[Report of the Medical Officer of Health for West Ham].

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County Borough of West Bam.

ANNUAL REPORT

ON THE

PUBLIC HEALTH

OF THE

COUNTY BOROUGH OF WEST HAM,

BY

CHARLES SANDERS, M.B. (Lond.), M.R.C.S. (Eng.), the Medical Officer of Health.

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County Borough of West Sam.

ANNUAL REPORT

Of the Medical Officer of Health for the Year 1893.

PUBLIC HEALTH COMMITTEE.

Alderman Geo. W. Kidd (Mayor). Alderman F. Smith (Chairman). Alderman R. Fielder.

Councillor	P. ALDEN.
	FOWLER

HUNNS.

" JACOBS.

" Noakes.

Councillor Relf.

" RIPPIN.

" ROGERSON.

" THRELFORD.

.. Wood.

To the Town Council of the County Borough of West Ham.

GENTLEMEN,

I have the honour to submit to you my Annual Report on the Health Statistics and the general sanitary condition of the Borough during the year 1893, that is to say, a short summary of the matters dealt with by your Committee, and the work done by the Public Health Department during the year. The chief statistical tables referred to in this report will be found in appendices at the end, as will also a memorandum on hospital accommodation for small-pox patients, which I submitted to you in November, and a complete extract from the final Report of the Registrar-General of the Census Statistics of 1891, so far as they relate to West Ham.

In various places throughout the report where it is deemed advisable to compare West Ham with other towns, I have compared it with, in some instances, the thirty-three great towns in England and Wales as a whole, but always with London, the latter being, in my opinion, the most suitable comparison, and one not calculated to err in favour of West Ham. The situation of the Borough being immediately outside the metropolitan area, the climatic variations do not materially differ in the two districts, while the natural arrangement of London as a whole is certainly much more favourable to that district than is the low-lying

formation of what used to be Essex Marshes to West Ham district. Another reason why it is advisable to compare West Ham with London arises from the fact that in the weekly death-rate list of the great English towns drawn up by the Registrar-General, and published in the daily press, the death-rate attributed to West Ham is always considerably below that of London, and, being uncorrected, tends to give a very inaccurate impression of the comparative mortality of the two districts.

Births.—During the year 1893 1,604 births were registered in the Stratford Ward, 1,580 in Forest Gate Ward, 2,538 in Plaistow Ward, and 2,304 in Canning Town Ward, making a total of 8,026 births in the whole Borough, being 13 more than were registered in 1892, and equivalent to an annual birth-rate of 35'3 per 1,000.

Deaths.—During the year, 749 deaths were registered in Stratford Ward, 879 in Forest Gate Ward, 1,194 in Plaistow Ward, and 1,144 in Canning Town Ward. Fifty-one deaths occurred in the Borough Small-pox Hospital, 44 in West Ham Hospital, 30 in the Branch Seamen's Hospital, 11 in the Plaistow Poplar Hospital, 4 in Forest Gate Industrial School, and 237 in the West Ham Workhouse. Besides these, 253 persons died in hospitals and other institutions in the metropolis who previously lived in West Ham, while 31 deaths were registered in the Borough of persons temporarily staying here. The correct number of deaths attributable to West Ham was therefore 4,565, or 546 more than occurred in the year 1892. Taking the Registrar-General's estimate of the population of the Borough at the middle of the year, viz., 227,405, the corrected annual death-rate amounted to 20 per 1,000, whereas the West Ham death-rate published by the Registrar-General was only 18.9, a much more favourable but fallacious figure. As it is, however, it compares favourably with London, the death-rate of which during the year was 21.3, and with many of the great English towns, which in the aggregate registered an annual death-rate of 21.6. It is a matter of common knowledge that a low death-rate does not by itself necessarily point to a thoroughly sanitary district, and the recurring instances, one might say the almost invariable fact, of the West Ham death-rate being lower than that of the metropolis can, in my opinion, be explained chiefly by the large and constant additions we receive of young lives from without our district. A glance at the census returns on p. 16 will show what a large number of young married people we have in West Ham. The time is not far distant when the whole area of the Borough shall have been built over, and when our phenomenal decennial increases of population shall cease. Then the character of the Borough population, the precarious nature of the work of a large proportion of the inhabitants and the conditions under which they live, will counteract the above-mentioned favourable factor which at the present time induces many to fancy that our hard-working manufacturing town is not only more healthy than London, but nearly as healthy as Brighton.

Chief Causes of Death.—In the appendix will be found a tabular statement of all the chief diseases causing death, distributed in various ages, in accordance with the table of the Registrar-General, together with tables of mortality and sickness required by the Local Government Board. The chief zymotic diseases caused 913 deaths, equivalent to an annual zymotic death-rate of 4 per 1,000, which is 9 above the London zymotic death-rate, and 4 above the average West Ham zymotic death-rate during the past eleven years. The increase was due to small-pox and scarlatina. Scarlatina was very prevalent during the whole year, about 500 cases being notified each quarter (vide Appendix, p. 65). In all, 2,184 cases occurred, causing eighty-three deaths. The disease did not attack one district more than any other

the cases being fairly distributed throughout the more populous parts of the Borough. Diphtheria, too, proved to be steadily increasing in the Borough. No distinct outbreak occurred which could be traced to a common source, but a general increase throughout the Borough in the number of cases. In all, 470 cases were notified, causing 104 deaths, besides which thirty deaths occurred from membranous croup.

In the early months of the year measles, which had been epidemic in 1892, was still very prevalent in the northern half of the borough, while whooping-cough was raging in the southern half. The latter disease caused 143 deaths, nearly every certificate, as is usual in the case of this disease, giving bronchitis as a secondary cause of death. One death occurred from typhus fever; this was in a child aged five years, at Silvertown. I only received information of the case after death, and, as other members of the family occupied the same room, I obtained a magistrate's order for the removal of the body to a mortuary, the bedding and clothes being destroyed prior to disinfection of the premises. No other case of this disease occurred during the year.

Cholera.—The precautions taken by the Port Sanitary Authority of London were successful in preventing the escape of cholera into West Ham. One case was notified, but on investigation proved capable of having a simpler explanation. The man had, up to within three days of his illness, been working at the river-side, but not in connection with any foreign boats. The following three days he was without both work and food; obtaining some money on Saturday, he spent it in a pound and a half of apples in the afternoon, and a pound of hot potatoes in the evening, and was seized in the night with choleraic symptoms, which quickly succumbed to treatment. No less than 201 addresses were visited in response to intimations received that the persons whose addresses were given had left ships or places under the suspicion of having been exposed to the risk of cholera infection. Unfortunately, at most of these addresses the persons named were not known, in many cases the address given was a common lodging-house or a house of lesser repute, and we naturally lost all trace of the person sought. During the summer the West Ham Board of Guardians granted the use of their hospital at Plaistow to the Council as a cholera hospital in the event of an outbreak, but with the exception of the above case it was not required. Early in September your Committee published throughout the Borough posters descriptive of the mode of infection and precautions to be taken in the case of cholera.

Small-pox.—A severe epidemic of this disease attacked the Borough throughout the year 1893, and has only just ceased. As the Council desired a short history of the epidemic, I have delayed this report until late in 1894, in order to be able to include not only an account of the small-pox statistics for 1893 but also those of the first half of 1894, which may be considered as practically the termination of the epidemic. From the beginning of the year 1893 to the end of June, 1894, 935 cases of small-pox occurred, causing 103 deaths, equivalent to a death-rate of 11 per cent. It is interesting to observe that more than half the cases occurred during the six months of 1894 (448 cases occurred during the whole of 1893, and 487 during the first six months of 1894). The disease was introduced into the Borough in January and February, from three separate sources, into three different parts of the Borough. On January 25th a sailor, who had been visiting some friends at Bow and appeared to have contracted the disease at the West India Docks, developed the disease at the house of a friend in Stratford New Town, and was promptly removed to hospital. On the next day three other cases were removed from the same house. No other case

occurred until February 22nd, when a young woman, living at Forest Gate, was removed suffering from Small-pox. She had contracted the disease by visiting her mother who lived at Bow, and who, being ill at the time, was shortly afterwards removed to the hospital ships of the Metropolital Asylums Board. On the same day a tramp was removed from the West Ham Workhouse to the Small-pox Hospital, but not before he had seriously infected the southern end of the Borough. He came from a common lodging-house in Poplar, evidently in an infectious condition, stayed two days in a common lodging-house in Canning Town, and then went to the workhouse, where he was discovered to be suffering from small-pox. The absolute impossibility of tracing and following up the denizens of this lodging-house is apparent, and the disease spread quickly among the unprotected and imperfectly vaccinated members of the population. One good has arisen out of the small-pox epidemic, namely, the fact that our temporary Cottage Small-pox Hospital has been closed, never to be opened again. In the height of the last epidemic of 1885-86, twelve cottages were acquired and hastily fitted for the reception of small-pox cases, and it may have been of some service to the Borough as a whole in dealing with the disease, but it certainly has proved a deadly enemy to the district of Plaistow in which it stood. Dr. Henry Power, Assistant Medical Officer of the Local Government Board, associated this hospital with its neighbour the hospital of the West Ham Guardians as potent factors in the spread of small-pox in Plaistow and Canning Town in 1886, and the circumstances connected with the late epidemic appear to bear out Dr. Power's contention. As noted above, the disease was introduced into the three wards of Stratford, Forest Gate, and Canning Town, but not into Plaistow Ward where the hospital is situate. It was not long, however, before Plaistow became invaded, suffering up till towards the close of the epidemic (as will be noticed presently) much more severely than either of the other wards-a fact very patent to those who have studied the monthly maps which I submitted to you during the period. Again, although the character of the various wards of the Borough (with the exception of one corner) does not materially differ, and although the hospital is situate close to the boundary of the Borough (the area of which is seven square miles), and is consequently only surrounded by population on three sides, yet three-fifths nearly of the whole cases of small-pox occurred within the hospital area formed by a half-mile radius from the hospital.

The following table gives the cases occurring within and without the hospital area with their respective percentages during each quarter:—

			No. of Case	s occurring in	Percentage of Cases occurring in			
			Hospital area.	Rest of Borough.	Hospital area.	Rest of Borough		
1893.	1st quarter	 	 7	22	.7%	2%		
	2nd quarter	 	 47	119	5	12		
	3rd quarter	 	 92	66	9	7		
	4th quarter	 	 43	52	4	5		
1894.	1st quarter	 	 59.	147	6	15		
	2nd quarter	 	 103	178	II	19		

The fact mentioned above that Plaistow Ward suffered enormously throughout the epidemic as compared with the other three wards is shown in the table below, which gives the cases occurring monthly distributed to their respective localities. From this it will be seen that out of the 935 cases 557 occurred in Plaistow Ward, and that, while Stratford Ward was responsible for 11 per cent. of the total number, Forest Gate for 12 per cent., and Canning Town for 17 per cent., no less than 59 per cent. of the cases developed in Plaistow, a much larger percentage than is warranted by the population.

TABLE shewing monthly attacks of small-pox.

Period.	Stratford.	Forest Gate.	Plaistow.	Canning Town.
1893.—Feb.	 I	7		
Mar.	 3	3	3 5	6
Apr.	 3	_	19	7
May	 9	I	44	12
June	 2	5	49	15
July	 5	I	43	I
Aug.	 I		36	2
Sept.	 3	_	46	20
Oct.	 I	1	23	2
Nov.		3	22	9
Dec.	 6	2	16	10
1894.—Jan.	 6	6	24	16
Feb.	 16	8	40	12
Mar.	 16	22	29	11
Apr.	 11	19	91	15
May	 16	30	56	20
June	 2	8	11	2
TOTAL	 101	116	557	161 —
	176	243	269	247 -
Percentage of	/		-	,
Cases	 11%	12%	59%	17%
Percentage of Population	 18.8%	26%	28.8%	26.4%

11 12 19 26 19 234 236 4

26

286 228 323

TABLE showing the number of houses newly attacked with small-pox in certain areas of the Borough during each month of 1893, namely: (a) within a zone of a half-mile radius from the hospital, (b) within a zone between half-mile and one mile from the hospital, (c) in the rest of the Borough; together with the rates per cent. of the houses, thereby showing that the houses within half-mile of the hospital suffered three times as much as those between half-mile and one mile of the hospital, and eight times as much as those situated beyond a mile from the hospital:—

1893.	Houses new	ly attacked with which situate	small-pox, of	The same	in rates per cent	. of houses
	Within half-mile of hospital.	Between half-mile and one mile of hospital.	In the rest of the Borough.	Within half-mile zone.	Within half-mile to one mile zone.	Within the res
7						
January	-	_	I	-	-	.00
February	-	-	I	-	-	.00
March	3	I	9	.07	.01	04
April	2	9	9	.05	12	*04
May	14	10	24	•36	.13	.11
June	16	12	14	.41	.19	.06
July	27	4	7	.70	.05	•03
August	17	5	3	*44	•06	.01
September	10	9	2	•26	.13	*00
October	6	8	3	.12	.11	.01
November	8	2	7	•20	*02	.03
December	9	I	8	•23	.01	•03
	112	61	88	2.87	•79	•36

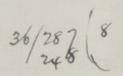


TABLE showing houses newly attacked with small-pox during the six months,

January to June, 1894.

1894.	Houses nev	wly attacked, of wh	nich situate	The same in rates per cent. of houses				
	Within half-mile of hospital.	Between half-mile and one mile zones.	In rest of Borough.	Within half-mile zone.	Within half-mile to one mile zone.	In rest of Borough.		
January	 10	7	18	•26	•09	.08		
February	 18	9	15	*47	*12	.07		
March	 17	31	32	*44	*43	.12		
April	 28	25	31	- '73	*34	14		
May	 15	13	26	*39	.18	.13		
June	 3	2	7	.07	*02	.03		
	91	87	129	2.36	1.18	•59		

It will be noticed in the tables given above, that the incidence of attack upon the hospital area was most extreme during the third quarter of 1893, and also that with the commencement of 1894 the disease, which up to this time had played havoc in Plaistow, and to a lesser extent in Canning Town, leaving Stratford and Forest Gate comparatively free, became disseminated much more evenly throughout the Borough. In this connection there are some interesting facts which, to some extent, may throw light on the peculiarities of incidence. Down to the end of May our hospital could only accommodate fifty patients. At this period the Mayor, Mr. Alderman Geo. Kidd, took prompt action to increase the accommodation which was rapidly becoming exhausted, and for that purpose he, with the Town Clerk, arranged to rent four additional cottages situated beside and at a right angle to the existing hospital, together with a neighbouring plot of ground on which were speedily erected two temporary iron wards, which, together with the added cottages raised the accommodation to ninety-five beds. It cannot but suggest itself as highly probable that this increased accommodation, though absolutely necessary and very advantageous to the rest of the Borough, assisted in swelling the number of Plaistow cases. With regard to the second point mentioned, it will be within the recollection of the Council that towards the close of the year the hospital became the centre of a considerable public scandal arising chiefly through the statements of a patient, whose complaints had been previously investigated by the Council without finding confirmatory evidence, and whose conduct in hospital appeared to have been far from regular. In spite of this investigation, a public meeting was held in Plaistow-not to complain of the hospital being situated there, but of the general

management of the domestic arrangements—which meeting being fully reported in the press, led to considerable correspondence. From this time I found it increasingly difficult to remove cases into the hospital, with the natural result that many remained at home forming separate centres of infection throughout the Borough. This led to a considerable increase in the number of cases. On April 16th of the present year, at the request of the Town Clerk, I accompanied him to a meeting of the Small-pox Committee of the Metropolitan Asylums Board who undertook to remove cases of small-pox from West Ham to their hospital ships on terms which were reported to and accepted by the Council By this arrangement we were enabled to obtain prompt removal of all cases from the Borough, though not until I had obtained a magistrate's order for removal in four cases. A steady decrease in the cases occurred during the end of May and the month of June, and at the time of writing the epidemic has ceased, and our hospital finally closed. I am indebted to the medical superintendent of the hospital, Dr. Moir, for the following experiences of mortality and vaccination associated with the cases treated in the hospital during the epidemic.

