

Report on the sanitary condition of the Hackney District for the year 1886.

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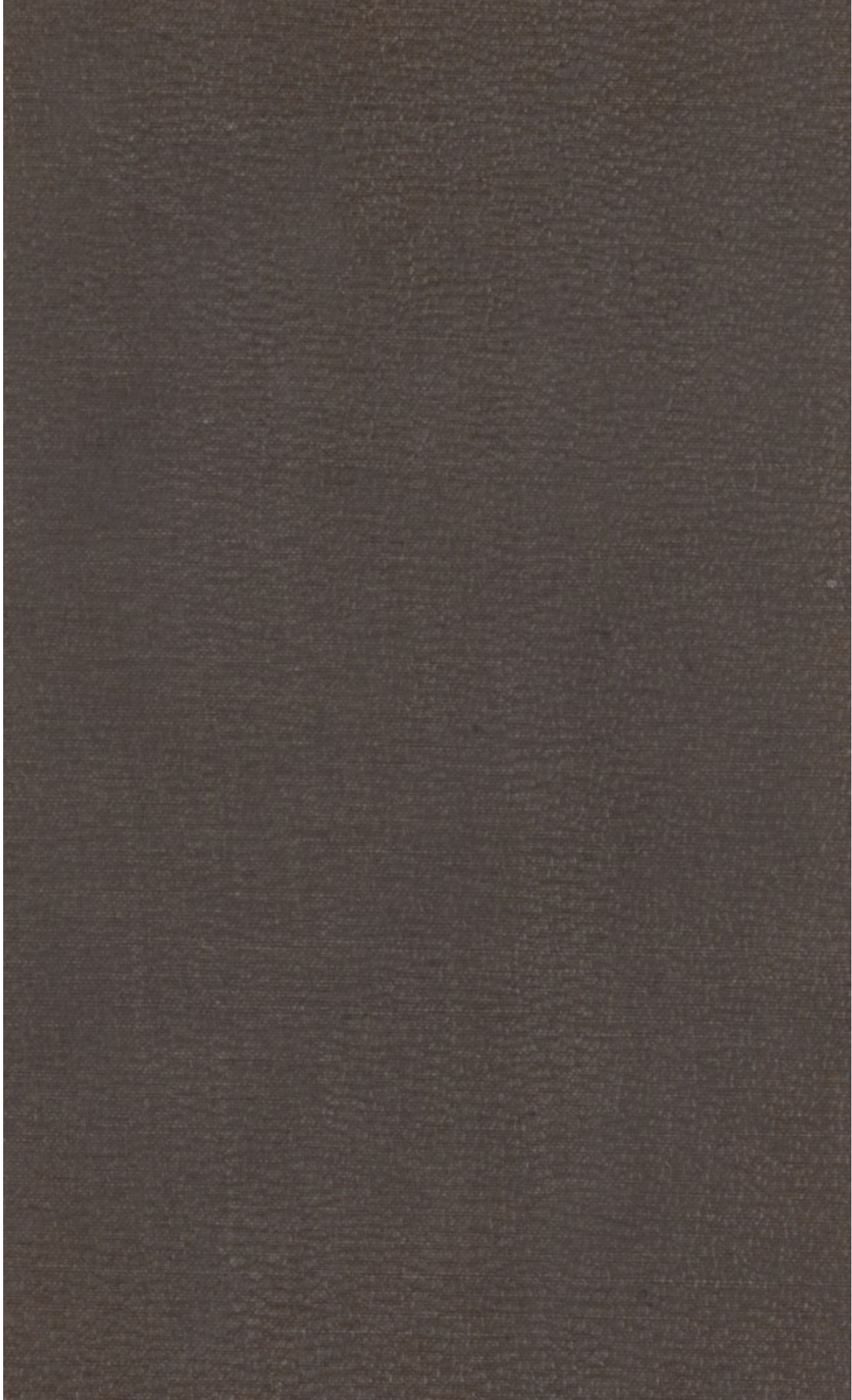
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