18,478	139

Senile Mortality.

The number of deaths over 65 years in 1902 was 473. This is a slight excess over the number in 1901, viz., 449, and is largely due to an increase in deaths from bronchitis, the numbers for which were 98 in 1901 and 118 in 1902.

Death Certification.

There were 16 uncertified deaths during 1902.

Zymotic Diseases.

The following table gives the death rates for the principal zymotic diseases. Corresponding figures are given for London for comparison.

TABLE E.

Year.	All Causes.		Principal Zymotic Diseases.		Small-Pox.		Measles.		Scarlet Fever.		Diphtheria.		Whooping Cough.		Typhus Fever.		Enteric Fever.		Simple Continued Fever.		Diarrhœa.	
	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.
1892	3126	22·8	388	2·83	—	—	129	·94	39	·28	34	·25	80	·58	3	·02	15	·11	—	—	88	·64
1893	3243	23·6	440	3·21	18	·13	47	·34	52	·38	118	·86	82	·60	1	·00	18	·13	—	—	104	·76
1894	2766	20·1	449	3·27	1	·00	139	1·01	42	·31	100	·73	71	·52	1	·00	18	·13	—	—	77	·56
1895	2966	21·6	411	2·99	1	·00	136	·99	24	·17	64	·46	37	·27	—	—	22	·16	—	—	127	·92
1896	2968	21·6	542	3·95	—	—	129	·94	35	·25	108	·79	146	1·06	—	—	24	·17	—	—	100	·73
1897	2902	21·4	537	3·95	—	—	103	·76	58	·43	85	·62	87	·64	—	—	16	·12	—	—	188	1·38
1898	2776	20·6	375	2·79	—	—	97	·72	30	·22	58	·43	73	·54	—	—	11	·08	—	—	106	·79
1899	3204	24·1	440	3·31	—	—	92	·69	23	·17	129	·97	43	·32	2	·01	31	·23	—	—	120	·90
1900	3062	23·2	437	3·32	—	—	87	·66	14	·11	88	·67	94	·71	—	—	37	·28	—	—	117	·89
1901	2719	20·8	387	2·96	14	·10	76	·58	45	·34	36	·27	56	·42	—	—	22	·16	5	·03	133	1·0
Average for years 1892-1901.	2973	22·0	441	3·26	3·4	·02	103	·76	36	·27	82	·60	77	·57	·7	·00	21	·16	·5	0·00	116	·86
1902	2756	21·3	396	3·06	31	·24	154	1·19	18	·14	29	·22	64	·49	—	—	12	·09	—	—	88	·68
London	80105	17·5	10280	2·24	1314	·29	2360	·51	560	·12	1159	·25	1876	·41	—	—	537	·12	4	·00	2470	·53

Small-pox.

During the year 1902 there were 31 deaths from this disease, against 14 deaths in 1901. The death rate from this disease per thousand living is ·24.

Measles.

There were 154 deaths from measles during 1902, giving a rate of 1·19 per thousand living. This is double what it was in 1901 and nearly so for the last ten years average. The deaths occurred in the quarters as follow :—4, 32, 27, and 91. It will thus be seen that by far the largest number of deaths occurred in the fourth quarter, the next highest being the second and third. Assuming that the death rate was similar to that of a previous epidemic in Glasgow, there were probably at least 1591 cases in the district. We received notice from the schools of 671 cases. If these were all the cases in the district it would make a case mortality of 22·9 per cent. Measles, unfortunately, has been regarded by the parents as a trivial complaint, but, as the following Table F shows, it certainly cannot be regarded as such during the first five years of life :—

TABLE F.—MEASLES.

Age Period.	COMPLICATIONS.													
	Uncomplicated.	Broncho-Pneumonia.	Bronchitis.	Whooping Cough	Laryngitis.	Empyema.	Meningitis.	Phthisis.	Tabes Mesenterica.	Convulsions.	Diphtheria.	Coma.	Pharyngitis.	Totals.
Under 1 ...	3	17	4	nil	nil	nil	1	1	nil	nil	nil	nil	nil	26
1—2 ...	3	46	8	1	1	1	nil	nil	1	2	nil	1	1	65
2—3 ...	nil	29	5	1	1	nil	nil	1	nil	nil	1	nil	nil	38
3—4 ...	1	10	4	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil	15
4—5 ...	nil	5	1	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil	6
Under 5 ...	7	107	22	2	2	1	1	2	1	2	1	1	1	150
5—10 ...	1	2	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil	3
10—15 ...	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil
15—20 ...	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil
20—25 ...	nil	1	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil	1
All Ages ...	8	110	22	2	2	1	1	2	1	2	1	1	1	154

The number of deaths due to uncomplicated measles is comparatively small, but in children under 5 the absence of complications is rather an exception. It will be seen that the largest number died from lung complications. I am inclined, however, to believe that the number of deaths under the complication of phthisis is under-estimated. It is the opinion of competent authorities that a large number of the cases of broncho-pneumonia following measles are tubercular.

Whooping Cough.

There have been 64 deaths from this cause, which is an excess of 8 over the number in 1901. Epidemics of measles are frequently followed by epidemics of whooping cough, and, like measles, it is a disease which kills through its complications, as the following table shows :—

TABLE G.—WHOOPING COUGH.

Age Periods.	Uncomplicated	Complications.						Totals.
		Pneumonia.	Bronchitis.	Measles.	Convulsions.	Marasmus.	Rickets.	
Under 1	3	11	6	nil	8	nil	nil	28
1–2	2	17	4	1	nil	1	1	26
2–3	1	1	nil	2	nil	nil	nil	4
3–4	2	3	nil	nil	nil	nil	nil	5
4–5	nil	nil	nil	nil	nil	nil	nil	nil
Under 5	8	32	10	3	8	1	1	63
15–20	nil	nil	nil	nil	1	nil	nil	1
All ages	8	32	10	3	9	1	1	64

The most fatal age for whooping cough is within the first two years of life, and pulmonary complications are the most frequent causes of death.

Both measles and whooping cough are very difficult to control, since they are infectious before the characteristic symptoms appear. I am glad to see that the London County Council has applied sections 60, 61, 62, 63, 64, 65, 68, 69, 70, 72, 73, and 74 of the Public Health (London) Act, 1891, to measles, and if it should do nothing else but call attention to the serious nature of the complaint, they will have accomplished something towards the checking of epidemics.

Scarlet Fever.

Eighteen deaths from scarlet fever occurred during 1902. This gives a rate of ·14 per thousand, which is ·13 below the average for the last 10 years, and ·20 below the year 1901, in which year the total deaths amounted to 45. The greatest number (12) occurred in the age period 1 to 5 years. As will be pointed out under "Notification," there was a great diminution of cases in the district during the year.

Diphtheria.

Twenty-nine deaths occurred from this cause during the year 1902, against 36 in the previous year. This gives a rate of ·22 per thousand, which is not only less than that for 1901 but ·38 less than the average for the last ten years. The greatest number of deaths, viz., 20, were in the age period 1 to 5 years, and 10 occurred during the fourth quarter.

Typhus Fever.

No deaths were attributed to this cause.

Enteric Fever.

Twelve deaths were attributed to enteric fever, which is a little more than half the number that occurred during the year 1901. The age period which contributed the largest number of deaths, viz., 6, was from 15 to 25 years.

Simple Continued Fever.

No deaths occurred which could be placed under this designation.

Diarrhœa.

As mentioned in the report for 1901, the following are included under this head:—

Epidemic Enteritis,
Zymotic Enteritis,
Epidemic or Summer Diarrhœa,
Dysentery and Dysenteric Diarrhœa,
Choleraic Diarrhœa, Cholera and Cholera Nostras (in absence of Asiatic Cholera).

88 deaths were attributed to these causes, viz., 63 in Bermondsey, 17 in Rotherhithe, and 8 in St. Olave's, against 133 during 1901. This gives a death rate of ·68 per thousand living, which is ·18 below the average of the last 10 years and ·32 below 1901. The decrease in the number of deaths from this cause may be attributed to the unusually cold and wet summer of 1902. As mentioned in my last report the immediate cause of diarrhœa is a specific microbe or microbes which probably abound in the dust and dirt of the streets, and which develop most rapidly during great heat. When the summer is cold and the streets are flushed with frequent rains, articles and food do not run such a risk of being contaminated. This is some indication of the endeavour which should be made to keep the streets in summer well watered with a dilute solution of some antiseptic, such as permanganate of potash. Inquiries similar to those of 1901 were instituted in the deaths of children under one year. The total number of cases inquired into was 40.

TABLE H.—DIARRHŒA.

Year.	Cases Inquired Into.	State of Premises.			Family.		Method of Feeding.			Over-crowding.
		Good.	Fair.	Defective.	Clean and Careful.	Dirty and Improvident.	Breast.	Artificially.	Partially by Both Methods.	
1901 ...	74	49	23	2	70	4	13	59	2	—
1902 ...	40	21	18	1	37	3	6	33	1	1
Total	114	70	41	3	107	7	19	92	3	1

The above table shows that by far the most important factor in the mortality from diarrhœa is artificial feeding, and this is brought out still more strikingly by the figures for the two years, viz., 92 artificially fed and only 19 breast fed. These figures only emphasise the importance of having purity in the milk supply.

Tubercular Diseases.

The number of deaths due to all forms of tubercular diseases in 1902 was 345, viz., 237 for Bermondsey, 78 for Rotherhithe, and 30 for St. Olave's.

Phthisis.

The number of deaths attributed to phthisis in the Borough was 239, viz., 163 for Bermondsey, 55 for Rotherhithe, and 21 for St. Olave's. Out of this total, 77 occurred in the first quarter, 45 in the second, 47 in the third, and 70 in the fourth. The appended table shows the death rates for phthisis in 1902 and the previous eight years, along with the death rate for phthisis in London.

TABLE I. PHTHISIS.

Sub-dist.	BERMONDSEY.		ROTHERHITHE.		ST. OLAVE'S.		WHOLE BOROUGH.		LONDON.	
Year.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.
1894	188	2·21	66	1·65	32	2·65	286	2·08	7334	1·69
1895	190	2·22	76	1·89	32	2·69	298	2·16	7742	1·77
1896	176	2·06	90	2·23	26	2·24	292	2·13	7567	1·68
1897	174	2·05	64	1·60	33	2·94	271	1·99	7629	1·71
1898	184	2·19	74	1·87	25	2·31	283	2·10	7746	1·72
1899	183	2·19	75	1 92	28	2·68	286	2·15	8275	1·82
1900	169	2·04	47	1·21	29	2·88	235	1·78	7809	1·71
1901	150	1·82	57	1·48	19	1·95	226	1·73	7514	1·66
Averages for years 1894-1901.	177	2·10	69	1·73	28	2·54	272	2·01	7702	1·72
1902	163	1·99	55	1·45	21	2·24	239	1·85	7424	1·62

Respiratory Diseases.

Under this heading are included deaths from bronchitis, pneumonia, pleurisy, and all other diseases of the respiratory organs (other than phthisis.) The total number of deaths was 667, viz., 420 for Bermondsey, 183 for Rotherhithe, and 64 for St. Olave's.

Of that number 248 occurred in the first quarter, 125 in the second, 98 in the third, and 196 in the fourth.

Alcoholism and Cirrhosis of Liver.

33 deaths are placed under this head, the largest number, 29, occurring in the age period 25–65. As pointed out in the previous year's report, this number does not accurately represent the deaths due to this cause, since many people who have been addicted to alcohol or have cirrhosis of liver are carried off by some other cause.

Cancer.

120 deaths were attributed to this cause, the largest number occurring above 25 years of age. This is an increase over last year's number of 86. There is general concensus of opinion that there has been some increase in this disease during the last twenty years, but the apparent increase during 1902 in Bermondsey can be nothing more than accidental.

Heart Diseases.

157 deaths were attributed to these causes, which is exactly the same number as last year. Under this head only organic diseases of the heart are included. Other causes, such as heart failure, have been excluded.

Suicides.

13 parishioners committed suicide during the year, 4 by hanging, 4 by poison, 3 by cutting the throat, and 2 by drowning.

NOTIFICATION OF INFECTIOUS DISEASE.

In Table III. of Appendix will be found full particulars of the diseases notified in Bermondsey during the year 1902, divided into districts and age periods. The total number notified during the year in question was 2,227, against 1,686 in the previous year. This large increase was due to the compulsory notification of chicken pox, so that, if the 912 cases due to this cause were subtracted, it would leave a total of 1,315, which is a diminution of 371 from the previous year's figures, notwithstanding the prevalence of small-pox. This immunity from infectious disease may be mainly attributed to the greatly diminished numbers of diphtheria and scarlet fever cases. Of the former disease there were 277 cases against 329 in 1901, and in the latter, 491 cases against 932. There was also a considerable diminution in the cases of enteric fever, the number being 150 in 1901, and 125 in 1902.

The number of notifications per thousand inhabitants was 17·5 for Bermondsey, 16·4 for Rotherhithe, and 18·2 for St. Olave's, and, though a considerable number of cases were returned as not suffering from the disease notified, I may reiterate the opinion I expressed in last year's Report, that, taking into account a certain number of unrecognised cases not notified, and putting them against the ones wrongly notified, the present notifications will probably fairly represent the actual number which occurred in the district.

Small-pox.

219 cases of this disease were notified during 1902. 24 were returned as not suffering from that disease, leaving 195 actual cases. The following are particulars as to vaccination, with the number of deaths :—

	No. of cases.	Deaths.	Rate per cent.
Vaccinated	174	18	10·34
Unvaccinated	20	12	60·00
Doubtful	1	1	100·00
Total cases ...	195	31	16·00

As there was a Special Report on this subject issued to the Council in October, dealing with the epidemic and precautions taken, and since only two cases occurred from the issue of that report to the end of the year, I do not purpose to deal at length with the matter, but only to state that the statistics given above confirm the previous statements as to the efficacy of vaccination.

Contrary to the general expectations and prophecies, the epidemic practically ceased in London about the middle of the year. There has been some recrudescence during the present year, but the cases have been largely imported from the Midlands, where the disease is more or less prevalent.

Diphtheria.

There were 277 cases of diphtheria notified during the year 1902, of which 194 occurred in Bermondsey, 60 in Rotherhithe, and 23 in St. Olave's. This is considerably lower than the corresponding figures for 1901, of which the total amounted to 329. 34 cases were returned as not suffering from this disease, thus making a total of 243 actual cases. Notwithstanding the cases which were returned, I think the higher figure more nearly represents the cases in the district, since a considerable number of cases of diphtheria are of an extremely mild type, and, in common with all other infectious diseases, it is these cases which keep the disease going. Diphtheria is a disease which varies in type in different individuals, even in the same household. One child takes a sore throat which is hardly noticed by the family. The next child which becomes infected takes a virulent attack of diphtheria, necessitating very prompt treatment, and it is only on the occurrence of the latter case that the primary case, which caused the disease, is discovered.

This reduction in the number of notifications in Bermondsey was part of a general reduction of the disease in London, the numbers for which were 12,156 in 1901, and 10,735 in 1902. It was also in part due to the measures which were taken in connection with the bacteriological laboratory mentioned below.

As compared with other districts in London, this is a low prevalence of diphtheria. There seems to have been very little difference in the different times of the year as regards prevalence, but it was, if anything, more prevalent during the summer months, as a glance at the accompanying chart will show. The number of cases treated in hospital was 251, and, subtracting the 34 returned as not suffering from diphtheria, we have a total of 217. The number of deaths in hospital was 22, thus making a "case-mortality" of 10·1 %. With the total cases at 243 there were 29 deaths, making a "case-mortality" of 11·9 %, which is the same as that for the previous year.

Enquiries were made into the source of infection in cases notified. In three it was attributed to a case returned recently from a hospital, and in 19 there had been a previous case in the family. In the remainder the source of infection was indefinite. During the year 1902 I visited 102 families in which diphtheria had occurred. Examinations were made of the members of the family who were in immediate contact with the patient, and these examinations were practically confined to "contacts" of school age, *i.e.*, up to 15 years of age. The number of examinations made was 259, and swabs were taken from the throats, and, in a few cases, from the noses of those examined. In 32 specimens, or 12·4 per cent. of the examinations, Klebs-Loeffler Bacilli, which constitute the immediate infective agent of diphtheria, were found. 16 of these cases, or 50 per cent., later developed the clinical symptoms of diphtheria, and were removed to hospital. Those who had bacilli in their throats, but did not develop the clinical symptoms of diphtheria, were kept isolated, as far as possible, until they were considered to be free from infection, and were advised to go to their medical attendant for an antiseptic gargle. These latter did not, as far as I am aware, give rise to any further cases in the household. In all cases of children in which diphtheria bacilli were found, the parents were immediately notified that their child harboured diphtheria bacilli in its throat, and might either develop diphtheria later, or be a source of infection to others, and were advised to keep the child in question under the close observation of their medical attendant.

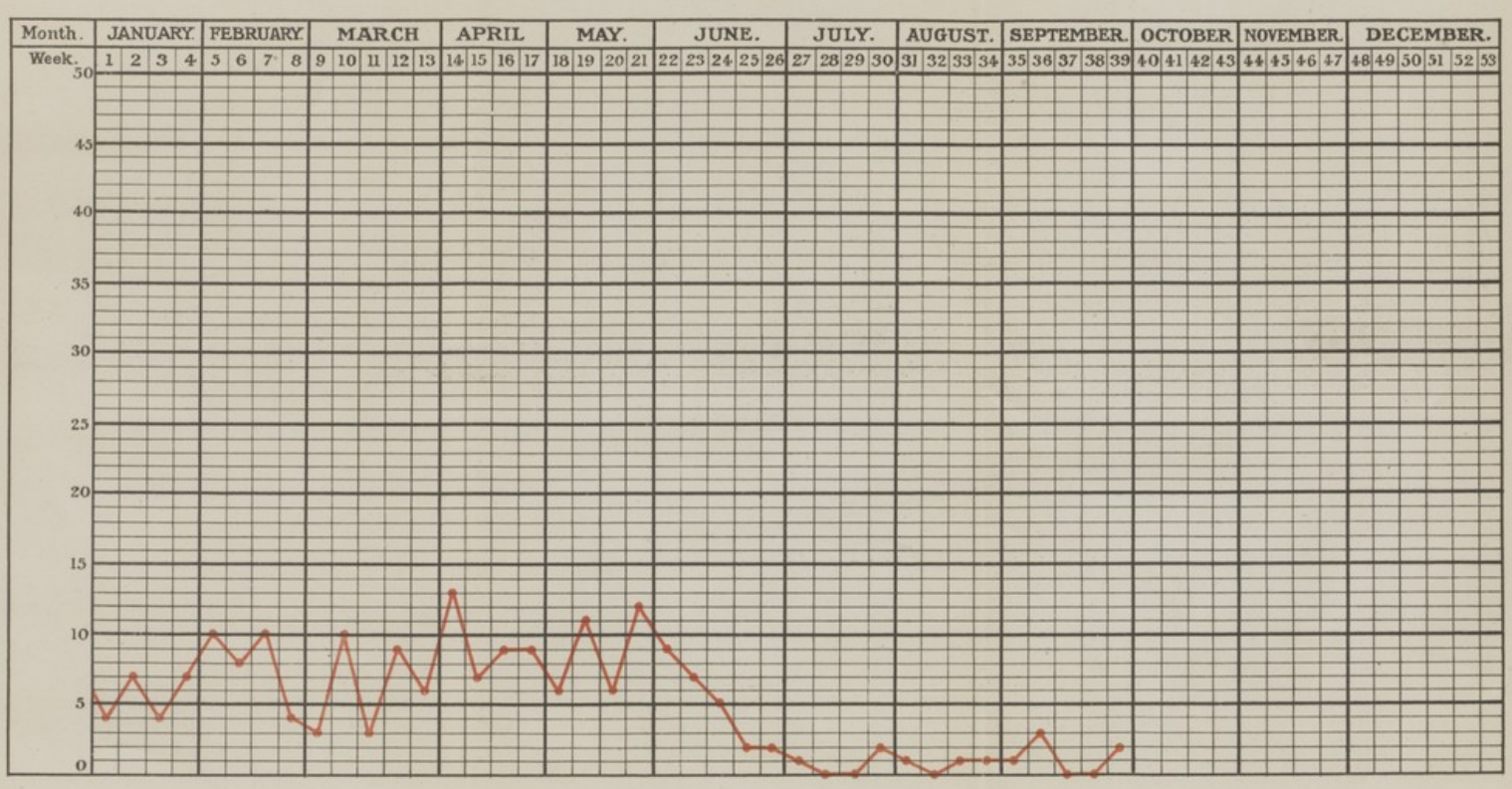
By this method there is no doubt the 16 cases notified were placed under treatment and isolated much earlier than they would otherwise have been.

