## PUBLIC HEALTH POOR-LAW MEDICAL SERVICES.

THE TRUE DEATH-RATES OF LONDON DISTRICTS DURING THE FIRST QUARTER OF 1888.

In the accompanying table will be found summarised the vital and mortal statistics of the forty-one sanitary districts of the metropolis, based upon the Registrar-General's returns for the first quarter of this year. The mortality figures in the table relate to the deaths of persons actually belonging to the respective sanitary districts, and are the result of a complete system of distribution of deaths occurring in the institutions of London among the various sanitary districts in which the patients had previously resided. By this means the precise number of deaths of persons actually belonging to the respective sanitary districts is known, as all deaths occurring in institutions of persons who had previously resided in another district have been excluded from the total number of deaths in the district in which the institution is situated, and credited to the districts from which they came. By this means alone can trustworthy data be secured

upon which to calculate reliable rates of mortality.

The births registered in London during the first quarter of the current year were equal to an annual rate of 32.2 per 1,000 of the population of the metropolis, estimated at 4,282,921 persons, and showed a further decline from the rates recorded in the corresponding periods of recent years. The birth-rates in the various sanitary districts last quarter showed the usual wide variations, the age and sex distribution of the population differing greatly. In St. James Westminster, Kensington, London City, and Hampstead the birthrates were considerably below the average, while in East London, St. Luke's, Southwark, and Fulham, where the population contains a large proportion of young married persons, the birth-rates showed a marked excess.

The 23,164 deaths of persons belonging to London registered during the quarter under notice were equal to an annual rate of 21.7 per 1,000, which, although it exceeded the low rate recorded in the corresponding period of 1887, was below the mean rate in the first quarter of the ten preceding years, 1878-87. The lowest death-rates among the forty-one sanitary districts last quarter were 13.9 in Hampstead, 16.7 in Kensington, 17.5 in Plumstead, 17.8 in Battersea, and 18.1 in Camberwell; in the other districts the rates ranged upwards to 28.3 in Bethnal Green, 28.9 in London City, 29.9 in St. George-in-the-East, 30.2 in Fulham, and 32.8 in Holborn. During the quarter under notice 2,965 deaths resulted from the principal zymotic diseases in London; of these, 1,617 were referred to whooping-cough, 412 to scarlet fever, 307 to diphtheria, 238 to measles, 238 to different forms of "fever" (including 4 to typhus, 224 to enteric or typhoid fever, and 10 to simple and ill-defined forms of fever), 149 to diarrhoea, and 4 to simple and ill-defined forms of fever), 149 to diarraca, and 4 to small-pox. These 2,965 deaths were equal to an annual rate of 2.8 per 1,000, which exceeded that recorded in the corresponding quarter of any year since 1882. The lowest zymotic death-rates during the three months under notice were recorded in Hampstead, Strand, St. Giles, Plumstead, Marylebone, St. George Southwark, Woolwich, St. George Hanover Square, Ken-

Analysis of the Vital and Mortal Statistics of the Sanitary Districts of the Metropolis, after Complete Distribution of Deaths