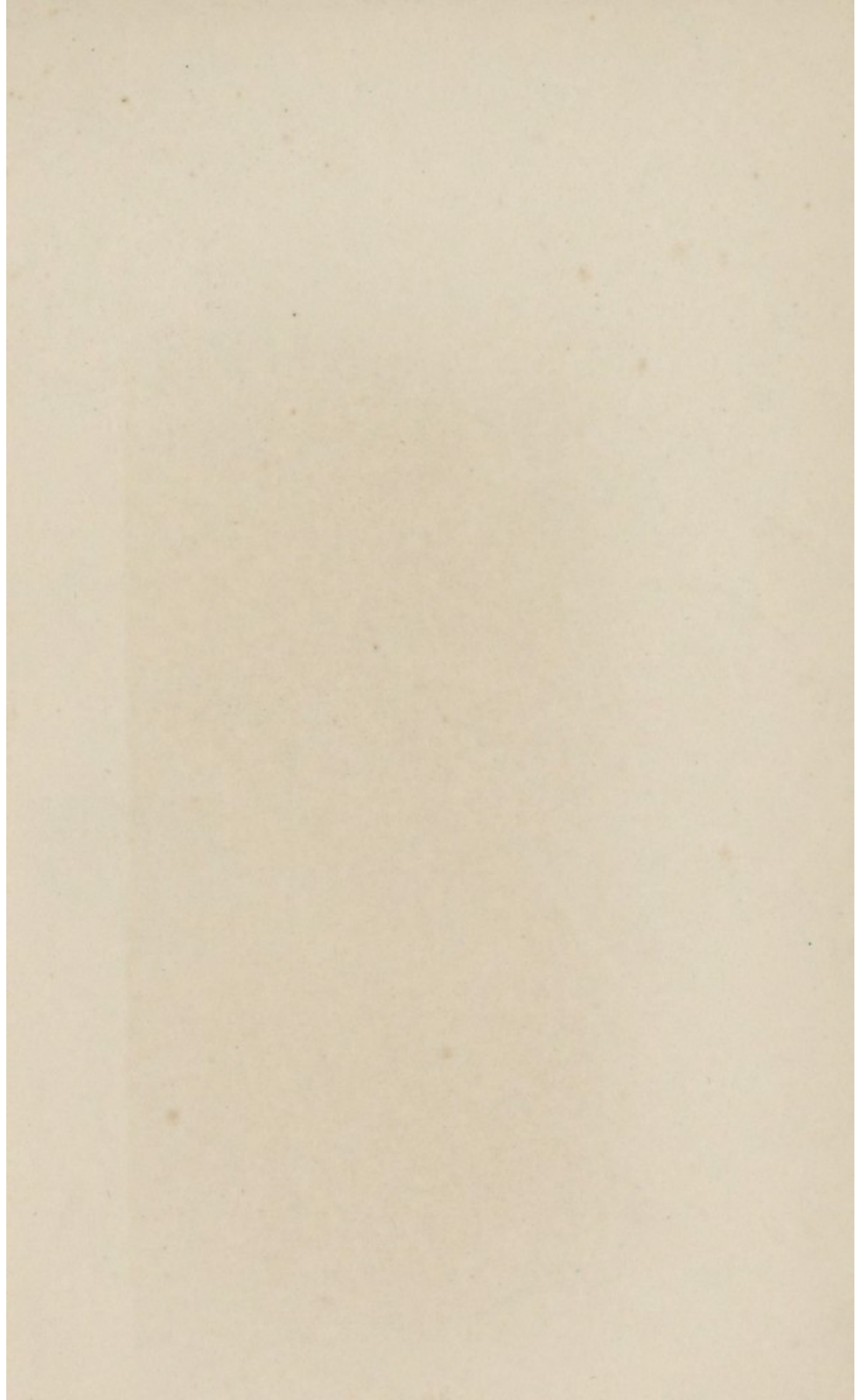
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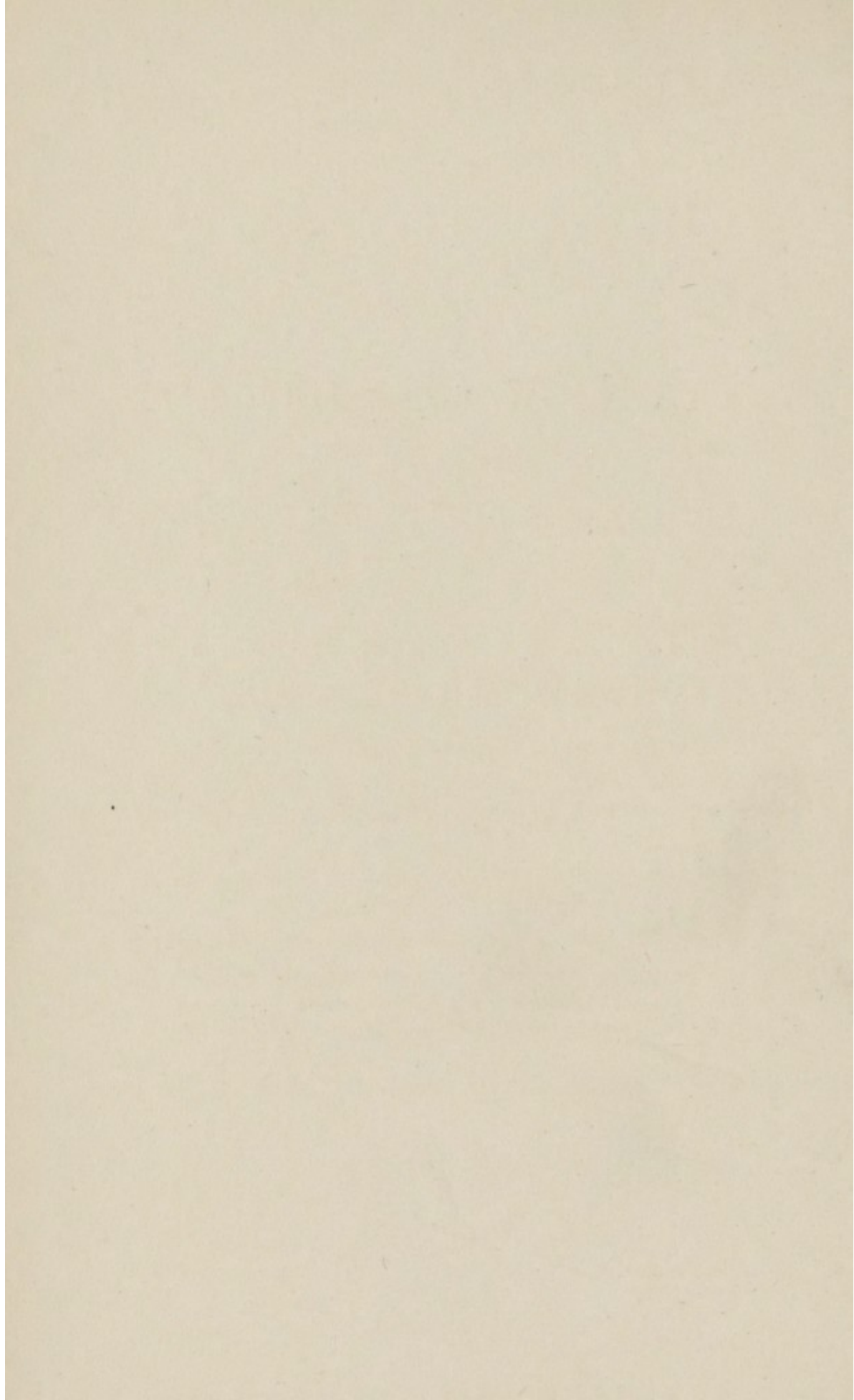