Some objection has been taken to my action in this matter, and it was stated by at least one medical man that I exceeded my powers in making these examinations. This, however, is not the case. Careful enquiries were made in each case as to whether there was a medical man in attendance, and none of the patients who were under treatment were examined without the permission of the medical attendant, and none examined in any case without the voluntary consent of the parents. This consent was scarcely ever refused.

Membranous Croup.

Three cases were notified as membranous croup. It is a pity that medical men still use this term, since the cases notified as such are diphtheritic in nature. There was one case, during 1902, notified as membranous croup, and, on endeavouring to have it removed, it was ascertained that the Metropolitan Asylums Board could not do so unless it was certified as being diphtheritic

SMALL POX.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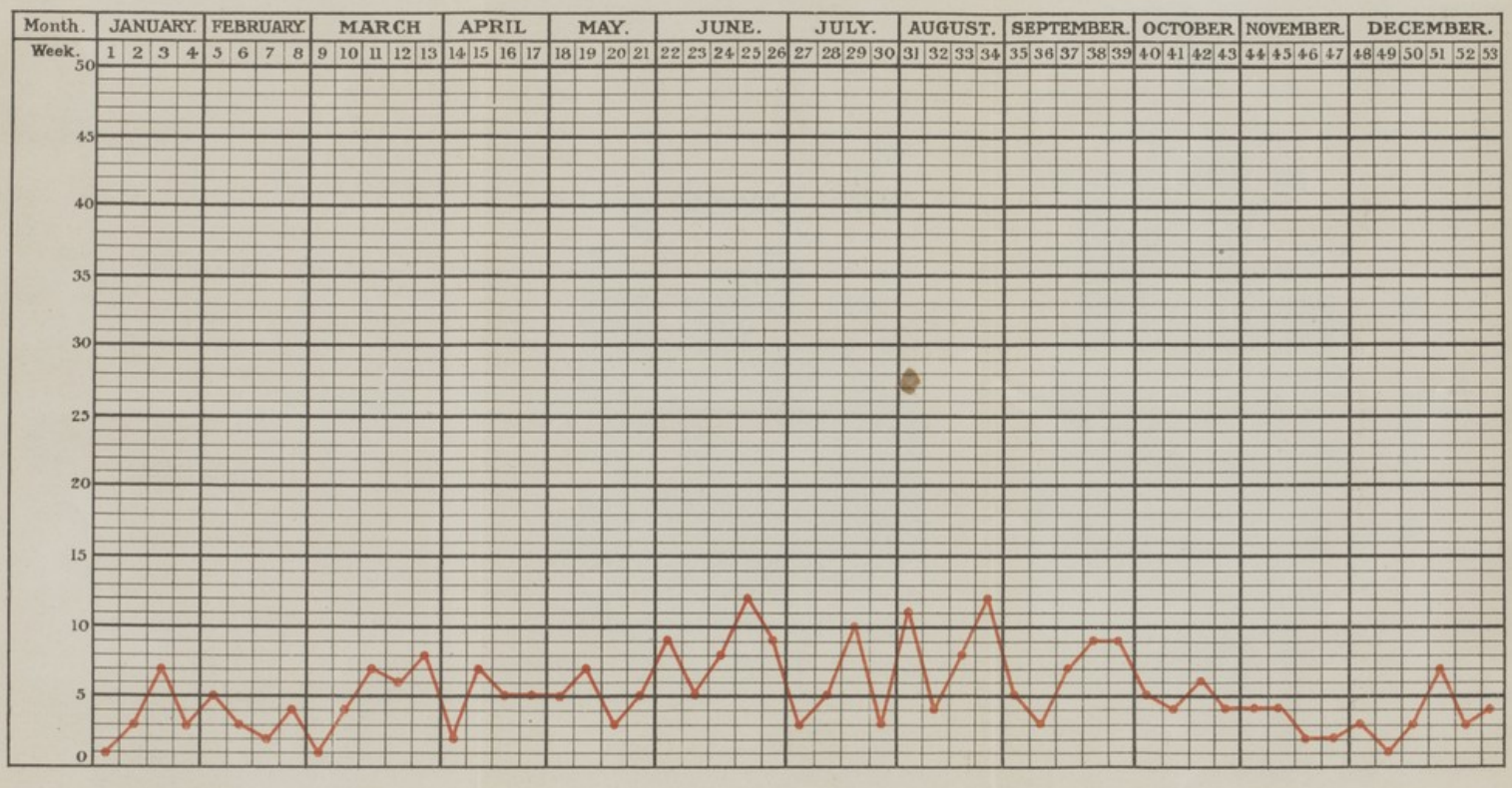
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in nature. As a consequence there was a delay of several hours before getting the patient under treatment. The case was a very serious one, and the delay may have accelerated, if it did not actually cause, the patient's death. On writing to the Metropolitan Asylums Board on the matter, I received the following reply:—

Sir, 30th October, 1902.

Diphtheria and Membranous Croup.

In reply to your letter of the 28th inst. *re* refusal to remove a patient, T. H. P., on a certificate of "membranous croup," I have to inform you that some years back the opinion of the Local Government Board was asked as to whether the term "diphtheria" was to be taken to include "membranous croup," and whether cases of the latter disease could be admitted into the Managers' hospitals, and the Managers were informed "that, in the opinion of the Board, a case of 'membranous croup,' which the medical officer concerned states to be diphtheritic in nature, may properly be admitted into such a hospital."

I am, Sir,
Your obedient Servant,
(Signed) T. Duncombe Mann,
Clerk to the Board.

Dr. R. K. Brown,
Medical Officer of Health,
Metropolitan Borough of Bermondsey.

Erysipelas.

192 cases of erysipelas were notified in 1902, against 155 notified in 1901.

Scarlet Fever.

There were 491 notifications of scarlet fever. Of these, 31 were returned as not suffering from that disease, leaving 460 actual cases. There were 18 deaths, making a case mortality of 3·9 per cent. During the year 1901 there were 932 notifications, thus showing a reduction in the number of cases by almost a half. The attack rate, therefore, was 3·8 per thousand living in 1902, against 6·99 in 1901. On looking at the chart the disease cannot be said to have been more prevalent at one time of the year than another. The cases, on the whole, were fairly evenly distributed, averaging from 5 to 10 per week, whereas in 1901 there was a very marked prevalence during the months of May to November, the maximum number of 44 in one week being reached in the middle of September; the greatest number in 1902, viz., 17 in one week, occurred in the last week of January. It is difficult to account for this great diminution, but that it is due to local conditions is shown by the fact that the numbers for London, viz., 18,381 in 1901, and 18,258 in 1902, are practically the same for the two years. As to the sources of infection, the following causes are attributed:—

Previous cases in family...	28	cases.
Previous illness in family with symptoms of scarlet fever	1	,,
From school mate	1	,,
From friend	2	,,
Visiting infected houses...	2	,,
Previous cases in neighbouring tenements ...	5	,,
From cases recently returned from hospital ...	10	,,
Total ...	49	,,

In the remainder the source of infection cannot be definitely traced. The percentage of "return cases" to the total number is 2·2 against 3 per cent. in 1901. The cause of these "return cases" and the best way to prevent their occurrence is the subject of a special investigation on the part of the Metropolitan Asylums Board, and a report on the subject is expected shortly. It is satisfactory, however, to note that the number of such cases is tending to decrease.

Typhus Fever.

One case was notified during the year, but was returned from the hospital as not suffering from that disease.

Enteric Fever.

125 cases of enteric fever were notified, being 79 for Bermondsey, 44 for Rotherhithe, and 2 for St. Olave's. 16 cases were returned as not suffering from that disease, leaving 109 actual cases, against 147 in 1901. This decrease in numbers is the more satisfactory since there was a considerable increase in the corresponding figures for London, the numbers for the latter being 3,194 in 1901, and 3,412 in 1902. The source of infection in these cases is very indefinite but, from recent investigations by Professor Koch in connection with an outbreak in a small country town in Germany, it would appear that mild unrecognised cases, commonly known as "ambulant" cases, keep the infection living. These "ambulant" cases may not exhibit any symptoms beyond perhaps a little diarrhœa and general malaise insufficient to keep them from work or confined to bed, and may last any time from 1 to 3 weeks. This source of infection probably applies to most of the ordinary infectious diseases, and these will not be stamped out until more attention is paid to mild attacks and improved means of diagnosis enables them to be discovered and isolated early.

Puerperal Fever.

Six cases of puerperal fever were notified, and four deaths took place. Puerperal fever is a general term which includes several varieties of septic diseases occuring in women at, or soon after, childbirth. The term cannot be very well dispensed with until the name has been

altered in the list of notifiable diseases in the Public Health Acts. In the "Nomenclature of Diseases" of the Royal College of Physicians, pp. 11, the disease is understood to include all forms of septic trouble occurring in puerperal women. If names were adopted, such as puerperal pyæmia, septicæmia, or sapræmia, it would be much easier to guage the severity of the disease, to discover the source of infection, and to take preventive measures against its spread.

Measles.

The notification of measles is a subject which is constantly recurring. Experiments in this direction have been tried in various towns, but, unfortunately, have been followed by no practical diminution in the prevalence of the disease. As already pointed out, the great difficulty in measles is that it is undoubtedly highly infectious before the characteristic rash appears, and children are very seldom isolated until the mischief has been done. Certificates stating that measles was prevalent have been granted to the following schools, in order that they might obtain the Government grant:—

Clarence Street Schools,
St. Paul's (infants) School,
St. Mary's Schools,
Holy Trinity Schools.

I regret to see that the Education Department are doing away with epidemic grants. I fear it will lead to the detention at school of children who are unwell and may be exhibiting the early symptoms of some zymotic disease or else the hurrying back to school of contacts, in order to keep up the attendance.

Tuberculosis.

Following up the transactions of the British Congress on Tuberculosis in 1901, I submitted the following report to the Public Health Committee in January, 1902:—

I attended the British Congress on Tuberculosis, held in London, July, 1901, as delegate appointed by the Metropolitan Borough of Bermondsey, and beg to submit the following general report on tuberculosis, together with a copy of the resolution, passed at the Congress:—

Tuberculosis is now looked upon as an infectious disease. The primary cause is a small microbe known as the tubercle bacillus. It exists in the atmosphere, in some places, adhering to and floating about with particles of dust, but is specially prevalent in the dust of houses, railway carriages, tramcars, etc., which have been recently occupied by persons suffering from phthisis.

This bacillus was discovered by Robert Koch in 1892, and according to him, a pure culture, if exposed to diffuse daylight at a window for five or seven days, is killed. Tubercular sputum when dried will retain its virulence in a room at the ordinary temperature for at least 2½ months, and if exposed in a thin layer to sunlight, for from one to two days, it is killed. The form which tuberculosis takes in the human body differs according to the mode of entry. If the germs are inhaled and find a nidus, the resulting disease generally attacks the lungs and is known as phthisis. If swallowed, it mostly attacks some abdominal organ. The former method of acquiring the infection is much the commoner.

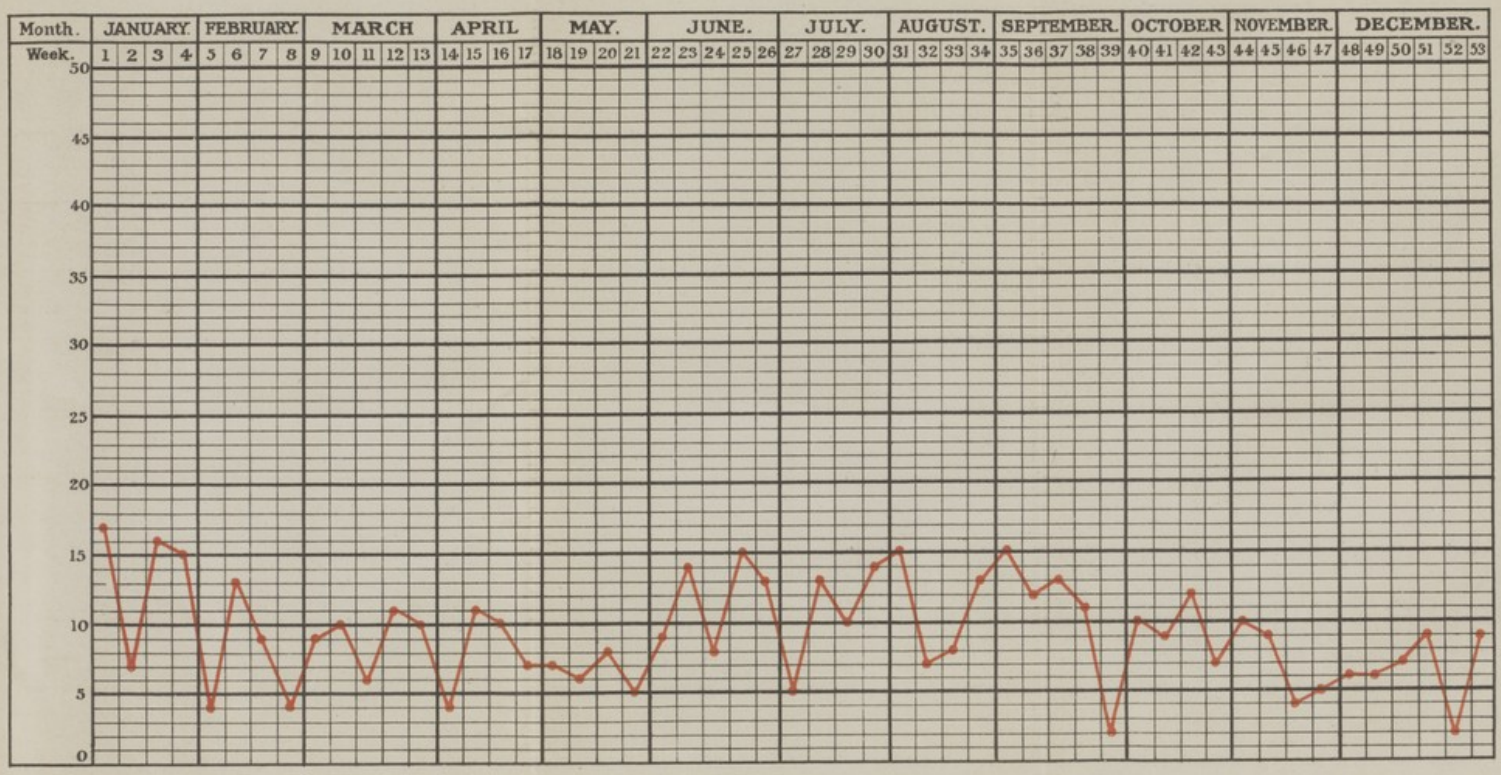
This is borne out by the fact that in Bermondsey last year the deaths from phthisis were 243, and from all other tubercular diseases 120. Professor Koch, in his address before the British Congress on tuberculosis, laid it down as an axiom that it is both preventable and curable.

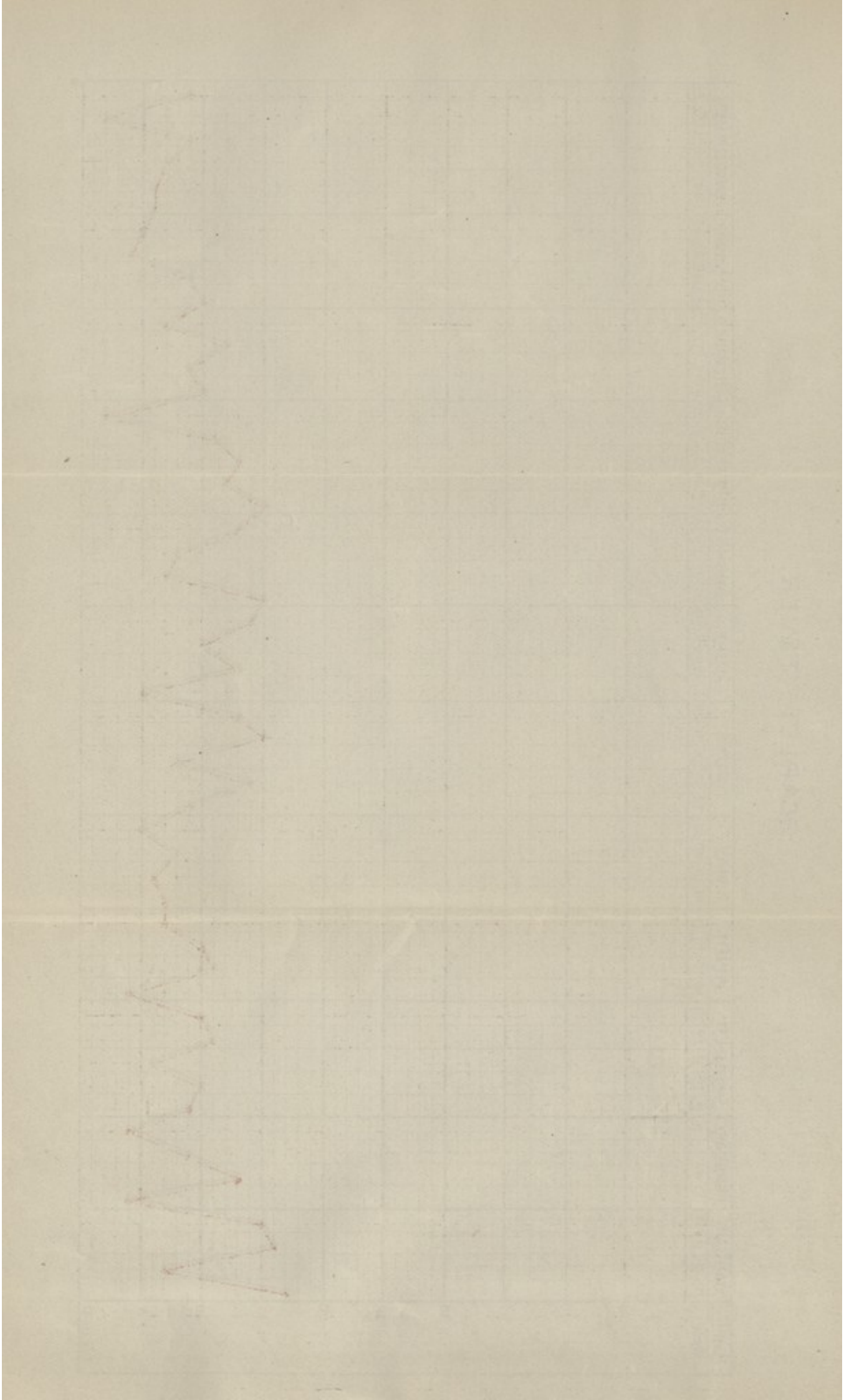
Before the discovery of the bacillus, phthisis or consumption, which is the most important division of the disease, both from its frequency and importance, was looked upon as hereditary, and little was done to check its spread. Now, however, this view has been entirely abandoned and heredity as a cause *per se* has been relegated to a very subordinate position. Heredity is now looked upon as furnishing two factors which favour the spread of the complaint, and these are both indirect. The first and least important factor is that the child of phthisical parents often inherits a body which is ill developed and makes a feeble resistance to the inroads of the organism. The second and most important factor is that consumption in the parents forms a bad environment for the offspring and abundant opportunities for acquiring the infection.