Sanitary Areas.	Estimated Popula- tion middle of 1888,	Births.	Deaths.	Annual Rate per 1,000 Living.			Principa Jiseases.	pox.	les.	Fever.	eria.	g-cough.	1119.	Fever.	d Unde-	1œ8.	Children ear of age
				Births.	Deaths.	Principal Zymotic Discases.	Deaths from Princil Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric Fever.	Simple and Unde- fined Fever.	Diarrhœa.	Deaths of Children under one year of age
LONDON West Districts	4,282,921	34,368	23,164	32.2	21.7	2.8	2,965	4	238	412	307	1,617	4	224	10	149	143
Paddington	112,781 193,247 98,823 62,556 102,106 88,024 55,406 27,528	753 1,016 730 787 793 480 417	582 803 520 471 543 455 359 156	26.8 21.1 29.6 50.5 31.2 21.9 30.2 20.0	20.7 16.7 21.1 30.2 21.3 20.7 26.0 22.7	2.6 1.9 3.4 5.0 2.3 1.8 4.1 2.5	72 92 83 78 58 39 57	1111111	3 13 3 13 5 3 5	9 11 6 7 9 6 12 2	26 8 5 4 5 7 2	22 48 60 41 32 16 33 3		9 9 7 5 2 3 1 5	- - - 1 1	3 3 2 7 4 5 1	133 141 181 173 151 121 149 149
North Districts and the second	150,053 56,565 244,703 332,163 238,374	1,113 343 1,895 2,468 1,688	837 196 1,284 1,629 1,102	29.8 24.3 31.1 29.8 28.4	22.4 13.9 21.1 19.7 18.6	1.7 0.9 2.2 2.9 2.8	62 13 134 244 169		6 4 18 27 27	12 2 17 24 18	8 4 15 13 19	26 -62 154 82	- - - - 1	4 2 19 15 13	_ _ _ _	6 1 3 9	15 9 12 13 15
Central Districts it. Giles it. Martin-in-the-Fields itrand Clerkenwell it, Luke's	40,001 15,125 29,309 30,489 70,308 52,000 38,528	329 93 204 263 627 523 210	258 101 201 249 436 329 277	33.0 24.7 27.9 34.6 35.8 40.4 21.9	25.9 26.8 27.5 32.8 24.9 25.4 28.9	1.5 3.5 1.4 2.0 3.4 3.6 2.0	15 13 10 15 59 47 19		3 2 2 - - 1	3 4 1 1 8 2 4	5 2 1 1 5 3 2	2 2 3 11 39 37	-	2 1 2 2 4 2 1	-	- 1 - 3 2 2	10 12 16 16 16 15 12
East Districts Shoreditch Bethnal Green Whitechapel St. George-in-the-East Stepney Mile End Old Town	125,396 131,347 67,389 46,229 58,802 114,444 186,200	1,256 1,308 693 479 577 1,123 1,595	839 926 460 344 393 641 994	40.2 40.0 41.3 41.6 39.4 39.4 34.4	26.9 28.3 27.4 29.9 26.8 22.5 21.4	3.6 5.6 3.0 2.8 4.0 4.3 2.9	114 182 51 32 58 124 136	1 	6 10 - 2 3 11 11	8 29 9 3 12 22 15	11 6 4 2 5 2 9	84 127 28 21 36 72 80	- - - -	2 4 4 3 2 10 18		3 5 6 1 - 6 3	15 17 14 15 14 12 14
South Districts St. Saviour, Southwark St. George, Southwark Newington St. Olave, Southwark Mewington Bermondsey Bermondsey Betherhithe Lambeth Lambeth Gamberwell Greenwich Lewisham Wolumstead	27,230 59,864 121,123 10,053 89,802 43,072 284,809 160,377 128,448 256,404 156,169 59,837 37,098 80,739	254 573 1,049 104 811 355 2,298 1,404 1,024 1,825 1,341 432 356	190 367 616 64 511 246 1,440 712 633 1,159 897 353 240 351	37.4 38.4 34.7 41.5 36.2 33.1 32.4 35.1 32.0 38.6 34.5 29.0 38.5 32.1	28.0 24.6 20.4 25.5 22.8 22.9 20.3 17.8 19.8 18.1 23.7 26.0 17.5	1.9 1.7 2.2 3.6 2.0 2.7 2.0 3.0 3.0 2.6 4.8 1.8	13 26 66 9 45 29 140 120 165 141 71 17 33	- - - - - - - 1 1		4 6 17 2 10 3 27 15 12 41 15 2	1 5 4 1 4 5 20 7 19 24 16 19	5 8 37 4 19 9 62 76 49 70 76 38 10 23	- - - - - - 1	2 2 4 2 10 4 8 9 6 12 8 3 2		1 4 4 - 6 8 9 10 10 5 1 1	14 15 13 14 14 17 12 12 12 13 15 16 16