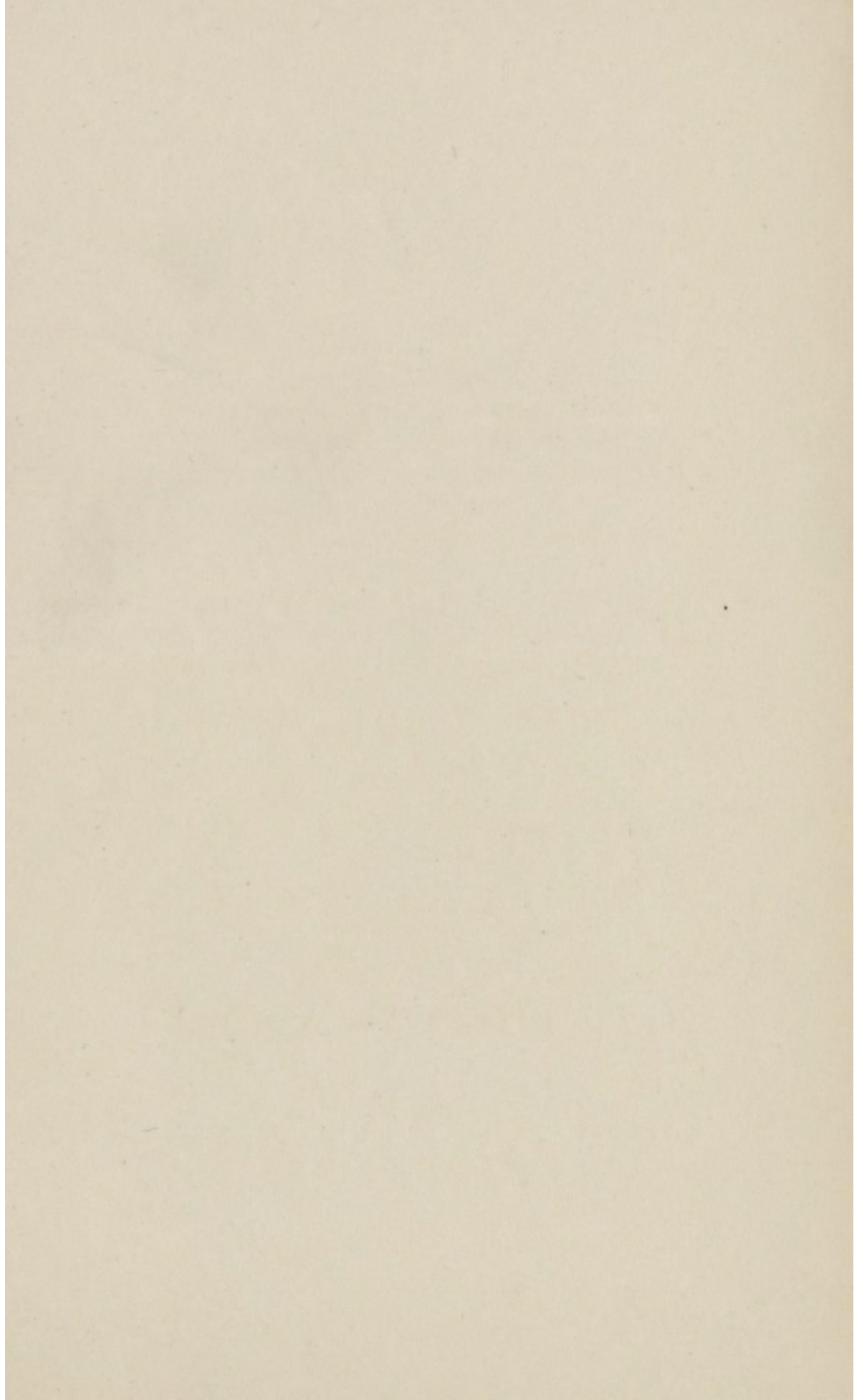
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