		Condition	as to V	Percentage	of Deaths.				
Unvaccin	ated						 35 P	er cent.	1
Said to h	ave be	een vacc	inated,	but w	ith no	marks	 23.57	,,	
Imperfec	tly vac	cinated					 II	,,	
Showing	good r	narks					 4.1	,,	
,,	2	,,					 2.2	,,	1
27	3	,,					 1.6	,,	
,,	4	,,					 *55	,,	
Re-vaccir	ated						 0	,,	

During the epidemic, as will be seen by the list on p. 40, several cases were admitted into our hospital at the request of neighbouring sanitary authorities, until the strain upon the accommodation arising from the spread of the disease in our own Borough rendered it impossible to further relieve outlying districts. Eighty cases were admitted from East Ham, nine from Leyton, and five from Walthamstow.

Hospital Accommodation.—The required provision for the isolation of fevers and small-pox received considerable attention during the year. A conference of the Urban Sanitary Authorities comprised in the West Ham Union was invited by the Mayor to meet at the Town Hall. The conference was held on February 17th, when Dr. Barry, of the Local Government Board, attended and gave the Council the benefit of his experience. The object of the Council was primarily to invite the other sanitary authorities to combine for the purpose of treating small-pox, leaving each authority free to deal with the other infectious diseases occurring in its district; but after discussion, a resolution was carried, "That it is desirable to unite in providing a hospital or hospitals for infectious diseases other than small-pox," the desirability to combine for purposes of small-pox having been previously accepted.

On June 13th, the Council, having considered the above resolutions, decided to adhere to their previous decision to combine with the adjoining authorities for small-pox purposes only, and to treat other infectious diseases in a separate hospital for the Borough. The further action taken by the Council in this question during the year is to be found in the memorandum which I submitted to the Council in November (vide Appendix, p. 32).

Early in the summer I was instructed to report upon the Canning Town Pumping Station and the Manhattan Wharf as possible sites for a temporary cholera hospital; my report being unfavourable in each case, and, as previously mentioned, the Council obtained the use of the Guardian's Hospital for this purpose.

Housing of the Working Classes Act, 1890.—Under section 32 of this Act, I reported the undermentioned houses during the year 1893, with the following results:—

Nos. 14 to 43 (consecutive) Channelsea Street. (Rendered fit).

Nos. 1 to 13 (odd) Prospect Row. (Rendered fit).

Nos. 1, 2 and 3, Hayward's Cottages. (Rendered fit).

Nos. 7, 9, 10, 11, 14, 16, 24, 26, 27, 29, East Street. (Rendered fit).

Nos. 4 to 10 (even) and No. 20, South Street. (Rendered fit).

Nos. 2, 4, 6, 22, 23, 24, 25, 30, 32, Union Street. (Rendered fit).

No. 70, Freemason's Road. (Rendered fit).

No. 24, Young Street. (Used only as Workshop).

Nos. 27, 29, 31, 33, Young Street. (Rendered fit).

Nos. 2 to 32 (consecutive) New Street, Stratford. (Rendered fit).

No. 165, Balaam Street. (Rendered fit).

No. 20, Andrew Street. (Rendered fit).

No. 141, Prince Regent's Lane. (Rendered fit).

No. 15, Western Road, Plaistow. (Closing order obtained. Council ordered demolition).

Nos. 35, 37, 39, 41, Hallesville Road. (Closing order obtained).

Nos. 5, 7, 9, Newton Street. (Closed and rendered fit).

No. 80, Victoria Dock Road. (Closing order obtained).

No. 9, Fulton Street. (Closing order obtained).

No. 41, Edward Street. (Rendered fit).

No. 11, Newton Street. (Closed).

Nos. 11, 13, 15, 19, 27, 29, 37, 39, 41, Brown's Road. (Rendered fit).

Nos. 2, 4, 6, 16, 18, Gift Lane. (Demolished by owners).

Nos. 2, 4, 6, Caroline Place, Portway. (Demolished by owners).

Rear of Carpenter's Arms. (Rendered fit).

No. 9, Market Place, Silvertown. (Rendered fit).

Food Inspection.—During the year 153 samples were submitted to the Public Analyst under the Sale of Food and Drugs Acts and the Margarine Act. Of these 31, or 20 per cent., were returned as adulterated as follows:—

Articles submitted.	Number submitted		Number adulterated.
Milk	 56		18
Spirits	 4		I
Mustard	 II		2
Butter	 27	***	6
Liquorice	 2		0
Condensed Milk	 2		2
Coffee	 16		I
Lard	 16		I
Pepper	 II		0
Chicory	 6		0
Tea	 I		0
Cayenne Pepper	 I		0

The results of prosecution in the above cases will be found in the table on pages 45, 46 and 47.

General Sanitary Work.—In the early part of the year the Public Health Department was reinforced by the appointment of four additional Assistant Inspectors of Nuisances, thereby enabling a much larger amount of sanitary work to be done during the year, and this in much greater proportion than the ratio of increase in staff, as may be gathered from this and my previous reports. Details of the nuisances remedied will be found on p. 43, but it may here be menuioned that among other of their duties the Inspectors have carried out the following:—

Number of	House-to-hous	e Inspections	S		 ***	 4,840
Do.	Inspections re	Infectious D	isease		 	 3,422
Do.	Re-inspections	· · ·			 	 9,680
Do.	Inspections of	Slaughter-ho	ouses		 	 549
Do.	do.	Bakehouses			 	 330
Do.	do.	Common Lo	dging-	houses	 	 246
Do.	do.	Factories			 	 259
Do.	Miscellaneous	Inspections			 	 1,210
		Total			 	 20,536

Gipsy Squatters.—These were a source of constant trouble to the department during the year, and the cause of frequent complaints from burgesses and others. During the greater part of the year the Sanitary Inspectors continued to put in force the method of warning the gipsies off the plots of land on which they were located, and, failing compliance, forcibly removing their vans and tents with a trace-horse into the public roadway, where they came under the notice of the police, and were "moved on." At the end

of the year the Council ordered legal proceedings to be taken against the squatters for infringing the Gipsy bye-laws. The following is a list of forcible removals by the Inspector:—

January 5.-5 vans removed from the Ravenhill Estate.

" 13.—4 vans removed from land in Beckton Road.

2 vans removed from land in Chargeable Lane.

I van removed from Ravenhill Estate.

February 13.—1 van and tent removed from land in Tucker Street.

17.—5 vans and 2 tents removed from Ravenhill Estate.

April 20.-3 vans removed from Ravenhill Estate.

7 vans removed from land in Beckton Road.

,, 28 .- 2 vans removed from Ravenhill Estate.

May 12.—3 vans removed from Ravenhill Estate.

" 18.—7 vans and 3 tents removed from Ravenhill Estate.

2 vans, 5 carts, and 3 tents removed from land in Beckton Road.

" 30.—I van and 3 tents removed from Ravenhill Estate.

I van removed from land in Beckton Road.

July 14.—2 vans, 3 carts, and 4 tents removed from Ravenhill Estate.

3 vans and 1 tent removed from land in Beckton Road.

September 21.—10 vans, 6 carts, and 4 tents removed from Ravenhill Estate.

I van and 4 carts from land in Beckton Road.

October 3.—Notices to remove served on 4 gipsies on Ravenhill Estate, and on 6 gipsies on land in Beckton Road.

November 29 .- 4 gipsy squatters summoned under bye-laws, and fined 10s., with 7s. costs each.

The disappointing character of this work can be seen by the above list. The squatters perambulate a few streets, soon returning to the same or a neighbouring spot, when the process of removal, like the stone of Sisyphus, has to be commenced all over again.

Parliamentary.—One of the most important results of the year's work was the passage through Parliament of the West Ham Corporation Act, 1893, an Act fraught with great and lasting benefits to the inhabitants of the Borough in many respects, but mostly, perhaps, from a sanitary point of view. Undoubtedly, the chief hygienic provisions of the Act are the clauses authorising the reception and dealing with the sewage of the Borough by the London County Council by means of the northern outfall sewer, which crosses the centre of the Borough. The Act consists of eleven parts, but I need only mention here Parts VI., VIII., dealing with sanitary matters, infectious diseases, and common lodging-houses, respectively.

Part VI.—Sanitary. Section 38 extends the definition of nuisances contained in section 91 of the Public Health Act, 1875, to include those articles, places, or things which are dangerous to health, as in the Public Health (London) Act, 1891.

Section 39 gives additional power to the Corporation in dealing with walls and ceilings which may be broken or dilapidated.

Section 40 provides a penalty not exceeding five pounds for the wilful damage of or the wilful improper use of any drain, water-closet, earth-closet, privy, or ashpit.

Section 41 enables the officers of the Corporation to examine any sanitary convenience or fitting, either upon reasonable grounds for believing the existence of a nuisance, or for the purpose of examining the course of the same, without receiving the written complaint mentioned in section 41 of the Public Health Act, 1875.

Section 42 gives powers to make bye-laws for securing freedom from pollution of receptacles for storing water used or likely to be used by man for drinking or domestic purposes, or for manufacturing drink for the food of man.

Section 43 provides a penalty not exceeding forty shillings, and a daily penalty not exceeding twenty shillings, for non-compliance with an order to close a polluted well under section 70 of the Public Health Act.

Section 44. Any dwelling-house without a proper and sufficient water-supply to be deemed unfit for human habitation, and no new dwelling-house to be occupied until provided with such supply.

Section 45. The Corporation may require alteration of or removal to a place specified by them of urinals so placed as to be offensive to public decency.

Section 46. The Corporation may require urinals to be attached to inns, refreshment-houses, or places of public entertainment.

Section 47 provides that sections 96, 97, and 98 of the Public Health (London) Act, 1891, shall extend to and apply within the County Borough.

Section 48. The provisions of section 73 of the Public Health Act, 1875, shall extend to persons occupying any cellar-dwelling which does not conform with the requirements of section 72 of that Act, although such cellar-dwelling is not occupied or suffered to be occupied for hire or rent.

Section 49 gives further powers in dealing with strayed swine.

Section 50 enables the Corporation to employ scavengers for collecting and removing manure, &c., from stables and cow-houses.

Section 51 is identical with sub-sections 3 and 4 of section 47 of the Public Health (London) Act, 1891.

Section 52 provides for the lighting of common stairs, passages, or courts; and section 53 empowers the Corporation to supply the light and charge the owners.

Part VII.—Infectious Diseases. Section 54 empowers the Corporation to require the cleansing, purifying, or destroying of any articles of bed or body clothing in such a filthy or unwholesome condition that health is affected or endangered thereby.

Section 55. It shall not be lawful to hold any wake over the body of any person who has died of an infectious disease, and the occupier of any house who permits such wake to take place shall be liable to a penalty not exceeding forty shillings.

Section 56. The words "without proper lodging or accommodation" in section 124, of the Public Health Act, 1875, shall be construed to include any person without proper lodging or accommodation, having regard to the danger of infection to other persons in the same house.

Section 57. Dairymen supplying milk within the Borough to notify infectious disease existing among their servants.

Section 58. A person who knows himself to be suffering from an infectious disease shall not milk any animal, or pick fruit, or engage in any occupation connected with food intended for the use of man, or carry on any trade or business so as to be likely to spread the disease.

Section 59 prohibits the sale of the milk of tuberculous cows.

Section 60. Dairymen supplying milk within the Borough to notify all cases of tuberculosis or milk fever to his knowledge occurring in his dairy.

Section 62. Dairymen who stop supplying milk at the request of the Corporation to be compensated.

Section 63. Midwives and nurses who stop their employment at the request of the Corporation to be compensated.

Section 64 provides a penalty on the person having charge of a child, who resides in a house where an infectious disease has existed within six weeks, permitting the said child to attend school without a medical certificate.

Section 65 provides a penalty on any person having charge of a school who shall knowingly permit any child to attend school in contravention of the provisions of this Act.

Section 66. Whenever a scholar shall be suffering from an infectious disease, the principal of the school shall, at the request of the Corporation, furnish a list of pupils with their addresses.

Section 67 enables the Corporation to pay the expenses of maintenance of patients other than paupers received into the Borough Hospital.

Part VIII.—Common Lodging-houses. Section 69 requires the keeper or his authorized deputy to reside constantly and remain within his common lodging-house between the hours of 9 p.m. and 6 a.m.

Section 70 provides a penalty, not exceeding forty shillings, on every person who keeps a common lodging-house without being registered in accordance with section 77 of the Public Health Act, 1875.

Section 71. Notwithstanding anything contained in section 88 of the Public Health Act, 1875, where a common lodging-house keeper has been convicted of any offence against the provisions of the Public Health Act, or of this Act or any other Act in force within the Borough, or of any bye-law made under the authority of any of such Acts in respect of common lodging-houses, the court before whom the conviction takes place may cancel the registration of any such common lodging house keeper.

Section 72. The Corporation may refuse to license any person as keeper of a common lodging-house, unless they are satisfied of his character and fitness for the position.

Other provisions of a sanitary tendency contained in the Act are section 31, which enables the Corporation to require yards or open spaces in connection with any house to be flagged or paved for at least 100 square feet adjoining the house, and section 34, which deals with licenses for the erection of slaughter-houses and knacker's-yards.

It will have been seen that many of the provisions contained in the above Act are similar to those contained in the Public Health (London) Act, 1891, and the Council used every endeavour to obtain the insertion of section 42 of that Act dealing with "bad workmanship" in the repair of water-closets and drains, but were unsuccessful. In the same manner they failed to obtain powers to prevent the opening and carrying on of private hospitals for infectious disease without the license of the Corporation.

I am, Gentlemen, Your obedient servant,

CHARLES SANDERS.

Medical Officer of Health.

APPENDIX.