I have spoken of the bacillus as being the primary cause, and I shall place the secondary causes under one head, viz.: all those which lower the vitality of the human organism, and so make it a suitable breeding ground for the bacillus. People in good health frequently inhale the tubercle bacillus when going into places where it is prevalent, but the body resists its inroads and casts it out again or else kills it, but those whose constitutions are weakened in any way, instead of throwing out the infection, harbour it and allow it to grow and increase. In many cases the human body, even after successful invasion, carries on a war with the enemy, as is evinced by the great protraction of the disease (in some cases to 20 years) which often occurs. Among the factors which cause this deterioration of health, intemperance, unhealthy dwellings, ill-ventilated and dirty workshops and unhealthy occupations take the foremost place.

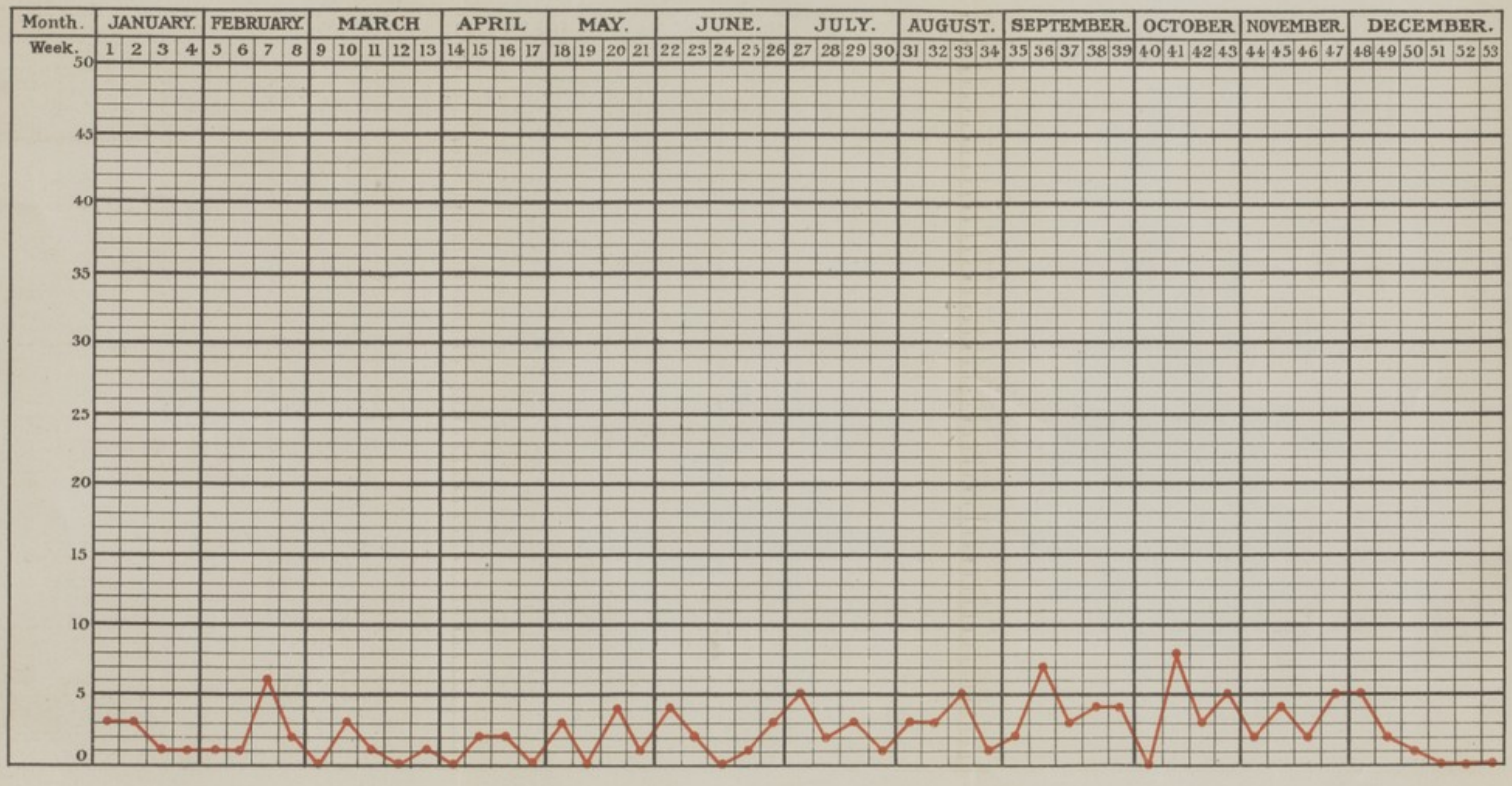
As before mentioned, the number of deaths in Bermondsey during 1900 of phthisis was 243, and of other tubercular diseases 120. This is equal to a death rate of 1·8 per thousand living for phthisis and of 2·7 per thousand living for all tubercular diseases. The corresponding rates for London during that year were 1·75 and 2·42. The number of deaths in Bermondsey during 1900 in the following diseases, viz.: small-pox, measles, scarlet fever, whooping cough, diphtheria, typhus, enteric and continued fever, cholera, together was 325, being a death rate per thousand living of 2·48. The corresponding rate in London for the same diseases was 1·4. It is, therefore, quite plain that tuberculosis alone claims more victims than all the principal zymotic diseases put together.

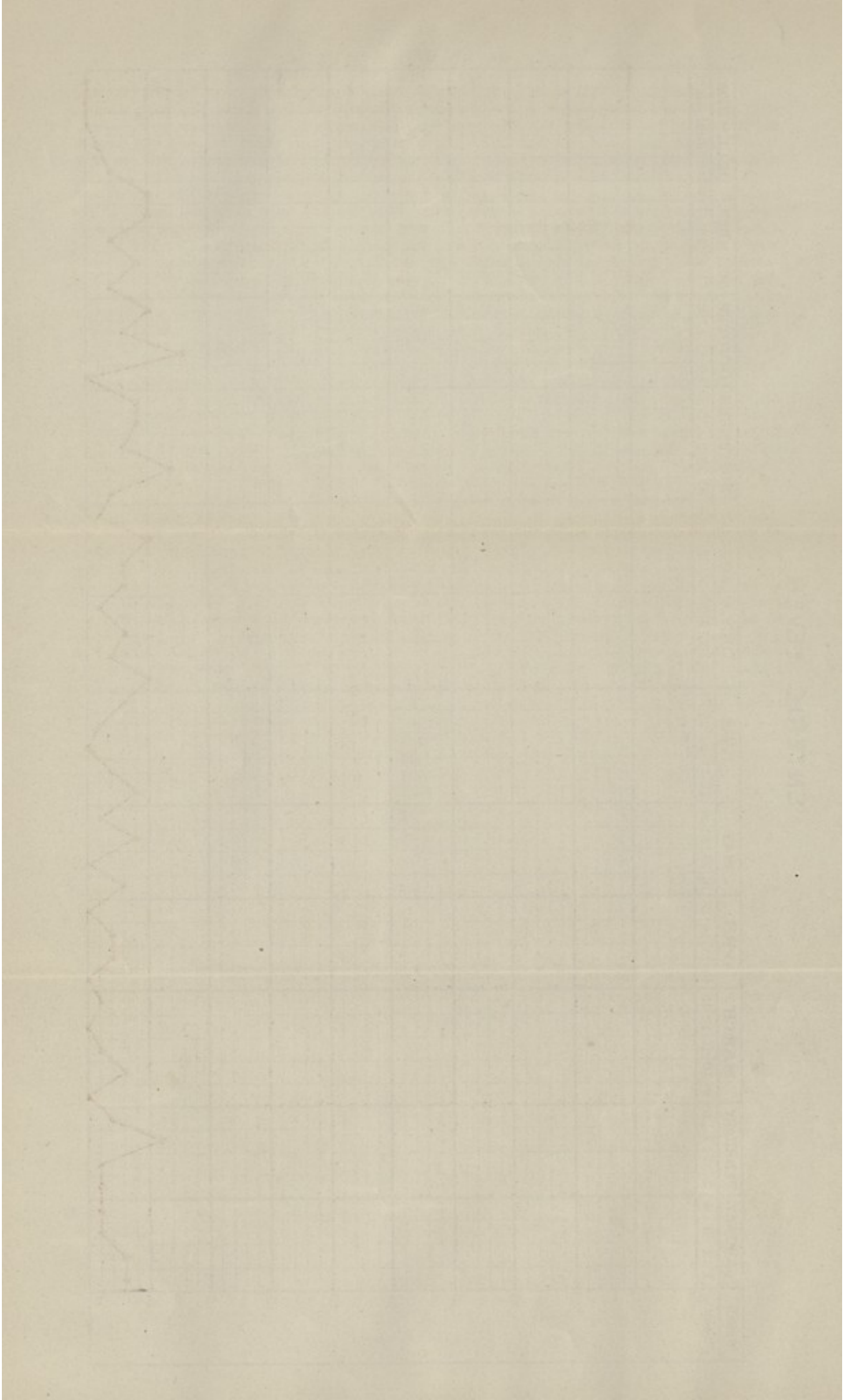
SCARLET FEVER





ENTERIC FEVER





Another point is that the large majority of deaths from phthisis occur between the ages of 25 and 55, at a period when the lives are most valuable to the family and the State, whereas the majority of the victims of the other zymotic diseases are in their childhood or early youth.

Enough has been said above to show what a very large share, for one single disease, tuberculosis takes in its different forms in making up our annual death-rate. Next, as to its mode of dissemination. The tubercle bacillus can be inhaled or swallowed. The latter generally happens through the medium of tuberculous foods such as milk, meat, etc., and the former through inhalations of tubercular sputum, which is by far the most important factor in the spread of tuberculosis. Every phthisical patient is constantly spitting up phlegm or mucous from the lungs, containing millions of tubercular bacilli. If this sputum falls where it can become dried, it gets broken up and mixed with the dust of the room ; the innumerable bacilli thus becoming dry and light, are able, when the dust is moved, to float about in the air. A certain proportion of the bacilli are also coughed direct from the lungs into the air by the fine spray which generally issues from the mouth in the act of coughing. These dried bacilli retain their virulence for months, especially if the house is dark and ill-ventilated, and when inhaled by a susceptible subject, frequently set up the disease. This is, undoubtedly, the principal manner in which tuberculosis is spread.

Prevention.—From these remarks it will be seen that preventive measures naturally fall under two heads—first, those which raise the general health of the community, and which come under general sanitary measures; secondly, isolation and disinfection. The benefits from the former measures have long been recognised in England, and the result is seen in an enormous reduction of phthisical mortality during the last twenty years, the reduction varying in different districts from 25 per cent. to 50 per cent. Coming to the second series of preventable measures, I would remark first that by isolation in phthisis I mean the withdrawing of the subjects of this disease who are coughing up infectious sputum from contact with the general population, and their treatment in special hospitals and sanatoria. This has three objects in view, viz.: the curing of the disease in suitable cases, and preventing the spread of infection between the sick and healthy. The best treatment for phthisis has been found to be a complete reversal of those conditions which most favour it, viz.: bad air, want of sunlight, etc., and the placing of patients under the best sanitary condition away from town, where they can get the full benefit of the fresh air and sunlight. For this purpose the open-air sanatoria are being instituted all over the world. Phthisis is, however, most common in the labouring and artisan classes, who are unfortunately unable to avail themselves of this treatment in England, since most of the sanatoria are erected by private enterprise. It is quite impossible for the class of patient in which the disease is commonest to carry out this treatment in their own homes, so the result is that they simply continue to work as long as they can, infecting their fellow-workmen in crowded workshops, and their families when at home.

In view of these facts and considering the great importance to the State and individuals of lessening or doing away with this scourge, a proposal is made by Dr. Louis C. Parkes, Medical Officer of Health for Chelsea, embodied in a letter to this Council, that "open-air sanatoria should be provided for the treatment of Phthisis on a large scale, where the poorer class of patients could be sent to for from three to six months according to requirement; and that the most suitable body to undertake this work in London is the Metropolitan Asylums Board, as proved by its experience and success in other diseases." "The general hospitals in London are averse to receiving phthisical patients and the special hospitals are too few to be able to deal with any but a very small number of cases."

Next to the State, I do not know any more suitable body to undertake such a task than the Board mentioned above. We are at present spending money on isolating a whole series of preventable diseases, and leaving out the one that is most important of all and doing very little to prevent its spread. I would go a step further and provide hospitals or sanatoria for those cases which are in too advanced a stage to cure, where they could end their days in peace and not be a menace to the community at large. Now even if patients were not all cured in the ordinary sanatoria, they would all learn habits of cleanliness, so that when they came out they would not be so dangerous to their neighbours. With this proposal I quite agree and recommend the Council to support the Borough Council of Chelsea in their suggestion that the work of providing open-air sanatoria should be undertaken by the Metropolitan Asylums Board.

My next remarks on prevention come under the head of disinfection. As regards the rooms, bed, and bedding where deaths from phthisis have occurred, this is already being done by us. The most important part, however, of disinfection is the destruction of the sputum of phthisical patients. This can be done in two ways, either by spitting into a cup containing a suitable disinfectant, or into a paper pocket handkerchief which can be burned before the sputum is dry.

To effect this reform the people want educating as to the infectiousness of phthisis, and the best methods of preventing its spread. For this purpose the Congress on Tuberculosis referred to drew up a series of resolutions, the purport of which was to do away with indiscriminate spitting in public and private places, by putting up notices pointing out the evils of this filthy habit, and the printing of small circulars to be placed in the hands of phthisical patients, giving information as regards the curability of the disease, and the importance of disinfecting the sputum.

Had we suitable sanatoria to which we could send patients, the next step would be to make the disease a notifiable one, so that we might have an opportunity of getting every patient into them. Although we do not possess the means of isolation referred to, we might do more than we are doing at present to prevent the spread of the disease in our own Borough, and to

bring this into effect I suggest that the medical men of the district should be invited to give information of any cases of phthisis occurring in their practices, and that half-a-crown be given for every case thus notified. We should thus have an opportunity of instructing the patients in the hygiene suitable to their case. This latter object could be best accomplished by having a leaflet or short pamphlet printed containing the essential facts regarding the nature and preventability of the disease, and giving general instructions concerning the best methods of disinfection. This printed information could be left at the houses of patients as we hear of them from the medical men.

The following resolutions were adopted at the final meeting of the Congress:—

1. "That tuberculous sputum is the main agent for the conveyance of the virus of tuberculosis from man to man, and that indiscriminate spitting should therefore be suppressed."

2. "That it is the opinion of this Congress that all public hospitals and dispensaries should present every patient suffering from phthisis with a leaflet containg instructions with regard to the prevention of consumption, and should supply and insist on the proper use of the pocket spittoon."

3. "That the voluntary notification of cases of phthisis attended with tuberculous expectorations, and the increased preventive action which it has rendered practicable, has been attended by a promising measure of success, and that the extension of notification should be encouraged in all districts in which efficient sanitary administration renders it possible to adopt the consequential measures."

4. "That the provision of sanatoria is an indispensable part of the measures necessary for the diminution of tuberculosis."

5. "That, in the opinion of this Congress and in the light of the work that has been presented at its sittings, medical officers of health should continue to use all the powers at their disposal, and relax no effort to prevent the spread of tuberculosis by milk and meat."

6. "That, in view of the doubts thrown on the identity of human and bovine tuberculosis, it is expedient that the Government be approached and requested to institute an immediate inquiry into this question, which is of vital importance to the public health, and of great consequence to the agricultural industry."

7. "That the educational work of the great national societies for the prevention of tuberculosis is deserving of every encouragement and support. It is through their agency that a rational public opinion may be formed, the duties of public health officers made easier of performance, and such local and State legislation as may be requisite called into existence."

8. "That this Congress is of opinion that a permanent international committee should be appointed: (*a*) to collect evidence and report on the measures that have been adopted for the prevention of tuberculosis in different countries; (*b*) to publish a popular statement of these measures; (*c*) to keep and publish periodically a record of scientific research in relation to tuberculosis; (*d*) to consider and recommend measures of prevention. This Congress is further of opinion that all international and great national societies whose object is the prevention of tuberculosis should be invited to co-operate."

9. "That, in the opinion of this Congress, overcrowding, defective ventilation, damp, and general insanitary conditions in the houses of the working classes diminish the chance of curing consumption, and aid in predisposing to and spreading the disease."

10. "That the following question be submitted for the consideration of the next Congress on tuberculosis: The constitutional conditions of the individual which prodisposes to tuberculosis, and the means by which they may be modified."

11. "That, while recognising the great importance of sanatoria in combating tuberculosis in all countries, the attention of Government should be directed to informing charitable and philanthropic individuals and societies of the necessity for anti-tubercular dispensaries as the best means of checking tubercular disease among the industrial and indigent classes."

This Report was brought before the Council by the Public Health Committee in February, with a draft of the recommendations, which was as follows:—

> (*a*) That it be referred to us to have prepared and printed a leaflet containing a short account of the nature of tuberculosis, its curability, the methods by which it is principally spread, and the best means of preventing the latter, such leaflet to be circulated among phthisical patients in the Borough as we become aware of them.
>
> (*b*) That for the purpose of obtaining information of consumptive persons in order to distribute the leaflet, give personal instruction and advice where necessary, disinfect the rooms, etc., the Local Government Board be asked whether they will sanction a payment of 2s. 6d. to medical practitioners for every fresh case notified to this Council.
>
> (*c*) That letters be sent to the Metropolitan Asylums Board and the Local Government Board, urging them to consider the advisability of providing sanatoria for the treatment of consumptive persons on the lines suggested in the Report received from the Chelsea Borough Council.

These were adopted by the Committee, and by the Council, on March 4th. On April 29th the Town Clerk reported the receipt of a letter from the Local Government Board, stating that, in their opinion, the Borough Council have the necessary powers to make reasonable payments in respect to the notification of cases of infectious disease occurring in the district.

