

Report on the sanitary condition of the Parish of Bermondsey for the year 1880.

Contributors

Bermondsey (London, England). Parish. Vestry.
Dixon, John.

Publication/Creation

London : Shaw & Sparks, 1881.

Persistent URL

<https://wellcomecollection.org/works/xaqtt5>

License and attribution

You have permission to make copies of this work under a Creative Commons, Attribution, Non-commercial license.

Non-commercial use includes private study, academic research, teaching, and other activities that are not primarily intended for, or directed towards, commercial advantage or private monetary compensation. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.



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

1880
55550
BER 7
METROPOLIS MANAGEMENT ACT,

18 and 19 Vict., cap. 120.

BERMONDSEY VESTRY.

REPORT

ON THE

SANITARY CONDITION

OF THE

PARISH OF BERMONDSEY,

FOR THE YEAR 1880,

BY

JOHN DIXON, M.D.,

MEDICAL OFFICER OF HEALTH.

London :

SHAW & SPARKS, Steam Printers, 51, Parker's Row, Bermondsey, S.E.

1881.

C

X

Lon

C. X. Lon.

55550

BER 7

METROPOLIS MANAGEMENT ACT,

18 and 19 Vict., cap. 120.

BERMONDSEY VESTRY.

REPORT

ON THE

SANITARY CONDITION

OF THE

PARISH OF BERMONDSEY,

FOR THE YEAR 1880,

BY

JOHN DIXON, M.D.,

MEDICAL OFFICER OF HEALTH.

London :

SHAW & SPARKS, Steam Printers, 51, Parker's Row, Bermondsey, S.E.

1881.

THE UNIVERSITY OF CHICAGO

LIBRARY

THE UNIVERSITY OF CHICAGO

LIBRARY

THE UNIVERSITY OF CHICAGO

LIBRARY

THE UNIVERSITY OF CHICAGO

LIBRARY

THE UNIVERSITY OF CHICAGO

LIBRARY

ANNUAL REPORT.

TO THE VESTRY OF BERMONDSEY,

MR. CHAIRMAN AND GENTLEMEN,

I have the pleasure of submitting my fifth Annual Report on the Vital Statistics of the Parish. The period comprised is the Registration year of 52 weeks, which ended on the first day of January, 1881. In conformity with a resolution of the Vestry, which was passed many years ago, my Fortnightly Reports are printed herewith.

As the low temperature of 1879 had the effect of causing a greater number of deaths from diseases of the respiratory organs and a smaller number of deaths from diarrhoea, it is quite in accordance with natural

laws to find that the warmer season of 1880 was attended with results of an opposite character. The epidemic of whooping cough, which accounted for 225 deaths in 1878, and for 98 deaths in 1879, continued to prevail during the first half of the past year; 85 deaths from this cause were registered during the first two quarters, 3 in the third quarter, and 6 in the last, making a total of 94. Scarlet fever, which had caused 102 deaths in 1879, produced the same number in the past year. Diarrhœa caused 125 deaths, against 45 in the previous year, and a five years' average of 77.—Of this number 102 occurred in the summer quarter and 23 in the remaining portions of the year. Measles prevailed during the last quarter, when there were 38 deaths in a total of 46. The deaths from Small-Pox were 3, of which one took place in each district, all were children under 5 years of age, and unvaccinated. The proportion of deaths from this disease was 1 in 28,700 persons living, and less than 1 in every 500 deaths.

The general mortality from all causes compares very favourably with that of the Metropolis generally, with the South London districts, and with most of the large English Towns. Our number of deaths from the chief diseases of the zymotic class, and in children under 5 years of age, may appear large, but our proportion of children living at that age, according to the

census of 1871, was 20 per cent. above the like proportion in London. Under 5 years of age the deaths from diarrhoea were 110; from scarlet fever 68; from measles 38; and from whooping cough 91; making a total of 307 deaths from these four causes, against 60 deaths from the same diseases at all other ages. Many other causes of death are chiefly fatal at this period of life, and hence in estimating the true value of a zymotic death rate, and also of the general rate of mortality, it is very important to bear in mind the difference which may exist in different districts in the constitution of the population with regard to age. Our infant death rate was low. The deaths under one year of age being 144 per 1,000 registered births. In London the proportion was 158. In the Provincial Towns it ranged from 146 in Bristol, to 219 in Leicester. The mean rate in 20 towns was 169.

POPULATION.

Estimates of population are based on the increase which occurred in the ten years which preceded the last census. When the number of inhabited houses is known the estimate may be checked by means of the average number of persons living in each house, at the last census. I have not been able to obtain the requisite information on this subject. The population in 1861 was 58,212, and in 1871 it was found to be 80,429,

shewing an increase of 22,217 in the ten years, or an average of 2221 per year. The excess of births over deaths in the ten years, 1871-1880, was 17,227; however at the census of 1881, (unrevised figures) the population was 86,562 shewing an increase of 6,133 only, or 613 per year. The population of the parish at Midsummer 1880, should therefore be estimated at 86,102.

BIRTHS.

The number of registered births was 3,532, of which 1794 were males and 1738 females. The proportion of boys was 103 to 100 girls. The births averaged nearly 68 per week. The birth rate for the year was 41·0 per 1000 of the estimated population. In London the birth rate was 36·2 per thousand. In the first quarter of the year there were 902 births; in the second, 920; in the third, 827; and in the fourth, 883. The number of children born in the Leather Market District was 574; in St. Mary Magdalen's 642; and in St. James's, 2,316. The total births were 183 below the number registered in 1879, and 53 below the average of the last ten years. The excess of births over deaths was 1,736, which is equal to a natural increase of 2 per cent, but as the number of births was the same as the average of five years between 1870 and 1874, it is evident that the population at present is almost stationary.

DEATHS.

The total deaths were 1796 :—males 878 ; females 918. They were 187 below the number in the previous year and 314 below the number registered in 1878. The weekly average was 34·5. One death occurred to every 48 persons living. The annual rate of mortality was 20·8 per thousand of the population. The death rate in London was 22·2 per thousand. In males the death rate is generally in excess of that of females. In London the former was 24·3 and the latter 20·2. In Bermondsey the rate was highest in females. The greater number of deaths of females is unusual, as the preponderance of the fair sex in our parish is less than the average, and the proportion has been steadily diminishing during the last 80 years, until the difference has become less than one per cent. In the first quarter of the year there were 574 deaths ; in the second, 354 ; in the third, 442 ; and in the last, 426. The number of persons who died in the Leather Market District was 372 ; in St. Mary Magdalen, 427 ; and in St. James's 997. There were 129 deaths in the Workhouse, of which 94 were of parishioners. The 35 non-parishioners are included in the total deaths and in the death rate. The exclusion of these would lower our rate by 0·4. A certain, but unknown, number of our parishioners died in the general hospitals. Our proportion of

such deaths would add 1·1 per 1,000 to the death rate, supposing the whole to be proportionately distributed.

CAUSES OF DEATH.

ZYMOTIC DISEASES :—In this large and important division 465 deaths, or one fourth (25·9 per cent) of the total, were registered ; of these, 411 belonged to the principal diseases of the Miasmatic order, being 67 above the number in the previous year (344), and 32 above the average of the previous five years (379). They amounted to 22·6 per cent of the deaths from all causes, and to a rate of 4·7 per 1,000 living. In 1879 this rate was 3·5, and in 1878, 5·4. The number of deaths from smallpox was 3, of which 2 occurred in the second and 1 in the fourth quarter. The other deaths in this class were measles 46 ; Scarlet fever 102 ; diphtheria 13 ; whooping cough 94 ; fever in various forms 21 ; diarrhœa 125 and simple cholera 1. Measles was most fatal during the last quarter of the year, there being only two deaths registered from this cause during the first six months. Scarlet fever prevailed generally throughout the year. The severe epidemic of whooping cough, which had continued for two and a half years, terminated in the third quarter, when the number of deaths fell to three. The deaths from diarrhœa exceeded the number of deaths from the same cause in the previous year by 80.

CONSTITUTIONAL DISEASES—caused 307 deaths, or 17·1 per cent. There were 12 from ill-defined forms of dropsy and 27 from cancer. In the tubercular class there were 266 deaths, of which 152 were attributed to phthisis or consumption; 65 to hydrocephalus and infantile meningitis; 41 to tabes mesenterica; and 8 to tuberculosis, scrofula &c. In the previous year there were 38 deaths from cancer and 218 from consumption. On an average of years, we have less than our proportion of deaths from these diseases.

LOCAL DISEASES—caused 728 deaths, or 40·5 per cent. In the previous year the number was 895, and the per centage 45·1. The total number of deaths from diseases of the respiratory organs, other than phthisis, was 421, against 547 in 1879. There were 315 deaths from bronchitis and 90 from pneumonia, or inflammation of the lungs. Bronchitis caused 408 deaths in 1879. From diseases of the brain and nervous system there were 179 deaths; from diseases of the heart and organs of circulation 57; from diseases of the digestive organs, including stomach, liver and intestines, there were 40 deaths.

DEVELOPMENTAL DISEASES—caused 265 deaths, or 14·7 per cent. 152 were children and 113 adults. In the deaths of children under this division are included 28 from premature birth; 5 from congenital malforma-

tions, 35 from teething, and 85 from atrophy and debility. The last named comprises several forms of "wasting diseases" in children which are dependent on different causes and are certified under a variety of names. In adults there were 8 deaths from child birth, 1 from abortion, and 103 from old age. Of the latter, 46 were aged 80 years and upwards.