CONTAINING:-

- 1. Census Returns, 1891.
- 2 Memorandum on Small-pox Hospital Provision.
- 3. List of Small-pox cases removed to Hospital.
- 4. List of West Ham Deaths occurring in London Institutions.
- 5. List of Notices served to abate Nuisances, &c.
- 6. Table of Prosecutions under various Acts and Bye-laws.
- 7. Tables of Birth, Death and Zymotic Rates for several years past.
- 8. Table of Mortality Statistics of large English Towns during 1893.
- 9. Table of West Ham Deaths at several groups of ages from different causes during 1893.
- 10. List of Streets in the Borough, distinguishing cases of Infectious Disease notified, Deaths from Infectious Disease, and Deaths from other diseases.
- 11. Table A required by Local Government Board.
- 12. Table B required by Local Government Board.

CENSUS RETURNS, 1891.

ADMINISTRATIVE.

County Persuch	Area in		Houses.		Population.			
County Borough. Acres	Acres.	Inhabited.	Uninhabited.	Building.	Persons.	Males.	Females.	
West Ham	4,706	32,066	1,658	334	204,903	102,341	102,562	

PARLIAMENTARY.

				1881.		
County Borough of West Ham.	Area in Acres.	Inhabited			Population.	
		Houses.	Males.	Females.	Persons.	Persons.
North Division	4706	15,053	44,815	47,308	92,123	66,675
South Division	4700	17,013	57,526	55,254	112,780	62,278

MUNICIPAL.

Municipal	Administrative	Area in	Inhabited Houses.		Population l	Increase of Population	
Borough.	County.	Acres.	1881	1891	1881	1891	between 1881 and 1891.
West Ham	County Borough.	4,706	19,167	32,066	128,953	204,903	75,950

MUNICIPAL WARDS.

		Houses.		Population.			
West Ham County Borough.	Inhabited.	Uninhabited.	Building.	Persons.	Males.	Females.	
Wards—Canning Town	7,715	432	56	54,750	28,716	26,034	
Forest Gate	9,103	499	136	53,511	25,600	27,911	
Plaistow	9,298	479	132	58,030	28,810	29,220	
Stratford	5,950	248	10	38,612	19,215	19,397	

ECCLESIASTICAL PARISHES.

Ecclesiastical Parish.	Date of Formation.	Inhabited Houses.	Population.	Ancient Parish in which situated.
Forest Gate, All Saints	1886	1,218	6,821	East Ham and West Ham.
Upton Park, St. Stephens	1888	2,478	13,786	East Ham and West Ham.
Barking Road, Holy Trinity	1867	2,425	17,069	
Canning Town, St. Gabriel	1879	1,396	9,790	
Forest Gate, Emmanuel	1852	2,764	14,816	
Forest Gate, St. James	1881	1,519	10,003	
Forest Gate, St. Saviour	1884	1,598	8,780	
West Ham, All Saints	_	4,061	26,180	
Plaistow, St. Andrew	1871	2,569	15,125	West Ham.
Plaistow, St. Mary	1846	3,588	21,393	
Stratford, St. John	1844	2,187	13,355	
Stratford, St. Paul	1864	2,295	14,378	
Stratford, Christchurch	1852	1,546	11,400	
Victoria Docks, St. Luke	1875	3,990	29,381	
Victoria Docks, St. Mark	1862	1,131	7,676	
Wanstead, Harrow Green, Holy Trinity	1879	4,952	29,619	Wanstead, Low Leyton, and West Ham.

* Total Tenements and Tenements with less than Five Rooms, distinguishing those occupied by various numbers of Persons.

SANITARY in Tene- th		Number of Tenements with less				Nu	MBER OF	OCCUPA	NTS OF	TENEME	NTS.			
	than Five Rooms.	1	2	3	4	5	6	7	8	9	10	11	12 or more.	
County Borough of West Ham.	1 2	2,287 4,156	1,003 371	717	361 1,057	148 664	42 402	10	2 68	1 32	2	- 3	-	I
Total Tenements=	3 4	8,291 9,036	209	1,577		1,517	1,261	985	567 978	275 671	357	43	9 55	3 26

^{*} This Table is to read as follows:—Of the 42,921 tenements in West Ham, 2,287 were tenements of one room, 4,156 were tenements of two rooms, &c., &c.; and of the 2,287 tenements of one room, 1,003 had one occupant each, 717 two occupants, &c., &c.

Inmates of Institutions on Census Night.

Name of Institution.		Number of Including Office		Number of Special Inmates, such as Paupers, Patients, &c.			
	Persons.	Males.	Females.	Persons.	Males.	Females.	
West Ham Hospital	36	18	18	24	17	7	
Plaistow Fever Hospital	5	2	3	-	-	_	
West Ham Small-pox Hospital	6	1	5	I	I	-	
Cottage Small-pox Hospital	2	1	I	_	_	-	
Seamen's Hospital	15	9	6	7	7	_	
Forest Gate Industrial School (Poplar Union).	586	300	286	536	290	246	

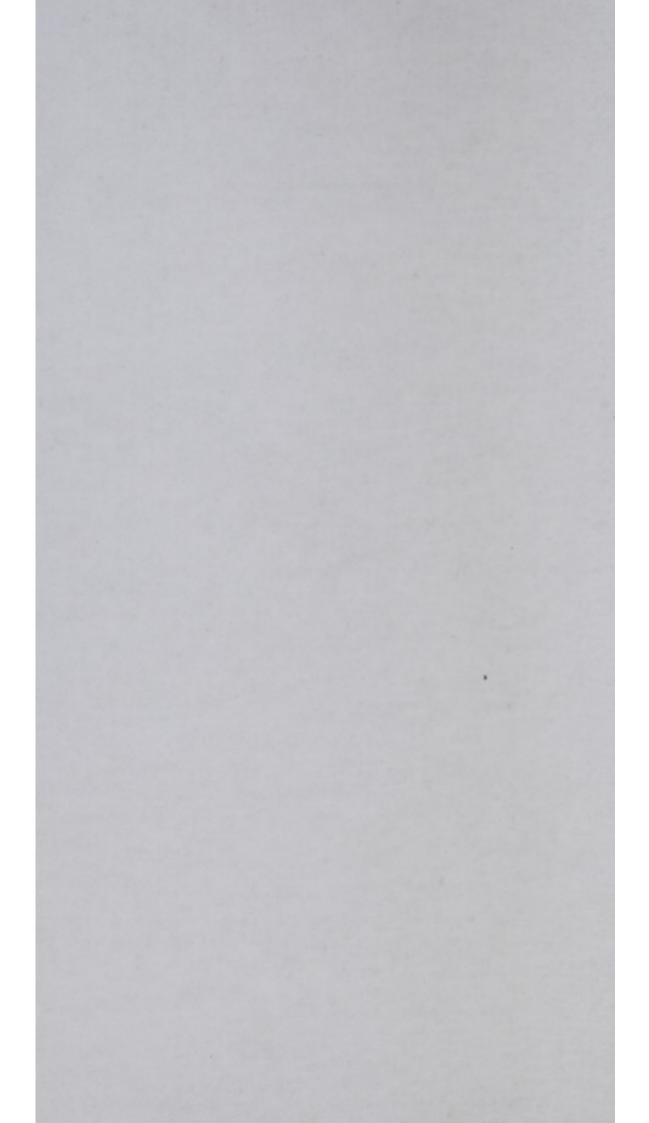
Persons enumerated on board Sea-going Vessels and in Inland Barges in Harbours,
Rivers, Creeks, and Canals.

	Number of Sea-going Vessels,			Persons.				
Registration District.	British. or Colonial.		Number of Inland	On board Sea-going Vessels.		On board		
			Barges.	British.	Foreign or Colonial.	Inland Barges.	TOTAL	
Stratford	_	_	9	_	_	18	18	
Canning Town	66	I	38	544	4	117	665	

Ages of Males and Females in County Borough of West Ham.

Condition as to Marriage, with ages of Males and Females.

URBAN SANI	TARY DISTRICT.	All Ages.	Under 15 years.	15—	20-	25 —	35—	45—	55	65 and upward
West Ham:-										
Unmarried	∫ Male	 63,715	40,455	9,880	6,784	4,448	1,251	621	211	65
Ommitted	Female	 59,551	40,912	9,240	4,851	2,739	917 -	456	238	198
Married	The second secon	 36,106	-	59	2,142	11,168	10,802	7,117	3,328	1,490
matrica	" Female	 37,171	-	318	3,721	12,718	10,464	6,265	2,661	1,024
Widowed		 2,520	-	-	17	174	435	583	614	697
Widowed	··· Female	 5,840	-	2	28	340	845	1,262	1,472	1,891



Occupations of Males and Females of Ten Years and Upwards.

Males.		FEMALES.	
73,735		73,697	Total.
			I.—Professional Class.
546		2.2	Civil Samia (afficient 1 1 1 1)
228		33	Civil Service (officers and clerks).
321			Civil Service (messengers). Police.
84		40	Municipal, parish, union officer.
26		-	Other local or county official.
5			Army officer.
37		_	Soldier and non-commissioned officer.
5		_	Navy officer.
18		_	Seamen, R.N. and Royal Marines.
53			Clergymen, Established Church.
16		_	Roman Catholic priest.
33		_	Minister of other religious bodies.
47		36	Missionary, scripture reader, itinerant preacher.
		2	Nun, sister of charity.
32		9	Church, chapel, cemetery officer, servant.
29		_	Barrister, solicitor.
216		I	Law clerk.
89		_	Physician, surgeon.
13		-	Dentist, dental apparatus maker.
4	***	_	Veterinary surgeon.
2		409	Sick nurse, midwife, invalid attendant.
27		4	Subordinate medical service.
331		905	Schoolmaster, teacher, professor.
339		513	Student (fifteen years and over).
39		7	School service or concerned in teaching.
18		3	Author, editor, journalist.
17		2	Reporter, shorthand writer.
35	•••	I	Engaged in scientific pursuits.
3	***	_	Literary, scientific institution service.
51	•••	_	Civil and mining engineer.
33		_	Land, house, ship, surveyor.
37	•••	21	Painter, engraver, sculptor (artist).
43	•••		Architect.
		131	Musician, music master.
38		+	Photographer.

MALES.	FEMALES.	
17	 18	Actor.
10	 I	Art, music, theatre service.
47	 6	Performer, showman, exhibition service.
		II.—Domestic Class.
		II.—DOMESTIC CLASS.
92	 5,731	Domestic servant (indoors).
30	 -	Lodge, gate, park-keeper.
493	 363	Inn, hotel servant.
12	 4	Cottage, club servant.
48	 31	Office keeper, caretaker.
59	 40	Cook (not domestic).
_	 435	Charwoman.
65	 1,098	Washing and bathing service.
14	 18	Hospital and institution service.
17	 14	Others.
		III.—COMMERCIAL CLASS.
17	 _	Merchant.
234	 4	Broker, agent, factor.
72	 3	Auctioneer, house agent, valuer.
67	 _	Accountant.
44	 4	Salesman, buyer (not otherwise described
470	 	Commercial traveller.
3,289	 149	Commercial clerk.
9	 I	Officer of commercial company.
2	 -	Banker.
137	 4	Bank officials and clerks.
7	 2	Bill discounter, broker.
256	 3	Life, house, ship, &c., insurance service.
537	 -	Railway engine driver, stoker.
164	 -	Railway guard.
106	 _	Railway pointsman.
832	 6	Railway porters and servants.
494	 	Railway officials and clerks.
38	 -	Livery stable keeper, cab proprietor.
447	 -	Coachmen, cabmen, groom, horsebreaker.
1,330	 3	Carman, carrier, carter (not farm).
147	 I	Tramway service.
12	 _	Navigation service (not crew).

MALES.	FEMALES.	
451	 2	Bargeman, lighterman, waterman.
2,203	 7	Merchant service, seaman, pilot.
3,307	 _	Dock and wharf labourer.
430	 9	Harbour, dock, wharf officials.
254	 5	Warehouseman.
28	 _	Meter, weigher.
1,404	 9	Messenger, porter (not railway or government).
123	 31	Telegraph, telephone service.
	IV	-Agricultural and Fishing Class.
7	 I	Farmer, grazier.
4	 _	Farm bailiff.
81	 12	Agricultural labourer, farm servant.
2	 _	Shepherd.
5	 _	Others connected with agriculture.
2	 _	Woodman.
228	 18	Gardener, nurseryman.
II	 _	Cattle, sheep, pig dealer, salesman.
8	 _	Drover.
I	 _	Gamekeeper.
2	 _	Dog, bird, animal keeper, dealer.
26	 7	Knacker, cats'-meat dealer.
5	 _	Fisherman.
		V.—INDUSTRIAL CLASS.
68	 6	Publisher, bookseller, librarian.
97	 76	Bookbinder.
658	 14	Printer.
55	 24	Newspaper agent.
60	 3	Lithographer.
2	 2	Map and print colourer, seller.
881	 13	Engine and machine maker.
69	 -	Millwright,
1,373	 _	Fitter and turner (engine and machine).
1,106	 -	Boiler maker.
10	 I	Spinning, agricultural, domestic implement maker.
18	 I	Tool maker.
18	 _	Cutler and scissors maker.
15	 -	Saw and file maker.
122 -	 9	Watch, clock maker.

Males.		FEMALES.	
59		5	Philosophical instrument maker.
310		17	Electrical apparatus maker.
17		I	Weighing and measuring apparatus maker.
6		8	Surgical instrument maker.
31		-	Gunsmith.
38		I	Musical instrument maker.
7		_	Type-cutter, founder.
8		_	Die, seal, coin maker.
25		24	Fishing-tackle, toy maker, dealer.
327		_	Builder.
1,718		3	Carpenter, joiner.
1,217		I	Bricklayer.
242		I	Mason.
45		_	Slater, tiler.
280	See.	I	Paperhanger, plasterer, whitewasher.
442		2	Plumber.
1,167		1	Painter, glazier.
361		50	Cabinet maker, French polisher, upholsterer.
164		I	Locksmith, bellhanger, gasfitter.
37		4	House and shop fittings maker, dealer.
43		4	Undertaker, funeral furniture maker.
9	?		Wood carver.
29		_	Carver and gilder.
3		I	Dealer in works of art.
2			Figure, image maker, dealer.
I		2	Animal, bird, &c., preserver.
1		17	Artificial flower maker.
598		3	Coach, carriage maker.
126		_	Wheelwright.
75			Bicycle, tricycle maker.
20		3	Others.
81		6	Saddler, harness maker.
115		-	Shipwright, barge builder (wood).
944		I	Shipwright, ship and barge builder (iron).
49			Ship-rigger, fitter.
24		I	Sail maker.
25		_	Ship chandler.
62		5	Dye, paint, ink, blacking manufacture.
49		211	Fireworks, explosive articles manufacture.
133		II	Chemist and druggist.
578		14	Manufacturing chemist, alkali, &c.