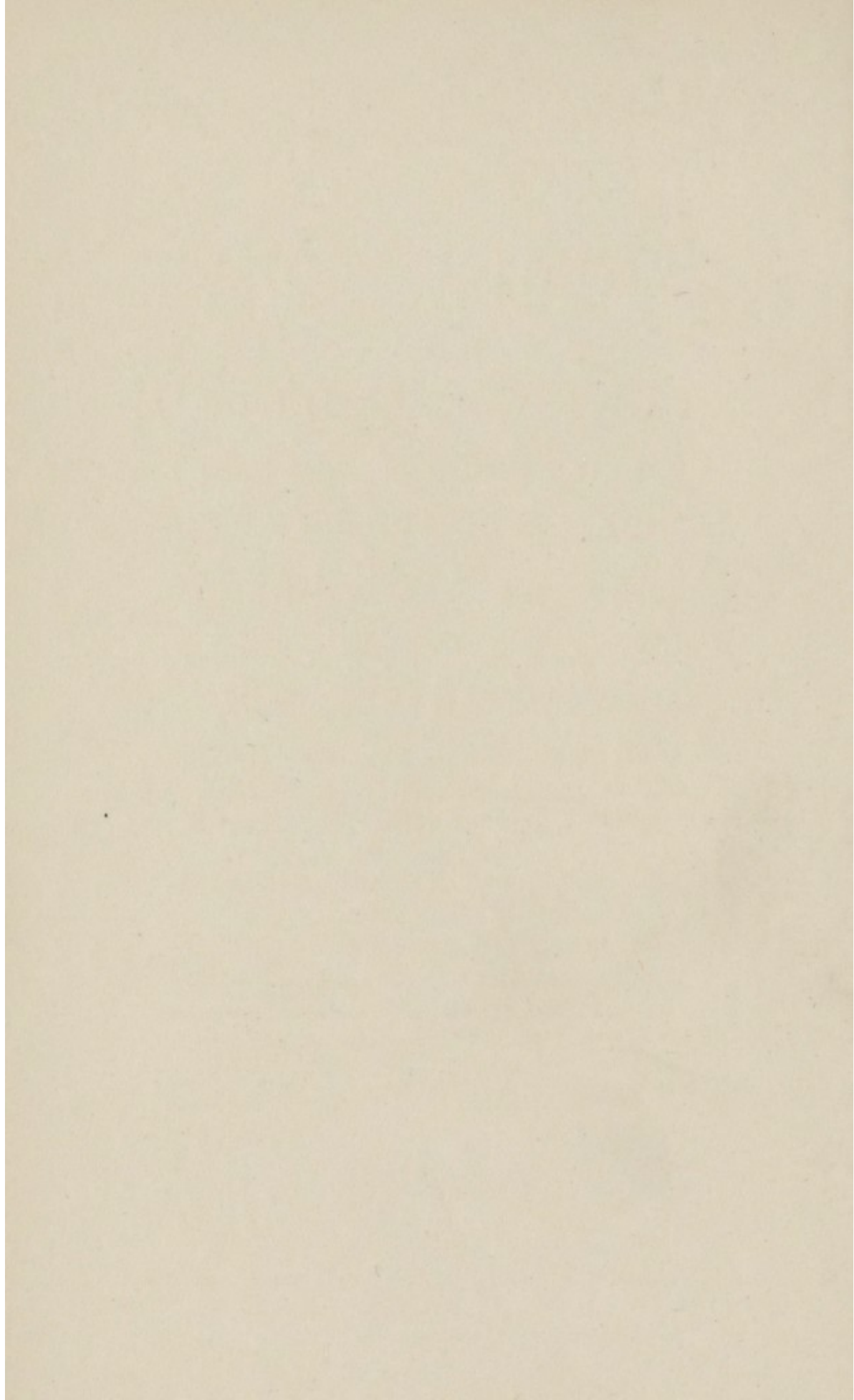