sington, and St. Saviour Southwark, in each of which it In the other districts the zymotic was below 2.0 per 1,000. death-rate ranged upwards to 4.0 in Stepney, 4.1 in West-minster, 4.3 in Mile End Old Town, 4.8 in Lewisham, 5.0 in Fulham, and 5.6 in Bethnal Green. Compared with the preceding quarter, the fatality of each of the principal zymotic diseases, except whooping-cough, showed a decline. Only 4 deaths from small-pox were recorded in London during the first three months of this year, of which I belonged to Bethnal Green, I to Mile End Old Town, 1 to Camberwell, and 1 to Greenwich sanitary districts. The number of small-pox patients in the Metropolitan Asylums Hospitals, which had been 7 at the beginning of the year, had increased to 17 in the middle of March, but declined to 9 at the end of the quarter; the admissions were 38 during the quarter, against 37 in the last six months of 1887. Measles showed the highest proportional fatality in Greenwich, Lewisham, Fulham, and St. James Westminster; scarlet fever in Mile End Old Town, Westminster, Bethnal Green, Camberwell, and Greenwich; diphtheria in Westminster, St. Giles, Paddington, and Lewisham; whooping-cough in Fulham, Shoreditch, St. Luke's, and Bethnal Green; and "fever" in Poplar and St. James Westminster. numer of scarlet fever patients in the Metropolitan Asylums Hospitals, which had been 2,049 at the beginning of the year, steadily declined to 1,087 at the end of March; the admissions to these hospitals of persons suffering from this disease, which had risen from 531 to 2,186 in the four quarters of 1887, declined to 1,416 during the three months ending March last.

Infanty mortality last quarter, measured by the proportion of deaths under one year of age to births registered, averaged 143 per 1,000, against 133, 149, and 131 in the corresponding periods of the three preceding years, 1885-6-7. Among the various sanitary districts the rates of infant mortality were lowest in Hampstead, St. Giles, Wandsworth, Mile End Old Town, and Lambeth; whereas they showed the largest excess in Lewisham, Woolwich, Rotherhithe, Fulham, Bethnal Green, and Hammer-

smith.

HEALTH OF ENGLISH TOWNS.—During the week ending Saturday, April 14th, 6,477 births and 3,952 deaths were registered in the twenty-eight largest English towns, including London, which have an estimated population of 9,398,273 persons. The annual rate of mortality per 1,000 persons living in these towns, which had been 21.5 and 19.9 in the two preceding weeks, rose again to 21.9 during the week under notice. The rates in the several towns ranged from 16.8 in Portsmouth, 17.7 in Huddersfield, 17.8 in Sunderland, and 18.4 in Norwich to 26.2 in Plymouth, 28.1 in Blackburn, 30.0 in Wolverhampton, and 34.9 in Manchester. The mean death-rate in the twenty-seven provincial towns was 23.1 per 1,000, and exceeded by 2.5 the rate recorded in London, which was 20.6 per 1,000. The 3,952 deaths registered during the week under notice in the twenty-eight towns included 358 which were referred to the principal zymotic diseases, against 388 and 371 in the two preceding weeks; of these, 172 resulted from whooping-cough, 46 from scarlet fever, 38 from diarrhoea, 33 from diphtheria, 32 from measles, 21 from "fever" (principally enteric), and 16 from small-pox. These 358 deaths were equal to an annual rate of 2.0 per 1,000; in London the zymotic death-rate was 2.2, while in the twenty-seven provincial towns it averaged 1.8 per 1,000, and ranged from 0.4 and 0.5 in Sunderland and Preston to 3.2 in Salford, 3.4 in Plymouth and in Sheffield, and 3.5 in Blackburn. Measles caused the highest proportional fatality in Nottingham and Plymouth; scarlet fever in Birkenhead, Hull, and Oldham; whooping-cough in London, Leicester, Blackburn, and Salford; and "fever" in Derby. The 33 deaths from diphtheria in the twenty-eight towns included 19 in London, 4 in Liverpool, and 2 in Sheffield. Of the 16 fatal cases of small-pox recorded during the week under notice, 11 occurred in Sheffield, 3 in Blackburn, 1 in Bristol, and I in Manchester. The Metropolitan Asylums Hospitals contained 15 small-pox patients on Saturday, April 14th, of whom 7 had been admitted during the week. These hospitals also contained 1,002 scarlet fever patients on the same date, showing a further decline from recent weekly numbers; there were 92 admissions during the week. The death-rate from diseases of the respiratory organs in London was equal to 5.4 per 1,000, and was slightly below the average.