Males.		FEMALES.	
4		_	Drysalter.
121	***	68	Tobacconist, tobacco manufacturer.
9		5	Tobacco-pipe and snuff-box maker.
172		21	Innkeeper, publican.
13		77	Lodging-house keeper.
108		35	Coffee, eating-house keeper.
6		_	Hop merchant, dealer.
12		_	Maltster.
88		_	Brewer.
137		28	Beerseller, ale, porter, cider.
89		2	Cellarman.
46		I	Wine, spirit merchant, agent.
366		31	Milkseller, dairyman.
91		3	Cheesemonger, butterman.
624		33	Butcher, meat salesman.
80		16	Provision curer, dealer.
298		24	Fishmonger, poulterer.
IIO		II	Corn, flour, seed merchant, dealer.
52		. 1	Corn miller.
582		52	Baker.
176		367	Confectioner, pastrycook.
380		61	Greengrocer, fruiterer.
7		2	Mustard, pickle, spice maker, dealer.
690		9	Sugar refiner.
732		136	Grocer, tea, coffee, chocolate maker, dealer.
21		5	Mineral water manufacturer, dealer.
19		4	Wool, worsted, flannel worker.
15		_	Dealer in wool and worsted.
19		50	Silk, satin, velvet worker.
3		I	Silk merchant, dealer.
64		242	Cotton, linen, lace manufacture.
3		_	Cotton, linen, lace dealer.
81	***	347	Hemp, jute manufacture.
28		27	Rope, twine, cord maker.
39		29	Mat maker.
6		66	Canvas, sailcloth, sacking maker.
3		2	Others working in hemp.
8		_	Dealers in hemp.
5		65	Weaver (undefined).
28		5	Dyer, bleacher, calenderer (undefined).
II		42	Textile factory hand (undefined).
II		I	Carpet, rug manufacture.

Males.	FEMALES.	
432	 432	Linen draper, mercer.
32	 86	Fancy goods worker, dealer.
II	 -	Other dealers.
45	 14	Hatter, hat manufacture (with straw plait).
405	 596	Tailor.
34	 2,302	Milliner, dressmaker, staymaker.
27	 385	Shirtmaker, seamstress.
86	 98	Hosier, glover.
656	 74	Shoemaker.
212	 6	Wigmaker, hairdresser.
47	 31	Umbrella stick maker.
14	 25	Others working and dealing in clothes.
126	 II	Tallow chandler, candle maker.
177	 5	Soap boiler, maker.
63	 3	Manure manufacture.
9	 -	Bone, horn, ivory, tortoise shell worker.
22	 _	Others working in similar industries.
96	 38	Furrier, skinner.
69	 II	Currier, leather goods maker, dealer.
87	 52	Brush, broom maker, dealer.
10	 20	Quill, feather dresser, dealer.
173	 24	Oil and colourman.
41	 4	Floorcloth manufacture.
259	 107	India rubber, water proof goods, worker.
95	 2	Others in similar industries.
21	 7	Basket makers, hay and straw cutters.
4	 -	Cane, rush, straw dealer.
73	 I	Timber, cork, bark merchant, dealer.
175	 _	Sawyer.
66	 38	Wood turner, wooden box maker.
362	 -	Cooper.
131	 20	Others working in wood, cork, bark.
18	 3	Paper manufacture.
128	 49	Stationer.
22	 II	Ticket, label writer.
3	 14	Envelope maker.
40	 87	Others working in paper.
95	 6	Coal, coke, &c., dealer.
858	 _	Coalheaver, labourer.
1,288	 3	Gasworks service and mine service.
547	 -	Platelayer, railway navvy.
109	 -	Paviour, road labourer.

MALES.		FEMALES.					
32		_	Stone cutter, dresser.				
116		_	Others working in stone, clay, and road making.				
148		4	Glass manufacture, earthenware, and china.	9.			
30		22	Glass, earthenware, and china dealer.				
3		_	Salt maker, dealer.				
30		-	Waterworks service.				
94		4	Goldsmith, silversmith, jeweller.				
980		2	Blacksmith, whitesmith.				
641		_	Other iron and steel manufacture.				
105		2	Ironmonger, hardware dealer.				
94		_	Copper goods manufacturer, worker.				
143		38	Tin goods manufacturer, worker.				
29	***	_	Zinc goods manufacturer, worker.				
10		2	Leaden goods manufacturer, worker.				
327		8	Workers in other, mixed, or unspecified metals				
264		203	General shopkeeper.				
139		4	Pawnbroker.				
276		75	Costermonger, hawker.				
123		10	Contractor, manufacturer, manager (undefined)				
7,670		23	General labourer.				
938		_	Engine driver, stoker, fireman (not railway or i	marine).			
407		26	Artizan, mechanic, apprentice (undefined).				
359		135	Factory labourer (undefined).				
192		320	Machinist (undefined).				
28	• • • •	I	Town drainage service.				
28		-	Chimney-sweep.				
36		_	Scavenger, crossing-sweeper.				
12		5	Rag dealer.				
			VI.—UNOCCUPIED CLASS.				
			VI.—CNOCCOPIED CLASS.				
529		138	Retired from business (not army, navy, church	, medicine).			
150		15	Pensioner.				
468		1,801	Living on own means.				
11,679		53,675	Others (over ten years).				

Birthplaces of Male and Female Inhabitants of West Ham.

Males.		FEMALES.		
102,341		102,562	Total of i	inhabitants.
30,287		33,044	born in	London.
41,519		41,097	,,	Essex (including West Ham).
4,067		3,778	,,	Norfolk and Suffolk (2).
6,089		6,177	"	South-Eastern Counties (5).
5,192		5,095	"	South Midland ,, (8).
2,584		2,664	,,	South Western ,, (5).
2,094		1,942	,,	West Midland ,, (6).
887		851	,,	North Midland ,, (5).
1,278	***	1,137	,,	North Western ,, (2).
952		822	,,	Yorkshire (1).
731		713	"	Northern Counties (4).
412		469	,,	Monmouthshire and Wales (13).
349		273	,,	England (County not stated).
2,146		1,872	,,	Scotland.
1,568		1,254	,,	Ireland.
756		536	,,	Other parts of British Empire.
188		115	,,	Foreign Countries (British subjects).
1,134		796	,,	" " (Foreigners).
28		17	,,	At sea.

Country of Birth of Foreigners Inhabiting West Ham.

Males.		FEMALES.		
31	 	14	born in	Russia.
78	 	51	,,	Poland.
29	 	3	,,	Sweden.
14	 	4	,,	Norway.
22	 	8	,,	Denmark.
32	 	35	,,	Holland.
20	 	19	"	Belgium.
59	 	60	,,	France.
620	 	356	,,	Germany.
19	 	II	"	Austria.
3	 	2	,,	Hungary.
16	 	7	,,	Switzerland.
7	 	5	,,	Spain.
3	 	2	,,,	Portugal.
57	 	28	"	Italy.
2	 	I	,,	Greece.
5	 	8	,,	Turkey.
13	 	1	"	China.
5	 	3	,,	Other parts of Asia.
5	 	3	"	Egypt.
	 	2	"	Other parts of Africa.
73	 	51	,,	United States.
-	 	1	"	Mexico.
3	 	5	,,	Brazil.
18	 	19	**	Other parts of America.



BOROUGH OF WEST HAM.

Memorandum.

ON THE

PROVISION OF HOSPITAL ACCOMMODATION

FOR

SMALL-POX,

BY THE

Medical Officer of Bealth.

November, 1893.

MEMORANDUM

ON THE

PROVISION OF HOSPITAL ACCOMMODATION FOR SMALL-POX,

BY THE

MEDICAL OFFICER OF HEALTH.

The resolution passed by the Council on the 24th day of October, referring back to the Public Health Committee the question of the provision of hospital accommodation for small-pox, with instructions to prepare a statement of the comparison as regards cost between a land hospital and a ship hospital, suggests to me the advisability of putting into writing some facts which may appear to be pertinent to the question or calculated to assist the Committee.

This course is rendered the more necessary, owing to the fact that the provision of hospital accommodation is interwoven with the larger question of the provision of hospital accommodation for other infectious diseases, to the lengthened period over which the discussion has unavoidably been spread, and consequently to the somewhat altered "personnel" of the Council since the earlier stages of this most debateable question.

It would render this memorandum very tedious and scarcely entertaining to give a history of the discussions, deputations, resolutions, &c., which have been forced upon the Council in this matter during the past four years, but it is only fair to myself to state that until the Council Meeting of October 24th I had never been asked the question whether I preferred a land hospital or a ship hospital for small-pox, or I should, as I did then, unhesitatingly have advised a land hospital. Four years ago, when the scheme for fever hospital provision, contained in my report dated October, 1890, was adopted by the Council, I was asked what could be done with small-pox cases if the Small-pox Cottage Hospital were closed, and I replied, "Take them down the river, or anywhere, provided they are removed from the crowded district of West Ham." It is possible that some members of the Council may have been led into the belief that I was in favour of West Ham having a hospital ship of its own, which is a very different thing. At this time, 1890, I felt that an arrangement could be made between the Council and the Metropolitan Asylums Board, whereby the Board's steamers could call at the Council's Wharf, and take the Borough cases to the hospital ship of the Metropolitan Asylums Board in Long Reach. This was no unreasonable belief, for local authorities outside the metropolis are empowered by section 131, Public Health Act, to combine for the purpose of providing hospitals, and I was aware of no legal disability on the part of the Metropolitan Asylums Board should they see fit to enter into such an arrangement; indeed, many things appear to suggest it. Small-pox in West Ham is almost as great a danger to the metropolis as small-pox in the metropolis itself. The Metropolitan Asylums Board hospitals contain accommodation sufficient to take West Ham cases, and owing to the extent of their land at Darenth, can be quickly enlarged if necessary. Moreover, during the 1884-5 epidemic the Metropolitan Asylums Board entered into an arrangement for the hire of a hospital, situate in West Ham, and filled it with small-pox cases. On the other hand, on the part of

the Council, it did appear, looking to all the surrounding facts of the case, that this arrangement would be the most simple, advantageous, and economical. On enquiry, however, I soon discovered that the Metropolitan Asylums Board could not entertain such a proposal, since when I have ceased to consider it practicable at present, although for reasons which will become more evident towards the end of my report, I am still of opinion that in the treatment of this one disease only, looking to the increasing populations of the extra-metropolitan districts, an arrangement such as is suggested above would be the most efficient, even if more costly than a land hospital, for the districts of West Ham, East Ham, and Leyton.

The treatment of small-pox from a municipal point of view may be considered under five headings:—

- (1.) Efficient vaccination.
- (2.) Prompt removal from home.
- (3.) Complete isolation from crowded districts.
- (4.) Ample accommodation for patients and staff.
- (5.) Strictest economy of cost, compatible with thorough performance of the previous four.

Under these headings I propose to compare ship and land hospitals.

- (1.) Vaccination. All sanitarians are agreed that small-pox epidemics are more quickly controlled by efficient vaccination than by removal to hospital or by any other treatment, and it is to be hoped that in the near future local authorities may be in a better position to control this most important preventive measure than they are at present, but as this subject does not affect the question at issue between ship and land hospital, it may be left with a mere mention.
- (2.) Small-pox being highly infectious from its very commencement, prompt removal from home becomes at first essential. On receipt by the local authority of notice of the existence of a case of smallpox, the patient should be on the way to hospital within a few hours. It is evident that for this purpose not only must the hospital be ever in readiness to receive patients, but also that the ambulance or other means of conveyance to the hospital must be ever in readiness. In the case of a land hospital the prompt removal is simple, our ambulance being ever ready for use. In the case of a ship hospital, beside the ambulance journey from home to the landing-stage, the patient will require the constant readiness of a steamer for removal from landing-stage to ship hospital. In the communications made to the Council by Mr. Hudson, the naval architect, whose advice the Council obtained in connection with the question of converting a ship into a small-pox hospital, certain figures (which will appear later) being the salaries of officials (captain, mate, &c.) appointed to the River Transit Service are given, and it was suggested that when no small-pox existed in West Ham, a shipkeeper could supervise, cleanse, and maintain the steamer. Such an arrangement, however, strikes at the foundation of successful hospital provision. The varied officials to man the river service could not be obtained at a moment's notice, and unless they are in constant attendance, and ready to remove isolated cases at any time, the hospital will be robbed of a great part of its value. This point must be borne in mind in considering the question of maintenance, as it tends largely to increase the cost of a ship hospital as compared with a land hospital. One other point under this heading for consideration, is the risk of spreading infection in transit. ambulance can be driven direct from the patient's home to the land hospital without stoppage, but to reach the landing-stage at Manhattan Wharf, which is the only available place of embarkation in West Ham, there are two routes. On both these routes the ambulance may be delayed for a quarter of an hour at two places, namely, the Tidal Basin Railway crossing, the Tidal Basin

swing bridge, the Connaught Road swing bridge, and the Silvertown railway crossing. The Tidal Basin crossing is situate in one of the poorest, busiest, and most crowded parts of the Borough, while there is frequently a stationary crowd at all the other places mentioned, and it will consequently not be denied that an ambulance with one or two small-pox patients would be a very undesirable addition to the localities mentioned, to say nothing of positive menace to the health of the population.

(3.) Complete isolation from crowded districts. What is complete isolation from a practical point of view? It is easy to take an alarmist's view, and in the matter of infectious disease there is a great tendency on the part of the public to do this. Since the issue of Dr. Power's Report to the Local Government Board on the Fulham Hospital in 1881, and Dr. Barry's Report on the Sheffield Small-pox Epidemic of 1888, many persons have been inclined to credit small-pox with an even greater virulence than it has; but I would remind the Council that, although these reports show definitely that a small-pox hospital situated in a crowded district is a grave danger to the population immediately surrounding the hospital, the investigations referred to therein were limited to zones around the respective hospitals of varying length, showing that the incidence of attack varied inversely with the distance from the hospital. Indeed, this diminished danger with increased distance from hospital, is apparently sufficiently uniform to suggest to the thoughtful reader conclusions of practical utility. For a thorough knowledge of this point the reports themselves must be read, but I append below two extracts of tables from the reports which will serve to illustrate the argument. Dr. Power, in his investigation of the Fulham Hospital, took four circles with the hospital as a centre, the radius of these circles being respectively \(\frac{1}{4}\) mile, \(\frac{3}{4}\) mile, \(\frac{3}{4}\) mile, and I mile.

An examination of columns 10, 11, 12 and 13 of the table below, extracted from his report, shows diminished incidence of attack before mentioned.

EPIDEMIC PERIOD (January to August, 1878).