VIOLENCE—25 deaths were caused by accident or negligence. Two children were run over in the streets. Four children died from burns and scalds. Ten infants were accidentally suffocated in bed. Five persons committed suicide; 1 by cut throat; 3 by poison; and 1 by hanging. The latter was a girl 15 years of age. The total deaths from violence were 1·8 per cent of the deaths from all causes, and 0·4 per 1,000 of the population.

INQUESTS—were held in 65 cases, or 3·6 per cent of the deaths. 30 deaths were attributed to natural causes and 1 to excessive drinking. A post-mortem examination seems to have been made in only three instances.

UNCERTIFIED DEATHS.—There were 42 or 2·3 per cent. Twenty six were children under one year of age, 10 between 1 and 5 years and 6 were adults. Six were registered on the authority of the Coroner and 8 on

that of the Coroner's Officer. In one of the latter cases the cause of death was said to be "Congestion of the stomach."

WATER SUPPLY.

During the year there were 28 complaints of a deficient supply, against 31 in 1879. This is in the proportion of one complaint to about 400 houses, but some of the complaints referred to several houses. The quality of the water was generally good. It approached uniform clearness having been found slightly turbid on one occasion only.

The average number of houses supplied by the Southwark and Vauxhall Company during the year was 90,535 and the average daily supply was 23,985,826 gallons, of which it is estimated that 19,668,377 gallons were used for domestic purposes, or 217 gallons to each house and 30 gallons to each person.

Dr. Frankland continues to extol the virtues of the water from the deep chalk wells and to describe the river water as grossly polluted. The maximum amount of organic impurity occurred in October and amounted to less than one-third of a grain per gallon. This was after the summer diarrhoea had subsided.

Drs. Odling and Tidy, are equally eminent as chemists, and have the additional advantages of being highly qualified medical men and experienced as

Medical Officers of Health. They affirm the purity and wholesomeness of the supply derived from the river.

Until the system of constant supply is completed it is the duty of the owners and occupiers of houses to take care that cisterns, tanks and butts for containing water are properly covered over and frequently cleaned out ; that they do not receive the drippings from roofs and gutters ; that they are not placed in close proximity to dust bins or other filthy deposits ; and, especially, that there is no untrapped waste pipe communicating with the drains.

A persistent waste of water is not uncommon and should be avoided by every good citizen, as it is likely to cause an inadequate supply in several adjoining houses producing stopped drains and other evils.

STATISTICS OF LONDON.

The births registered in the year 1880 amounted to 132,173 and the deaths to 81,128. Epidemic diarrhoea prevailed in the summer and caused 3,767 deaths. In 1879 there were only 1,835 deaths ascribed to this cause. The mortality from scarlet fever, diphtheria and whooping cough shewed some excess above the average of the previous ten years, while the mortality from all kinds of continued fevers shewed a large

decline. The death referred to smallpox numbered 475, to measles 1,501, to scarlet fever 3,073, and to whooping cough 3,438. The chief zymotic diseases caused 170 in each 1,000 deaths. The general mortality (22·2 per 1,000) was below the average. In the West districts it was 19·9; in the North, 21·2; in the Central, 23·2; in the East, 24·3; and in the South, 22·8. There died in 151 Public Institutions 14,730 persons; in 52 Workhouses, 9,059; and in 39 General Hospitals, 4,435. Nearly one person in every nine dies in a Workhouse, and nearly one in 18 in a Hospital. Two deaths in every 11 occurred in a Public Institution of some kind.

THE MEAN TEMPERATURE of the air was 49°·4, and exceeded the average of 100 years by 0°·8. In the first quarter the excess was 1°·0. and in the third quarter 1°·7.

THE RAINFALL was 29·8 inches and exceeded the average by 4·4 inches. Most rain fell in the months of July, September, October and December.

SMALLPOX IN LONDON.

During the year 1880. the deaths from smallpox in London numbered 475. In 142, or 29·9 per cent of the fatal cases no information was supplied as to whether the deceased had ever been vaccinated. In the remain-

ing 333 cases, 104, or 31.1 per cent, were vaccinated, and 229, or 68.8 per cent, were not vaccinated. The population of London, at all ages, contains about 3,620,000 persons who are vaccinated and 190,000 who are not vaccinated. The death rate in the vaccinated class was 28 per million of the vaccinated population, and the death rate in the unvaccinated class was 1,205 per million of the unvaccinated population, or *forty-three times as great as that of the vaccinated*. It is *assumed* by the opponents of vaccination, that the whole of the non stated cases are really vaccinated, and that the fact is concealed to save the credit of vaccination. As 34.5 per cent. of these non stated cases were under 5 years age, when some documentary evidence of vaccination could be produced if the operation had been successfully performed, and 23.9 per cent. were between 5 and 20 years, making 58.4 per cent. under 20 years of age, when in most cases the fact of the patients having been vaccinated or not could be easily determined, there can be little doubt that most of them were not vaccinated and that the information was withheld to avoid prosecution for non-observance of the law. However if all these 142 not stated cases had been vaccinated, the death rate in the vaccinated would be only 68 against 1,205 in the unvaccinated. It is further *asserted* that some of those

who are classed as not vaccinated, should be included in the list of vaccinated. If this were the case with so many as half of them, (which it is absurd to suppose) the death rate in the vaccinated would be 100 per million, against 594 per million in the unvaccinated. Thus it will be seen that *if all the non-stated cases, and half of those certified to be not vaccinated are included (for the sake of argument) in the vaccinated class; the mortality is only one sixth of what it is in the non-vaccinated class.*

The following table shews the number of deaths at various ages:—

Ages.	Vaccinated.	Not Vaccinated.	No Statement.
0 - 1 years	1	28	29
1 - 5 „	9	51	20
5 - 20 „	20	87	34
20 - 40 „	58	45	34
40 - 60 „	16	17	20
60 - 80 „	0	1	5
	—	—	—
Total	104	229	142
	—	—	—

Considering that the vaccinated are nineteen times as numerous as the unvaccinated, and that nearly every case of smallpox must have been almost necessarily in contact with several vaccinated persons, the above figures clearly shew what a large amount of protection

must have been conferred by vaccination under 20 years of age. Between 20 and 40 years the deaths in the vaccinated are higher in actual number but not in proportion to persons living.

This shews the advisability of re-vaccination, and that a large proportion of the unvaccinated had taken smallpox at an earlier period of life. It is also some evidence of the honesty of the official statistics which the anti-vaccinationists take so much pains to deride as "cooked" and unreliable, but which they do not hesitate to avail themselves of whenever a partial quotation, or an ingenious perversion of them may serve to mislead the public.

SANITARY WORK.

The number of houses and other premises inspected and reported to the Vestry was 2055, being an increase of 478 above the number in the previous year. 1972 notices were served on owners or occupiers to execute works, and in the large majority of cases these were complied with, without the necessity of having recourse to legal proceedings.

In 42 instances, or 2·2 per cent of the notices, it was necessary to take out summonses at the Police Court for non-compliance with the orders of the Vestry.

The parties concerned paid the costs, and did what was required of them.

Two hundred and twenty-two houses in a dirty and dilapidated condition were cleansed and repaired, and 254 houses in which infectious diseases had occurred were disinfected. Five persons suffering from infectious diseases were removed to the hospital under the Sanitary Act, and 8 dead bodies were removed to the mortuary from rooms in which persons were living. Eleven cases of over-crowding were abated. Seventy-three offensive accumulations and 82 animals kept so as to be a nuisance were removed.

Defective drains occupied a large portion of the Inspector's time. He reports 532 stopped; 113 old, dilapidated, and useless; 91 defective; and 14 of inadequate size. Each of these required three or four attendances, viz :—to view, to serve notice, and to inspect during progress and on completion of works.

The usual sanitary inspections were made, and particular attention was paid to the exposure for sale of meat, fish, rabbits, fruit, &c., which were unfit for food. Several articles were seized and destroyed.

The activity and efficiency of your Inspector are well-known. I have much pleasure in stating that he has rendered me every assistance, and with the utmost cordiality.

Thanking the Vestry for the kind support I have
at all times received in the discharge of my duties.

I am, Gentlemen,

Your obedient servant,

JOHN DIXON, M.D.,

Medical Officer of Health.

133, JAMAICA ROAD,
BERMONDSEY.

TABLE 1.

Causes of Death registered in Bermondsey during the 52 weeks ending January 1st, 1881.