On this being submitted to the Public Health Committee, they decided, owing to the prevalence of small-pox in the district, to let the matter stand over for six months.

The subject was not referred to again until February of the present year, 1903, when the following Report was made:—

Tuberculosis—Notification of Phthisis.

We report having again had this question under consideration. The Council agreed to a recommendation of this Committee on the 4th March, 1902, that a leaflet should be printed containing a short account of the nature of tuberculosis, its curability, the methods by which it is principally spread, and the best means of preventing it, and that this should be circulated among phthisical patients in the Borough as we become aware of them, and in order that the necessary information might be obtained so as to distribute the leaflet, give personal instruction and advice where necessary, disinfect the rooms, etc., the Local Government Board were asked to sanction a payment of 2s. 6d. to medical practitioners for every fresh case of phthisis notified to the Council.

The Local Government Board replied, stating that, in their opinion, the Borough Council have the necessary powers to make reasonable payments in respect to the notification of cases of infectious disease occurring in this district. The Committee, owing to the small-pox epidemic, decided then to let the question stand over for six months.

In bringing this matter again before us, the Medical Officer emphasises the great prevalence of the disease, and states that the average death-rate is 2·01 for the last ten years in Bermondsey, which is greater than that of the six principal zymotic diseases put together.

It was stated by the Medical Inspector of the Local Government Board, who was present unofficially at a conference on the subject of Sanatoria on July 7th, 1900, that there were 1,562 consumptive patients in "Metropolitan institutions" (workhouses and infirmaries), of whom 1,000 could be moved to a sanatorium or sanatoria within 50 miles of London, and of these, 400 were in the initial (and therefore curable) stages of the disease. This, in itself, is a strong argument for the equipment of sanatoria. As a step towards this, it is highly important to have some idea of the number of cases of phthisis, and this can only be done by voluntary notification.

The following Metropolitan Sanitary Authorities have already adopted voluntary notification of phthisis:—

The Corporation of London,		Lambeth Borough Council,	
Finsbury Borough Council,		Southwark	,,
Greenwich	,,	Stoke Newington	,,
Hammersmith	,,	Wandsworth	,,
Hampstead	,,	Woolwich	,,
Kensington	,,		

On February 17th, 1903, the Council, on the recommendation of the Public Health Committee, definitely decided to adopt the notification of phthisis, paying a fee of 2s. 6d. for every fresh case notified in private practice, and 1s. for those notified in connection with a public body or institution.

I was then instructed to make arrangements for carrying out this resolution, and, as a consequence, sent the following letter to the practitioners in the Borough:—

Town Hall, Lower Road, S.E.,
May, 1903.

Dear Sir,

As you have no doubt already been informed by the Clerk to the Metropolitan Borough of Bermondsey, the Council has decided to adopt the voluntary notification of phthisis.

I send, under separate cover, the notification form to be used. I would draw your attention to the heading of the certificate that it refers to phthisical patients with infective sputum.

It is most desirable that in doubtful cases the sputum should be examined for tubercle bacilli, and I would remind you that facilities for this have been provided by the Council.

In the footnote you will see that no case is to be notified which has already been notified by another practitioner, and as it has to be done with the consent of the patient, I do not anticipate that there will be any difficulty in this matter.

Yours faithfully,

R. K. Brown, *Medical Officer of Health.*

I also drew up a leaflet to be posted to the houses in which phthisical patients lived, and adopted a special notification form.

I hope to give a further report on the working in my next annual report.

In connection with the various reports, I still adhere to the opinions expressed in them, and hope that the time will soon come when sanatoria will be provided free of cost, to at least the poorer inhabitants of the Metropolis, and other parts of the British Isles. The opinion, which has been known to medical men for a very long time, is gradually gaining ground amongst the laity that consumption is both preventable and curable. It makes terrible ravages at the most useful period of life, and there is no doubt that if cases are diagnosed early, removed to suitable surroundings at once, and for sufficient length of time, a cure follows which is permanent in proportion to the way the individual can live after he leaves the sanatorium. For the Metropolis there is, in my opinion, no more suitable body to undertake this work than the Metropolitan Asylums Board. Looking at it from an economic point of view, the suggestion of sanatoria is pre-eminently a business proposal. Many families are at present pauperised, and have support from the rates, because the bread winner is afflicted with phthisis. The adoption of this principle would therefore be a saving in the long run, not to speak of the comfort and happiness produced by the diminution in the prevalence of this disease.

Overcrowding.

My attention was drawn to the following cases visited in 1902:—

Address.	Occupants of overcrowded portion of house.	Space required.	Rooms occupied and cubic ft. space.	Deficiency	State of Premises and Family.	Result.
				cub. ft.		
Woods Place ...	Man, wife and 1 child, aged 3 months	Living and sleeping, 1000 cubic ft.	Front room, 1st floor, 905 cubic ft.	95	Husband, a waterside labourer, and works very irregularly. He earns 2/6 to 3/- per day. Does not get £1 a week. Does not drink. Place fairly clean, bedclothes dirty.	Abated.
Woods Place ...	Man and wife	Living and sleeping, 800 cubic ft.	Back room, 1st floor, 574 cubic ft.	226	Husband a waterside labourer, wages and work irregular. He is steady, but does not earn £1 a week. Earns from 2/- to 4/- per day, according to work. States that work has been very bad for the last three months. Very poor, and very few bedclothes. Place fairly clean.	,,
Salisbury Street	Man, wife and 2 children, aged 16 F, and 14 M.	Living and sleeping, 1600 cubic ft.	Back room, 1st floor, 1228 cubic ft.	372	Husband a carman. Room fairly clean, but bed dirty. Owes 9/-.	,,
Bracton Road ...	3 children, 14, 10½, and 8 years	Sleeping, 750 cubic ft.	Back ante-room, 455 cubic ft.	295	Husband ill. Earns 30/- and gives wife 24/- per week. Rent 6/6. Place clean.	,,
Woods Place ...	4 children, 10 F, 9 F, 5 F, and 8 M.	Living and sleeping, 800 cubic ft.	Back room, 1st floor, 535 cubic ft.	265	A labourer at leather merchants. Earns about £1 a week. Place fairly clean.	,,
Marine Street ...	Mother and 3 children, 21 F, 18 F, 5 M.	Living and sleeping, 1400 cubic ft.	Back room, grd. floor, 648 cubic ft.	752	Husband, a stevedore, who lives apart from his wife, pays the rent of the room. The mother earns something by selling old clothes. The two girls earn 12/- each per week at a jam factory. This is a bad case of overcrowding.	,,
Gilhams Court ...	5 girls, aged 15, 14, 12, 10 and 8, and 1 boy, aged 5	Sleeping, 1350 cubic ft.	Attic room, 544 cubic ft.	806	Husband, a dock labourer, who, when in full work can earn 4/- a day, but owing to bronchitis, he can very rarely do a whole week's work. One daughter contributes 6/- per week. A lodger pays 3/- per week for one room. The rent of house is 8/- per week. The people are clean and tidy, but very poor.	,,
Gilhams Court...	Man, wife and 2 children, aged 14 F., 9 M.	Sleeping, 1050 cubic ft.	Attic, 558 cubic ft.	492	Husband a dock labourer, steady, making a precarious living, the amount earned in the previous week being 7/6. Wife works at a pickle manufactory at 9/- per week. Rent is 9/-, and lodger pays 5/- per week. The attic is clean, but the bedclothes are scanty, and not very clean.	,,
Gilhams Court...	Father and 3 sons, ages 18, 10, and 9 years	Sleeping, 1050 cubic ft.	Attic, 558 cubic ft.	492	Father, a labourer at Hayes Wharf, earns 28/- per week. The son, aged 18 years, is out of work. A fourth son, aged 23 years, sleeps in the first floor front (he is also out of work), and the mother in the first floor back. The attic is clean, but the bedclothes are scanty and dirty. The house in general is dirty and untidy.	,,
Staples Rents ...	4 girls, aged 10, 7, 5 and 3 years, and 1 boy aged 9 years	Sleeping, 900 cubic ft.	Attic, 550 cubic ft.	350	Husband works at Peek, Frean & Co.'s, and earns 21/- per week. Rent, 7/- per week. People are clean and tidy, but poor.	,,
Staples Rents ...	Man, wife and 5 children, ages 11 M., 9 F., 6 F., 4 F., 1½ F.	Sleeping, 1500 cubic ft.	Room, 1st floor, 1218 cubic ft.	282	Rent, 7/- per week. People fairly clean and tidy. In this case the overcrowding could be abated by using the attic, which is at present unoccupied. The mother objects to using it as she states it is not healthy for the children. It would not be so unhealthy as sleeping in the way they are at present.	,,
Turners Retreat	3 girls, aged 14, 10 and 8 years, and 2 boys, 14 and 9 years	Sleeping, 1200 cubic ft.	Room, 1st floor, 770 cubic ft.	430	The people are very poor, but the house and contents are fairly clean for the neighbourhood.	,,

Bacteriological Laboratory.

As stated in last year's report the Council decided to fit up a bacteriological laboratory at an estimated cost of £150. This came into working order at the beginning of 1902. Notices of its establishment with outfits for diphtheria swabs, were sent to all medical men practising in the Borough with an intimation that all examinations would be done free of cost. During the year there were in all 522 specimens of various sorts examined in the laboratory. These included 412 throat specimens for diphtheria, 38 specimens of blood for enteric fever, 67 specimens of sputum for tubercle bacilli and 5 various which included pus for gonococci, pneumococci, &c., Of the throat specimens, 153 were sent in by general practitioners and 259 were taken by myself.

I regret that the general practitioners do not make more use of the laboratory for suspicious cases of diphtheria, since a considerable number of cases are still sent to hospital not suffering from the complaint, and on the other hand many throats are passed over as tonsilitis, which are really mild cases of diphtheria, and are not discovered till either the patient or his friends develop serious symptoms. In no disease is bacteriological examination more important and useful than diphtheria, since the symptoms vary extremely in severity, and I feel quite convinced that, as in many other infectious diseases, it is the mild unrecognised cases as well as the healthy "contacts" harbouring diphtheria bacilli in their throats, that keep the disease "alive" in a district, and that insanitary conditions only predispose to, but do not originate attacks.

All the specimens of sputum sent for tubercle bacilli came from practitioners, but now that the voluntary notification of phthisis has been adopted, I anticipate a much larger number, and up to date of writing this anticipation has been realised. 21 gave a positive, and 46 gave a negative result.

Nearly all the specimens of blood sent in for enteric fever cases came from general practitioners. 17 gave a positive, 21 gave a negative reaction.

There would no doubt have been a much greater number of specimens sent, only fortunately the cases of enteric fever, like diphtheria, were much fewer in number during 1902 than 1901. The specimens under the heading "various" were all supplied by general practitioners.

Temporary Shelter.

The Council last year obtained the permission of the Local Government Board to erect a shelter at their depot in Spa Road, for the members of families displaced from their homes during disinfection.

The building is completed, and is now being furnished, and we hope to have it opened by July of the present year.

Four complete tenements of three rooms each, with scullery, etc., have been erected in a two-storey building with an additional tenement in the same building for a caretaker.

The walls have been made of sufficient thickness to allow of a third storey being added in case of need.

Each tenement has a separate entrance from the outside, and between three there is a common yard; the fourth has a small yard to itself, and is so arranged that in the case of any particular infectious disease the family can be completely isolated.

From the caretaker's apartments a common passage runs through the centre of the building, and communicates with each of the tenements by a door which is ordinarily kept locked.

While not luxuriously, the shelter is comfortably fitted up, and when furnished and in working order will be a very valuable adjunct to our sanitary equipment.

Workshops.

The following is a copy of the memorandum of the Home Office, drawing attention to the new duties which devolve upon the District Council through the coming into force of the Factory and Workshop Act, 1901.

HOME OFFICE.

FACTORY AND WORKSHOP ACT, 1901.

DUTIES OF LOCAL AUTHORITIES.

ENGLAND AND WALES.

The Factory and Workshop Act, 1901, which consolidated with amendments all previous Acts relating to factories and workshops, made considerable alterations in and additions to the duties of District Councils in regard to factories, workshops and workplaces. The present memorandum describes the duties of District Councils as extended by that Act.

"District Council" includes for the purposes of the Act—

(i.) Councils of municipal boroughs, including county boroughs.
(ii.) Councils of urban districts.
(iii.) Councils of rural districts.

In London, subject to certain exceptions,† "District Council" means the Court of Common Council and the Councils of the Metropolitan Boroughs.

District Councils have duties in regard to each class of places named above, factories, workshops and workplaces. It will be useful therefore at the outset to state briefly what is included in these terms by the Act.

† See page 23.

Definitions.

Factories include (1) all places in which mechanical power is used in aid of the manufacturing processes; and (2) all places, whether mechanical power is used or not, in which the industries specified in Part I. of Schedule VI. to the Act are carried on (that is, print works, bleaching and dyeing works, earthenware works, lucifer match works, percussion cap works, cartridge works, paper staining works, fustian cutting works, blast furnaces, copper mills, iron mills, foundries, metal and india rubber works, paper mills, glass works, tobacco factories, letterpress printing works, bookbinding works, flax scutch mills, electrical stations).*

Workshops include—

(1) The places specified in Part II. of Schedule VI. (that is, hatworks, ropeworks, bakehouses, lace warehouses, ship-building yards, quarries, pit banks of metalliferous mines, dry cleaning works, carpet beating works, and bottle washing works),† unless mechanical power is used and they are in consequence factories within the meaning of the Act.

(2) Any other premises (not being factories) in which manual labour is exercised by way of trade or for purposes of gain in or incidental to the making, altering, repairing, ornamenting, finishing or adapting for sale of any article and to or over which the employer of the persons working there has the right of access or control.

(3) Any workplace (termed in the Act "tenement workshop") in which "with the permission of or under agreement with the owner or occupier two or more persons carry on any work which would constitute the work-place a workshop if the persons working therein were in the employment of the owner or occupier." These were included for the first time by the Act of 1901. Previously they were partially or wholly excluded because some or all of the persons working there were not employed but worked on their own account. Instances of tenement workshops are (*a*) the Sheffield file-cutting shops, where file-cutters work on their own account, with or without other persons to help them, at stocks hired by them from the owner or occupier of the shop; (*b*) journeymen tailors' workshops where journeymen tailors work on their own account, with or without other persons to help them, each hiring a separate "sitting" or place to work at from the owner or occupier of the workshop. These are now deemed to be workshops within the meaning of the Factory Act.

*Laundries** do not come within the definitions of "factory" and "workshop"; but under sec. 103 of the Act, they are so far as sanitation and means of escape from fire are concerned to be treated as factories if mechanical power is used; if mechanical power is not used, as workshops. Laundries however which are worked by inmates of a prison, reformatory school, industrial school or any institution subject to Government inspection under other Acts or by inmates of a *bona fide* religious or charitable institution, or by members of the same family dwelling on the premises, are excluded from the Act, if the inmates of the prison, etc., or the members of the family work the laundry by themselves or with the assistance of not more than two persons from outside.

Factories and workshops belonging to or in the occupation of the Crown are excluded from the jurisdiction of the District Council: the powers which in other factories and workshops belong to the Council are in them exercised by the Inspector of Factories (sec. 150.)

"Workplace" is not defined in the Factory Act, but the term is used in the several Public Health Acts, and in a case under sec. 38 of the Public Health (London) Act, 1891, where the phrase "factory, workshop, and workplace" occurs, it was held that the word "workplace" is not to be limited to places where something is being manufactured or made, but includes any "place where work is done permanently, and where people assemble together to do work permanently of some kind or other." It is therefore a word of wider signification than the word "workshop." In the case in question a stable and stable yard where men were employed as cab cleaners and horse keepers was held to be a workplace. Similarly the Secretary of State has been advised that the kitchens of restaurants, &c., though they are not workshops, come within the meaning of the term "workplace."

Bennett v. Harding, 1900, 2 Q.B. 397.

Factories.

In the case of factories the duties of a District Council are few. The Council is charged with the duty of seeing that every factory in its district is provided with means of escape in case of fire; and also has special duties in regard to bakehouses and domestic factories. These duties, which apply also in the case of workshops, will be further referred to below. Another duty in regard to factories, though not arising under the Factory and Workshop Act, is (in districts where Part III. of the Public Health Acts Amendment Act, 1890, is in force) the enforcement of the requirement in sec. 22 of that Act as to the provision of suitable and sufficient sanitary conveniences, and (elsewhere) the enforcement of sec. 38 of the Public Health Act, 1875.

Workshops and Workplaces.

In regard to workshops and workplaces, District Councils have important duties, which may be classified under four heads: (1) the sanitary condition of workshops and workplaces generally; (2) provision of means of escape from fire in workshops; (3) special sanitary regulations for bakehouses; (4) home work.

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† The definitions of these places in the schedule should be consulted.

* Laundries on factory or workshop premises form part of the factory or workshop and are subject to all the provisions of the Act.

Sanitation (secs. 2, 3, 7 and 8).

The District Council is made the authority responsible for the sanitary condition of the workshops and workplaces in its district, while the Factory Inspector is responsible for the sanitary condition of factories. "Sanitary conditions" include (*a*) cleanliness, (*b*) air space, (*c*) ventilation, and (*d*) drainage of the floors. For these purposes the provisions of sec. 91 of the Public Health Act, 1875, apply to all workshops and workplaces, and are supplemented by certain additional provisions in the Factory Act. It should be noted that the other sanitary provisions in Part I. of the Act, viz., with regard to temperature and sanitary conveniences (secs. 6 and 9) are not brought under the law relating to public health, and will therefore be enforced by the Factory Inspectors.

The requirements of the Act in the matters above-mentioned, which it is the duty of a District Council to enforce, are as follows:—

(a) *Cleanliness* (sec. 2).—Every *workshop and workplace* must be kept in a cleanly state and free from effluvia, and if not so kept may be dealt with by the Council as a nuisance under sec. 91 of the Public Health Act, 1875.

If the medical officer of health, or the inspector of nuisances, certifies that it is necessary for the health of the persons employed that a *workshop*,* or any part of a workshop, should be limewashed, cleansed or purified, the District Council may give notice to the owner or occupier of the workshop to carry out such limewashing, cleansing or purifying as the case may require, within a time specified in the notice. If the person to whom the notice is addressed fails to comply with it in the time specified, he will be liable to a penalty of 10s. for each day during which the default continues, and the Council may themselves undertake the work and recover the expense from him in a summary manner.

(b) *Air space* (secs. 2, 3).—*Workshops and workplaces* must not be overcrowded while work is carried on so as to be dangerous or injurious to the health of the persons employed, and a workshop or workplace which is overcrowded may be dealt with as a nuisance under sec. 91 of the Public Health Act. A *workshop* is deemed to be owercrowded unless in each room at least 250† cubic feet of air space (or during overtime‡ 400) are allowed for each person employed in the room, and the Act requires a notice to be affixed in the workshop specifying the number of persons who may be employed in each room of the workshop.

(c) *Ventilation* (secs. 2, 7).—Every *workshop and workplace* must be ventilated in such a manner as to render harmless as far as practicable any gases, vapours, dust or other impurities generated in the course of the work that are a nuisance or injurious to health. Any workshop or workplace not so ventilated may be dealt with as a nuisance under sec. 91 of the Public Health Act.