Cases all so receive Ful	ll-pox from ources ed into		1000	in one i			-	The	same ir	n Rates Houses		at. of
Hospital during period.			Of which situated.						le.	le.	ė.	e.
Acute Cases.	Convalescent Cases.	PERIOD.	Total such Houses.	Under 4 mile from Hospital.	In ring 1-3 mile from Hospital.	In ring ½-2 mile from Hospital.	In ring 3-r mile from Hespital.	Rate on total Houses.	Rate on Houses o-4 mile.	Rate on Houses 4-4 mile	Rate on Houses 1-1 mile.	Rate on Houses 1-1 mile.
714	344	January, 1878, to August, 1878.	211	20	89	78	24	1.80	4.62	2.55	1.84	•67
I	2	3		5	6	7	8	9	10	II	12	13

Again, Dr. Barry, in his investigation of the Sheffield epidemic, 1888, took four circles with the hospital as a centre, the radius of the circles being respectively 1,000 feet, 2,000 feet, 3,000 feet, and

4,000 feet, and an examination of columns 11, 12, 13, and 14 of the table below, extracted from his report, leads to the same conclusion as that derived from Dr. Power's report, although to a less extent in consequence of the area under examination being smaller.

Showing for the thirteen months from February, 1887, to March 17th, 1888, the number of acute cases of small-pox received into the Borough Hospital, Winter Street, and the extent to which houses in the special areas within 4,000 feet of the hospital, and houses in the rest of the Borough of Sheffield, were newly infected by small-pox.

nto Hospitals eld.	atients under ter Street.	o Borough		With Hospit	in 4,000 al Hou newly in f which	o feet of ses becomfected, a situate	f the oming	In the Borous Sheff House become new infections.	igh of field, uses ming	The :	same in	Rates	per cen	t. of H	ouses.
Total Acute Small-pox Cases received into within the Borough of Sheffield.	Average Daily Number of Small-pox Patients under Treatment in Borough Hospital, Winter Street.	Acute Cases of Small-pox admitted to Borough Hospital, Winter Street.	PERIODS.	Under 1000 ft. from Hospital.	In Zone 1000-2000 ft. from Hospital.	In Zone 2000-3000 ft. from Hospital.	In Zone 3000-4000 ft. from Hospital.	In special area within 4000 ft. of Hospital.	In the rest of the Borough.	o-1000 ft. Circle.	1000-2000 ft. Zone.	2000-3000 ft. Zone.	3000-4000 ft. Zone.	In the Special Area.	In the rest of the Borough.
I	2	3	4	5	6	7	8	9	10	II	12	13	14	15	16
1,775		Whole Period from commencement of Epidemic to 17th March, 1888.	225	599	595	811	2,230	2,866	-	17.55	-	10.19	12:26	6.37	

The foregoing tables suggest that small-pox hospitals should not, if possible, be erected within about one mile of a crowded district.

(4.) Ample accommodation for patients and staff. It is an impossibility to accurately estimate the amount of accommodation which will be just enough for the wants of West Ham, and yet it is highly desirable to form such an estimate, as if the accommodation be insufficient the Council will be unable to cope with an epidemic of small-pox, while if the accommodation provided be too large the annual cost of maintaining a large building which is only occasionally used, but which, as I said before, must be kept ever in readiness, would be a standing thorn in the side of the Finance Committee. It will be within the recollection of the Public Health Committee that the question of the (very small) annual outlay in maintaining our present Cottage Hospital, the salaries of officials, their maintenance, &c., came up for discussion just prior to the outbreak of the present small-pox epidemic. Another reason for limiting so far

as possible the accommodation required for the treatment of small-pox is the fact that the fever hospital for the treatment of other infectious diseases, which the Council shortly hopes to open, will be in constant use at all times, and will cause a considerable financial outlay annually.

The accommodation provided by the Metropolitan Asylums Board for small-pox consists of 350 beds for acute cases on the ships at Long Reach, and 800 convalescent beds in the hospital on land, making a total of 1,150, and giving one bed to each 3,774 persons according to the last census. The Borough of Sheffield has lately commenced erecting a small-pox hospital to contain 100 beds, situate four miles from the borough, to replace the Borough Hospital in Winter Street, which was so unfavourably reported upon by Dr. Barry. This provision gives one small-pox bed for each 3,330 persons. To equal the provision made in the case of London and Sheffield, the Borough would require some sixty beds. It is true that this number has been exceeded in the present epidemic, but as my periodical maps issued to the Public Health Committee have shown, the epidemic has been almost limited to the district in which our hospital is situated, and I am strongly of opinion that the fifty beds at the command of the Council at the commencement of the epidemic would have been sufficient if the hospital had been some miles away. In the case of a land hospital, should the accommodation be insufficient, additional accommodation of a temporary character could be quickly erected. On the other hand, in the case of a ship hospital, the accommodation to be provided must be equal to the largest possible demand likely to be made upon it, as additional accommodation could not easily be acquired in the height of an epidemic.

(5.) Cost.—In order to estimate the relative cost of a ship hospital compared with that of a land hospital, I have obtained information of the working of the hospitals under the Metropolitan Asylums Board, kindly supplied me by T. Duncombe Mann, Esq.

I have also quoted below an extract from a paper by Deputy-Surgeon-General Bostock, C.B., and Sir Vincent K. Barrington, contained in the Transactions of the Seventh International Congress of Hygiene and Demography, dealing with this subject. The experience of the Metropolitan Asylums Board in dealing with scarlet fever in land hospitals leads them to estimate the cost of treating and maintaining an individual case (excluding the capital charges of the cost of buildings, etc.), at £15. The average stay in hospital of scarlet fever cases from the East End of London is from nine to ten weeks. Now the average stay of a small-pox case in hospital is not more than six weeks, and consequently the average cost of treatment of a case of small-pox in a land hospital would be less. As will be seen from the paper quoted below, the cost of each case of small-pox treated in the hospital ships during the 1884-5 epidemic is estimated at £23 5s., that is, at least one-third more than it would have cost if treated in a land hospital.

Extract of Paper on the Metropolitan Infectious Hospital and Ambulance Organization.

The question is often asked, what is the cost of an epidemic, and what price do the ratepayers pay for the means provided by the Metropolitan Asylums Board to limit, if not to prevent, the spread of infectious disease in their midst? The epidemic of small-pox described above may be taken as an example. Great difficulty is experienced in answering this question correctly.

All the hospitals in London received both fever and small-pox patients in 1884-5, and no separate accounts of the expenditure on each disease were kept, but an approximate estimate may be arrived at by (1) setting down the expenditure on the establishments specially devoted to the reception of small-pox cases,

and (2) by calculating what proportion of	the expenditure on the land	hospitals and land ambulance service
should be charged to this disease.		

		f
I.—a.	The floating hospital total cost during 1884-5 was £68,631, from which may be deducted £24,000, being the average nominal cost of maintaining the ships when without patients for two years	44,631
<i>b</i> .	The camp for 1,000 convalescent patients at Darenth, maintenance and administrative charges	81,112
с.	Plaistow Hospital, rent for one and a half years, with maintenance, &c., &c	8,882
d.	River ambulance service	16,860
2.—€.	At the beginning of the epidemic three-fourths of all the patients admitted into the land hospitals in London were suffering from small-pox, but as has been explained, convalescents were at an early period transferred to the ships, mild cases were soon afterwards removed from their homes to the wharves, and at last all cases, with few exceptions, were so treated, and the land hospitals admitted fever cases only. Under these circumstances the total expense may be fairly divided between the two diseases. The total expense of the land hospitals during the period was £171,759. Deducting one-half, it leaves £85,880 to be added to the cost of the epidemic	85,880
f.	A similar deduction can be made from the total expenditure on the land ambulance service, but in this case one-quarter only should be deducted, as three-quarters of all the patients were suffering from small-pox, and were carried either to the hospitals or the wharves, and the expense must be debited in either case to small-pox	19,800
	Total	£257,165

As 11,060 cases were admitted during the period, it follows that each case cost £23 5s.

This is exclusive of the capital expenditure on the sites and buildings of the hospitals, wharves, and ambulance stations and steamboats. The sums thus expended are raised on loan from the London County Council, at 3½ per cent. interest, and are repayable in an average of fifty years. The cost of the epidemic was defrayed from the current account of the managers, and was a charge on the rates of the several parishes of the district.

For the purpose of estimating the comparative cost of ship and land hospitals, the question may be considered under three heads—(a) cost of buildings and site, (b) ambulance service or apparatus for conveying patients, (c) annual cost of maintenance; and in doing so I shall quote the figures given by Mr. Hudson to the Council as the estimated cost in providing a ship hospital, and figures suggested by consideration of Dr. Thorne Thorne's report to the Local Government Board, together with the experience gained in West Ham itself. Many items may be left without consideration, as they would entail the same expense in both ship and land hospital, such as furnishing, cost of nursing, and medical attendance.

(a) Estimated Cost of Site and Buildings.

	SHIP.				LAND.	
Site-Mooring Fee at	£200	per ani	num,		Site—Fifty acres of Land, at £60 per acre	£3,000
capitalized				£6,000	Building and Fitting Hospital of Fifty	
Buildings-Pontoon				9,450	Beds	12,500
Fitting ditto				14,000	Steam Disinfecting Chamber	200
				£29,450		£15,700

(b) Estimated Cost of Ambulance Service.

	HIP.					LAND.
Launch for 8 or 10 Patie				£	700	Land Ambulance (already in use)
Land Ambulance and ho	orse (alrea	dy in	use)			Extra Horse, at £50 £50
	V	Veekly	/ E	kper	nse in	Removing Patients.
S	HIP.					LAND.
			£	S.	d.	£ s. d.
Captain of Launch			2	IO	0	Driver 1 10 0
Mate			2	0	0	Keep of two Horses, &c I 10 0
Youth			0	16	0	Incidentale
Engineer			2	5	0	0 IO 0
Coals and Stores						
Incidentals for Doctor ar	nd Nurse		-	0		
Driver of Ambulance				IO		
Keep of Horse, &c.						
2	***		_	15		
			14	16	0	3 10 0

(c) The annual cost of maintenance in either case will vary in accordance with the decision of the Council as to whether the hospital shall be kept ever in readiness to receive cases or not. If, during interepidemic periods, when no small-pox cases exist, the hospital is to remain in the hands of caretakers simply, there will doubtless be no great difference between the annual expenditure of ship and land hospital; but if, as I submit should be the case, the hospital is to be kept in readiness to receive any case suddenly arising in the shortest possible time, then the heavy outlay incurred in connection with the river service militates strongly against the adoption of a ship hospital.

In conclusion, I respectfully submit that the facts cited in this memorandum suggest—(1) the advisability of erecting a land hospital in preference to converting a ship for that purpose, (2) that a hospital of 50 beds, with an administrative block capable of dealing with double that number of beds, would be sufficient accommodation for the requirements of the Borough at present, (3) that the hospital should be within, if possible, five or six miles from the Borough, and situate a mile from a populated district.

In connection with the last paragraph, I may state that your Public Health Committee have, at the instance of your chairman, visited and inspected a large site at Dagenham, the only drawback to which is the close proximity of the village of Dagenham itself. I have no grounds for stating so, other than a consideration of the reports of Drs. Power and Barry before referred to, but I suggest that the Local Government Board might raise objection to this site in consequence of this close proximity of population. The Council has recently acquired land at Chadwell Heath for the purpose of erecting a Borough Asylum. This latter site is more isolated than that at Dagenham, and would be, in my opinion, much more suitable or a Borough small-pox hospital, as the distance is not so great, a consideration of much greater moment

in removing persons dangerously ill than in conveying persons of unsound mind who are not physically diseased, while in the event of an epidemic, the shorter journey would add materially to the prompt removal of cases.

Opposition will have to be met wherever the small-pox hospital shall be placed, and will probably not be greater in one case than in the other, although there are good grounds for greater and more successful opposition to the Dagenham site than at Chadwell Heath.

I respectfully submit it would, in my opinion, be advantageous to the Borough to use the latter site for the small-pox, and the former for asylum purposes, for the following reasons:—

- (1) The Chadwell Heath site is more easily accessible from West Ham, and consequently the journey not so dangerous to the patient.
- (2) More journeys could be made each day, with consequent diminished cost of removal.
- (3) Should East Ham and Leyton engage to send their cases to our Hospital, this site would be much more central.
- (4) The Local Government Board, in my opinion, will not be so likely to object to this site as to the Dagenham site.
- (5) The Dagenham site is much larger, and the land offers greater advantages to the Council from the employment of capable lunatics, than from the establishment of a small-pox hospital.
- (6) The Dagenham site is admirably fitted for dealing with the sewage of an asylum by the irrigation process—a process unsuitable for sewage from a small-pox hospital.

CHARLES SANDERS,

Medical Officer of Health.

Small-pox Cases removed to Hospital.

	D : 1 - 1'		No of Cases notified	No.	of Cases remov	ed to Hospital	from	No. of Cases removed from Borough to
	Period ending.		in Borough.	Borough.	East Ham.	Leyton.	Walthamstow.	Hospital Ships of Metropolitan Asylums Board.
1893.	Feb. 4		4	4	_	-	-	_
	,, 18		I	I.	-	I	-	_
	Mar. 4		6	- 6	-	-	-	-
	,, 18		II	10	_	-	-	_
	Apr. 1		9	II	_	2	-	-
	,, 15		15	II	-	-	-	_
	,, 30		16	13	_	_	-	
	May 13		32	31	-	I	-	-
	June 3		39	35	_	_	_	_
	,, 17		48	42	_	-	-	-
	July I		31	28	_	-	-	_
	,, 15		44	38	_	-	_	_
	Sept. 6		78	68	6	_	-	_
	,, 30		16	15	7	_	-	_
	Oct. 14		9	8	I	_	_	_
	Nov. 18		40	23	· I	_	-	_
	Dec. 2		16	13	7	1	_	_
	,, 30		33	28	12	I	-	
1894.	Jan. 17		25	17	13	I	3	_
	Feb. 3		37	30	5	_	I	-
	,, 21		28	20	18	_	_	_
	Mar. 3		46	35	10	2	I	_
	,, 31		114	82	_	_	_	_
	Apr. 14		61	44	-	_	_	4
	,, 28		60	_	_	-	_	44
	May 19		67	-	_	-	_	57
	June 2		25	-	_	-	_	22
	,, 16		17	_	_	_	_	II
	,, 30	•••	7	-	-	-	-	5

West Ham Deaths occurring in London Institutions.

- 12 in St. Bartholomew's Hospital.
- 101 ,, London Hospital.
- 36 ,, Shadwell Children's Hospital.
- 10 ,, Poplar Hospital.
 - 2 ,, Poplar Workhouse.
 - 9 ,, German Hospital.
 - 3 ,, North Eastern Hospital.
 - 4 ,, Homerton Fever Hospital.
 - 3 ,, Mile End Infirmary.
 - 4 ,, River Thames and Docks.
 - 4 ,, Brompton Hospital.
 - I ,, Wormwood Scrubbs Prison.
 - 2 ,, London Temperance Hospital.
 - 6 ,, Guy's Hospital.
 - 1 ,, Royal Hospital (Lambeth).
 - 1 ,, Stepney Workhouse.
 - I ,, Metropolitan Asylums Board Hospital Ships.
 - 2 ,, Great Northern Hospital.
 - 2 ,, Middlesex Hospital.
 - 1 ,, Middlesex Asylum (Wandsworth),
- 10 ,, City of London Chest Hospital, Victoria Park.
 - I ,, Bethnal House Asylum.
 - 2 ,, Mildmay House.
 - 3 ,, University College Hospital.
 - 1 ,, London Fever Hospital.
 - 1 ,, Grove Hall Asylum.
 - 1 ,, City of London Infirmary.
 - 1 ,, St. Thomas's Hospital.
 - I ,, Chelsea Hospital for Women.
 - ı " Dr. Brownfield's, East India Road.
 - 3 ,, Friedenheim, Hampstead.
 - 1 ,, Shadwell Railway Station.
 - 1 ,, Poplar and Stepney Sick Asylum.
 - I " Royal Free Hospital.
 - 1 ,, Lock Hospital, Soho.
 - 1 ,, Hospital for Women, Euston Road.
 - 1 ,, Metropolitan Hospital.
 - 1 ,, St. Peter's Hospital.