CLASS.	ORDER.	CAUSES OF DEATH.	1880.			AGES.						
			TOTAL.	Male.	Female.	0-1	1-5	5-20	20-40	40-60	60-80	80-100
		All Causes	1796	878	918	511	436	133	171	236	247	62
		(Classes.)										
I.		Zymotic Diseases	465	244	221	155	214	67	10	5	13	...
II.		Constitutional „	307	149	158	48	53	35	89	59	23	...
III.		Local „	728	353	375	164	143	29	61	166	149	16
IV.		Developmental „	265	112	153	134	19	...	8	3	56	46
V.		Violent Deaths	30	19	11	10	7	2	3	2	6	...
		Not Classed	1	1	...	...	...	...	..	1	...	...
		(Orders.)										
I.	1	Miasmatic Diseases	449	232	217	145	209	67	10	5	13	...
	2	Enthetic „	5	3	2	4	1	...	...	...	...	...
	3	Dietic „	8	7	1	3	4	...	...	1	...	...
	4	Parasitic „	3	2	1	3	...	...	...	...	...	...
II.	1	Diathetic „	41	15	26	...	1	6	4	13	17	...
	2	Tubercular „	266	134	132	48	52	29	85	46	6	...
III.	1	Dis. of Nervous System	179	90	89	59	32	4	7	30	41	6
	2	Circulatory Organs	57	29	28	...	...	4	6	27	19	1
	3	Respiratory „	421	207	214	98	102	13	35	85	79	9
	4	Digestive „	40	13	27	5	4	3	7	15	6	...
	5	Urinary „	15	9	6	...	2	...	4	7	2	...
	6	Generative „	1	...	1	...	...	...	...	1	...	...
	7	Bones and Joints, &c.	6	3	3	...	...	4	...	...	2	...
	8	Skin, &c.	9	2	7	2	3	1	2	1	...	...
IV.		Devl. Diseases of										
	1	Children	68	31	37	55	13	...	...	...	...	..
	2	Adults	9	...	9	...	...	...	8	1	...	...
	3	Old People... ..	103	38	65	...	...	...	...	1	56	46
	4	Diseases of Nutrition	85	42	43	78	6	...	...	1	...	...

TABLE 1.—continued.

CLASS.	ORDER.	CAUSES OF DEATH.	1880.			AGES.						
			TOTAL.	Male.	Female.	0-1	1-5	5-20	20-40	40-60	60-80	80-100
III.		(Order 6.)										
	6	Uterus, Disease, of &c.	1	...	1	...	...	...	...	1		.
		(Order 7.)										
	7	Synovitis	1	...	1	...	..	...	...	...	1	...
		Joint and Bone Disease	5	3	2	...	...	4	...	...	1	...
		(Order 8.)										
	8	Plegmon, Abscess, &c.	3	1	2	2	...	1	...	...	...	...
		Pyæmia	3	...	3	...	...	...	2	1	...	...
IV.		Ulcer	1	...	1	...	1	...	...	...	...	...
		Skin Disease, &c. ...	2	1	1	...	2	...	...	...	...	...
		(Class IV.)										
		(Order 1.)										
	1	Premature Birth ...	28	8	20	28	...	...	..	...	...	...
		Cyanosis	2	2	...	2	...	...	...	...	...	...
		Spina Bifida	2	1	1	2	...	...	...	...	...	...
		Other Malformations ...	1	...	1	1	...	...	...	...	...	...
		Teething	35	20	15	22	13	...	...	...	...	...
		(Order 2.)										
	2	Paramenia ... ..	...	...	...	...	...	...	...	...	...	...
		Childbirth	8	...	8	...	...	...	7	1	...	...
		Abortion	1	...	1	...	...	...	1	...	...	...
		(Order 3.)										
	3	Old Age	103	38	65	...	...	...	...	1	56	46
V.		(Order 4.)										
	4	Atrophy and	85	43	42	78	6	...	...	1	...	...
		Debility, &c.										
		(Class V.)										
		(Order 1.)										
	1	Accident or Negligence										
		Fracture, Contusion, &c.	8	4	4	...	3	...	2	...	3	...
		Wounds ... ..	...	...	...	...	...	...	...	...	...	...
		Burns and Scalds ...	4	2	2	...	4	...	...	...	...	...
		Poison	1	1	...	...	...	...	...	...	1	...
		Drowning	2	2	...	...	...	1	...	...	1	...
		Suffocation	10	7	3	10	...	.	...	...	...	...

TABLE 1.—continued.

CLASS.	ORDER.	CAUSES OF DEATH.	1880.			AGES.						
			TOTAL.	MALE.	FEMALE.	0-1	1-5	5-20	20-40	40-60	60-80	80-100
V.	1	(Order 1.)										
		Otherwise ...	...	...	...	...	...	...	..	...	...	...
		(Order 3.)										
	3	(Homicide.)										
		Murder ...	...	...	...	...	...	...	...	...	...	...
		Manslaughter...	...	...	...	...	...	...	..	...	...	...
	4	(Order 4.)										
		(Suicide.)										
		Wounds { Gunshot ...	..	...	...	...	...	...	...	...	...	...
		{ Cut, Stab	1	1	...	..	...	...	...	1	...	...
		Poison ...	3	2	1	...	...	...	1	1	1	...
		Drowning ...	...	...	...	...	...	...	...	...	...	...
		Hanging ...	1	...	1	...	...	1	...	..	...	...
		Otherwise ...	...	...	...	...	...	...	...	...	...	...
		Not classed.										
		Found Dead in the River Thames ...	1	1	...	...	...	...	...	1	...	...
		Not specified or ill-defined ...	...	...	...	...	...	...	...	...	..	...

NOTES.

Area of Parish=652 acres (Land 626, Tidal Water 26.)

Population at census 1871=80,429.

Average number of persons per house 1871=7.5.

Population estimated at Midsummer 1880=86,102.

TABLE II.

Deaths from the Principal Zymotic Diseases during 1880, and Five previous Years.

ZYMOTIC DISEASES.	1880.					Five Previous Years.					Average.
	1st. Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.	1875	1876	1877	1878	1879	
Smallpox ...	0	2	0	1	3	0	9	39	8	8	12.8
Measles ...	1	1	6	38	46	101	46	46	75	56	64.8
Scarlet Fever ...	34	20	27	21	102	130	97	21	43	102	78.6
Diphtheria ...	2	3	2	6	13	16	3	5	9	19	10.4
Whooping Cough...	63	22	3	6	94	111	63	75	225	98	114.4
Fever ...	5	9	9	4	27	21	20	21	25	16	20.6
Diarrhœa ...	5	3	102	15	125	73	112	78 79	134	45	76.6
Cholera ...	0	1	0	0	1	0	1	2	3	0	1.2
	110	61	149	91	411	452	351	248 287	512 514	344	379.4

TABLE III.

Total Deaths from certain groups of Diseases and rate of mortality therefrom.

Diseases.	Total Deaths.	Deaths per 1000 of Population.	Proportion of Deaths to 1000 Deaths.
1—Seven Principal Zymotic Diseases	411	4·7	226
2—Pulmonary Diseases ... (Other than Phthisis)	421	4·9	234
3—Tubercular Diseases ... (Not including Meningitis)	201	2·3	111
4—Wasting Diseases of Infants	122	1·4	68
5—Convulsive Diseases of Infants.	183	2·1	102

NOTES.

1.—Includes Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever and Diarrhœa.

2.—Includes Bronchitis, Pleurisy, Pneumonia, Asthma, Lung Disease and Laryngitis.

3.—Includes Phthisis, Scrofula and Tabes.

4.—Includes Atrophy and Debility, Marasmus, Inanition, Want of Breast Milk and Premature Birth.

5.—Includes Hydrocephalus and Meningitis, Convulsions and Teething.

TABLE IV.

Weekly statement of Births and Deaths in each Sub-District of the Parish of Bermondsey, during 52 weeks ending January 1st, 1881.

1880. Week ending	SUB-DISTRICTS.						Total for the whole of Bermondsey.	
	Leather Market.		St. Mary Magdalene.		St. James's.			
	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.
January 10	10	4	12	6	42	13	64	23
" 17	9	7	13	6	58	23	80	36
" 24	18	10	13	12	49	26	80	48
" 31	11	11	14	15	44	32	69	58
February 7	9	21	11	14	49	55	69	90
" 14	18	14	16	21	45	25	79	60
" 21	7	13	11	9	44	26	62	48
" 28	11	7	11	10	43	25	65	42
March 6	14	5	13	8	40	25	67	38
" 13	13	4	14	8	38	17	65	29
" 20	16	3	17	12	49	24	82	39
" 27	8	7	14	7	40	13	62	27
April 3	5	2	9	13	44	21	58	36
" 10	13	5	20	10	65	12	98	27
" 17	7	5	17	8	34	13	58	26
" 24	15	4	5	8	42	14	62	26
May 1	10	10	8	4	37	20	55	34
" 8	14	4	18	8	48	16	80	28
" 15	11	4	13	8	42	11	66	23
" 22	8	9	11	7	44	16	63	32
" 29	8	8	14	1	46	16	68	25
June 5	11	7	15	4	45	20	71	31
" 12	16	9	12	7	62	12	90	28
" 19	10	7	7	3	40	11	57	21
" 26	9	10	17	5	43	14	69	29
July 3	14	9	22	5	47	9	83	23
" 10	19	5	15	6	59	16	93	27
" 17	5	4	9	4	25	19	39	27
" 24	0	12	8	7	53	13	61	32
" 31	6	10	8	14	29	29	43	53

TABLE IV.—*continued.*

1880. Week ending	SUB-DISTRICTS.						Total for the whole of Bermondsey.	
	Leather Market.		St. Mary Magdalene.		St. James's.		Births.	Deaths.
	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.		
August 7	11	13	9	9	38	22	58	44
„ 14	14	11	12	3	44	22	70	36
„ 21	9	7	7	9	50	14	66	30
„ 28	14	6	10	8	49	15	73	29
Sept. 4	10	7	9	8	44	28	63	43
„ 11	4	5	12	6	46	15	62	26
„ 18	13	9	12	7	46	14	71	30
„ 25	9	7	7	13	41	22	57	42
October 2	9	2	14	5	47	17	70	24
„ 9	11	2	16	9	35	13	62	24
„ 16	12	3	10	5	56	14	78	22
„ 23	12	8	7	11	46	13	65	32
„ 30	12	6	17	6	40	22	69	34
Nov. 6	7	3	19	7	53	22	79	32
„ 13	14	11	9	6	57	23	80	40
„ 20	14	10	12	8	46	22	72	40
„ 27	15	9	4	9	34	24	53	42
Dec. 4	9	7	18	8	42	18	69	33
„ 11	9	2	8	9	36	20	53	31
„ 18	11	4	12	9	46	21	69	34
„ 25	17	2	9	10	34	15	60	27
1881. January 1	12	8	22	12	40	15	74	35
Total ...	574	372	642	427	2316	997	3532	1796

TABLE V.