HEALTH OF SCOTCH TOWNS.-In the eight principal Scotch towns, 849 births and 526 deaths were registered during the

week ending Saturday, April 14th. The annual rate of mortality, which had been 23.7 and 21.8 per 1,000 in the two preceding weeks, further declined to 20.8 during the week under notice, and was 1.1 per 1,000 below the mean rate during the same period in the twentyeight large English towns. Among these Scotch towns the lowest rates were recorded in Leith and Greenock, and the highest in Aberdeen and Perth. The 526 deaths in these towns during the week under notice included 49 which were referred to the principal zymotic diseases, equal to an annual rate of 1.9 per 1,000, which almost corresponded with the mean zymotic death-rate during the same period in the large English towns. The highest zymotic rates were recorded in Edinburgh, Glasgow, and Perth. The largest proportional fatality of whooping-cough occurred in Glasgow and Edinburgh. The three deaths from diphtheria included 2 in Edinburgh; and 5 fatal cases of "fever" were recorded in Glasgow. The mortality from diseases of the respiratory organs in these towns was equal to 5.1 per 1,000, against 5.4 in London.

HEALTH OF IRISH TOWNS .- During the week ending Saturday, April 14th, the deaths registered in the sixteen principal town districts of Ireland were equal to an annual rate of 26.9 per The lowest rates were recorded in Sligo and Galway, and the highest in Kilkenny and Lisburn. The death-rate from the principal zymotic diseases in these towns averaged 2.9 per 1,000, and was highest in Lisburn and Lurgan. The 187 deaths regisand was highest in Lisburn and Lurgan. tered in Dublin during the week under notice were equal to an annual rate of 27.6 per 1,000, which showed a slight further decline from the rates recorded in the two preceding weeks. The 187 deaths included 15 from the principal zymotic diseases (equal to an annual rate of 2.2 per 1,000), of which 7 were referred to whooping-cough, 3 to measles, 3 to "fever," 1 to scarlet fever, and 1 to diarrhoea.

BELVIDERE FEVER HOSPITAL, GLASGOW. FURTHER improvements are proposed at Belvidere Hospital, with a view to increase the administrative department. It is proposed to erect new washing houses, with all necessary appliances, and so arranged as to isolate officials, patients, and hospital clothing, a point strongly urged by the medical staff. The present washing houses would then be reconstructed for the accommodation of the house steward's department, stores, etc. The total cost of the new work is estimated at £10,000. It will also provide for the erection of dwelling-house accommodation for the employées other than the nursing staff, who should reside in the hospital.

## THE MARGARINE ACT IN OPERATION.

A SECOND prosecution under this Act has occurred in Glasgow, in which a penalty has been imposed. The shopkeeper was fined for having lumps of margarine exposed for sale unticketed. Beside the margarine there was butter labelled as such. The suggestion was that the lumps of margarine were meant to be covered by the butter label.

THE GOVERNMENT SANITARY SURVEY.

Mr. J. Davies.—The sanitary survey in question was made by the Medical Department of the Local Government Board. It was begun in the summer of 1884, when cholera first began to threaten us from the Continent, and it was continued until the close of 1886. It did not include every sanitary area in the kingdom, but that was not the fault of the Department. It embraced, however, all the coast districts, and such of the inland areas as were specially liable to the importation of infection, or had shown by their sickness and other records evidence of doubtful sanitation. The results of the survey have not been issued in an absolutely separate form, but are contained in the Papers on Cholera, published as a supplement to the Fifteenth Annual Report of the Local Government Board (Command Paper 4,873, Session 1886, price 28.), and in the Report of the Medical Department, published as a supplement to the Sixteenth Report of the Board (Command Paper 5,171, Session 1887, price 78.). These reports can be obtained from the Queen's Printers, or from any of the agents who sell Parliamentary papers. An article on this subject will be found at page 787 of the Journal for April 9th, 1887. THE GOVERNMENT SANITARY SURVEY.

DUTIES OF MEDICAL OFFICERS OF HEALTH WITH REGARD TO NUISANCES.

ALPHA asks: 1. What is my duty with regard to nuisances if the inspector of nuisances is under the control exclusively of the Sanitary Committee? 2. Am I responsible for the reporting of all nuisances?

<sup>\*, \*</sup> It is your duty to report generally as to the necessity for removal of nuisances in your district, and you would necessarily call attention to any special causes of ill-health, but the duty cannot be performed in the detailed way that is required of an inspector of nuisances, and we hold you have no responsibility for reporting all.