This general provision is supplemented in the case of *workshops* by a special requirement introduced for the first time by the Act of 1901, that in every room in a workshop sufficient means of ventilation must be provided and sufficient ventilation maintained, and where a standard of sufficient ventilation has been prescribed by the Secretary of State (as he has now power to do) for any class of workshops, that standard must be observed. Workshops, however, where men only are employed are excluded from the operation of this requirement. Any workshop where this requirement is contravened may be dealt with as a nuisance.

In *workshops* where dust, gas, or other impurities are generated and inhaled by the workers to an injurious extent, the Factory Inspector has power to require the provision of a fan or other mechanical means for preventing such inhalation. If in any case the Council are of opinion that this power could be usefully employed, they should refer it to the Inspector of the district.

(b) *Drainage of floors* (sec. 8).—A provision introduced for the first time by the Act of 1901, requires that in every *workshop or part of a workshop* in which any process is carried on which renders the floor liable to be wet to such an extent that the wet is capable of being removed by drainage, adequate means shall be provided for draining off the wet. A workshop not so drained may be dealt with as a nuisance under section 91 of the Public Health Act. This provision, however, does not apply to workshops in which men only are employed.

(e) *Sanitary accommodation*.—In districts where Part III. of the Public Health Amendment Act, 1890, is in force, every building used as a *workshop or manufactory*, or where persons are employed or intended to be employed in any trade or business, must be provided with sufficient and suitable accommodation in the way of sanitary conveniences (see. 22). On a report from their surveyor that this requirement is not observed in the case of any building, the Council may serve a written notice on the owner or occupier requiring him to make such alterations or additions as may be necessary for the purpose.

In districts where Part III. is not in force, the Council may deal with the matter under sec. 38 of the Public Health Act, 1875, subject to the observance of the requirements of any Order made by the Secretary of State under sec. 9 of the Factory Act.

(ii.) *Safety from fire* (secs. 14 and 15).

It is the duty of a District Council to see that every factory and workshop in its district is provided with sufficient means of escape in case of fire.

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* In London, this power extends also to domestic factories and to workplaces:—Public Health (London) Act, 1891, sec. 25.

† Under sec. 3 (3) of the Act the Secretary of State has power to alter this amount in the case of a workshop, not being a domestic workshop, which is occupied by night as a sleeping apartment. By his Order of 17th January, 1902, the amount in such cases is increased to 400 cubic feet.

‡ "Overtime" here means overtime under secs. 49 to 53 and sec. 103 (2) of the Factory Act.

Briefly, the provisions which are to be enforced by District Councils are now as follows:—

(1) Every factory of which the construction was commenced after 1st January, 1892, and every workshop of which the construction was commenced on or after 1st January, 1896, must, if more than 40 persons are employed, be furnished with a certificate from the District Council that it is provided with such means of escape in case of fire for the persons employed therein as can reasonably be required in the circumstances of the case. (The provision in the previous Acts which limited the requirements to the storeys above the ground floor is now repealed.) Before giving the certificate the Council must have the factory or workshop examined, and must satisfy itself that means of escape are provided as required by the Act. Any such factory or workshop not furnished with a certificate will be deemed not to be kept in conformity* with the Act. If a case come to the knowledge of the Council in which any such factory or workshop is being used as a factory or workshop without the Council's certificate, it will be open to the Council either to take proceedings itself against the occupier or to report the matter to the District Inspector of Factories with a view to proceedings being taken by him.

As questions sometimes arose under the previous Acts as to what were the means of escape which had been passed by a Council as satisfactory, the Act now requires that the certificates given by the Council must specify in detail the means of escape provided. It also requires that the means of escape provided shall be maintained in good condition and free from obstruction.

It will doubtless be convenient for the Council when considering the plans of any new building which is intended to be used as a factory or workshop to examine the means of escape proposed to be provided, and also to see that doors are made to open outwards, where required by section 16 (2).

(2) In the case of all other factories and workshops in which more than 40 persons are employed, the District Council is charged with the duty of ascertaining from time to time whether they are provided will such means of escape from fire as can reasonably be required. In the case of a factory or workshop not so provided, the Council is required to serve on the †*owner* a notice specifying the measures necessary to be taken for providing such means of escape, and requiring him to carry them out within a specified time. If the owner disagrees with the Council as to the measures required, the dispute is to be determined by arbitration in the manner provided by the Act (sec. 14 (3); Sch. I.).

For the purposes of the fire provisions the whole of a tenement factory‡ or workshop is to be counted as a single factory or workshop, and the owner is to be substituted for the occupier.

(3) In addition to these powers, a new and important power is given to District Councils by sec. 15 of the Act to make bye-laws providing for means of escape from fire in the case of any factory or workshop. The provisions of the Public Health Act, 1875, with regard to the making of bye-laws, are to apply to the making of these bye-laws, and they will accordingly require to be confirmed by the Local Government Board before they can come into operation.

(iii.) *Bakehouses.* (Secs. 97–102.)

Bakehouses are either factories or workshops within the meaning of the Act according as mechanical power is or is not used in aid of the processes carried on. They are, therefore, subject to the general provisions of the Act; and the same powers will be exercised by District Councils in regard to bakehouses that are exercised by them in regard to factories and workshops.

A general power is also given (sec. 98) to the Council in the case of any bakehouse which is in such a state as to be on sanitary grounds unfit for use or occupation as a bakehouse to bring the case before a court of summary jurisdiction; and the Court may thereupon impose a fine and order means to be adopted for the purpose of removing the ground of complaint.

In addition to the general regulations of the Act, special sanitary regulations for bakehouses are contained in the Act. These regulations require that—

(1) A bakehouse must not contain or communicate directly with a water-closet, earth-closet, privy or ashpit; a cistern supplying water to a bakehouse must be separate from any cistern supplying water to a water-closet; and a sewage pipe or drain must not have any opening in the bakehouse.

(2) All inside walls and ceilings of rooms and all passages and staircases must be lime-washed every six months, or coated with three coats of paint or varnish every seven years and washed with hot water and soap every six months.

(3) Places on the same level with a bakehouse and forming part of the same building must not be used as sleeping places unless effectually separated from the bakehouse by a partition from floor to ceiling and provided with an external glazed window 9 square feet, of which 4½ feet must be made to open.

These regulations will in the case of all *retail* bakehouses§ be enforced by the District Council (sec. 102); a "retail bakehouse" meaning any bakehouse or place in which no mechanical power is used and the bread, biscuits, or confectionery baked in which are sold not

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* The penalty in the case of a factory or workshop not kept in conformity with the Act is a fine not exceeding £10, and in the case of a second or subsequent offence within two years from the last conviction for the same offence, not less than £1. The Court may order means to be adopted to bring the factory or workshop into conformity with the Act.

† "Owner" has the same meaning as under the Public Health Act, 1875, sec. 4.

‡ Where several factories are situated in the same building and are supplied with power by the owner, they constitute a "tenement factory."

§ In London, these provisions will be enforced by the Borough Councils in every bakehouse (whether retail or not) which is a workshop:—Public Health (London) Act, 1891, sec. 26.

wholesale, but by retail, in some shop or place occupied with the bakehouse. The medical officer of health is, for the purpose, given all the powers of entry, inspection, taking legal proceedings, and otherwise of a Factory Inspector.

Further, new duties of great importance are placed by sec. 101 of the Act on District Councils in regard to *underground bakehouses*:—

(i.) The Act provides generally that no underground bakehouse (whether factory or workshop) shall be used as such unless it was so used on the 17th August, 1901.

(ii.) Moreover, after 1st January, 1904, it will not be lawful to use any underground bakehouse (whenever established) unless the Council are satisfied that it is suitable for the purpose in regard to construction, light, ventilation, and in all other respects, and have given it a certificate of suitability. This provision will apply to all bakehouses, whether factories or workshops and whether wholesole or retail. Every bakehouse will be deemed an underground bakehouse if any room used for baking, or for any process incidental thereto, is so situate that the surface of the floor is more than 3 feet below the surface of the footway of the adjoining street, or of the ground adjoining or nearest to the room. An underground bakehouse used in contravention of these provisions will be deemed to be not kept in conformity with the Act.

In cases of contravention of the provisions of sec. 101, it will be the duty of the Council to take proceedings when the place is a retail* bakehouse. In other cases it will be open to them either to take proceedings themselves or to report the matter to the District Inspector with a view to proceedings being taken by him; but, as the duty of certification under the section rests with the Council, it will probably be most convenient that they should take proceedings themselves in all cases of contravention which come within their knowledge.

(iv.) *Home Work*. (Secs. 107–115.)

Very important powers of controlling the conditions under which certain classes of work are done in the homes of the workers were for the first time given to District Councils by the Act of 1901. These powers aim at the prevention of home work being done (1) in dwellings which are injurious or dangerous to the health of the workers themselves, *e.g.*, through overcrowding, want of ventilation, or other insanitary conditions; (2) in premises where there is dangerous infectious disease.

The provisions of the Act are as follows:—

(1) *Unwholesome dwellings*.—If any place in which home work is being done in connection with the business of a factory or workshop is injurious or dangerous to the health of the persons working there, the Council may, by notice to the occupier of the factory or workshop, or to any contractor employed by such occupier, prohibit him from giving out work to be done in that place.

The power may be exercised also in the case of work given out from places other than factories or workshops, *e.g.*, laundries, warehouses, shops, &c.

The power does not apply to all classes of home work, but only to those which may be specified by orders of the Secretary of State. Two Orders have been made (the "Home Work Orders of 11th December, 1901, and 14th July, 1902,") applying the power to the following classes of work:—

The making, cleaning, washing, altering, ornamenting, finishing, and repairing of wearing apparel, and any work incidental thereto;
The making, ornamenting, mending, and finishing of lace, and of lace curtains and nets;
Cabinet and furniture making, and upholstery work;
The making of electro-plate;
The making of files;
Fur-pulling;
The making of iron and steel cables and chains;
The making of iron and steel anchors and grapnels;
The making of cart gear, including swivels, rings, loops, gear buckles, mullin bits, hooks, and attachments of all kinds.
The making of locks, latches and keys.

(2) *Infected dwellings*.—If any inmate of a house in which home work is done is suffering from any infectious disease which is required by law to be notified to the local authority, the Council may, whether such inmate has been removed from the house or not, by order served on the occupier of any factory, workshop, or other place from which work is given out, or on any contractor employed by such occupier, prohibit him from giving out such work to any person living or working in the house, or a specified part of a house, during such time as the Council may fix. In an emergency, the power may be exercised by any two or more members of the Council acting on the advice of the Medical Officer of Health.

This power, like the last, does not apply to all classes of work, but only to such as the Secretary of State may fix. The classes of work in regard to which the power may be exercised have been fixed as follows:—

The making, cleaning, washing, altering, ornamenting, finishing, and repairing of wearing apparel, and any work incidental thereto;
The making, ornamenting, mending, and finishing of lace, and of lace curtains and nets;
Upholstery work; and
Fur pulling.

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* In London the duty belongs to the Borough Councils in the case of every bakehouse (whether retail or not) which is a workshop:—Public Health (London) Act, 1891, sec. 26.

(3) *Out-workers' lists.*—In order that the Council may be kept fully informed as to the places in its district in which home work is being done, occupiers of factories, workshops, or any place from which work is given out, and contractors employed by such occupiers are required, in regard to such classes of work as may be fixed by the Secretary of State, to keep lists showing the names and addresses of all persons employed by them, either as workmen or as contractors outside such factory, workshop or place, and the place where they are employed, and to send to the Council twice a year (viz., on or before the 1st February and the 1st August) copies of such lists. The form in which the lists are to be kept is prescribed by the Secretary of State in his Home Work Order of 11th December, 1901. Forms may be obtained from the Government printers.

In the event of any occupier failing to keep or to send such lists he will be liable to a fine of £2 for the first offence, and to a fine of £5 for a second or subsequent offence. Proceedings to recover the fine may be taken by the Council.

It will be the duty of the Council to have the lists so sent to them examined, and if the place of employment of any out-worker included in the list is in another district, to furnish his name and place of employment to the Council of that district.

The list required to be kept by the occupier or contractor will be open to inspection by any duly authorised officer of the Council; and the copies sent to the Council, and any particulars furnished to it by another Council, will be open to inspection by any of the Inspectors of Factories and Workshops.

The classes of work to which these provisions have been applied by the Secretary of State are the same as those enumerated above under the heading "*unwholesome dwellings.*"

Domestic Factories and Workshops.

In some cases it will be found that dwellings in which home work is done constitute a factory or workshop, in consequence of the employment by the occupier of the dwelling, or some part of it, of persons on work which comes within the definitions in the Act. Such places will be subject to the ordinary provisions of the Act with regard to factories and workshops. An important exception, however, is made for dwellings in which no mechanical power is used and the only persons employed are members of the same family dwelling there. These places (termed in the Act "Domestic Factories" and "Domestic Workshops") are exempted from many of the provisions of the Act.*

Domestic Factories are exempted from the provisions in the Act as to the sanitation of factories, and are made subject, so far as sanitary conditions are concerned, only to the provisions in sec. 2 (1) and sec. 3; *i.e.*, if not kept in a cleanly state, or not ventilated in such a manner as to render harmless, as far as practicable, any gases, vapours, dust or other impurities generated in the course of the work that are a nuisance or injurious to health, or so overcrowded while work is carried on as to be dangerous or injurious to the health of the workers, it is liable to be dealt with as a nuisance under sec. 91 of the Public Health Act, 1875. A domestic factory will, for the purpose of this provision, be deemed to be overcrowded unless in each room at least 250 cubic feet of air-space (or during overtime 400) are allowed for each person employed in the room. These provisions will be enforced by the Council.

Domestic workshops are exempted from the special provisions as to means of ventilation and the drainage of floors, but are otherwise, so far as sanitary conditions are concerned, to be treated as ordinary workshops.†

Any domestic factory and workshop, however, in which any work is carried on that has been certified by the Secretary of State as dangerous, is subject to all the provisions of the Act as though it were an ordinary factory or workshop.

Administration.

Powers of District Council.—For the purpose of their duties with respect to *workshops and workplaces* under the Act, and under the Public Health Acts, the District Council and their officers are given the same powers of entry, inspection, taking legal proceedings, or otherwise as a Factory Inspector possesses. The powers of an inspector are contained in sec. 119 of the Act, and include the power to enter, inspect, and examine, to take a constable in cases in which there is reason to apprehend any serious obstruction, to examine the persons found therein, to require the production of documents, &c. In cases where proceedings are taken under the Factory Act, and not under the Public Health Acts, special attention should be paid to the provisions of sec. 146 of the Act with respect to legal proceedings.

Register of Workshops.—The Act placed the new duty on every District Council to keep a register of all workshops situate within its district (sec. 131). To assist the Council in preparing such a register, instructions were given, after the passing of the Act, to the Factory Inspectors to allow the District Council to make copies of the register of workshops kept by the Inspector, and the Council will also continue to receive (sec. 127) from the Inspector any notices of occupation of a workshop which may be sent to him. The Council should not, however, depend exclusively on these sources of information for compiling their register, but should take steps, through their own officers, to ascertain what workshops are situate in their district, with a view to making the register as complete as possible.

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* The only classes of factories which can come within the definition of "Domestic Factory" are those specified in Part I. of the Sixth Schedule to the Act. *See* p. 1, above.

† Domestic workshops in which the work is only done at irregular intervals and does not furnish the whole or principal means of living to the family, or in which certain classes of work of a light character (viz., straw-plaiting, pillow-lace making and glove making) are carried on are wholly exempt, except so far as they come within the term "workplace."—*See* sec. 114.

Duties of Medical Officer of Health.—Under sec. 132 of the Act, the Council's Medical Officer of Health is required for the future in his annual report to the Council to report specifically on the administration of the Act in workshops and workplaces so far as the matters under the charge of the Council are concerned, and to send a copy of his report, or of so much of it as deals with this subject, to the Secretary of State. The matters which the report should specially deal with are indicated in the instructions issued by the Local Government Board to Medical Officers of Health in England and Wales.

It is also the duty of the Medical Officer, if he finds any woman, young person, or child employed in a workshop *in which no abstract of the Act is posted up*, to inform the District Inspector of Factories in writing.

Matters referred to Council by Factory Inspectors.—The Factory Inspector will, on finding in a factory or workshop, any act, neglect, or default in relation to a drain, water-closet, earth-closet, privy, ashpit, water supply, nuisance, or other matter which is punishable or remediable under the Public Health Act, but not under the Factory Act, give notice to the Council of such act, &c.; and it will then be the duty of the Council to make inquiry into the matter, take such action as may seem proper, and inform the Inspector of the proceedings taken. If proceedings are not taken by the Council within one month, the Inspector is authorised to take the same proceedings as the Council might have taken, and to recover from the Council the expenses incurred by him which have not been recovered from any other person, and have not been incurred in any unsuccessful proceedings (sec. 5).

The Inspector may take similar action for the purpose of enforcing in a factory or workshop the provision of means of escape in case of fire.

In the event of a District Council failing generally to carry out the provisions of the Act and the Public Health Acts with regard to factories, workshops, and workplaces, the Secretary of State may authorise a Factory Inspector during such time as he may fix to enforce those provisions. An Inspector so authorised will be entitled to recover from the Council any expenses incurred by him which are not recovered from any other person (sec. 4).

General.—It is provided that the powers conferred by the Act on District Councils shall be in addition to and not in substitution for any other power which they may possess.

Application to London.

The duties of District Councils as described above will be discharged in London by the Metropolitan Borough Councils, and in the City, by the Court of Common Council, with the following exceptions:—

(1.) The duties in regard to the provision of means of escape in case of fire will be discharged by the London County Council.

(2.) For the references to sec. 91 of the Public Health Act, 1875, should be substituted references to sec. 2 of the Public Health (London) Act, 1891.

(3.) For the references on pp. 2 and 4 to sec. 22 of the Public Health Act Amendment Act, 1890, should be substituted a reference to sec. 38 of the Public Health (London) Act, 1891, which applies throughout the County of London, and requires that every factory, workshop, or workplace shall be provided with sufficient and suitable accommodation in the way of sanitary conveniences. The Metropolitan Borough Councils are charged with the duty of enforcing this provision.

(4.) The Metropolitan Borough Councils have special powers under secs. 25 and 26 of the Public Health (London) Act, 1891. *See* notes on pp. 3, 5 and 6 above.

SCOTLAND.

The foregoing memorandum will apply in all particulars to Scotland, subject to the following modifications:—

(1) For the references to the Public Health Act, 1875, should be substituted references to the Public Health (Scotland) Act, 1897, and in particular for references to secton 91 of the former Act, references to section 16 of the latter Act. It should be noted that the word "factory" in sub-section 8 of the latter section includes "workshop" and "workplace"—see definition of "factory" in section 3 of the Act.

(2) For "District Council" should be substituted "Local Authority," as defined in section 12 of the Act of 1897.

(3) For "Medical Officer of Health" and "Inspector of Nuisances" should be substituted "Medical Officer" under the Act of 1897, and "Sanitary Inspector," as defined in section 3 of that Act.

(4) For "Local Government Board" should be substituted "Local Government Board for Scotland."

(5) For the references to section 38 of the Public Health Act, 1875, should be substituted a reference to section 29 of the Public Health (Scotland) Act, 1897.