Nuisances, &c., inspected and reported to the Vestry, during the year 1880, by the Medical Officer of Health and the Inspector of Nuisances.

TABULAR STATEMENT OF SANITARY WORK.

2055	Houses and other premises inspected and reported to the Vestry.
1972	Notices served on Owners or Occupiers to execute works, &c.
222	Houses in a dirty and dilapidated condition, cleansed, repaired, &c.
7	Houses condemned as unfit for habitation.
254	Houses disinfected, cleansed and purified.
11	Cases of Overcrowding abated.
163	Privies repaired: others ventilated.
121	Offensive Privies cleared.
60	Closets Panned and trapped.
134	Closets supplied with Water.
91	Defective Drains repaired.
532	Stopped Drains cleared.
194	Untrapped Sinks, trapped.
5	Cesspools abolished.
164	Badly Paved Yards repaired.
65	Water Receptacles supplied.
130	Water Receptacles cleansed, repaired and covers provided.
55	Water supply apparatus repaired.
82	Houses supplied with Water, which previously had none, or had supply cut off.
189	Dust-bins provided.
4	Public Dust-bins provided.
164	Defective Roofs repaired.
29	Defective Rain-shoots and Gutters repaired.
73	Offensive accumulations removed.
84	Urinals and other Offensive places cleansed.
82	Animals kept so as to be a nuisance, removed.
15	Slaughter-houses inspected and licensed.
16	Cow-houses inspected and licensed.
93	Bake-houses inspected.
7	Cellar Flaps repaired.
6	Gates altered to open inwards.
8	Streets and Roads re-numbered.
36	Street Obstructions removed.
49	Stables and other premises drained, which previously had no drainage.
113	Old and dilapidated Brick Drains taken up and re-laid with Stoneware Glazed Pipes.
14	Drains being found to be too small, were taken up and re-laid of sufficient size to carry off sewage.
3	Barrels and 41 Baskets of Fish, 3 Breasts of Mutton, 1 Leg of Veal, 12 Sheep's Lights, and 5 Rabbits were destroyed as being unfit for food.
4	Works injurious to health abolished or removed from the parish.
5	Persons suffering from infectious diseases removed to Hospital.
8	Dead bodies removed from Rooms to mortuary upon Magistrate's orders.
42	Summonses taken out before Police Magistrates for not complying with orders of the Vestry.
	Various attendances at the Police Courts, &c.

H. THOMAS, INSPECTOR.

List of Articles submitted to the Public Analyst, from
April 3rd, 1880, to April 3rd, 1881.

Article.	Number of Samples.	Genuine.	Adulter- ated.	Amount of Fines.			Costs.		
				£	s.	d.	£	s.	d.
Milk	35	21	14	37	16	0	8	2	6
Condensed Milk }	1	1	...	...	...	...	..	...	...
Butter... ..	14	7	7	11	0	0	4	7	6
Bread	8	8	...	...	...	...	...	...	...
Flour	1	1	...	...	...	...	...	...	...
Arrowroot ...	2	2	...	...	...	..	..	...	...
Oatmeal	1	1	...	...	...	..	...	...	...
Magnesia	1	1	...	..	...	...	...	...	...
Mustard	4	3	1	0	5	0	0	12	6
Coffee	3	...	3	0	16	0	1	17	6
Tincture Quinine }	1	1	...	...	..	...	...	...	...
Sherbet	1	1	...	...	...	...	...	...	...
	72	47	25	49	17	0	15	0	0

The Fines and Costs recovered under the Sale of Food and Drugs Act
are paid to the Vestry's Account.

H. THOMAS, INSPECTOR.

MEDICAL OFFICER'S REPORTS

From **JANUARY 19th, 1880, to JANUARY 3rd, 1881.**

January 19th, 1880.

During the fortnight that ended on the 10th day of January, 153 births and 79 deaths were registered in Bermondsey. The number of deaths in the previous fortnight was 104, and in the corresponding period of last year 92.

The annual death rate from all causes was 21·0 per thousand of the estimated population. The death rate in London was 28·2 per thousand.

The causes of death included 18 from the principal zymotic diseases, viz :—4 from scarlet fever, 2 from diphtheria, 11 from whooping and 1 from enteric fever. Diseases of the organs of respiration caused 19 deaths, of which 13 were referred to bronchitis, 3 to pneumonia, and 3 to croup. There were 6 deaths from consumption, and 4 from hydrocephalus.

The deaths which occurred at various periods of life, were 22 under one year, 23 between one and five years, 23 between five and sixty years, and 11 above sixty years.

The Inquest cases included 2 deaths from accident, 1 from "a fit," and 1 suicide by hanging.

The water supplied by the Southwark Water Company during the month of December was of superior quality considering the season of the year.

In the metropolis the deaths from diseases of the respiratory organs, from measles and scarlet fever have declined, but the fatal cases of whooping cough have risen to a higher number than has been recorded in London in any previous week on record.

The Registration year 1879, (comprising 53 weeks) ended on the 3rd day of January. During that period 3716 births and 1982 deaths were registered in the parish. The births were 119 above, and the deaths 128 below the corresponding numbers in the previous year. The annual birth rate was 37·9, and the annual death rate 20·2 per 1000. The increase of the population was at the rate of 17·6 per 1000, raising the estimated number of inhabitants to 99·734.

The population of registration in London is estimated at 3,664,149.

February 2nd, 1880.

During the fortnight that ended on the 24th day of January, 160 births and 84 deaths were registered in Bermondsey. These numbers are equal to an annual birth rate of 41·7, and to an annual rate of mortality of 21·9 per thousand of the estimated population. The death rate in London for the corresponding period was 25·8 per thousand.

From the principal diseases of the zymotic class there were 14 deaths, viz :—measles 1, scarlet fever 3, whooping cough 8, enteric fever 1, and diarrhœa 1.

Tubercular diseases caused 8 deaths, viz :—phthisis 6, and hydrocephalus 2.

From diseases of the respiratory organs there were 28 deaths, viz :—bronchitis 19, pneumonia 6, and croup 3.

Diseases of the brain and the nervous system caused 12 deaths of the heart 2, of the liver 1.

From old age there were 5 deaths.

The deaths which occurred at different periods of life were 19 under one year, 23 between one and five years, 22 between five and sixty years, and 20 above sixty years.

Five Inquests were held. In 2 the deaths were referred to natural causes, and in 2 to suicide.

Three deaths were not certified :—2 being registered as due to convulsions, and 1 to thrush.

The Registrar General reports that “during last year 458 deaths from smallpox were registered in London, against 2544 and

1416 in the two preceeding years. After distributing the hospital cases, it appears that 93 of the 458 deceased smallpox patients in 1879 had resided in Greenwich, 80 in Camberwell, 52 in Southwark and Newington, 39 in Fulham, 25 in Kensington, and 25 in Wandsworth. The death rate from smallpox in London last year was equal to 126 per million of the population, against an average annual rate of 410 per million in the 42 years 1838—79. During the 16 years 1838—53 the death rate from smallpox in London averaged 512 per million, whereas in the 26 years 1854—79, since the Compulsory Vaccination Act was passed, the annual rate has not averaged more than 348 per million." Dr. Farr (who is unquestionably the highest statistical authority on these points in this country) has estimated that *before* the practice of inoculation from 1629—1635 the deaths from smallpox in London per million of the population were 1890. From the year 1660—1679, the deaths were 4170 per million. *After* the practice of inoculation from 1728—1757, they were 4260, and between that period and the end of last century 5020 per million. From 1801—10 (when vaccination was partially practised) they were 2040, and from 1831—35 they were 830 per million.

That there has been no abatement in the virulence of smallpox itself is clearly shown by the fact that notwithstanding all the sanitary improvements of modern times, the mortality from smallpox in the unvaccinated is actually higher than it was during the last century.

February 16th, 1880.

During the fortnight that ended on the 7th day of February, 138 births and 148 deaths were registered in Bermondsey. These numbers were equal to an annual birth rate of 35.9, and to an annual rate of mortality of 38.5 per 1000. The death rate in London for the same period was 39.7 per 1000.

To the seven principal diseases of the zymotic class 28 deaths were referred, viz :—4 to scarlet fever, 22 to whooping cough, 1 to enteric fever, and 1 to diarrhoea. The zymotic death rate was 7.3 per 1000 against a rate of 5.3 in London.

The excess is due to a sudden and large increase in the number of deaths from whooping cough.

Diseases of the organs of respiration caused 55 deaths, viz :— bronchitis 45, pneumonia 7, asthma 1, and croup 2. The extraordinary number of deaths from bronchitis is attributable to the low temperature, easterly wind, and dense fogs which prevailed during the first week of the above period.

The deaths from tubercular diseases numbered 20 ; of which 14 were from consumption, 3 from tabes, and 1 from hydrocephalus.

The other registered causes of death included 7 from convulsions, 9 from old age, 6 from teething, and 8 from heart disease.