Brought forward 237

- I in St. Pelagia's Crêche.
- I ,, Islington Infirmary.
- 2 ,, Seamen's Hospital.
- 2 ,, King's College Hospital.
- 1 ,, St. George's Hospital.
- I " Convent Hospital.
- 2 ,, Metropolitan Asylums Board North Western Hospital.
- 1 ,, Cancer Hospital.
- 1 ,, Refrigeration Company's Works, Shadwell.
- 1 ,, Alexandra Hospital.
- ,, North London Consumption Hospital.
- I ,, Heart Hospital, Soho.
- 1 at 7, Marshall Grove, Woolwich.

²⁵³ Total.

Notices to abate Nuisances, or remedy Defects, served during the year 1893.

Drains choked	***							 	851
To cleanse w.c. pans								 	90
To lay drains bare for insp	pection							 	217
To furnish new pans to v	v.c.'s							 	236
Stack pipes connected to	drains							 	476
Sink do. do.	do.							 	356
To relay drains					***			 	105
Drains defective								 	299
W.C. pans do								 	150
Flushing apparatus defec	tive					***	***	 	577
Stack pipes defective								 	190
Sink pipes do.						***		 	155
Gutters do.								 	359
Water fittings do.			***					 	120
Walls and ceilings dirty	or defe	ctive						 	1926
Floors defective								 	314
Roofs do.								 	479
Doors do.								 	52
Water tanks do.								 	71
Seats of w.c.'s do.								 	121
W.C.'s dilapidated								 	13
Offensive accumulations								 	166
Animals improperly kept								 	41
To abate over crowding								 	48
To pave and drain yards								 	483
To drain stables								 	15
Houses without proper w	ater-su	ipply						 	298
m 1 1 1			***					 	174
To cover do. do.								 	450
To furnish new gullies								 	645
To render premises fit for		n habit	ation					 	26
To cleanse walls and ceil								 	28
W.C. traps defective								 	103
Gullies do.								 	121
Stairs do.								 	34
Windows do.								 	54
To ventilate drains								 	86
To disconnect disused w.				***				 	3
Smoke nuisance								 	4
To abate nuisance from f								 	2
LO WOMEN THROWN TO THE T						1.0			
					Carri	ed forw	ard	 	9,938

				Broug	ght for	ward	 	9,938
Fire grates defective							 	43
Stables dilapidated							 	2
To provide water tank							 	3
To connect drains to sewer							 	45
Washing copper defective							 	2
To cleanse and fill up cesspools							 	57
To furnish new guttering							 	14
Insufficient ventilation							 	21
To provide dung pits							 	4
To furnish an intercepting trap							 	1
To remove soil pipes							 	24
To cleanse yard							 	1
To prevent shooting house refus	e						 	4
To close and cover inspection cl	nambe	er					 	10
To alter soil pipes							 	48
To abate nuisance from offensiv	e urir	nal					 	2
Cases of no flushing apparatus t	o w.c	. repor	ted to	town cl	erk		 	202
Gipsy notices served					****		 	20
					Т	OTAL		10,441

1,397 rooms in 1,277 houses were disinfected.

PROSECUTIONS.

Date.		Name.	Address.	Cause of Prosecution.	Result.
1893. 18th Jan.		Charles Gibbons	"Two Brewers," High Street, Stratford.	Selling whisky, 35° under proof	Fined £5, and 17s. 6d. costs.
8th Feb.		Henry Murch	352, Romford Road	Selling milk, one-fifth of cream abstracted.	Dismissed with costs.
Do.		Wm. Ed. Phillips	11, Jamiston Road, Strat- ford.	Selling milk, one-fifth of cream abstracted.	Dismissed with costs.
Do.		Herbert Dean	12. Cruikshank Road, Stratford.	Selling milk, 22 per cent. added water	Fined £3, and 17s. 6d. costs.
29th March		Henry G. Berry	10, Tate Road, Silvertown	Selling mustard, adulterated with 20 per cent. wheaten flour.	Fined 5s., and 17s. 6d. costs.
Do.		Henry G. Berry	10, Tate Road, Silvertown	Selling butter, 90 per cent. margarine	Fined £3, and 17s. 6d. costs.
Do.		Fred. Jno. Wesley	294, Romford Road	Non-compliance with terms of notice to remedy sanitary defects at Nos. 42 and 44, Studley Road.	Fined $£1$, and $£1$ ros. 6d. costs.
Do.		Charles Living	125, Broadway, Plaistow	Non-compliance with terms of notice to remedy sanitary defects at 23, Chargeable Street, Canning Town.	Ordered to pay costs, £1 10s. 6d.
Do.		D. C. Simpson	Graydon Villa, Woodford Road, Forest Gate.	Non-compliance with terms of notices to render the premises Nos. 132 and 134, Barking Road, fit for human habitation under Housing of Working Classes Act.	Ordered to pay costs, 7s. 6d.; closing order made.
Do.		— Smith	39, Alexandra Street, Canning Town.	Non-compliance with terms of notice to remedy sanitary defects at No. 25, Sydney Street.	Ordered to pay costs, £1 10s. 6d.
Do.		Rachel Birchall	11, Tate Road, Silvertown	Selling condensed milk, 85 per cent. original cream abstracted.	Summons dismissed; case stated after- wards withdrawn.
19th April	•••	Charles Keyer	9, Lawson Terrace, Albert Road, Silver- town.	Selling mustard, adulterated with 30 per cent. wheaten flour coloured with turmeric.	Fined 3s. 6d., and 17s. 6d. costs.
Do.	***	Charles Keyer	9, Lawson Terrace, Albert Road, Silver- town.	Selling coffee, 45 per cent. chicory.	Fined 2s. 6d., and 17s. 6d. costs.
Do.		Charles Keyer	9, Lawson Terrace, Albert Road, Silver- town.	Selling condensed milk, one half of its cream abstracted.	Fined 2s. 6d., and £2 6s. costs.
24th April		Alexander Burr	Mountnessing Hall, Ingatestone.	Consigning milk wholesale, with 7 per cent. added water.	Four days taken in serving summons; case not heard.

Date.	Name.	Address:	Cause of Prosecution.	Result.
24th April	 George Bish	211, High Street, Stratford.	Non-compliance with terms of notice to remedy sanitary defects at 211, High Street, Stratford.	Fined 1s., and 8s. costs, and an order made to prevent a recurrence of the
Do.	 Mrs. Randall	Melrose House, Romford Road.	Non-compliance with terms of notice to remedy sanitary defects at 63, Water Lane, Stratford.	nuisance. Case withdrawn through inability to prove ownership.
24th May	 Charles Hall	2, Paul Street, West	Exposing for sale 2 lbs. brawn unfit for human food.	Fined £1, and 17s. 6d. costs.
Do.	 Thomas Young	20, Broadway, Barking	Non-compliance with terms of notices to remedy sanitary defects at Nos. 4, 8, 10, and 12, Agate Street, 7, Randolph Road, and 28, Tucker Street, Canning Town.	Fined £3, and £3 5s. 6d. cost.
5th July	 George Douglas	Prince Regent's Lane, Canning Town.	Selling milk, 11 per cent. added water.	Fined £2, and 198. 6d. costs.
Do.	 Sarah Ann Bye	33, Randolph Road, Custom House.	Selling milk, 17 per cent. added water.	Fined £2, and 198. 6d. costs.
Do.	 Henry Davis	7, Kelland Road, Plaistow	Selling milk 7 per cent. added water	Fined £2, and 19s. 6d. costs.
Do.	 Henry Hooker	73, High Street, Plaistow	Selling milk 25 per cent. added water	Fined £3, and
12th July	 Henry Wagstaff	68, Victoria Dock Road, Canning Town.	Exposing for sale four pieces of beef, and six pieces of mutton, unfit for human food.	Fined £2 10s., and £2 18s. 6d. costs.
4th Oct.	 Frederick John Folkard	50, Stratford Road, Plaistow.	Selling margarine which was not duly branded or durably marked.	Fined £5, and costs.
Do.	 William Marshall	78, Stratford Road, Plaistow.	Selling margarine which was not duly branded or durably marked.	Fined £3, and £1 is. costs.
Do.	 Benjamin Swan	72, Chargeable Street, Flaistow.	Non-compliance with terms of notice to abate nuisance at 72, Chargeable Street.	Fined £2, and costs.
Do.	 George Allard	Laurel Farm, East Ham	Fish offal van passing along Barking Road during prohibited hours.	Find £2, and 7s. costs.
18th Oct.	 Joseph Smith	219, Barking Road, Can- ning Town.	Exposing for sale beef unfit for human food.	Fined £5, and 10s. costs.
Do.	 Henry Hudson	20, Clarence Terrace, Becton Road.	Exposing for sale grapes, unfit for human food, on a stall in Victoria Dock Road.	Fined £1 1s., and 10s. costs.

		-			
29th Nov.	David Lee		On land, Ravenhill Estate	Squatting on land known as the Raven- hill Estate, Barking Road (failing to	Fined 10s., and 7s. costs.
Do.	Samuel Coop	oer	On land, Ravenhill Estate	comply with gipsy notice). Squatting on land known as the Ravenhill Estate, Barking Road (failing to	Fined ros., and 8s. costs.
Do.	Joseph Smith	h	On land, Ravenhill Estate	comply with gipsy notice). Squatting on land known as the Ravenhill Estate, Barking Road (failing to	Fined 10s., and 7s. costs.
Do.	James Lee		On land, Ravenhill Estate	comply with gipsy notice). Squatting on land known as the Ravenhill Estate, Barking Road (failing to	Fined ros., and 7s. costs.
13th Dec.	John E. Ford	d	42, Ford's Park Road, Canning Town.	comply with gipsy notice). Non-compliance with terms of notice to remedy sanitary defects at 4,	Case withdrawn.
Do.	John E. Ford	d	42, Ford's Park Road, Canning Town.	Queensland Terrace. Non-compliance with terms of notice to remedy sanitary defects at 21, Granville Road.	Fined 5s., and 11s. 6d. costs.
Do.	John E. Ford	d	42, Ford's Park Road, Canning Town.	Non-compliance with terms of notice to remedy sanitary defects at No. 3, Queensland Terrace.	Fined 5s., and 11s. 6d. costs.
Do.	D. C. Simpse	on	Graydon Villa, Woodford Road, Forest Gate.	Non-compliance with terms of notices to remedy sanitary defects at Nos. 48, 50, and 52, Marten Road, Custom House.	Fined 40s., and 11s. 6d. costs, and an order made to do work.
Do.	J. Heath		142, Grange Road, Bermondsey.	Non-compliance with terms of notice to remedy sanitary defects at 18, Francis Street.	Fined 5s., and costs, and an order made to do work.
Do.	O. E. Cash		52, Wrotham Road, Camden Square, N.W.	Non-compliance with terms of notice to remedy sanitary defects at 75, Vincent Street.	Fined 20s., and 10s. costs, and an order made
Do.	O. E. Cash		52, Wrotham Road, Camden Square, N.W.	Non-compliance with terms of notice to remedy sanitary defects at 77, Vincent Street.	to do work. Fined 20s., and 10s. costs, and an order made
Do.	D. C. Simps	on	Graydon Villa, Woodford Road, Forest Gate.	Non-compliance with terms of notices to render the premises Nos. 35, 37, 39, and 41, Hallsville Road, fit for human habitation under Housing of Working Classes Act.	to do work. Ordered to pay £1 costs; closing orders made.

The following Table shows West Ham Births and Deaths with their respective rates during the past 11 years.

Year.	Births.	Birth-rate per 1,000.	Deaths.	Death-rate, per 1,000
1883	6,014	12	2,693	70
1884	6,563	42		19
		43.7	3,057	20
1885	6,547	41.9	3,503	22
1886	7,075	41.6	3,151	18.2
1887	6,865	. 39.1	3.286	18.7
1888	6,867	38.5	2,848	18
1889	6,947	38.5	2,883	18
1890	7,063	38.5	3,977	21.7
1891	7,911	38.2	3,952	10.1
1892	8,013	36.9	4,019	18.6
1893	8,026	35'3	4,565	20

Chief Zymotic Deaths and Zymotic Death-rate during past 11 years.

Year.	No. of Deaths from chief Zymotic Diseases.	Zymotic Death-rate, per 1,000.	Remarks
1883	420	2.0	
1884	696	4.6	Small-pox epidemic.
1885	1,014	6.3	Small-pox epidemic.
1886	563	3.3	
1887	460	5.2	Half-year only.
1888	466	2.6	Notification introduced.
1889	352	1.0	
1890	752	4.1	Measles epidemic.
1891	489	2.3	
1892	721	3.3	Scarlatina epidemic.
1893	913	4	Small-pox & Whooping-coug

Notified Cases and Percentage of Deaths to Attacks during the past five years.