IRELAND.

The memorandum will apply in all particulars to Ireland, subject to the following modifications:—

(1) For the references to the Public Health Act, 1875, should be substituted references to the Public Health (Ireland) Act, 1878, and in particular for references to section 91 of the former Act, references to section 107 of the latter Act.

(2) The expression "Medical Officer of Health" includes "Medical Superintendent of Health."

(3) For "Local Government Board" should be substituted "Local Government Board for Ireland."

February, 1903.

It will be seen from this memorandum that the duties are extremely onerous and important. Not only have all these workshops to be regularly inspected, but special registers of workshops and workplaces, slaughterhouses, and bakehouses, have to be kept up to date, otherwise it is impossible to keep a record of what is being done to perform the duties imposed by the Act. It is probable that when it comes into full working order we shall have to ask for a special female inspector for factories and workshops, and an extra clerk to keep the registers. There are at present 966 workshops and workplaces on the register, but this probably does not represent more than two-thirds of the actual number in the district, since fresh places are constantly being discovered during house-to-house inspection. In these there are employed 4,619 men, 2,313 women, 64 boys and 37 girls. In the annexed list will be found the nuisances which were discovered in the course of inspection.

Walls and ceilings of workplaces cleansed	33
Workshops supplied with water	2
Means of Ventilation improved	10
Roof repaired	1
W.C. accommodation provided or reconstructed	44
W.C. flushing apparatus repaired	11
W.C.'s repaired, ventilated or cleansed	32
W.C. pans cleansed or new pans fixed	13
W.C. connections repaired	3
W.C.'s supplied with water or existing supplies improved	12
Urinals reconstructed, cleansed or repaired	7
Urinals supplied with water	3
Lavatories cleansed	4
Drains reconstructed, cleansed, repaired, or ventilated	22
Drains trapped	5
Waste pipes disconnected from drain	1
Gutters and stackpipes repaired or fixed	7
Cisterns cleansed or covers provided	3
Accumulations of refuse removed	9
Dung receptacle provided or repaired	14
Floor repaired	11
Yard paved or paving repaired	14
Yard drained	5
Yard cleansed	5
Miscellaneous	19

The total number of primary inspections during the year was 271. This does not include re-inspections. The number of intimation notices served was 108, and, in default, there were statutory notices served in 26 cases. It was only necessary to take out summonses in the following cases.

Premises and Date of Hearing	Order of Council.	Fines and Costs.
June 16th, 1902, Messrs. White, Cottell & Co., 101-3, Long Lane	Render premises fit for habitation (Intimation, October 3rd, 1900. Statutory, December 12th, 1900. Magistrate's Order, June 6th, 1901)	£11 10s., and 2s. costs.
Do. do. summons withdrawn, July, 1902	Premises vacated	£5 5s. costs.
Summons withdrawn, (premises closed) March, 1902; 104, Bermondsey Street	Provide suitable and sufficient accommodation in the way of sanitary conveniences with separate accommodation for each sex to the extent of at least one w.c. to each 20 employees. Provide that water for drinking purposes cannot be drawn from a cistern which is in direct communication with w.c. (Intimation, July 22nd, 1901. Statutory, October 7th, 1901)	12s. 6d. costs.
33, 47 and 49, Tooley Street (summonses withdrawn). Notices complied with, June, 1902	Provide premises with suitable and sufficient accommodation in the way of sanitary conveniences for persons employed. (Intimations, December 18th and 23rd, 1901, Statutory, January 30th, 1902)	2s. costs.

It is difficult to give a general idea of the condition of workshops and workplaces during the year 1902, since there was such a large number to be inspected that it was impossible to get them all measured up, with full notes as to the light, ventilation and air space. A new register containing these particulars has been adopted so that it will be possible to give a detailed account of every workshop.

Ventilation is one of the most difficult subjects to deal with, and one which requires constant supervision, since means of ventilation should be provided that cannot be interfered with by the workpeople themselves, and will, at the same time, maintain a regular temperature. The most common means of ventilation found are, of course, windows and fireplaces, but the former are generally closed so that they are practically useless as a means for a constant supply of fresh air. They are seldom opened except when the Inspector calls. In many cases the hands complain of draughts, and the ventilation is therefore largely dependent on the state of the weather. Where possible Tobins' Tubes or some such method has been recommended. It is difficult, however, to enforce the adoption of these in some of the small workshops in private houses.

It will be seen from Secs. 107 to 115 that important powers are given as regards home work. These powers aim at the prevention of home work being done in unsuitable rooms, or in any place where infectious disease has occurred. Occupiers of any factory or workshop or any place where work is given out, and the contractors employed by such occupiers are required to keep lists, showing the names and addresses of all persons employed by them as out-workers, and to submit these lists to the Council twice a year. On the examination of these lists, if it is found that the out-workers live in any other district, the names and addresses are immediately forwarded to the Sanitary authority of that district, and we receive similar lists from other Boroughs. In this way we have been notified of 198 workplaces where work is received from without the district. We have also obtained particulars of 54 workplaces which receive work from firms within the district, making a total of 252 places where out-work is done.

These have been inspected in the general inspections, and in no case has any infectious disease been found in these. The notices served on these workplaces for home work are included in the general list of nuisances remedied.

These powers do not apply to all classes of home work, but to those set out on page 19.

The following is a list of workshops and workplaces at present on the register :—

TRADE.	PEOPLE EMPLOYED. No.	Men.	Women.	Boys.	Girls.
Army Accoutrement and Bedding Makers	10	1	12	—	—
Bottlers	3	12	3	2	—
Blouse Makers ...	11	—	44	—	—
Box Makers	4	14	3	—	—
Buttonhole Makers ...	6	—	6	—	—
Basket Makers ...	9	4	9	—	—
Brush Makers ...	35	58	32	—	—
Blacksmiths... ...	8	31	—	—	—
Bootmakers	30	125	4	—	—
Builders	19	97	—	1	—
Cork Merchants and Cork Cutters	7	22	37	—	—
Cabinet Makers ...	3	11	4	—	—
Coopers	12	77	—	—	—
Carmen, Stables ...	70	548	—	1	—
Confectioners ...	11	99	201	—	—
Collar Makers ...	8	1	6	—	5
Curriers	5	50	—	—	—
Chemists and Druggists	3	36	17	—	—
Carpenters	14	21	—	—	—
Coffee Houses and Dining Rooms	3	8	10	—	—
Dressmakers ...	62	1	110	—	—
Drapers	5	15	50	—	—
Engineers	13	47	—	—	—
Farriers	6	30	—	—	—
Fur Pullers	7	10	22	—	—
Fish Curers	7	47	—	—	—
Flour and Grain Stores	12	109	—	—	—
Harness Makers ...	6	22	—	—	—
Hop Factors ...	13	74	—	—	—
Helmet Makers ...	3	118	70	18	15
Leather Merchants and Workers	53	320	34	1	—
Leather Dressers ...	29	257	6	2	—
Laundries	46	4	161	1	—
Mantle Makers ...	12	3	61	—	—
Milliners	5	—	27	—	—
Offices, Wharves, and Warehouses	25	529	17	—	—
Pork Butchers ...	3	9	—	—	—
Paper Bag Makers ...	19	3	23	—	—
Picklers	5	6	16	2	—
Provision Merchants	16	184	70	—	—
Potato Warehouses ...	3	29	1	—	—
Picture Frame Makers	4	26	10	—	—
Rag Merchants ...	8	76	243	8	—
Rope Makers ...	5	68	3	4	—
Saddlers	3	6	—	—	—
Staywork	5	—	5	—	—
Shirtwork	24	73	561	—	—
Sack Makers ...	16	13	38	—	—
Smith's Shops ...	5	9	—	—	—
Slate Merchants ...	3	30	—	—	—
Tie Makers	10	—	14	—	—
Tailors	9	13	27	—	—
Timber Merchants ...	5	17	—	2	—
Tarpaulin Makers ...	5	28	20	—	—
Wine Merchants ...	8	47	2	—	—
Wheelwrights ...	18	92	—	1	—
Whipmakers ...	5	43	4	—	—
Woodchoppers and Firewood Merchants	19	25	57	—	—
Wool Clippers ...	7	3	7	—	—
Undertakers ...	5	15	—	—	—
Various	181	1003	266	23	17
Totals ...	966	4619	2313	64	37

Food and Drugs.

In Tables VIII. and IX. of Appendix will be found particulars of the action taken under the Food and Drugs Acts. While it is most important so see that the articles of diet in commonest use are wholesome and unadulterated, it is also important to see that the drugs used are good. Owing to the large quantities of many of the drugs required for analytical purposes it is in practice found difficult to administer this part of the Act, and the purchases have been confined to a few of the commonest drugs. For a proper quantitative analysis of paregoric about 6 ozs. would be required, and for a qualitative examination 2 ozs. This means the purchase of three times this amount, which would at once excite suspicion, and would naturally prevent a fraud being perpetrated on the Inspectors. This applies to most drugs.

373 samples of milk were taken during 1902, and of these, 324 were genuine, and 49, or 13% adulterated to such an extent as to require prosecution. The commonest adulteration of milk consists in the addition of water or the abstraction of cream. Of the 324 genuine samples, 234 were just up to or a little above the minimum standard required by the Board of Agriculture. The following shows the statements of the Public Analyst regarding the remaining 90 genuine samples:—

Genuine, good quality	33	samples
,, rich in fat...	25	,,
,, of rich quality	6	,,
,, of poor quality	16	,,
,, of very poor quality	10	,,

In the 26 marked "poor" and "very poor" the milk was barely up to, or in some cases slightly below the standard, but not sufficient to demand prosecution. From these figures it is evident that only 64 out of 373 samples of milk taken can be considered of good quality such as one would expect from healthy cows in the country milked at proper intervals, the remaining 260 having the quality of the minimum standard. The minimum standard of the Board of Agriculture, viz., 3 per cent. fat and 8·5 per cent. solids, is the very lowest quality which can be supposed to be genuine, and has been arrived at by an analysis of an immense number of samples, the average of the poorest milks being taken as the minimum. This is done so as to avoid a possible injustice to any milk vendor who sells a poor quality milk. It is very evident, however, it allows an large amount of adulteration to take place which cannot be touched by the law in its present form.

I am of opinion that this standard could be raised without doing any injury to the industry, and a great deal of good to consumers.

It is the custom now for the retailer to protect himself behind a warranty, and we certainly require some legislation which will enable authorities to go behind this—trace the milk back, and punish the original offender.

About 50 per cent. of the poor people in Bermondsey use cow's milk, the remainder using condensed milk. Of those using the latter I am safe in saying that 90 per cent. use condensed skim milk of the very cheapest brand, ranging from 2d. to 2½d. a tin, as against 5½d. for the better brands. The whole milk supply of the poor requires investigation, and any legislation which would improve the quality of cows' milk and *prohibit* the importation of condensed skim milk, and the sale of fresh skim milk, would be a great boon to them and the health of the community at large.

Of the other articles of food which are adulterated, butter comes next highest, but none of them hold the important place of milk, since during the first year of life it should form the staple food.

Food Inspection.

This is a very important part of an Inspector's duty in the Borough of Bermondsey. There is an enormous amount of food manufactured here, and also coming into the district through the wharves and railway companies. It is difficult to give an estimate of the amount of food manufactured, but the following figures, compiled for a recent inquiry of the Local Government Board, give some idea as to the amount coming through the Port of London:—

Food Landed in Bermondsey.—1902.

	Tons.
(1) Meat	3,982
(2) Tinned foods	13,256
(3) Dried food products	159,892
(4) Fresh or perishable food	112,313
(5) Grain and flour	530,703
Total	820,146 tons

In the summer, when the fruit comes in, it would take practically one inspector to be constantly going round visiting the jam factories. It has always been most efficiently done by the Chief Inspector, but the other inspectors have instructions to visit all places where food is prepared, landed or stored. The advisability of appointing a special food inspector, especially for wharves, will probably have to be considered later by the Council especially if the Local Government Board do not make the proposed Order transferring the inspection of foodstuffs at wharves and riverside places from the Borough Council to the Port Sanitary Authority.

The following is a list of the food destroyed, by consent of the owner. The 368 tons of grain was not really destroyed but was dried here and allowed to proceed to the country on a written understanding that it was only to be used for the food of animals. Notice from the Medical Officer of the Port of London was received in all cases in connection with this grain.

Food Destroyed, 1902.

88 tubs of Butter.
5 tubs of Lard.
159 sacks, 40 bags, 16 casks of Potatoes.
173½ cases of Eggs,
692 crates of Bananas.
14 cwt., 212 cases, 28 tins of Tinned Fruit.
70 bags of Currants.
368 tons of Grain.
49 Cheeses.
20 lbs. Cocoa Beans.
77½ lbs. Hams.
8 cases of Condensed Milk.
1 box of Roe.
1 box of Plaice.
1 bag of Whelks.
1½ bushel of Apples.
1 case of Rabbits.

Houses Let in Lodgings.

Owing to the want of system in the inspection of the above, the Public Health Committee decided that they should be visited by the district inspectors once a quarter and a list of the visits supplied to the Committee. They are thus regularly visited, and none can escape proper attention. It has not been necessary to take legal proceedings in any case. The following is a list of those on the Register:—

Street.		Street.		Street.	
Aberdour Street	5	Gainsford Street ...	1	Parkers Buildings ...	4
Arnold's Place	1	Hatteraick Street ...	1	Reed Street	1
Abbey Street	5	Kenning Street... ...	3	Riley Street	1
Bermondsey Street ...	4	Kipling Street	2	Rotherhithe Street ...	1
Bermondsey Wall... ...	2	Lamb Alley	3	St. Helena Road ...	1
Bell Court	6	Larnaca Street	2	St. Marychurch Street	2
Bermondsey New Road ...	1	Leroy Street	9	Suffolk Street	2
Curlew Street	2	Litlington Street ...	1	Snowsfields	1
Cloyne Row	1	London Street	10	Salisbury Place ...	6
Crosby Row	1	Lafone Street	1	Salisbury Street ...	9
Debnam's Row	3	Long Lane	1	Tanner Street	1
Decima Street	2	Lower Road	1	Trident Street	2
East Lane	2	Maze Pond	8	Turner's Retreat ...	1
Emba Street	2	Morris Court	6	The Grange	2
Enid Street	1	Manor Lane	1	Vauban Street	2
Elim Street	9	Marigold Street ...	3	West Lane	6
Freda Street	1	Marshall's Place ...	2	Westlake Road... ...	2
Flockton Street	1	Maynard Road	1	Weston Street	3
Foxlow Street	12	Mellicks Place	5	Wilds Rents	1
Faustin Place	3	Marcia Road	2	Woods Place	5
Fendall Street	1	Oldfield Road	2	Woolf Street	2
Ferrand Street	2	Osborne Buildings ...	1	Warford Place	2
Fulford Street	2	Paulin Street	1	William Square ...	1
Gedling Street	2	Porlock Place	3		
Grange Walk	5	Pages Walk	1	Total	206
Green Walk	1				

Section 48, *Public Health* (*London*) *Act*, 1891.

Certificates were granted to the following places for a proper and sufficient water supply:—

19, 21, 23, Pages Walk.
"Dundee Arms," Artillery Street.
1, 2, 4, 5 and 7, Brandon's Almshouses, Somerset Place.
246, Rotherhithe Street.
South Wharf (new houses).
Lower Road (two houses belonging to Surrey Commercial Dock Company).
Riley Street School (Caretaker's House).
Nurses' Institution and house adjoining.
Model Dwellings, Swan Lane.
Two Houses in Farncombe Street.
Vine Street Buildings (new addition).
64, Marigold Street.
Presbytery, Paradise Street.
Caretaker's House, Union Church, Horselydown.
"Bunch of Grapes," Curlew Street.

Cowhouses.

The following is a list of the cowhouses, with the number of cows kept in each. In the third column will be found the results of inspections in 1902. The cowhouses were kept under constant supervision, and regularly visited. No difficulty was found in having these requirements carried out.

Address.	No. of Cows.	Defects remedied.
53, Southwark Park Road ...	14	Accumulation of manure removed.
32–34, Cherry Garden Street ...	7	—
33, Clarks Orchard	5	Fowls removed from cowshed. Water trough repaired. Water supply to trough improved. Zinc on walls repaired.
63, Jamaica Road	8	Accumulation of manure removed.
28, Arnolds Place	4	Cattle trough cleansed. Channel in cowshed repaired. Gutters to cowshed repaired.
1, Abbeyfield Road	10	—
56, St. Marychurch Street ...	2	Yard paving repaired. Floor of cowshed repaired. Accumulation of manure removed.

Slaughterhouses.

There are 5 slaughterhouses in the Borough. On the whole these have been kept in fair condition, though they require constant visiting. The nuisance most common was due to the want of regularity in cleaning up after slaughter, and not putting offal immediately into proper receptacles. If they are not visited for some time, neglect in this respect is sure to be found creating a grave nuisance to the neighbours, and rendering the carcases liable to contamination. The following is a list of the slaughterhouses and the defects remedied in them:—

Address.	Defects remedied.
174, Jamaica Road	Water trough provided. Pounds properly enclosed. Paving repaired. Zinc around walls repaired.
73, Grange Road	Trough provided.
205, Jamaica Road	Walls and floor repaired.
210, Lower Road	In good condition.
323, Old Kent Road	Do.

Milk Sellers.

The total number of milk sellers on the register is 265. This includes 7 cowkeepers and 258 dairymen and milk vendors. The cowkeepers have already been dealt with, and the dairymen and milk vendors were mentioned under the heading of "Adulteration of Milk." In visiting milk sellers one is struck very much with their want of knowledge as to the best way to store milk in shops and other places. In small shops especially, the milk is nearly always in open pans exposed to all the dust of the street, and, on making enquiries, I was informed there is an impression that milk would not keep if covered. I pointed out, however, that at least in summer when it is most important to keep it free from contamination, the best way to do this is to see that the vessel is thoroughly clean, and to keep it covered over with a cloth kept damp with water. The cloth not only keeps out the dust, but the evaporation from it tends to keep the milk cool.

Offensive Trades.

The following is a list of the offensive trades:—

Tripe Boilers...	1	Glue and Size Makers	4
Fellmongers	3	Fat Melters	4
Manure Manufacturers ...	1		

These places have been regularly visited.

Offensive Matter.

Eight summonses were taken out, under the London County Council bye-laws, for removing offensive matter through the streets during prohibited hours, or not properly covered. Four of these summonses were against the owners and 4 against the carmen. On conviction being obtained the summonses against the carmen were withdrawn. Fines and costs to the amount of £8 6s. were inflicted.

Margarine Register.

Forty-three persons are on the register as wholesale dealers in margarine.

Ice Cream.