Three Inquests were held. The causes of death were inflammation of the lungs, heart disease and apoplexy.

Five deaths were not certified. Two of them were registered on the authority of the Coroner's Officer.

The deaths which occurred at various periods of life were 36 under one year, 32 between one and five years, 52 between five and sixty years, and 28 above sixty years.

The water supplied by the Southwark Water Company during the month of January was efficiently filtered; but inferior in quality to that supplied during December.

The proportion of organic impurity was double that in the water of the West Middlesex Company which is taken from the same source.

In London during the week ending February 7th, 2684 births and 3376 deaths were registered. Allowing for increase of population, the deaths exceeded by 1657 the average number in the corresponding week of the last 10 years. The annual death rate from all causes, which had been equal to 24·6, 27·1, and 31·3 in the three preceding weeks, further rose to 48·1 per thousand. The death rate was higher than it has been in any week since the cholera epidemics of 1849, 1854 and 1866. The nearest approach in recent years to so high a rate of mortality, was recorded in the week ending December 20th, 1873 when the death rate was equal to 37·5 per 1000, influenced then, as recently, by low temperature and dense fogs. The deaths from diseases of the respiratory organs rose to 1557 last week and exceeded the corrected weekly average by 1118. The fatal cases of bronchitis, which had been 531 in the previous week, rose to 1223 last week. The fatal cases of whooping cough were also unprecedentedly numerous. They rose from 193 to 248—of these 101 occurred in the South Districts.

Accompanied by the Inspector, I have visited on a Saturday night several butchers' shops and meat stalls in Dockhead, Bermondsey New Road, and Southwark Park Road. The beef sold at a low price is generally "American." It varies in quality from "fair" to "very inferior." In five shops some small pieces of meat, and in one instance some rabbits, were exposed for sale in a putrid condition. At one shop we found about a dozen sheeps' lungs affected with tubercular disease and also a diseased liver. From one stall the Inspector took a box of exceedingly stale fish, and at another stall we noticed a most miserable leg of mutton which weighed five pounds. All these articles were destroyed by consent of the owners. In only one instance did we meet with any obstruction. It was at No. 22, Bermondsey New Road, where we found about ten pounds of meat in a putrid state offered for sale at 2½d. per pound. The meat was taken before the magistrate at the Southwark Police Court and was condemned by him. I believe the bulk of the cheap mutton sold at the stalls—and in some of the shops, is the flesh of animals who have lost half of their original weight from a form of consumption known as "sheep rot." This disease is common in sheep fed on marshy ground and is due to a parasite affecting the liver. The impoverishment of the blood, in consequence of large quantities of serum being drained away by the bowels, brings on a dropsical condition, of which the sheep eventually dies, or would die if not killed. Differences of opinion exist with regard to the effects of eating the flesh of diseased animals, but I have no hesitation in saying that the diminution in nutritive value in mutton of this kind, far exceeds the difference in the price. It is dearer at 5d. per pound, than sound mutton at 9d.—as food.

March 1st, 1880.

During the fortnight that ended on the 21st day of February, 141 births and 108 deaths were registered in Bermondsey. These numbers were equal to an annual birth rate of 36·7 and to an annual rate of mortality of 28·1 per 1000 of the estimated population. The death rate in London for the corresponding period was 32·1 per 1000.

From the principal diseases of the zymotic class there were 16 deaths, viz :—6 from scarlet fever, 8 from whooping cough, and 2 from diarrhoea.

Diseases of the organs of respiration caused 49 deaths, viz :—bronchitis 37, pneumonia 9, lung disease 2, and croup 1.

There were ten deaths from diseases of the tubercular class, of which 7 were referred to consumption.

The other causes of death included brain disease 8, old age 5, atrophy 5, liver disease 3.

There were 2 Inquests. The causes of death were asthma 1, and burn 1.

The deaths which occurred at various periods of life, were 27 under one year, 25 between one and five years, 35 between five and sixty years, and 21 above sixty years.

The number of deaths from diseases of the respiratory organs caused by cold and fogs, continues to affect the registration returns for some time after the return of milder weather.

The deaths from scarlet fever and whooping cough remain much above the average numbers.

March 15th, 1880.

During the fortnight that ended on the 6th day of March, 132 births and 80 deaths were registered in Bermondsey. These numbers are equal to an annual birth rate of 34, and to an annual rate of mortality of 21 per 1000 of the estimated population. The death rate in London during the same period was 23·3 per 1000.

Diseases of the organs of respiration caused 22 deaths, of which 15 were referred to bronchitis, 5 to pneumonia, 1 to acute laryngitis, and 1 to congestion of the lungs.

From diseases of the tubercular class there were 7 deaths, viz :—phthisis 4, meningitis 1, tabes 1, and strumous abscess 1.

From the principal zymotic diseases there were 20 deaths, viz :—from scarlet fever 7, from whooping cough 12, and from enteric fever 1.

The deaths which occurred at various periods of life, were, 16 under one year, 21 between one and five years, 29 between five and sixty years, and 14 above sixty years.

Two deaths not certified were registered as due to convulsions. This term seem to be generally adopted when the cause of death in children is unknown. I have no doubt it covers a large amount of ignorance and neglect.

After having been for five consecutive weeks considerably above the average, the number of deaths in London has during the last fortnight been 290 below the average. Whooping cough continues to be unusually prevalent, the number of deaths being 84 per week above the average.

April 5th, 1880.

During the three weeks that ended on the 27th day of March, 209 births and 95 deaths were registered in Bermondsey. These numbers are equal to an annual birth rate of 36·2, and to an annual rate of mortality of 16·5 per 1000 of the estimated population. The death rate in London during the corresponding period was 20·9.

The number of deaths referred to the principal zymotic diseases was 14, viz:—to scarlet fever 7, diphtheria 2, whooping cough 4, and diarrhœa 1.

Diseases of the organs of respiration caused 24 deaths, of which 18 were from bronchitis, 4 from pneumonia, 1 from asthma and 1 from croup.

From tubercular diseases there were 21 deaths, viz:—phthisis 12, hydrocephalus 6, and tabes 3.

The other registered causes of death included 11 from diseases of the brain and nervous system, 3 from heart disease, and 8 from natural decay.

One Inquest was held, and 1 death was not certified.

The deaths which occurred at various periods of life were, 2 under one year, 17 between one and five years, 37 between five and sixty years, and 17 above sixty years of age.

After having experienced an unusually high death rate a few weeks ago, it is a very gratifying circumstance that the rate of mortality during the last 3 weeks has been much below that of the corresponding period in the previous three years.

April 19th, 1880.

During the fortnight that ended on the 10th day of April, 156 births and 63 deaths were registered in Bermondsey. These numbers are equivalent to an annual birth rate of 40·6, and to an annual rate of mortality of 16·4 per 1000 of the estimated population. The death rate in London during the same period was 23·2 per 1000.

The number of deaths referred to the principal diseases of the zymotic class was 14, viz :—measles 1, scarlet fever 6, whooping cough 6, and enteric fever 1.

The last case is one of a child aged 2 years, the cause of whose death is certified as “functional constipation (6 days) enteric fever.”

There were only 4 deaths from tubercular diseases, viz :—1 from consumption, 2 from meningitis, and 1 from tabes.

Diseases of the organs of respiration caused 20 deaths, viz :—bronchitis 13, pneumonia 5, pleurisy 1, and croup 1.

The other causes of death included 5 from diseases of the brain and nervous system, 7 from old age, and 4 from heart disease.

One Inquest was held. The cause of death was “accidental asphyxia.”

The birth rate is higher in consequence of delayed registration during the Easter holidays. The death rate is unusually low.

The Southwark Water Company is again at the head of the list for comparative amount of organic impurity. The actual amount however is not large.

May 3rd, 1880.

During the fortnight that ended on the 24th day of April, 120 births and 52 deaths were registered in Bermondsey. These numbers are equivalent to an annual birth rate of 31·2, and an annual rate of mortality of 13·6 per 1000 of the estimated population. The death rate in London was 20·9, and the mean rate of the 20 large towns was 22·0 per 1000. This is a lower rate than has prevailed in any week since the beginning of the year.

The causes of death included 7 from the principal zymotic diseases, viz :—smallpox 1, (a child aged 8 months, at 14, Long Walk, not vaccinated,) scarlet fever 3, whooping cough 1, and enteric fever 2.

From tubercular diseases there were 8 deaths, viz :—phthisis 5, meningitis 1, and tabes 2.

Diseases of the organs of respiration caused 13 deaths, of which 6 were referred to bronchitis, 4 to pneumonia, and 3 to other diseases.

The deaths which occurred at various periods of life were 9 under one year, 12 between one and five years, 18 between five and sixty years, and 13 above sixty years.

Five Inquests were held. In 4 cases the deaths were attributed to natural causes, viz :—age, heart disease, convulsions, and dentition, and in 1 case to accidental asphyxia.

May 24th, 1880.

During the three weeks that ended on the 15th day of May, 201 births and 85 deaths were registered in Bermondsey. These numbers are equal to an annual birth rate of 34·9, and to an annual rate of mortality of 14·8 per 1000 of the estimated population. Both these rates are below the average. The corresponding death rate in London was 19·9 per 1000.

To the principal zymotic diseases 16 deaths were referred, viz :—1 to smallpox (a child aged 3 weeks,) 4 to scarlet fever, 6 to whooping cough, 4 to enteric fever, and 1 to diarrhœa.