Disease.		Year.	No. of Cases notified.	No. of Deaths.	Percentage of Deaths to Attacks.		
		1889	806	78	9 per cent.		
		1890	921	49	5 ,,		
Scarlatina		1891	742	29	4 ,,		
		1892	2,023	70	3 "		
		1893	2,184	83	3 ,,		
		1889	145	32	23 ,,		
		1890	232	50	21 ,,		
Diphtheria		1891	179	55	30 ,,		
		1892	401	100	24 ,,		
		1893	470	104	22 ,,		
	(1889	171	39 -	22 ,,		
		1890	254	43	17 ,,		
Enteric Fever		1891	248	49	19 ,,		
		1892	138	23	17 ,,		
		1893	359	68	18 ,,		

Analysis of the Vital and Mortal Statistics of Thirty-three

			opulation 1893.				Annual Rat	
TOWNS			Estimated Population middle of 1893.	Births.	Deaths.	Births.	Deaths.	Principal Zymotic
							1	
33 Towns			10,327,846	328,342	222,178	31.9	21.6	3.2
32 Provincial Town		***	6,021,435	195,377	130,642	32.2	21.8	3.3
London			4,306,411	132,965	91,536	31.0	21.3	3.1
WEST HAM			227,405	8,026	4.565	35.3	20	4
Croydon			108,997	2,852	1,772	26.5	16.3	2.2
Brighton			117,833	2,981	2,165	25.4	18.4	1.8
Portsmouth			167,277	4,709	3,039	28.2	18.3	2.8
Plymouth			86,781	2,590	1,839	29.9	21.2	2.8
Bristol			225,028	6,814	4,249	30.4	18.9	1.7
Cardiff			142,435	5,121	2,796	36.1	19.7	3.3
Swansea			93,816	3,285	1,836	32.1	19.6	1.8
Wolverhampton			84,298	2,902	1,956	34.2	23.3	2.8
Birmingham			487,891	15,916	10,693	32.7	22.0	3.0
Norwich			104,184	3,210	2,003	30.9	19.3	3.1
Leicester Nottingham	***	***	184,547	6,006	3,683	32.6	20.0	4.0
Dorby			220,551	6,642	4,061	30.5	18.5	2.6
Rielronhood			97,341	3,123	1,771	32.2	18.2	2.1
[iverneel	***		103,817	3,431	2,127	39.0 33.1	20.5	2.8
Rolton			510,514 117,278	18,322 3,874	13,919 2,821	33.1	27.3	3.0
Manchastar				17,268	12,801	33.6	24'1	4.7
Salford			515,598 203,431	7,047	4,886	34.7	24.1 54.1	3.7
Oldham	***		136,469	3,896	2,860	28.6	21.0	4'1
Burnley	***	***	93,462	3,161	2,039	33.9	21.0	3.8
Blackburn			124,005	3,822	2,879	30.0	23.3	4.1
Preston			110,225	3,855	2,899	32.1	26.4	6.0
Huddersfield			97,549	2,313	1,673	23.8	17.2	1.3
Halifax			91,918	2,253	1,591	24.6	17.4	1.7
Bradford			221,611	6,132	4,632	27.7	21.0	3.4
Leeds	***		382,093	12,349	8,493	32.4	22.3	3.2
Sheffield	***		333,922	11,591	7,428	34.8	22.3	3.2
Hull	***		208,709	7,125	4,545	34.5	21.8	4.1
Sunderland	***		134,515	4,771	3,022	35.6	22.5	3.4
Gateshead			90,938	3,309	1,750	36.2	19.3	3.5
Newcastle-on-Tyne			196,997	6,624	4,126	33.7	21.0	2.5

of the Largest English Towns during the Year 1893.

West Ham Deaths at several groups of Ages from different Causes during 1893.

	0-1	1-5	5-20	20-40	40-60	60-80	80
Small-pox { Vaccinated Unvaccinated No statement Scarlet fever	 3 4 11 5	2 10 4 21 37	4 4 4 33 1	5 2 8	3 1	I	
Relapsing fever	 4 56 8	4 82 70	7 10 28	17 1 2	14 1	17	1
Enteric fever Cholera and choleraic diarrhœa Diarrhœa, dysentery Remittent fever Hydrophobia	 4 195	3 2 39	36	28 1 3	2 2 2	9	1
Glanders Cow-pox and effects of vaccination Venereal affections Erysipelas Pyæmia and septicæmia Puerperal fever Other zymotic diseases	 17 14 2 —		-i	4 2 5 19	2 7 2 2	4 3	1
Thrush							
Starvation, want of breast milk Alcoholism	 45	_	_	4	2	I	
Rheumatic fever Rheumatism Gout Rickets Cancer Tabes mesenterica Tubercular meningitis Phthisis Scrofula, tuberculosis Other constitutional diseases	 6 61 8 11 18 134	1 - 2 - 26 19 6 22 7	7 3 - 1 6 8 44 13 3	12 1 18 1 1 153 8 3	2 2 2 67 1 76 5 4	2 1 45 12 1 3	3

	0-1	1-5	5-20	20-40	40-60	60-80	80
Premature birth	158 13 14	_		_	2	76	66
Apoplexy			1 2 3 21	3 2 2 16	40 3 30	56 1 46	6
Diseases of organs of special sense	I	-	I	1			
Diseases of circulatory system	5	1	29	32	75	90	6
Croup	4 170 45 4	20 113 80 3 11	6 17 3 ² 2	1 14 50 7 9	92 60 3 7	175 35 5 6	20 3 1 1
Dentition Quinsy, sore throat Peritonitis Diseases of liver Other diseases of digestive system	34 63 2 3 12	16 4 10 1 — 3	1 5 7 1 3	1 4 12 9	5 5 25 15	3 4 18 13	I
Diseases of lymphatic system and ductless glands.	2	.1	2	-	2		
Diseases of urinary system	1	2	2	15	20	18	2
Diseases of generative system Accidents of child-birth		_	_	3 17	3 3	I	
Diseases of locomotive system Diseases of integumentary system	2 10	2 3	6	1	3	2 2	

	0-1	1-5	5-20	20-40	40-60	60-80	80
Violent deaths—							
By railways			4	8 2	4	I	
By railways	=	_	_1	2 I	4	I	
By burns, scalds, explosions By drowning	2	9	3 5	3 7	4 4	4	
By suffocation in bed	23		2	2	2		
Other or not stated causes ك	1	4	3	3 3	8	3	I
Suicide	-	_	-	4	5	I	
Other causes	III	5	6	5	15	17	

TABLE showing No. of Cases of Infectious Disease notified, with No. of Deaths from Infectious Disease, and No. of Deaths from other Diseases, occurring in the several streets of the Borough.

STREETS.	Cases of infectious disease notified.	Deaths from infectious disease.	Deaths from other diseases.	Streets.		Cases of infectious disease notified.	Deaths from infectious disease.	Deaths from other diseases.
Abbey Lane Abbey Street Adamson Road Addison Road Adine Road Agate Street Alwyn Road Albany Road Albany Road Albert Road, Forest Gate Albert Road, Plaistow Albion Street Aldworth Road Aldworth Road Aldworth Road Alexandra Street Alice Road Alice Road Alice Road Alma Terrace Almshouses, West Ham Alnwick Road Amelia Street Amelia Street Amelia Street Angel Lane Angel Lane Anno Street Argyle Road, Canning Town Arkwright Street Arthingworth Street Arthingworth Street Arthingworth Street Arthur Street, Stratford Arthur Street, Stratford Arthur Street, Silvertown	14 4 10 14 9 3 3 10 8 5 4 1 1 1 3 1 1 1 4 6 19 3 10 14 15 16 17 18 18 19 19 19 19 19 19 19 19 19 19	I	15 8 4 10 1 2 12 1 3 5 9 9 1 2 3 7 1 1 4 1 3 13 6 9 2 10 5 3 2	Ascot Street Ashlin Road Ashton Street Atherton Road Aubrey Street Aviary Street Avenons Road Avenue Road 1st Avenue 2nd Avenue 3rd Avenue Bailey Street Bakers Row Balaam Street Barking Road Barnby Place Barnby Place Barnby Street Barnby Street Barnby Street Barnwood Road Baron Road Beaconsfield Road Beale Street Beatrice Street Beauchamp Road Beaufoy Road Beaumont Road Beck Road Bective Road Bective Road Beddingfield Street Beechwood Road Belton Road Belton Road Beddingfield Street Beechwood Road Belton Road Bedti's Road Bett's Road Bett's Road		78 3 1 1 6 4 5 6 1 1 6 198 2 2 6 16 1 1 2 8 7 2 8 10 10 1 7 7 6 3	2 2 1	2 4 3 1 1 1 3 2 3 3 3 5 7 1 1 47 2 9 8 5 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7

STREETS.			Cases of infectious disease notified.	Deaths from infectious disease.	Deaths from other diseases.	Streets.	Cases of infectious disease notified.	Deaths from infectious disease.	Deaths from other diseases.
Bidder Street			8	3	II	Catherine Street, Canning	4	_	6
Biggerstaff Road			13	I	2	Town.			
Bignold Road	***		3	I	2	Catherine Street, Silver-	3	2	4
Bishop Road Blanche Road				I	_	town. Cave Road	_ I		1
Blythe Road			5	4	7 21	Cave Road Cecil Road, West Ham			1
Boleyn Road			IO	4	12	Cecil Road, Upton	4	-	5
Bolton Road, Stratfe			I		3	Cedars Road	6	2	8
Bond Street			2	-	_	Cemetery Road	9	I	6
Boulton Road, Plais	tow		2	I	5	Chadd Street	-	-	4
Bow Street			-	-	2	Chandos Road	13	9	17
Boyd Road			4	5	9	Channelsea Road	6	4	9
Bradley Street Braemar Road	***		8	I	2	Channelsea Street	3	_	I
Bridge Road			10	4	7 6	Chant Square Chapel Street, Forest Gate		2	4 I
Brighton Road			I	2	2	Chapel Street, Forest Gate Chapel Street, Stratford	5	3	5
Broad Street				_	8	Chaplin Road	2	_	I
Broadway, Plaistow			5		2	Chapman Road	2		I
Broadway, Stratford			4	_	2	Chargeable Street	12	I	8
Brooks Road			6	I	8	Charles Street, Plaistow	6	_	2
Brownlow Road			4	I	4	Charles Street, Silvertown	3	_	I
Brown's Road			4	I	5	Charlotte Street, Canning	7	_	9
Brunel Street			5	2	4	Town.			
Bryant Street				-	I	Charlotte Street, Old Canning	_	_	3
Brydges Road Buckingham Road			_	_	-	Town. Charlton Road	-		
Burford Road		***	3	I	8	Chatamouth Dond	3	I	3
Burgess Road			2		4 2	Chamilton Dood	5	4 2	5
Burke Street			I		8	Chaucer Road	8	2	3
Burleigh Road			3	2	I	Chesterton Crescent	2	I	_
Burnham Street			3	I	10	Chesterton Road	2	2	2
Burrard Road			9	2	9	Chesterton Terrace	4	I	6
Buxton Road			3	I	15	Chesnut Avenue	2	I	7
						Chobham Road	9	2	12
Calatan D. I. D. I						Church Street, West Ham	13	I	6
Caistor Park Road			7	I	4	Church Street, Plaistow	3	I	-
Campbell Road Canning Road	***	***	2	2	I	Church Street, Buildings	2	THE REAL PROPERTY.	4
Capel Road			_		I	Church Street Buildings Churchill Road	2		2 I
Carlton Street		***	3 7	2	7 2	Clare Road	3 5	_	4
Carnaryon Road				I	2	Clarence Road	9	3	6
Carpenters Road			24	5	II	Claremont Road	II	_	3
Carter Road			_	_	_	Clarkson Street	7	5	II
Castle Street			I	_	5	Clever Road	17	6	14

STREETS.	Cases of infectious disease notified.	Deaths from infectious disease. Deaths from other diseases.	Streets.	Cases of infectious disease notified.	Deaths from infectious disease.	Deaths from other diseases.
Clifford Road Clifton Road Clova Road Clyde Road Cobbold Road Colegrave Road Colegrave Road Columbia Road	1 5 1 2 3 15	1 6 6 9 — 2 2 4 7 24 2	Disraeli Road Dongola Road Drew Road Dunbar Road Dunmow Road	7 22 — 1 5		2 6 — 3 1
Connaught Road Constance Street, Plaistow Constance Street, Silvertown Cook's Road Coolfin Road Cooper Street Corner Street	5 1 2 3 8 1	I 3 8	Earl Street Earlham Grove East Road East Street Eastbourne Road Eastern Road, Stratford Eastern Road, Plaistow Eastwood Road	2 10 9 - 4 - 1	2 I 2 — 2	1 12 5 4 10 —
Crawford Street Cranbrook Road Creek Street Crescent Road Cross Street, Stratford Cross Street, Canning Town Crown Street	2 -	I 4 I I I I I I I I I I I I I I I I I I	Eaton Place Edith Road Edward Street, Barking Road Edward Street, Canning Town Edwin Street Eleanor Road Elm Road	7 2 1 6	3 - 2 - 1	4 1 4 7 2 1 1
Crownfield Road Croydon Road Crosby Road Cruickshank Road Cullum Street Cundy Road Curtis Street Custom Street	1 12 1 - 4 3 ² 1	4 15 1 6 4 11 6 6 - 1 1 2	Elmhurst Road Elphick Street Emily Street Emma Road Emma Street Ernest Road, Forest Gate Ernest Road, Plaistow Essex Street	3 2 1 2 3 4	4 2 — I I I	7 3 1 2 7 1 4 5
Dacre Road Dale Road Dames Road David Street Davis Street	5 23	2 5 1 12 — 13 4 4 — 1	Ethel Road, Barking Road Ethel Road, Canning Town Eve Road Evelyn Road Evesham Road Exning Street	7 - 8 4 18	3 1 4	- 4 3 6
Dean Street	1 5 16	3 1 3 1 6 - 1 2 1 3	Factory Road Fairland Road Falmouth Street Faulkner Street Falkland Road Feltham Gardens			I I I

Streets.	Cases of infectious disease notified.	Deaths from infectious disease.	Deaths from other diseases.	Streets.	Cases of infectious diseases notified.	Deaths from infectious disease.	Deaths from other diseases.
Fentons Avenue Ferndale Road Ferns Road Field Road Field Road Firwood Road Fisher Street Florence Road Florence Street Fords Market Fords Market Fords Park Road Forest Lane Forest Street Forty Acre Lane Foster Road Fox Street Fox Street Fox Street Francis Street, Stratford Francis Street, Canning	2 		5 2 1 7 	Godsell Street Godwin Road Goodman Row Gordon Street Gough Road Gowar Road Grace Road Grafton Road South Grafton Road South Graham Road Grange Road Granyille Road Granyille Road Gray Street Green Street Green Street Greenyille Street Greenyille Street Gregory Road Grove Crescent Road Gurney Road	3 1 9 1 2 5 9 4 4 5 2 2 7 3 1 6 5 7	1 1 3 6 2 2 3 1 1 2 1 1 1 1	12 12 1 7 9 5 2 31 3 10 2 6 7
Town. Frank Street Frederick Road Fredericks Street Freemason Road Fulton Street Garfield Road Garvery Road Geere Road George Street, Canning Town George Street, Plaistow George Street, Silvertown Gift Lane Gibbins Road Gipsy Lane Gladstone Road Gladstone Road Globe Crescent Road Globe Road Globe Road Godfrey Street	3 7 1 13 3 2 4 16 3 6 1 8 2 2 3 — 4	1 5 3 - 1 4 3 - 2 - 1	5 2 1 4 6 6	Hack Road Hallsville Road Ham Road Ham Park Road Hamfrith Road Hampton Road Hartington Road Hartington Road Hartland Road Hastings Road Helena Street Helena Street Helena Street Hemsworth Street Henniker Road Herbert Road Heyworth Road Heyworth Road Hejh Street, Plaistow High Street, Stratford Hill Street Hollybush Street	57 	1	6 I 8 48 8 5 5 5 2 6 4 8 10 12 6 2 7 20 6 4