The London County Council (General Powers) Act, 1902, which came into force on November 1st, contains the following clauses relative to ice cream:—

> Any person being a manufacturer of or merchant or dealer in ice creams or other similar commodity who within the County—
>
> (*a*) Causes or permits ice creams or any similar commodity to be manufactured sold or stored in any cellar shed or room in which there is any inlet or opening to a drain or which is used as a living room or sleeping room;
>
> (*b*) In the manufacture sale or storage of any such commodity does any act or thing likely to expose such commodity to infection or contamination or omits to take any proper precaution for the due protection of such commodity from infection or contamination; or
>
> (*c*) Omits on the outbreak of any infectious disease among the persons employed in his business or living or working in on or about the premises in or on any part of which any such commodity as aforesaid is manufactured sold or stored to give notice thereof forthwith to the Medical Officer of the Sanitary District in which such business is carried on or such premises are situate;
>
> shall be liable for every such offence on conviction in a Court of Summary Jurisdiction to a penalty not exceeding Forty Shillings.
>
> Every itinerant vendor of any such commodity as aforesaid shall if not himself the manufacturer thereof exhibit in a legible manner on a conspicuous part of his barrow a notice stating the name and address of the person from whom he obtains such commodity and if such vendor is himself the manufacturer of such commodity he shall in the same manner exhibit his own name and address. Every such itinerant vendor who shall fail

to comply with the provisions of this Section shall be liable for each offence on conviction as aforesaid to a penalty not exceeding Forty Shillings.

Proceedings for the recovery of the penalties shall be instituted by the Sanitary Authority for the District in which the offence was committed or of the District to the Medical Officer of which such notification as aforesaid ought to have been made or in which such itinerant vendor as aforesaid shall offer any such commodity as aforesaid for sale as the case may be.

Copies of these clauses were circulated in English and Italian to all the ice cream vendors in London.

There are at present 68 vendors or manufacturers of ice cream on the register.

The subject of the importance of cleanliness was brought prominently forward by the action of the Medical Officer of Health (Dr. Collingridge) of the Corporation of London in having several samples of ice cream analysed bacteriologically by Professor Klein, as a result of the occurrence of cases of sudden illness which followed the eating of ice creams bought at certain shops in the City. The result of these examinations showed that, out of 24 samples taken, 13 contained micro-organisms which were pathogenic or poisonous when injected into guinea pigs, and therefore presumably injurious to man in sufficient quantities. This is a very serious indictment, and proves that freezing does not by any means sterilise ice creams, or water. It appears that the contamination took place between the boiling and freezing of the mixture, and that therefore there is less risk of contamination in proportion to the shortness between these two processes. As a result of these enquiries the following facts were established :—

(1) That in a number of cases of illness occurring among young persons of a susceptible age, the symptoms were strictly identical, and were characteristic of poisoning by ingestion of toxic material.

(2) That the cases reported followed the ingestion of ice creams.

(3) That ice creams subsequently obtained at shops frequented by the patients contained bacilli of a virulent character.

(4) That the symptoms observed were those generally following the ingestion of material containing such bacilli.

(5) That where pathogenic bacilli were found the ices had been manufactured under insanitary conditions.

As a result of this, regulations were provided by the Corporation for the manufacture of ice creams, of which the following is a copy :—

CORPORATION OF LONDON.

Regulations to be observed by persons being Manufacturers of, or Merchants, or Dealers in Ice Creams, or other similar commodity within the City of London, approved by the Corporation upon the 26th day of November, 1902.

1. No such commodity must be manufactured, sold, or stored in insanitary premises, nor in any cellar, shed, or room in which there is any inlet or opening to a drain, or which is used as a living room or sleeping room.
2. Such premises must at all times be kept in a thoroughly clean and sanitary condition.
3. All materials must be of a sound and wholesome description.
4. All utensils used in the preparation of ice cream, etc., should be thoroughly cleansed and scalded with boiling water before use.
5. Such utensils should not be used for any other purpose than for making ice creams, etc.
6. When in the process of manufacture materials are boiled, *freezing must take place immediately afterwards.*
7. Such materials, after manufacture, should be kept in clean vessels, covered, and placed in cool, well-ventilated rooms.
8. No ice cream or other similar commodity should be kept for a longer period than 48 hours after manufacture, if remaining then unsold it must be destroyed.
9. If any case of infectious disease occur amongst the persons employed in the business, or living, or working in, on, or about the premises, in or on any part of which any such commodity is manufactured, sold or stored, notice shall be forthwith given to the Medical Officer of Health, Public Health Department, Guildhall, E.C.

Any infringement of the above Regulations will be dealt with as the Law directs.

Public Health Department, Guildhall, E.C.
26th November, 1902.

It would be well if such regulations could be adopted here.

All the ice cream places in this Borough were visited during the course of the year, special attention being paid to the places where it is manufactured, by myself and the Chief Inspector. In all of these certain structural alterations were carried out so as to provide for cleanliness during the making and storage. No difficulty was found in having these alterations carried out, since the manufacturers were quite alive to the importance of attending to them.

Smoke Nuisances.

Four hundred and sixty observations were made of chimneys and shafts, and 134 offences reported to the Public Health Committee. Fines and costs were inflicted in the following cases:—

	Fines. £ s. d.	Costs. £ s. d.
Quirk, Barton & Co., Normandy Wharf ...	10 0 0	0 2 0
Gillman & Spencer	(1) 10 0 0	0 2 0
	(2) 10 0 0	0 10 0
Peek, Frean & Co., Drummond Road ...	5 0 0	0 2 0
Young & Co.	1 0 0	0 2 0
Enthoven & Sons	0 10 0	1 3 0
South Eastern Railway	(1) 5 0 0	1 1 0
	(2) 5 0 0	1 1 0
	(3) 3 0 0	2 2 0
Maule & Co.	2 0 0	0 2 0
Scotch Soda Co.	10 0 0	0 2 0
	£61 10 0	£6 9 0

There is difficulty in dealing with smoke from the various vessels in the Surrey Commercial Docks. Steamers there are constantly creating smoke nuisances, and, as we have no jurisdiction, the Port Sanitary Authority has been notified. This, however, has practically no effect, since by the time the Port Inspector arrives, the nuisance has ceased and may be repeated next day by another vessel which has replaced the one previously committing the nuisance. Had we power over the smoke in the Docks, I feel confident it could be more effectually checked.

Bakehouses.

There are at present 108 bakehouses in the district—15 not in use and 93 in use. Of these latter, 36 are underground and 57 above ground. They have been systematically inspected, and the regulations as to whitewashing carried out in all cases. 57 intimations and 12 statutory notices were served for various defects. The following are the defects which were remedied owing to these notices:—

Bakehouses cleansed	47	W.C.'s repaired	5
Walls cleansed	1	Stack pipes and gutters repaired ...	2
Ceilings cleansed	3	Roof repaired	1
Floors repaired	2	Waste pipe to trough properly trapped ...	1
Yard paving repaired	5	Store cleansed	1
W.C.'s cleansed	2	Cisterns cleansed	2

The subject of underground bakehouses has been brought very prominently forward owing to the new Factory and Workshops Act. The whole matter of licensing these bakehouses is at present under the consideration of the Public Health Committee, and I purpose dealing fully with the matter in the next Annual Report. In the Appendix will be found a list of the bakehouses, and where they are situated.

Inhabited House Duty.

Certificates of exemption of artisans' dwellings from inhabited house duty under the Customs and Inland Revenue Act, 1890, Sec. 26 (2), were granted to the following houses:

33, 35, 37, 39, 41, 43, Lafone Street,
Winchelsea Buildings,
56, 57, 57A, Gainsford Street,
Tranton House, Cherry Garden Street,
Jamaica House, do.

APPENDIX.

Table I.—Vital Statistics of Whole District during 1902 and Previous Years.

Year.	Population estimated to Middle of each Year.	Births.		Total Deaths Registered in the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Net Deaths at all Ages belonging to the District.	
				Under 1 Year of Age.		At all Ages.						
		Number.	Rate.*	Number.	Rate per 1000 Births registered.	Number.	Rate.*				Number.	Rate.*
1	2	3	4	5	6	7	8	9	10	11	12	13
1892	136,880	4958	36·2	802	162	2806	20·5	392	40	360	3126	22·8
1893	137,091	4983	36·3	836	168	2910	21·2	388	47	380	3243	23·6
1894	137,249	4928	35·9	745	151	2417	17·6	336	43	392	2766	20·1
1895	137,438	4944	35·9	818	165	2650	19·3	387	41	357	2966	21·6
1896	137,231	4968	36·2	807	162	2646	19·3	385	57	379	2968	21·6
1897	135,827	4868	35·8	903	185	2540	18·7	404	35	397	2902	21·4
1898	134,446	4745	35·3	779	164	2422	18·0	438	81	435	2776	20·6
1899	133,085	4690	35·2	855	182	2817	21·2	515	48	435	3204	24·1
1900	131,748	4410	33·5	837	190	2684	20·4	540	99	477	3062	23·3
1901	130,433	4459	34·2	711	159	2320	17·8	423	52	451	2719	20·8
Averages for years 1892–1901	135,143	4795	35·4	809	169	2621	19·4	421	54	406	2973	22·0
1902	129,136	4346	33·6	636	146	2323	18·0	460	63	496	2756	21·3

* Rates in columns 4, 8, and 13 calculated per 1,000 of estimated population.

Area of District in acres (exclusive of area covered by water), 1336·1.
At Census of 1901—Total population of all ages, 130,760.
" " Number of inhabited houses, 15,817.
" " Average number of persons per house, 8·26.

I. Institutions within the District receiving sick and infirm persons from outside the District.	II. Institutions outside the District receiving sick and infirm persons from the District.	III. Other Institutions, the deaths in which have been distributed among the several localities in the District.	
Column No. 10 includes deaths of non-residents which occurred in the following :—	St. Olave's Workhouse, Ladywell—62 deaths		Deaths.
1. St. Olave's Infirmary, Rotherhithe		Guy's Hospital	195
2. St. Olave's Workhouse, Tanner Street		South Eastern Fever Hospital ...	25
3. St. Olave's Workhouse, Parish Street		Park " " ...	20
4. Metropolitan Asylums Board Wharf and Shelter, Rotherhithe		Brook " " ...	4
5. Surrey Commercial Docks, River Thames, etc.		South Western " " ...	2
		Children's Hospital, Shadwell ...	11
		Charing Cross Hospital	5
		Chelsea Cancer Hospital	2
		Evelina Hospital	3
		German Hospital	1
		General Lying-in Hospital	1
		Gore Farm Hospital	2
		Hospital Ship "Atlas"	8
		" "Castalia"	6
		Long Reach Hospital	14
		King's College Hospital	5
		London Hospital	10
		London Temperance Hospital ...	1
		Lying in Hospital, York Road ...	1
		Hospital for Women, Soho	1
		St. Bartholomew's Hospital	7
		St. Mary's Hospital	1
		St. Thomas' Hospital	13
		Seamen's Hospital	1
		Royal Chest Hospital	2
		Royal Hospital	1
		University Hospital	1
		Westminster Hospital	1
		Banstead Asylum	7
		Cane Hill Asylum	6
		Caterham Asylum	7
		Claybury Asylum	3
		Colney Hatch Asylum	4
		Darenth Asylum	4

I. Institutions within the District receiving sick and infirm persons from outside the District	II. Institutions outside the District receiving sick and infirm persons from the District.	III. Other Institutions, the deaths in which have been distributed among the several localities in the District.	Deaths
		Horton Asylum	5
		Leavesden Asylum	6
		London County Asylum, Dartford ...	8
		Manor Asylum, Epsom	3
		Camberwell Infirmary	1
		City Infirmary, Bow	1
		Greenwich Infirmary	1
		Lambeth Infirmary	1
		Southwark Infirmary	5
		Shoreditch Infirmary	1
		Whitechapel Infirmary	1
		St. George's-in-the-East Infirmary ...	1
		St. Olave's Workhouse, Ladywell ...	62
		St. Olave's Children's Home	2
		St Giles' Workhouse	2
		"Friedenheim"	1
		Gresham Almshouses, Brixton ...	1
		Heart House, Soho	1
		St. Peter's House	1
		"The Nest," Upper Clapton	1
		Faulkener's Hotel, Villiers Street ...	1
		Blackheath	1
		Grand Surrey Canal	2
		Hampstead Heath	1
		Nine Elms Goods Depot	1
		Old Kent Road	1
		Lea Cut, Poplar	1
		St. James' Park Ornamental Water ...	1
		Ruby Street, Old Kent Road... ...	1
		River Thames	5
		River Lea	1
		Total	496

TABLE II.—VITAL STATISTICS OF SEPARATE LOCALITIES IN 1902 AND PREVIOUS YEARS.

Year.	BERMONDSEY.				ROTHERHITHE.				ST. OLAVE'S.			
	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.
1892	84,880	3177	1935	516	39,533	1318	846	198	12,467	463	345	85
1893	85,038	3192	2004	537	39,757	1379	927	227	12,295	412	312	58
1894	85,197	3095	1734	451	39,983	1353	764	218	12,069	480	268	55
1895	85,356	3212	1869	520	40,208	1304	783	193	11,874	428	314	88
1896	85,323	3203	1873	513	40,281	1346	834	214	11,627	419	261	64
1897	84,717	3176	1883	605	39,890	1258	766	219	11,220	434	253	67
1898	84,116	3090	1771	485	39,504	1298	773	220	10,826	357	232	47
1899	83,518	3063	2063	574	39,121	1266	865	215	10,446	361	276	53
1900	82,925	2826	1948	526	38,742	1184	883	243	10,081	400	231	48
1901	82,337	2920	1768	497	38,367	1220	747	215	9,729	319	204	42
Averages of years 1892 to 1901.	84,341	3095	1885	522	39,539	1293	819	216	11,263	407	270	61
1902	81,752	2855	1782	455	37,995	1170	741	174	9,389	321	233	49

Table III.—Cases of Infectious Disease Notified During the Year 1902.

Notifiable Disease.	Cases Notified in Whole District:							Total Cases Notified in Each Locality.			No. of Cases Removed to Hospital from Each Locality.		
	At all Ages.	At ages—Years.						Bermondsey.	Rotherhithe.	St. Olave.	Bermondsey.	Rotherhithe.	St. Olave.
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.						
Small-pox	219	2	9	27	80	97	4	117	75	27	117	74	27
Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	277	9	108	109	30	21	—	194	60	23	178	50	23
Membranous croup	3	1	2	—	—	—	—	2	1	—	—	—	—
Erysipelas	192	1	7	13	30	126	15	122	63	7	—	—	—
Scarlet fever ...	491	11	160	254	53	13	—	336	112	43	304	90	43
Typhus fever ...	1	—	—	—	1	—	—	1	—	—	1	—	—
Enteric fever ...	125	—	2	42	44	37	—	79	44	2	66	41	2
Relapsing fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Continued fever ...	1	—	—	—	—	1	—	1	—	—	1	—	—
Puerperal fever ...	6	—	—	—	2	4	—	4	2	—	—	—	—
Plague	—	—	—	—	—	—	—	—	—	—	—	—	—
Chicken Pox ...	912	108	433	344	6	11	—	578	265	69	—	—	—
Totals	2227	132	721	789	246	310	19	1434	622	171	667	255	95

Table IV.—Births and Corrected Deaths, for the Year 1902.

Cause of Death.	All Ages.	Under 1	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards.	Corrected deaths all ages.			Outlying Institutions.	Institutions in Borough.	Deaths of Non-Parishioners in Boro.'
								Bermondsey.	Rotherhithe.	St. Olave's.			
Small-pox	31	—	6	4	4	17	—	12	15	4	30	—	27
Measles	154	26	124	3	1	—	—	106	33	15	11	24	—
Scarlet Fever ...	18	4	12	2	—	—	—	10	8	—	15	—	—
Whooping Cough ...	64	28	35	—	1	—	—	42	19	3	3	6	1
Diphtheria and Membranous Croup	29	1	20	7	—	1	—	19	8	2	22	—	—
Croup	1	—	1	—	—	—	—	—	1	—	—	—	—
Fever. Typhus ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Fever. Enteric ...	12	—	—	1	6	5	—	7	5	—	8	2	—
Fever. Other Continued	—	—	—	—	—	—	—	—	—	—	—	—	—
Epidemic Influenza.	36	2	—	—	1	17	16	21	11	4	1	15	—
Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—
Plague	—	—	—	—	—	—	—	—	—	—	—	—	—
Diarrhœa	88	68	15	1	—	2	2	63	17	8	11	5	—
Enteritis	20	14	2	1	—	2	1	20	—	—	5	—	—
Puerperal Fever ...	4	—	—	—	—	4	—	2	2	—	—	—	—
Erysipelas	8	—	—	—	1	7	—	7	1	—	—	2	—
Other Septic Diseases	41	4	5	4	6	22	—	34	7	—	26	6	—
Phthisis	239	2	9	9	32	185	2	163	55	21	21	116	2
Other Tubercular diseases	106	44	40	10	7	4	1	74	23	9	25	10	2
Cancer and Malignant disease	120	1	3	1	2	79	34	80	28	12	33	21	1
Bronchitis	311	67	17	2	2	105	118	199	79	33	24	47	2
Pneumonia ...	337	124	88	12	11	82	20	213	97	27	33	16	2
Pleurisy	7	1	—	—	—	6	—	5	1	1	2	2	—
Other diseases of Respiratory Organs	12	1	—	1	—	8	2	3	6	3	2	—	—
Alcoholism and Cirrhosis of Liver	33	—	1	—	—	29	3	23	7	3	3	5	—
Venereal diseases ...	8	4	—	1	—	3	—	5	2	1	1	2	—
Premature birth ...	86	85	1	—	—	—	—	43	37	6	—	1	2
Diseases and accidents of Parturition	11	—	—	—	1	10	—	4	6	1	2	—	—
Heart diseases ...	157	3	1	9	13	92	39	100	43	14	28	20	1
Accidents	108	36	11	8	7	38	8	63	33	12	50	3	12
Suicides	13	—	—	—	1	9	3	5	6	2	4	—	4
Anthrax	1	—	—	—	—	1	—	1	—	—	1	—	—
All other Causes ...	701	163	40	21	17	236	224	458	191	52	135	157	7
All Causes	2756	678	431	97	113	964	473	1782	741	233	496	460	63

Births.	Bermondsey.			Rotherhithe.			St. Olave's.			Whole Borough.		
	M.	F.	M. & F.	M.	F.	M. & F.	M.	F.	M. & F.	M.	F.	M. & F.
	1491	1364	2855	602	568	1170	176	145	321	2269	2077	4346

TABLE V.—CENSUS, 1901. AGES OF PERSONS, MALES AND FEMALES, IN THE METROPOLITAN BOROUGH OF BERMONDSEY AND ITS CONSTITUENT WARDS.