Diseases of the organs of respiration caused 15 deaths, viz :—bronchitis 10, pneumonia 4, and croup 1.

From diseases of the tubercular class there were 17 deaths, viz :—10 from consumption, 6 from hydrocephalus, and 1 from scrofula.

The other registered causes of death included diseases of the brain and nervous system 7, of the heart 1, of the liver 2, of the kidneys 2, premature birth 3, infantile debility 4, cancer 3, and natural decay 6.

The deaths which occurred at various periods of life were 19 under one year, 20 between one and five years, 34 between five and sixty years, and 12 above sixty years.

Two Inquests were held. In both cases the deaths were attributed to accidental asphyxia.

Dr. Frankland reports that during the month of April "The Southwark and Lambeth Companies sent out water of a very objectionable quality, containing a very large proportion of organic matter." I doubt the fairness of taking the water from the chalk wells of the Kent Company as a standard of comparison for the quality of organic matter in river water, unless the process is reversed for the inorganic matter which is largely in excess in the water from the chalk wells. It is very important that the water should be re-filtered and kept in a cool place, and also that cisterns should be covered over, as light and heat favour the development of organic germs, whether of animal or vegetable origin.

During the 13 weeks ending April 3rd, the number of births registered in the parish was 902, and the number of deaths 574. These numbers are equal to an annual birth rate of 36.0, and to an annual death rate of 23.0 per 1000.

The number of deaths from the principal zymotic diseases was 110, viz:—measles 1, scarlet fever 34, diphtheria 2, whooping cough 63, enteric fever 5, and diarrhoea 5.

June 7th, 1880.

During the fortnight that ended on the 29th day of May, 131 births and 57 deaths were registered in Bermondsey. These numbers are equal to an annual birth rate of 34.1, and an annual rate of mortality of 15.4 per 1000 of the estimated living. The yearly death rate in London during the corresponding period was 18.7.

From the principal diseases of the zymotic class there were 9 deaths, of which two were referred to scarlet fever, 6 to whooping cough, and 1 to typhus.

Diseases of the respiratory organs caused 15 deaths, viz:—bronchitis 9, pneumonia 3, and croup 3.

From tubercular diseases there were 10 deaths, viz:—4 from phthisis, 5 from meningitis, and 1 from struma.

The other registered causes included diseases of the brain and nervous system 7, of the kidneys 2, of the stomach 2, of the liver 2, and of the heart 1.

One death, not certified, was registered on the authority of the coroner's officer as "congestion of the stomach."

The deaths which occurred at various periods of life were 16 under one year, 15 between one and five years, 14 between five and sixty years, and 12 above sixty years.

There were 2 Inquest cases, in both the verdicts were "suicide" by poison.

I have visited the Glue and Size Manufactory of Messrs. Young & Co. A decided odour of scutch pervaded the whole of the premises. This however was not perceptible outside. I attributed it to a number of dirty casks, and quantities of bones, hoofs, and animal matter of various kinds, which presented a very large surface fully exposed to the action of the sun. The process of boiling both glue and size was in operation, although not so actively as on other occasions when I have visited these premises. The vapour which arises from boiling the glue is made to pass through the furnace, and if proper attention be paid to the working of the apparatus I do not think any nuisance is likely to arise, except perhaps for a short time when the pans are being emptied. The boiling of size is conducted in large shallow open pans situated at some distance from any street. The edges and surroundings of these pans had a very filthy appearance, and the vapour or steam given off was by no means of a pleasant or appetitive character. This seemed to be due to the *quantity* of animal matter and the action of heat on fat, and not to any putrid condition of the materials. There was no nuisance at the distance of a few yards from the pans. It would have been better if the apparatus which has been successfully applied to the glue pans had also been applied to the size pans, but I am not certain that this would obviate all complaints. It is evident that the boiling *can* be conducted without any nuisance, as I have myself repeatedly witnessed. It is also clear, from the testimony of several persons, that very offensive smells do, from time to time, arise from these premises, and cause a nuisance to persons dwelling in the Yalding Road. These smells are occasional and not permanent. I believe they occur when the pans are being emptied. The firm have at all times expressed their willingness to do anything they can to prevent any nuisance. I have advised the removal of all offensive materials, cleansing the size vats, protecting the casks from the sun, the free use of sanitas as a deodoriser, and greater care in the manufacture.

I have also visited the adjoining premises of Mr. Brockies, and Messrs. Powell, and am satisfied that neither of these are likely to occasion any nuisance in the Yalding Road.

June 21st, 1880.

During the fortnight that ended on the 12th day of June, 59 deaths and 161 births were registered in Bermondsey. These numbers are equivalent to an annual birth rate of 41·9, and to an annual rate of mortality of 15·3 per 1000 of the estimated population. The death rate in London during the same period was 18·5.

From the principal diseases of the zymotic class there were 8 deaths, viz :—3 from scarlet fever, 3 from whooping cough, 1 from enteric fever, and 1 from diarrhœa.

Diseases of the organs of respiration caused 10 deaths, viz :—bronchitis 8, pneumonia 1, and croup 1.

Fourteen deaths were referred to tubercular diseases, viz :—7 to consumption, 4 to meningitis, and 3 to tabes.

The deaths which occurred at various periods of life were 15 under one year, 16 between one and five years, 17 between five and sixty years, and 11 above sixty years of age.

Six Inquests were held. The causes of death were 2 natural, (both from fits) 3 accidental, 1 by drowning, 1 by scald, and 1 killed by a horse in the street, and 1 was attributed to excessive drinking.

I have again visited Messrs. Young & Co.'s premises and found them in a much cleaner condition.

An accumulation of dust and rubbish on a vacant piece of ground in Major Road has been removed. It has been asserted that a nuisance arises from putrid pork which was buried in this ground about two years ago, at a depth of several feet. I have found no evidence of any nuisance from this cause.

The Inspector called my attention to offensive smells on the adjoining premises occupied by Mr. Saunders. The trap over the drain in the yard was taken up instead of being kept in its place and kept filled with water. This I was informed had been done from ignorance of the use of the trap.

Some time ago I had occasion to state certain facts bearing on the subject of the non-removal of infectious cases in the early stages of the disease. Those facts, upon which I placed no interpretation have been regarded by some highly respectable medical men as a personal imputation. As no such idea was present in my mind, I

have much pleasure in taking the first opportunity of correcting an erroneous impression and of expressing my views more fully and perhaps more clearly. It is well known that there are many poor persons—but little above the pauper class—who prefer to remain at home until the last shilling of their means is exhausted, rather than be removed to a hospital. No doubt this feeling is a laudable one. Such persons generally live in crowded neighbourhoods, they have no proper nursing, they have no suitable food, and all idea of anything like effective isolation is out of the question. These are the very cases which should be removed without delay. The pecuniary interest attached to the attendance of cases of this description at their own homes is so trifling, that it must be presumed the medical men who attend them are influenced by a high sense—although possibly a mistaken sense—of professional duty. However I venture to think if they were a little more urgent in recommending the removal of such cases, and more willing to inform the sanitary authorities of their existence, they would be discharging their duty to their patients equally well, they would render an important service to the public in assisting to prevent the spread of infectious diseases, and they would obviate the possibility of any suspicion of unworthy motives being attached to themselves. These are the kind of cases I referred to when I said we received no information whatever about their existence until the patients were dead, or all their private means were exhausted. My remarks were general, and although illustrative of cases which occurred within my own knowledge, they were not even directed against any particular individual, and still less against the general body of medical practitioners.

July 5th, 1880.

During the fortnight that ended on the 26th day of June, 126 births and 50 deaths were registered in Bermondsey. These numbers are below the average. They correspond to an annual birth rate of 33·0, and an annual rate of mortality of 13·0 per 1000 living. The death rate in London was 17·9.

The registered causes of death included 10 from the diseases of the respiratory organs; 4 from diseases of the tubercular class; and 12 from the principal zymotic diseases; of the latter division 6 were referred to scarlet fever; 2 to diphtheria; 1 to whooping cough; 1 to remittent fever; and 2 to diarrhœa.

The deaths which occurred at various periods of life were 16 under one year, 9 between one and five years, 19 between five and sixty years, and 6 above sixty years.

The Inquest cases were:—found drowned 1, accidental asphyxia 2, convulsions 1, general debility 1.

I have made inquiries about the mortality and alleged nuisance in Major Road. The causes of death appear to have been croup and scarlatina. When a case of croup occurs in a house where the drain is not kept trapped, where the cistern requires to be cleansed, and where fowls and rabbits are kept in a small back yard I should hesitate before I referred the cause of the disease exclusively to the presence of a dust heap on adjoining premises. With regard to scarlet fever, which is well known to be a very contagious disease, I would observe that several of the memorialists are not only neighbours but friends and relatives, and as they have resided in these houses, one, four, seven or eight years, without any serious illness occurring until eight or nine weeks ago, and as the same disease has lately prevailed in the adjoining street, I am unable to attribute its existence to the fact of some putrid pork having been buried in Mr. Hart's ground during the summer of 1878.

July 19th, 1880.

During the fortnight that ended on the 10th day of July, 176 births and 50 deaths were registered in Bermondsey. The former were above, and the latter were below the average. These numbers are equal to an annual birth rate of 45·8, and to an annual rate of mortality of 13·0 per 1000 of the estimated population. The death rate in London during the same period was 18·7 per 1000.

The causes of death included 11 from the principal zymotic diseases, viz:—1 from measles, 2 from scarlet fever, 1 from diphtheria, 4 from whooping cough, and 3 from diarrhœa.