Streets.	Cases of infectious disease notified.	Deaths from infectious disease.	Deaths from other diseases.	Streets.	Cases of infectious disease notified.	Deaths from infectious disease.	Deaths from other diseases.
Holness Road Holtum Place Hooper Road Horace Road Hospital, West Ham Hospital, Poplar Board of Works. Hospital, Cottage Small-pox Hospital, West Ham Guardians. Hospital, Seamen's Hospital, St. Mary Day Nursery. Hospital, St. Mary Cottage Hotham Street Howard Road, Forest Gate Howard Road, Plaistow Hoy Street Hubbard Street Huddleston Road Hughan Road Hughan Road Hughan Road Huntingdon Street Idmiston Road Ingal Road Invicta Road In	1 — 22 2 3 — 2 — 15 6 17 20 7 1 2 2 4 2 5 — 1 1 5 3 1 6 3 —	- I 3 - 3 - 50 - 4 3 2 - I 4 I - I - I - I - I - I - I - I - I	1 2 11 4 42 13 — 6 3 3 6 8 3 — 2 6 6 3 3 6 8 3 — 2 1 — 3 3 1 4 3 2 2 3 2 6	Keogh Road Khartoum Road King Street, Canning Town King Street, Plaistow King Street, Plaistow King Street, Stratford Kingsley Road Knight's Road Knox Road Knox Road Ladywell Street Lancaster Road	9 7 9 8 18 1 1 2 5 11 3 - 17 3 1 1 1 14 14 19 5 2 6 5 - 15 10 4 2 1 - 12	2	7 3 3 7 9 1 1 1 1
Town. Jupp Road	4	3	5	Lucas Road Luton Road	8	3	8
Kelland Road Kent Street	5	I 2	5 9	M ajor Road	7	2	8

Streets.		Cases of infectious disease notified	Deaths from infectious disease.	Deaths from other diseases.	Streets.	Cases of infectious disease notified.	Deaths from infectious disease.	Deaths from other diseases.
Malmesbury Road Manbey Grove Manbey Park Manbey Road Manbey Street Manor Road Marcus Street Margery Park Road Mark Street Marshgate Lane Martha Road Martin Street Martindale Road Mary Street Maryland Park Maryland Road Maryland Square Maryland Street Maryland Street Mason Road Maud Road		2 1 4 11 7 3 8 2 - 5 6 9 10 4 7 -	8 — I — I — — — — — — — — — — — — — — —	18 1 2 1 4 4 9 3 14 2 7 7 7 15 5 5 13 4 3 - - - - - - - - - - - - -	Nelson Street	1 15 5 3 4 3 6 15 - 5 2 1 4 2 - 8 10 4 1	1 — — — — — — — — — — — — — — — — — — —	8 10 2 — 7 2 8 4 1 4 — 1 1 2 — 8 7 1 1
Maud Street Mayfield Road May's Buildings Macdonald Road Meeson Road Melford Road Meredith Street Merton Road Middle Road		4 1 2 6 7 —	5 3 1	6 4 9 3 1	Oak Road Oakdale Road Odessa Road Ohio Road Ordnance Road Oriental Road Osborne Road Outram Street	2 ————————————————————————————————————	3 3 2 5 1 2	4 1 6 - 7 10 6 1
Milton Road Milton Street Montague Street Montesquieu Street Morecambe Street Morgan Street Mortham Street Morton Road Mount Street Muir Street Myra Street	··· }	3 7 7 2 1	2 - - - 1 - - - 2	3 1 5 1 10 7 1 3 3 2	Pacific Road	1 1 — 1 8 9 1 —	1 — 2 — 3 4 — 1	1 5 1 6 4 5 2 16 6 2 3 4

Streets.	Cases of infectious disease notified. Deaths from	infectious disease. Deaths from other diseases.	STREETS.	Cases of infectious disease notified.	Deaths from infectious disease.	Deaths from other diseases.
Peter Street Peto Street Phillip Street, Canning Town Phillip Street, Plaistow Pitchford Street Plaistow Grove Plaistow Road Plaistow Park Road Plashet Road Pleasant Place Portland Road Portland Road Portland Road Prince Regents Lane Prince of Wales Road Prospect Row	9 5 5 20 5 4 - 5	3 7 1 2 2 3 4 12 5 8 4 12 - 4 10 3 3 3 3 3 3 3 3 3 3 3 5 4 2 2 1 -	Ridley Road Riles Road River Lea River Thames River Street Rivett Street Roberts Road Robertson Street Rochester Avenue Rokeby Street Romford Road Roscoe Street Rosetta Road Rosher Road Ross Road Royal Road Russell Street Ruth Street	2	- - - - - - - - - - - - - - - - - - -	5 3 4 2 4 4 1 1 6 20 9 17 2 1 1
Quadrant Street Queens Road, Canning Town Queens Road Plaistow Queen Street, Stratford Queen Street, Stratford New Town Radnor Street Railway Cottages Randall Street Randolph Road Ranelagh Road Rathbone Street Ravenstone Road Raymond Road Redriff Road Reginald Road Reginald Road Reynolds Road Rehold Road Reynolds Road Richard Street Richford Road	16 5 8 - 4 6 1 6 - 3 5	- 5 1 7 9 25 2 8 - 1 - 2 - 5 - 11 - 2 - 4 - 1 - 2 - 4 - 1 - 2 - 5 - 11 - 2 - 5 - 11 - 2 - 3	Sabberton Street Salisbury Road Salmen Road Salway Road Samson Street Sandal Street Sarah Street Scott Street Sebert Road Selwyn Road Selwyn Road Sewell Street Shaftesbury Avenue Shepheard Street Ship Street Shipwright Street Shirley Avenue Shirley Street Short Street Short Street Short Street Skelton Road Skiers Street Smeaton Street	11 4 2 6 — 11 6 4 14 8 2 12 5 1 1 — 7 — 15 3 2 2	I I I I I I I I I I I I I I I I I I I	3 1 3 3 4 2 8 13 3 18 3 7 4 6 1 9 1 4 3 7 —

Streets.	Cases of infectious disease notified.	Deaths from infectious diseases.	Deaths from other diseases.	STREETS.	Cases of infectious diseases notified.	Deaths from infectious disease.	Deaths from other diseases.
Smith Street	1 - 2 19 8 14 11 1 3 - 6 15 6 11 9 - 6 3 14 3 9	Jui 2 48 51 2 1 1 3 1 3 1 1 2 1	3 2 1 2 3 1 15 13 17 4 3 3 3 4 10 5 1 2 1 2 5 4 5 3 11 2 3	Sutton Road Swanscomb Street Swete Street Sylvan Road Tabernacle Avenue Talbot Road Tate Road Tate Road Tavistock Road Temple Mill Lane Tenby Road The Green The Green The Green The Grove Thornham Grove Thornham Grove Thorpe Road Thore Mills Tidal Basin Road Tree-in-pound Road Tree-in-pound Road Treelyan Road Treelyan Road Trinity Gardens Tucker Street Tucker Street Tunmarsh Lane Twyford Street Tyas Road Tylney Road Union Cottages	" 1 2 9 4	I 2 - 2 3 3 2 I I I 3 I - 2 2 - 5 I - 4 3 - 2	38
St. George's Square St. James Road St. John's Avenue St. John's Road St. Luke's Square St. Mary's Road St. Thomas' Road Suffolk Road Suffolk Street Sugar House Lane Surrey Street Sussex Street	2 17 5 10 1	3 2 1 3 3 4 —	2 7 4 3 18 2 2 1 5 2	Union Road, Plaistow Union Road, Stratford Union Street, High Street Union Street Marsh Upper Road Upton Lane Upton Park Road Ursuline Convent Valetta Grove Vansittart Road Vaughan Road	3 7 4 16 16 13 —		2 3 7 5 5 6 1

Streets.	Cases of infectious diseases notified.	Deaths from infectious disease.	Deaths from other diseases.	Streets.		Cases of infectious diseases notified.	Deaths from infectious disease.	Deaths from other diseases.
Vicarage Gardens Vicarage Lane Vicarage Road Victoria Place Victoria Road, Plaistow Victoria Street, Stratford Victoria Dock Road Village Street Vincent Street Vine Road Vine Road Waddington Road Warmington Street Warrington Street Warrington Street Warwick Road Water Lane Watson Street Webb Street Webb Street Wellington Place Wellington Road Wellington Road Wellington Street West Ham Lane West Road, Canning Town West Road, Plaistow West Street, Forest Gate West Street, Stratford Western Road			1 13 6 2 4 13 22 19 2 13 2 10 6 3 1 3 4 5 5 1 1 3 1 7 8 2 15 6 6 6	Westbury Road Westwood Road Whalebone Lane Wharf Road Wharf Street Wharton Road White Road Whitehall Place Whitwell Road Whyteville Road Widdin Street Wightman Street Wilberforce Street William Street William Street William Street Willow Grove Wilson Street Winchester Street Windmill Lane Windsor Road Wingfield Road Winkfield Road Wood Street Woodford Road Woodstock Street Worland Road Woodstock Street Worland Road Wouldham Street Wyatt Road Wycliff Road	}	3 — 3 2 — 9 5 4 10 1 6 12 — 2 — 7 4 4 3 5 — 7 7 10 — 11 3 —	I	5
Western Street, Canning Town Western Street, Stratford	7	I	3	York Street Young Street	 	3 5	I	6 3

									-	age	s, a	na	LOC	aliti	es.															-
		Morta	lity fi subjo	rom a		ses, at					Morta	lity fi	rom su	bjoin	ed cau	ses, di	sting	nishin	g Dea	ths of	Child	ren ur	nder I	live Y	ears o	f Age.				
Names of Localities									1			-		F	EVER	s.	. 1				1	4	-			nia	1	1	1	
adopted for the purpose of these Stati-ties; public institutions being shown as separate localities.	At all Ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.		Small-pox.	Scarlatina.	Diphtheria.	Membranous Croup	Typhus.	Enteric or Typhold	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Measles.	Whooping-cough.	Diarrhœa & Dysentery	Rheumatic Fever.	Ague.	Phthlsis.	Bronchitis, Pheumon and Pleurisy.	Heart Discase.	Injuries.	All other Diseases.	TOTAL.
(a)	(b)	(c)	(d)	(0)	(f)	(g)	(h)	(i)	1	2	3	4	5	6	7	8	9	10	II	12	13	14	15	16	17	18	19	20	21	22
Stratford Ward	749	254	133	41	32	170	119	Under 5 5 upwds.		3 5	28 3	4		12			2		2	4 2	18	36 5			32 62	73 106	5 44	6 7	178	
Forest Gate Ward	879	269	109	50	30	199	222	Under 5 5 upwds.		7 9	13	5		2 8			5		2 2	11 3	25 I	52 4	5		30 65	76 128	60	7 2	146 198	
Plaistow Ward	1194	409	215	63	61	257	189	Under 5 5 upwds.	I	19	18 7	7 3		16			8		4 7	7	46	100	10000		33 78		5 5 ²	11	4	624 570
Canning Town Ward	1144	422	222	73	46	246	135	Under 5 5 upwds.		14 13	7 6	8	 I	I 22			4		4 3	7	46 2	103			50 67	132 134	2 44	1000	256 165	
Borough Hospital	51	7	15	10	6	12	1	Under 5 5 upwds.	22 29																					22
West Ham Hospital	44	3	11	6	6	15	3	Under 5 5 upwds.			I														2	3 2		7	2 9	14 30
Seamen's Hospital	30		1		3	23	3	Under 5 5 upwds.														5			4	6		7		I 29
Poplar Hospital	11					2	9	Under 5 5 upwds.																	3				7	
Forest Gate Indus- trial School.	4		1	3				Under 5 5 upwds.																				2		1 3
West Ham Work- house.	237	23	9	1	9	78	117	Under 5 5 upwds.						2								8			6 30	4 47		2	13	3 ² 205
TOTALS	4343	1387	716	247	193	1002	798	Under 5 5 upwds.	23 31	43 38	67 27	24 6		3 60					11 14	30 6	135	300				421 584		44 73	8 ₃₅	2103
The su	bjoi	ned	nu	mb	ers	hav	e a	lso to b	e ta	ken	int	to a	ссо	unt	in	judg	ging	of	the	ab	ove	rec	ord	s o	f M	orta	lity			
Deaths occurring outside the District among per- sons belonging thereto	253	22	26	27	23	123	32	Under 5 5 upwds.		I	7 3			5					t			8 5			6 27	5 21	2 22	1 33	16 88	48 205
Deaths occurring within the District among per- sons not belonging	31		1	3	3	15	9	Under 5 5 upwds.														5					3	1 6		I 30

(B.)—Table of Population, Births, and of New Cases of Infectious Sickness, coming to the knowledge of the Medical Officer of Health, during the year 1893, in the Urban Sanitary District of West Ham; classified according to Diseases, Ages, and Localities.

	Populati Ag					NEW C				S IN E						THE		NUM	BER N TH	OF E	VER.	AL L	OCA	LITI	OVED ES FO	OR T	REA	HEIR	HONT IN	MES
NAMES OF LOCALITIES										F	EVER	s.											F	EVE	18.					
adopted for the purpose of these Statistics: Public Institutions being shown as separate localities.	Cersus 1891.	Estimated to middle of 1893.	Registered Births.	Aged under 5 or over 5.	Small-pox.	Scarlatina.	Diphtherla.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera, English.	Erysipelas.			Small-pox,	Scarlatina,	Diphtheria.	Membranous Croup.	Typhus.	Enterie or Typhoid.	Continued.	Relapsing.	Puerperal,	Cholera.	Erysipelas.		
(a.)	(b.)	(c.)	(d.)	(0.)	I	2	3	4	5	6	7	8	9	10	II	12	13	I	2	3	4	5	6	7	8	9	10	II	12	13
Stratford	38,612	43,237	1,604	Under 5 5 upwds.	12 49	196 425	71 97	4 I		7 91	6																			
Forest Gate	53,511	58,636	1,580	Under 5 5 upwds.	4	128 233	33 52	tifiable H 5		6 29					tifiable 8 8															
Plaistow—H	58,030	64,657	2,538	Under 5 5 upwds.	48 185	203 356	45 46	Not no		5 51								44 174												
Canning Town	54,750	60,875	2,304	Under 5 5 upwds.	35 79	249 394	33 116	8		22 148	3		5	I 2																
West Ham Hospital				Under 5 5 upwds.			I																							
				Under 5 5 upwds.																										
				Under 5 5 upwds.																	5555									
				Under 5 5 upwds.																										
				Under 5 5 upwds.				:::														2000								
				Under 5 5 upwds.																										
				Under 5 5 upwds.													_													
TOTALS	204,903	227,405	8,026	Under 5 5 upwds.	99 332				 I	40 319	10			I 2				89 296												

State here whether "Notification of Infectious Disease" is compulsory in the District—Yes. Since when?—1888. Besides the above-mentioned Diseases, insert in the columns with blank headings the names of any that are notifiable in the District, and fill the columns accordingly. State here the name of the Isolation Hospital used by sick of the Isolation Mark (H) the Isolation Hospital is situated; and if not within the District, state where it is