—		All Ages.	0—	5—	10—	15—	20—	25—	35—	45—	55—	65—	75—	85—	95—
Borough of Bermondsey	P	130760	16771	15247	13959	13219	12174	20511	15876	11052	7236	3469	1130	113	3
	M	65134	8326	7605	7019	6605	6083	10416	8106	5594	3452	1462	432	34	—
	F	65626	8445	7642	6940	6614	6091	10095	7770	5458	3784	2007	698	79	3
Wards :—															
No. 1, Bermondsey	P	14323	2098	1914	1659	1515	1233	1998	1795	1124	626	293	64	4	—
	M	7070	1052	909	852	728	605	999	926	572	273	130	23	1	—
	F	7253	1046	1005	807	787	628	999	869	552	353	163	41	3	—
No. 2 „	P	14405	1970	1655	1462	1462	1340	2312	1626	1190	779	457	141	11	—
	M	7173	976	835	745	712	636	1190	814	615	396	199	53	2	—
	F	7232	994	820	717	750	704	1122	812	575	383	258	88	9	—
No. 3 „	P	15633	2062	1830	1515	1474	1465	2742	1943	1230	881	374	105	11	1
	M	7624	1021	923	758	718	710	1351	978	579	402	143	38	3	—
	F	8009	1041	907	757	756	755	1391	965	651	479	231	67	8	1
No. 4 „	P	16336	1833	1669	1677	1619	1669	2762	1994	1462	1003	495	140	13	—
	M	8022	889	868	842	765	834	1396	1004	717	453	194	56	4	—
	F	8314	944	801	835	854	835	1366	990	745	550	301	84	9	—
No. 5 „	P	11804	1473	1267	1178	1159	1155	2023	1401	980	723	309	122	14	—
	M	5723	714	620	595	568	569	1015	685	472	318	123	39	5	—
	F	6081	759	647	583	591	586	1008	716	508	405	186	83	9	—
No. 6 „	P	9982	1403	1343	1215	1037	858	1398	1266	759	455	189	55	4	—
	M	4999	702	658	631	530	437	687	654	372	228	75	25	—	—
	F	4983	701	685	584	507	421	711	612	387	227	114	30	4	—
No. 1, Rotherhithe	P	15508	1961	1892	1789	1649	1288	2198	1824	1367	868	452	194	24	2
	M	7885	979	959	886	859	644	1132	983	708	449	200	79	7	—
	F	7623	982	933	903	790	644	1066	841	659	419	252	115	17	2
No. 2 „	P	15046	1875	1641	1576	1464	1534	2418	1749	1368	869	409	131	12	—
	M	7475	958	832	774	759	753	1234	845	697	405	164	49	5	—
	F	7571	917	809	802	705	781	1184	904	671	464	245	82	7	—
No. 3 „	P	7906	989	970	924	912	741	1075	945	676	412	190	67	5	—
	M	4167	495	485	466	485	425	573	523	370	222	92	27	4	—
	F	3739	494	485	458	427	316	502	422	306	190	98	40	1	—
St. John	P	5986	722	657	578	543	510	939	807	528	393	213	85	11	—
	M	2903	361	307	284	277	258	448	386	264	182	100	33	3	—
	F	3083	361	350	294	266	252	491	421	264	211	113	52	8	—
St. Olave	P	2250	256	269	237	206	160	388	346	221	119	38	9	1	—
	M	1309	119	143	125	106	92	251	222	155	73	19	4	—	—
	F	941	137	126	112	100	68	137	124	66	46	19	5	1	—
St. Thomas ...	P	1581	129	140	149	179	221	258	180	147	108	50	17	3	—
	M	784	60	66	61	98	120	140	86	73	51	23	6	—	—
	F	797	69	74	88	81	101	118	94	74	57	27	11	3	—

Table VI.—Meteorology of the Year, 1902.

1902. MONTH.	Mean Reading of the Barometer.	TEMPERATURE OF THE AIR.							RAIN.	
		Highest by day.	Lowest by night	Range in month.	Mean of all highest.	Mean of all lowest.	Mean daily range.	Mean for the Month.	Number of days it fell.	Amount collected.
	ins.	o	o	o	o	o	o	o		ins.
January	29·985	52·7	24·7	28·0	45·7	37·2	8·5	41·8	9	0·64
February	29·691	54·1	14·3	39·8	40·2	30·6	9·6	35·2	13	0·79
March	29·683	60·5	26·6	33·9	51·9	37·4	14·5	44·4	15	1·36
April	29·775	68·2	30·9	37·3	55·6	38·9	16·7	46·9	7	0·42
May	29·794	71·0	29·8	41·2	57 3	41·2	16·1	48·4	22	3·33
June	29·743	80·7	41·1	39·6	66·9	49·6	17·3	57·6	15	3·10
July	29·853	86·1	42·4	43·7	71·7	51·6	20·1	61·7	12	1·09
August	29·753	79·0	42·8	36·2	69·5	51·7	17·8	60·6	19	2·93
September	29·891	75·1	36·8	38 3	65·6	47·5	18·1	56·6	8	1 65
October	29·808	67·1	32·6	34·5	55·9	43·7	12·2	49·8	14	1·24
November	29·710	57·9	27·2	30·7	49·5	39 8	9·7	44·7	12	1·29
December	29·881	56·7	24·5	32·2	44·9	37·5	7.4	41.2	13	1·50
Means	29·797	67·4	31·1	36·3	56·2	42·2	14·0	49·1	159 Sum.	19·34 Sum.

Table VII.—Marriages.

Year.	BERMONDSEY.		ROTHERHITHE.		ST. OLAVE'S.		WHOLE BOROUGH.	
	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.
1892	459	10·82	197	9·96	84	13·48	740	10·82
1893	477	11·22	219	11·02	67	10·90	763	11 12
1894	547	12·84	225	11·26	105	17·40	877	12·78
1895	605	14·18	240	11·94	72	12·12	917	13·34
1896	686	16·08	268	13·30	73	12·56	1027	14·96
1897	831	19·62	280	14·04	86	15·32	1197	17·62
1898	833	19·80	302	15·28	81	14·96	1216	18·08
1899	826	19·78	288	14·72	68	13·02	1182	17·76
1900	783	18·88	334	17·24	69	13·68	1186	18·00
1901	800	19·44	296	15·42	58	11·92	1154	17·70
Average for years 1892–1901	685	16·27	265	13·42	76	13·54	1026	15·22
1902	799	19·55	270	14·22	54	11·50	1123	17·39

Table VIII.—Food and Drugs Act.

Articles submitted for Analysis.	Total samples taken.	No. genuine.	No. adulterated.	Percentage of articles adulterated. per cent.
Milk	373	324	49	13
Skimmed Milk ...	15	13	2	13
Condensed Skimmed Milk	2	2	—	—
Milk and Water ...	1	1	—	—
Butter...	132	118	14	10
Milk-blended Butter ...	2	2	—	—
Lard	11	11	—	—
Cheese	11	11	—	—
Jap Nuggets	3	3	—	—
Coffee	15	15	—	—
Chicory and Coffee ...	3	3	—	—
Coffee Mixture ...	1	1	—	—
Arrowroot	6	6	—	—
Margarine	20	18	2	10
Margarine Mixture ...	1	—	1	100
Oatmeal	4	4	—	—
Sugar	6	4	2	33
Golden Syrup ...	2	2	—	—
Syrup...	1	1	—	—
Ground Ginger ...	1	1	—	—
Ice Cream	2	2	—	—

Articles submitted for Analysis.	Total samples taken.	No. genuine.	No. adulterated.	Percentage of articles adulterated. per cent.
Pepper	33	33	—	—
Broken Chocolate ...	2	—	2	100
Mustard	16	16	—	—
Vinegar	13	13	—	—
Soda Water	1	1	—	—
Quinine and Iron ...	1	1	—	—
Sweet Spirits of Nitre	3	3	—	—
Camphorated Oil ...	3	3	—	—
Flowers of Sulphur ...	1	1	—	—
Cream of Tartar ...	3	3	—	—
Soap Liniment ...	1	—	1	100
Glycerine	3	3	—	—
Castor Oil	3	3	—	—
Epsom Salts	5	5	—	—
Milk of Sulphur ...	5	5	—	—
Tartaric Acid	5	5	—	—
Tincture of Iodine ...	1	—	1	100
Whisky	29	29	—	—
Gin	18	17	1	5
Rum	1	1	—	—
Total ...	759	684	75	11

TABLE IX.—PROSECUTIONS.

FIRST QUARTER.

No.	Sample.	Adulteration.	Result.
79B	Skimmed Milk	38 per cent. of added water	Summons not served. False address given.
128C	Milk	12 per cent. deficient in fat	Summons withdrawn. Sample bottle broken. 12/6 costs.
85B	Butter	Margarine 100 per cent.	£3 and 12/6 costs.
69A	Milk	24 per cent. deficient in fat	£4 and 12/6 costs.
71A	Milk	9 per cent. of added water	Summons dismissed. Warranty proved
64A	Milk	13 per cent. deficient in fat	£5 and 12/6 costs.
74A	Butter	Margarine 100 per cent. Contained under 5 per cent. of butter fat	£5 and 12/6 costs.
100B	Butter	Margarine 100 per cent.	£5 and 14/6 costs.
126D	Butter	Contained about 60 per cent. of margarine	£5 and 12/6 costs. (Food and Drugs Act). £5 and 12/6 costs. (Margarine Act).
144C	Milk	Contained 27 per cent. of added water ...	£2 and 12/6 costs.
59T	Milk	Contained 19 per cent. of added water and 20 per cent. deficient in fat	£5 and 12/6 costs (added water) £5 and 12/6 costs (deficient in fat).
63T	Milk	10 per cent. of added water	£10 and 12/6 costs.
138D	Milk	9 per cent. of added water. 11 per cent. deficient in fat	£10 and 14/6 costs.
71A	Butter	Margarine 100 per cent.	£5 and 2/– costs. (Margarine Act). £5 and 12/6 costs. (Food and Drugs Act).
14W	Butter	Margarine 100 per cent.	£5 and 12/6 costs.
112B	Milk	10 per cent. deficient in fat	£2 and 12/6 costs.

SECOND QUARTER.

No.	Sample.	Adulteration.	Result.
120B	Milk	5 per cent. of added water	£2 and 12/6 costs.
148D	Milk	20 per cent. of added water	£2 and 12/6 costs.
74A	Butter	The proportion of butter fat calculated in the total fat contained in the sample amounted to 15·9 per cent.	£2 and 12/6 costs. (Food and Drugs Act). 10/– and 12/6 costs. (Margarine Act).
163C	Milk	6 per cent. deficient in fat	Summons withdrawn; 12/6 costs paid.
155D	Milk	13 per cent. deficient in fat	£2 and 12/6 costs; 10/– and 2/– costs (vehicle not marked).
156D	Milk	5 per cent. of added water	£3 and 12/6 costs.
157D	Margarine Mixture	Margarine 100 per cent. Contained no appreciable proportion of butter fat	£2 and 14/6 costs.
130B	Butter	Butter fat .. ... 71·6 per cent. Other fats ... ... 19·0 ,, Water, salt, and curd ... 9·4 ,, 100 ,,	£1 and 14/6 costs
79A	Milk	15 per cent. deficient in fat	£2 and 12/6 costs
37W	Butter	11·3 per cent. excess of water	£2 and 12/6 costs
60S	Margarine ...	Unlabelled	10/- and 12/6 costs
93T	Milk	13 per cent. deficient in fat	10/- and 12/6 costs
142B	Milk	10 per cent. deficient in fat	Summons dismissed; warranty proved
14	Margarine ...	Unlabelled	£2, and 12/6 costs
19	Margarine ...	Unlabelled	£2, and 12/6 costs
69S	Milk	28 per cent. deficient in fat	Summons dismissed; warranty proved

THIRD QUARTER.

No.	Sample.	Adulteration.	Result.
1D	Butter	Margarine 100 per cent. Contained no appreciable proportion of butter fat	£10, and 12/6 costs (Margarine Act) 12/6 costs (Food and Drugs Act)
8D	Butter	Margarine 100 per cent. Contained no appreciable proportion of butter fat	£10 and 12/6 costs (Food and Drugs Act) £1 and 2/- costs (Margarine Act)
106T	Butter	Margarine 100 per cent. Contained no appreciable proportion of butter fat	£2 and 12/6 costs
66W	Milk	16 per cent. excess of water	Summons dismissed; warranty proved
69W	Milk	10 per cent. deficient in fat	Summons dismissed; warranty proved
113T	Milk	10 per cent. excess of water	£4 and 12/6 costs
184B	Milk	27 per cent. excess of water, and 15 per cent. deficient in fat	£5 and 12/6 costs (sec. 6) £1 and 2/- costs (sec. 9) Went to prison instead of paying a fine
106A	Milk	6 per cent. excess of water	£10 and 12/6 costs
109A	Milk	8 per cent. excess of water; 5 per cent. deficient in fat	£10 and 12/6 costs
110A	Milk	16 per cent. deficient in fat	Summons dismissed; warranty proved
111A	Milk	17 per cent. deficient in fat	Summons dismissed; notice sufficient disclosure

FOURTH QUARTER.

186B	Separated Milk	5 per cent. excess of water. ·19 per cent. of boracic acid present, equal to over 16 grains per pint	5/- and 12/6 costs
1H	Broken Chocolate	Contained practically no chocolate	12/6 costs
2H	Demerara Sugar	Consisted of white sugar crystals coloured with a minute proportion of an aniline dye, commonly known as yellow crystals	£1 and 12/6 costs
10D	Milk	7 per cent. excess of water	£1 and 12/6 costs
11D	Margarine ...	·8 per cent. of boracic acid equal to 36 grains per lb., more than necessary to preserve the article	£2 and 12/6 costs
15D	Demerara Sugar	White sugar crystals coloured with an aniline dye, known as yellow crystals	£1 and 12/6 costs
114A	Milk	10 per cent. deficient in fat	£2 and 12/6 costs
228C	Margarine ...	Contained under 5 per cent. of butter fat and traces of boracic acid	£3 and 12/6 costs

SUMMARY.

	Fines. £ s. d.	Costs. £ s. d.
First Quarter	81 0 0	10 6 0
Second Quarter	24 0 0	9 13 6
Third Quarter	53 0 0	5 4 0
Fourth Quarter	10 5 0	5 0 0
	£168 5 0	£30 3 6

Table X.—List of Bakehouses in the Borough.

Address.	Situation of Bakehouse.
49, Abbey Street ...	Underground
157, ,, ...	,,
20, Alice Street ...	,,
2, Alscot Road ...	,,
126, ,, ...	,,
186, Abbey Street ...	Above ground
66, Abbeyfield Road ...	,,
218, Bermondsey Street	Underground
88, Bermondsey Wall...	,,
20, Bracton Road ... (not in use)	,,
209, Bermondsey Street (not in use)	,,
16, Bermondsey Wall... (not in use)	Above ground
101, Bermondsey Street	,,
111, ,,	
31, Charlotte Street ...	,,
48, Cherry Garden Street	,,
	,,
31, Crimscott Street ... (not in use)	,,
145, Drummond Road	,,
51, Dockhead... ...	
30-6, Denman Street ...	Underground
27, Derrick Street ...	Above ground
20, Dockhead ... ... (not in use)	,,
	,,
51, Esmeralda Road ...	,,
49, Frean Street ... (not in use)	,,
77, Grange Road ...	,,
31, George Row ...	
68, Galleywall Road ...	Underground
163, Grange Road ... (not in use)	,,
	,,
55, ,, ... (not in use)	,,
	,,
33, ,, ...	Above ground
125, ,, ...	,,
2, Galleywall Road ...	,,
36, Gedling Street ... (not in use)	,,
1a, Ilderton Road ...	Underground
16, ,, ...	,,
170, Jamaica Road ...	,,
53, ,, ...	,,
140, ,, ...	,,
75, ,, ...	Above ground
203, ,, ...	,,
227, ,, ...	,,
29, Kipling Street ...	,,
82, Keetons Road ...	Underground
142, Long Lane ...	,,
2, Lucey Road ..	,,
97, Lynton Road ...	,,
132, Lower Road ...	,,
93B, ,, ...	,,
184, Long Lane ...	Above ground
49, Lucey Road ...	,,
25, Lower Road ...	,,
160, ,, ...	,,
182, ,, ...	,,
204, ,, ...	,,
47, Maltby Street ...	Underground
17, Neckinger Street...	Above ground
16, Neptune Street ...	,,
69, New Church Street (not in use)	,,
333, Old Kent Road ...	,,
91, Old Kent Road ...	Above ground
69, ,, ...	,,
7, Paradise Street ...	Underground
246, Rotherhithe New Road	,,
365, ,, ...	,,
173, ,, ...	,,
25, Parkers Row ...	Above ground
49, ,, ...	,,
25, Paradise Street ...	,,
3, Plough Road ...	,,
1, Rosebery Street ...	Above ground
79, Rouel Road ...	,,
270, Rotherhithe Street	,,
34, Rotherhithe New Road	,,
37, Rolls Road ... (not in use)	,,
574, Rotherhithe Street (not in use)	,,
39, St. James' Road ...	Underground
239, Southwark Park Road	,,
351, Southwark Park Road	,,
415, Southwark Park Road (not in use)	,,
479, Southwark Park Road	,,
3, Spa Mansions ... (never been used)	,,
49, Southwark Park Road	Above ground
119, Southwark Park Road	,,
158, Southwark Park Road	,,
198, Southwark Park Road	,,
319, Southwark Park Road	,,
355, Southwark Park Road	,,
208, Southwark Park Road	,,
92, Snowsfields ...	,,
92, Spa Road ...	,,
61, Salisbury Street...	,,
5, St. Marychurch Street	,,
96, Tooley Street ...	Underground
157, ,, ...	,,
167, ,, ...	,,
95, Tower Bridge Road	,,
87, ,, ,, ...	,,
43, Tanner Street ...	Above ground
144, ,, ...	,,
245, Tooley Street ...	,,
53, Tower Bridge Road	,,
26, ,, ,, ...	,,
65, ,, ,, ...	,,
22, The Grange ...	,,
106, Union Road ... (not used)	,,
22, Union Road ...	,,
94, ,, ...	,,
Messrs. Peek, Frean & Co., Drummond Road	,,

Sanitary Work—YEAR 1902.

Houses and other places inspected:—	
House to house	4532
Various	5207
Re-inspections	20384
Notices and Intimations served:—	
Intimations	3430
Statutories	1057
Houses or parts of houses cleansed or repaired	2360
W.C. accommodation provided or reconstructed	98
W.C.'s repaired, ventilated and whitewashed	377
Closets panned and trapped or old pans cleansed or new ones fixed ...	342
Closets supplied with water or defective water supplies remedied	540
Defective drains reconstructed, repaired, ventilated or trapped	303
Stopped drains and w.c.'s cleared ...	328
Yards and forecourts paved or paving repaired	718
Houses supplied with water	26
Defective roofs repaired	513
Defective rainshoots and gutters repaired, unstopped or disconnected from drain...	491
Offensive accumulations removed ...	117
Defective water apparatus in w.c.'s repaired	236
Animals kept so as to be a nuisance, removed	39
Urinals cleansed, supplied with water, and doors	49
Stables and other premises drained and paved	29
Waste water pipes disconnected from drains and made to discharge in the open-air, and new waste pipes provided	111
Providing means of ventilation beneath ground floor	120
Dung receptacles provided or repaired	52
Accumulations of manure removed ...	36
Separating w.c. and domestic water supplies	11
Effective means taken to prevent dampness...	147
Workrooms cleansed or repaired ...	70
Yards cleansed	145
Means of ventilation provided, or improvement in ventilation made ...	307
Cisterns cleansed or covers provided ...	93
Cowsheds cleansed	8
Miscellaneous	590
Drains tested	1952
Persons removed suffering from infectious disease	915
Rooms disinfected	1258
Articles disinfected	27326
Bodies received into mortuaries ...	187
Inquests	127
Postmortem examinations	102
Houses disinfected to satisfaction of medical attendant	84
Cases reported to Superintendent of Visitors, School Board	2227
Letters written to owners, etc. ...	3165
Copies of notifications sent to schools	2727
Notices sent to "Master of House" ...	1975