From diseases of the organs of respiration there were 12 deaths viz:—bronchitis 4, pneumonia 6, croup 1, and congestion of the lungs 1.

There were only 5 deaths from diseases of the tubercular class, viz:—phthisis 2, tabes 1, and meningitis 2.

The deaths which occurred at various periods of life were 17 under one year, 12 between one and five years, 14 between five and sixty years, and 7 above sixty years.

Four Inquests were held. In three cases the deaths were due to natural causes, and in one to accident.

The water supplied by Southwark Company during the month of June was of fair quality, better than that supplied in May, and slightly superior to the water of the West Middlesex Company.

At this season of the year the higher temperature of the air causes an increased tendency to disorders of the liver and bowels. Moderation in diet should be the rule for adults, and particular care should be taken that the food which is given to young children be perfectly fresh and sweet.

Complaint has been made of a nuisance at Mr. Higgins's Fish Manure Factory. It arose from the breaking down of a new apparatus which was being tried. I have desired that notice should be given us before it is again made use of.

August 9th, 1880.

During the three weeks that ended on the 31st day of July, 143 births and 112 deaths were registered in Bermondsey. The number of births is unusually low. No births were registered in the Leather Market District during the week ending July 24th. The above numbers are equal to an annual birth rate of 24·8, and to an annual rate of mortality of 16·1 per 1000. The death rate in London was 22·2 per 1000. The general mortality in London, which had been below the average for 20 weeks, has been slowly increasing during the last 6 weeks, until it has slightly exceeded the average of the corresponding period of the last 10 years. The excess is due to the prevalence of scarlet fever and diarrhoea.

Zymotic diseases caused 42 deaths, viz:—measles 2, scarlet fever 5, remittent fever, enteric fever, and diphtheria each 1, and diarrhoea 32.

Eleven deaths were referred to diseases of the organs of respiration, 14 to tubercular diseases, and 3 to accident.

The deaths which occurred at various periods of life were 53 under one year, 25 between one and five years, 17 between five and sixty years, and 17 above sixty years.

Further complaints have been made of the nuisance at Mr. Higgins's Manure Factory at 25, Little Abbey Street. On visiting the premises I found that the new apparatus had been used without

previous notice having been given us as promised. On June 12th 1876, I reported the existence of an offensive nuisance on these premises. The business then consisted of mixing fish heads and refuse shumac together in a shed or in the open air. It was a constant nuisance in hot weather, whenever the intervention of Sunday, or a Public Holiday, or accidental circumstances, delayed the collection or removal of the stale and often putrid fish. The mixing was afterwards conducted in a closed chamber, the effluvia from which passed through a fire in the room above. With proper precautions as to cleanliness, the avoidance of any considerable accumulation of offensive matters, and due attention to the fire, the business might have been tolerated, but nothing could make it desirable in this crowded neighbourhood. The chamber in question was allowed to become filthy in the extreme—dirty, damp and stinking, and swarming with tens of thousands of flies. I have directed this place to be cleansed, fumigated, and lime washed. Recently a monstrous iron cylinder, capable of holding two tons of fish, has been erected in an adjoining part of the premises. It is proposed to turn an apparatus inside this cylinder, which is fixed over hot air pipes, until the contents are thoroughly dried. In my opinion the arrangements adopted for consuming the vapour which must arise from the putrid fish are unsuitable and inadequate. I would suggest that the Vestry should request the Metropolitan Board not to sanction a business of this kind in this populous although poor district. I may say that two years ago I distinctly warned Mr. Higgins's in the presence of Mr. Thomas the Inspector, that any outlay or expense he might incur would be at his own risk, and would not in any way influence my opinion or action in the event of any public nuisance being caused by the business.

Shortly after the last meeting of the board I visited the Vestry Wharf. From the quantity of material on the premises, and from its condition, I conclude some circumstances had interfered with and delayed the regular course of removal.

I went again last week and noticed a decided improvement. No nuisance therefrom was perceptible off the premises. In the seven houses which overlook the wharf I counted twenty-four windows, of which sixteen were open, two or three in every house. I made inquiries at all these houses. Some of the inmates have resided there seven years. With the exception of scarlet fever in one house shortly before last Christmas, there did not appear to

have been any illness. The general opinion of the residents was that the premises were offensive at times, and particularly so three or four weeks ago, but that the erection of a higher wall or shed, on the side next Bermondsey Wall, would be still more objectionable to them, and detrimental to the property.

The last report of Col. Bolton on the Water Supply of the Metropolis contains some important remarks on the Southwark and Vauxhall Company, which I think it my duty to bring under the notice of the Vestry.

[*Extract from Report for June, 1880. Sec. 7. Southwark and Vauxhall Company.*]

September 20th, 1880.

During the six weeks that ended on the 11th day of September, 392 births and 209 deaths were registered in Bermondsey. The deaths were 11 below the average of the corresponding period of the last ten years corrected for increase of population. The annual birth rate was 34, and the annual rate of mortality 18·2 per 1000. The death rate in London was 21·8.

From the principal diseases of the zymotic class there were 82 deaths, viz :—measles 3, scarlet fever 17, whooping cough 2, enteric fever 3, simple fever 2, and diarrhœa 55.

There were more deaths from diarrhœa during these six weeks than in the preceding seven months. This remark applies to the Metropolis as well as to Bermondsey.

Diseases of the tubercular class caused 24 deaths, viz :—consumption 15, tabes 5, and water on the brain 4.

From diseases of the respiratory organs there 24 deaths, of which 16 were referred to bronchitis, 4 to pneumonia, and 3 to croup.

In the cases in which Inquests were held there were 3 natural deaths from apoplexy, and a child one year of age was killed by a van in the street.

Under one year of age there were 79 deaths, and above sixty years of age 23 deaths.

Complaints have been made of a nuisance from the soaks for foreign hides at 159, Long Lane; of a nuisance from boiling trotters in Gibbins's Yard, Alderminster Road; and of a nuisance from boiling animal matter at 241, Southwark Park Road. I have visited these premises and have written to all the parties concerned desiring them to abate the nuisances complained of.

The water supplied by the Southwark and other Companies during the month of August was reported by Dr. Frankland to be "efficiently filtered, but quite unfit for dietetic purposes owing to the large quantity of organic matter which it contained." I think this unqualified statement is likely to occasion unnecessary alarm. The total solid matter is less than a third part of a teaspoonful in every gallon. The greater part of that solid matter is chalk or harmless salts. The amount of free organic matter is about one grain in three gallons of water. The larger portion of that is of vegetable origin. There are no medical facts which support the opinion that river water of this character, when efficiently filtered, is really unwholesome. The water which is obtained from the deep chalk wells is doubtless of most excellent quality from a chemist's point of view, but medical men have failed to discover any difference worth noting in the death rates, or any evidence whatsoever that any special class of disease has been prevalent from drinking the waters of the Thames and Lea, or absent from the use of chalk water. Indeed, what differences exist are in favour of the river water over that of the chalk wells.

From the recent concurrence of an increased amount of dissolved organic impurity in the river water and an increased number of the deaths from diarrhoea, it may be supposed that the former is the cause of the latter. Such is not necessarily the case. During the last few weeks the number of deaths from diarrhoea have been quite as numerous, in proportion to the population, in the districts which are supplied by the Kent Water Company as in other districts which are supplied by the Southwark and Lambeth Companies. In the third quarter of last year the proportional amount of organic elements in the river water compared with that of the chalk wells, was 5·9 to 1. The number of deaths in London from diarrhoea was 1184. In the same quarter of the previous year (1878) the proportionate amount of impurity in the river water was only 3·4 to 1, but the deaths from diarrhoea were 2932. In the first quarter of 1872, the Thames water was $9\frac{1}{2}$ times as im-

pure as the chalk water. The deaths from diarrhoea were 132, being the lowest for that quarter during 9 years (1871-79.) In the third quarter of 1873, the river water was only $2\frac{1}{2}$ times as impure as that of the Kent Company. The deaths from diarrhoea were 3170, being the highest number in that quarter during the same 9 years. Impure water is unquestionably a cause of diarrhoea and many other diseases, but these are due to the presence of decomposing animal matter or of sewer gas, and not to the minute quantities of vegetable and mineral substances from which no natural water is ever found to be absolutely free. The water of the Thames at Hampton, when efficiently filtered and properly stored, is—in a practical, if not in a chemical sense—a pure and wholesome water.

October 24th, 1880.

During the fortnight that ended on the 25th day of September, 128 births and 72 deaths were registered in the parish. The former were equal to an annual birth rate of 33.2, and the latter to an annual rate of mortality of 18.7 per 1000 of the estimated population. The death rate in London was 20.5.

The principal diseases of the zymotic class caused 13 deaths, viz:—scarlet fever 1, typhus 1, enteric fever 1, and diarrhoea 10.

From tubercular diseases there were 16 deaths, of which 8 were referred to phthisis, 4 to meningitis, and 4 to tabes.

Diseases of the organs of respiration become more frequent at this season of the year. There were 11 deaths from bronchitis, and 3 from croup.

Under one year of age there were 17 deaths, and above sixty years of age 10 deaths.

Three Inquests were held. In each case the deaths were attributed to natural causes.

One death not certified was registered as "tubercular peritonitis." I presume this case was attended by an unqualified medical practitioner.

The number of deaths in Bermondsey was the same as the corrected decennial average and in the Metropolis slightly in excess of it.

October 18th, 1880.

During the fortnight that ended on the 9th day of October, 132 births and 48 deaths were registered in the parish. The former were equal to an annual birth rate of 34·4, and the latter to an annual rate of mortality of 12·5 per 1000 of the estimated population. The death rate in London was 19·6 per 1000.

The number of deaths from the principal zymotic diseases was 8, viz :—from measles 2, scarlet fever 3, diphtheria 1, and diarrhoea 2.

Thirteen deaths were referred to tubercular diseases, viz :—4 to meningitis, 5 to phthisis, and 4 to tabes.

There were 4 deaths from bronchitis, and 3 from pneumonia.

The deaths under one year of age numbered 17, and those above sixty years of age, 7.

Three Inquests were held. The causes of death were bronchitis 1, concussion of the brain 1, and found drowned 1.

One death—referred to dropsy—was not certified.

The returns of mortality are very satisfactory, but an undue importance should never be attached to the statistics for a short period.

I have again visited Mr. Higgins's premises and found no attempt had been made to use the new apparatus since the date of my last report.

Dr. Frankland reports as the result of his analysis of the waters supplied to the Metropolis during September as follows:—
“Except the supply sent out by the Chelsea Company all the water drawn from the Thames, although in every case efficiently filtered, was again unfit for dietetic purposes owing to the large quantity of organic matter which it contained.” The difference between water which is fit for domestic use and water which is not is exceedingly minute. It is a question of the quality and condition of the organic matter rather than of its exact quantity. In this case, as all the water is derived from the same source, the nature of the organic constituents must be of similar quality. The difference in the quantity of the organic elements in the Chelsea water which is approved of, and that of the Southwark Company which is condemned, is little more than one grain (1·162,) or about the weight of a large pin's head in *ten gallons of water*. Under certain

circumstances even this very minute difference might be of great importance, but I have no reason to think it is so in the present instance. When water is not properly stored, animal and vegetable organisms are rapidly developed, and the water soon becomes highly charged with organic impurities which may or may not be injurious to health. The filth accumulates and grows in the cisterns. In the present condition of the Southwark water, when properly filtered, and as it flows from the mains, a man must drink a quart of it every day for 21 years before he will have consumed one ounce (troy weight) of organic carbon, and he must do the same for 130 years to finish his first ounce of organic nitrogen. The only remedy for objectionable cisterns is the constant supply system, which is being gradually adopted by most of the Water Companies from motives of economy. but I know no reason why the process should not be accelerated for the benefit of the public.

November 1st, 1880.

During the fortnight that ended on the 23rd day of October, 143 births and 54 deaths were registered in Bermondsey. These numbers are equal to an annual birth rate of 37·2, and to an annual rate of mortality of 14·1 per 1000 of the estimated population. The death rate in London was 20·8 per 1000.

To the principal diseases of the zymotic class 11 deaths were referred, viz:—to measles 1, to scarlet fever 5, to diphtheria 1, to whooping cough 1, to typhus 1, and to diarrhoea 2.

From diseases of the respiratory organs there were 16 deaths, viz:—14 from bronchitis and 2 from pneumonia.

Tubercular diseases caused 10 deaths, viz:—phthisis 8, meningitis 1, tuberculosis 1.

There were 2 Inquests, and 2 deaths were not certified by any registered medical practitioner.

Under one year of age there were 18 deaths, between one and sixty years 29 deaths, and above sixty years 7 deaths.

On the 28th of October, an unvaccinated child, aged 8 years, died of hæmorrhagic smallpox at 67, Salisbury Street. The body was removed to the mortuary and the house disinfected. There were three other children in the same house unvaccinated.

The cases of overcrowding in Metcalfe Court and Aldred Street have been investigated.

The trotter boiler in Alderminster Road has removed his apparatus from the premises.

I have inspected the houses on each side of the approach to the Bridge in St. James's Road. If the Vestry think proper to deal with these houses under the Sanitary Acts, there are abundant reasons to justify this course. I am doubtful whether Torrens's Act is applicable, unless the Vestry are prepared to purchase the property. There are no facts which would enable me to certify these houses as an unhealthy area, to be dealt with under the provisions of the Artizans' Dwellings Act, 1875.

Professor Wanklyn in his report on the organic matter in the water supplied to London by the various water companies during the month of September last, gives his opinion that "the general character of the water supply is excellent." The water of the Southwark and Vauxhall Company, according to his analysis, was slightly inferior to that supplied by other Companies.

November 15th, 1880.

During the fortnight that ended on the 6th day of November, 148 births and 66 deaths were registered in the parish. These numbers are equivalent to an annual birth rate of 38·5, and to an annual rate of mortality of 17·2 per 1000 of the estimated population. The death rate in London for the same period was 31·7.

The causes of death included 12 from diseases of the zymotic class, viz :—smallpox 1, measles 2, scarlet fever 4, typhus 1, and diarrhoea 4.

Diseases of the respiratory organs caused 11 deaths, viz :—bronchitis 6, pneumonia 4, and croup 1.

From the tubercular diseases there were 15 deaths, of which 11 were referred to phthisis, 2 to meningitis, and 2 to tabes.

There were 5 deaths from old age, 4 from apoplexy, and 2 from heart disease.

Two Inquests were held, and in both cases the deaths were attributed to natural causes.

There were 18 deaths in children under one year of age, and 12 deaths in persons aged sixty and upwards. Of the latter 3 were between seventy-five and eighty, and 3 above eighty years.

The Thames water supplied in October is reported to have been of inferior quality to that which was delivered in September. The zymotic death rate is low and the general state of the public health is satisfactory.

December 8th, 1880.

During the three weeks that ended on the 27th day of November, 205 births and 122 deaths were registered in the parish. These numbers are equal to an annual birth rate of 35·6, and an annual death rate of 21·3 per 1000 of the estimated population. The death rate in London was 22·1.

The principal diseases of the zymotic class caused 24 deaths, viz :—measles 9, scarlet fever 5, diphtheria 2, whooping cough 4, typhus 1, and diarrhoea 3. Diseases of this class are unusually prevalent. The zymotic death rate was 4·1, that of London being 2·8. The difficulty of properly isolating cases of infectious disease in children is a very considerable one with poor persons who are blessed with a numerous progeny, and its importance is not sufficiently appreciated by those who are in a position to adopt the necessary precautions to prevent the spread of infection.

From diseases of the respiratory organs there were 33 deaths, viz :—from bronchitis 26, pneumonia 5, asthma 1, croup 1. Ten persons died of old age.

There were 18 deaths from consumption, 2 from meningitis, and 1 from tabes.

The deaths under one year of age numbered 28, and above sixty years of age 30.

Five Inquests were held. In 3 cases the deaths were attributed to accident, and in 2 to natural causes.

Seven deaths were not certified. Six of these were children. The causes were said to be bronchitis 2, convulsions 3, croup 1. One was an adult said to have died from diabetes.

I have inspected the houses No. 25, 26, 27, 28, and 29, King Street, Bermondsey New Road, and consider them unfit for human habitation.

December 20th, 1880.

During the fortnight that ended on the 11th day of December, 122 births and 64 deaths were registered in the parish. These numbers are equal to an annual birth rate of 31·8, and an annual rate of mortality of 16·7 per 1000 of the estimated population. The death rate in London was 20·3.

The principal diseases of the zymotic class caused 17 deaths, of which 12 were referred to measles, 3 to scarlet fever, 1 to diphtheria, and 1 to diarrhœa.

From diseases of the respiratory there were 16 deaths, viz :—12 from bronchitis, and 4 from pneumonia.

To tubercular diseases 9 deaths were attributed, viz :—5 to meningitis, 1 to tabes, and 3 to phthisis.

Eight persons died of natural decay.

Two Inquests were held. In one case death resulted from an overdose of chlorodyne, and in the other from a fall while cleaning the outside of a window.

One death was not certified. It was that of a child aged 7 months, the daughter of a lighterman at 22, Farncombe Street. The child was found dead in bed. The death is registered as "measles."

Dr. Frankland reports that the water supplied by the Southwark Company during November was of improved quality and efficiently filtered before delivery.

January 3rd, 1881.

During the fortnight that ended on the 25th day of December, 129 births and 61 deaths were registered in Bermondsey. These numbers are equal to an annual birth rate of 33·6, and to an annual rate of mortality of 15·9 per 1000 of the estimated population. In the corresponding period of last year the deaths numbered 104, and the death rate was 29. In London during the fortnight the total deaths have been 1161 below the decennial average. The deaths from zymotic diseases were 186, and those from diseases of the respiratory organs 512 below the average. The annual death rate was 18·7 per 1000.

The number of cases of smallpox in the Metropolitan Asylum Hospitals (which were 77 eight weeks ago) have increased to 380. The deaths from this disease were 48, of which 9 were vaccinated,

25 not vaccinated, and 14 not stated. The disease was most prevalent in the North and East districts. Some cases have been removed from Bermondsey, but there have been no deaths in the parish.

Zymotic diseases caused 16 deaths, viz :—measles 9, scarlet fever 2, diphtheria 2, whooping cough 1, and diarrhœa 2.

Twenty deaths arose from diseases of the organs of respiration of which 16 were attributed to bronchitis.

Tubercular diseases caused 10 deaths.

Under one year of age there were 12, and above sixty years of age 9 deaths.

Two Inquests were held. One was a case of suicide by poison (carbolic acid,) and in the other an elderly woman died from falling down stairs

There were no uncertified deaths.

BER 7