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Board of Works for the Hackney District

REPORT

ON THE

SANITARY CONDITION

OF THE

HACKNEY DISTRICT,

FOR THE YEAR 1886,

BY

JOHN W. TRIPE, M.D.,

Member of the Royal College of Physicians, Edin., &c. ;

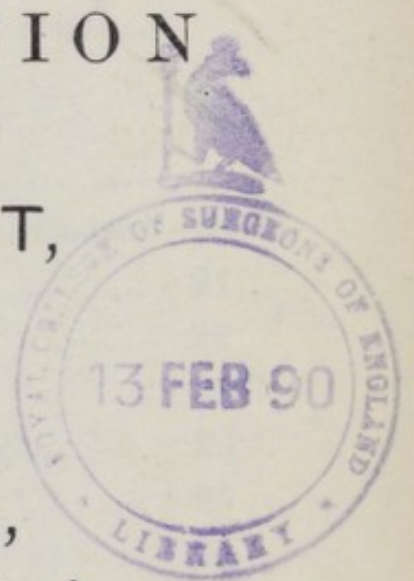
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REPORT

NAVY CONDITION

HOCKEY DISTRICT

For the Year 1886

JOHN W. WATKINS, M.D.

Report of the Board for the Hocking District, Navy Condition, for the Year 1886. The report details the state of the navy in the district, including the number of vessels, their condition, and the progress of various projects. It also discusses the financial situation and the actions taken by the board to improve the navy's efficiency and safety. The report is a comprehensive overview of the district's naval operations and is a valuable historical document.

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THIRTY-FIRST ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH,
FOR THE YEAR 1886.

THE great feature in the mortality statistics of this year is the disappearance of small-pox from the district, as there has not been a single case reported to me, with the exception of a tramp who had symptoms of the disease on the day after he was admitted to the casual ward of the Hackney Union. As the disease takes several days to manifest itself, it could not have been contracted in the district, especially as the person came from Hammersmith on the day of his admission to our Workhouse. He unfortunately died at the Deptford Hospital before any further account could be obtained as to his history. There has not been such a total cessation of this disease since 1858, when no death was registered. The question now arises, when may we expect another epidemic in our district? To this I cannot reply, as previously to 1870 and the existence of the Small-pox Hospital in our district, its recrudescence every fourth year was not so marked as in the whole of London, and the proportion of deaths to population was not so great. How far the non-use of the Hospital at Homerton for small-pox may be accompanied in future by a very decided diminution here of the disease I cannot state, as owing to the increased number of houses, we are more intimately united with the rest of the Metropolis than before 1870. That the disease will return as an epidemic in London next year (1888) I have but little doubt, and only hope that under altered circumstances we shall not suffer in so large a proportion as during the last 16 years. Indeed, if disconnection of the interior of the houses

from the drains, the provision of improved traps for the inefficient bell-traps, and of a better water supply to closets, will be of any use in preventing or ameliorating small-pox, we certainly ought not to have so many cases as before, because these sanitary works have been carried out far more systematically since the appointment of the last Inspector in 1884, than they were or could have been previously done. This will be referred to again when speaking of the sanitary works performed.

In my former annual reports, I have from time to time pointed out the excessive mortality from small-pox in the vicinity of the Small-pox Hospital, and in my report for 1884 I showed, by spot-maps, not only the large excess around the Hospital, but that infection by traffic and personal intercourse did not suffice to explain, to more than a slight extent, the amount and direction of the infection. Indeed, I stated in my evidence before the Royal Commissioners in 1881, and in my annual report for 1884, that I believed the disease to be spread partly by aërial infection. I am glad to find that the Medical Officer of the Local Government Board holds that it (the infection) "is proved to extend to the distance of at least a mile, and to be independent of lines of human communication." He further points out that whilst "Hackney and Camberwell, which for 20 years before 1870, stood amongst districts of the first rank in their freedom from small-pox, they afterwards became debased to a place amongst the worst." "This was after the establishment of Homerton Hospital in Hackney in 1871, and of Stockwell and Deptford Hospitals on either side of Camberwell." He also shows from the Registrar General's Reports, that up to 1870 the death-rates from small-pox in the Provinces to 100 in London were 72, 59, 90, 81, 62 and 44 for each quinquennial period since 1838; but since 1870 they have been only 59, 16 and 14 in the three quinquennial periods 1870-84, showing a very large decrease in the Provinces and an increase in London. Under these circumstances, I trust there will be a strong opposition offered to the treatment of even a

single case of small-pox in the Homerton Hospital. Indeed, the result of my personal experience shows that it would be safer for the district that cases should be treated at home, than that the Homerton Hospital should be again occupied with small-pox cases as before. The statistics of cases treated at home, when due care as to disinfection and isolation were used, indicate that they rarely acted as centres of infection from which the disease spreads, whilst repeated outbreaks occurred in the vicinity of the Hospital, apparently from new infection. I object to a single case being treated in the Hospital, because if that were done, more would almost certainly be brought there, because of the great comparative expense of treating a small number of cases in the ships.

Scarlet Fever.—My statistics as to scarlet fever, which I now present to you, show that it is not at all likely to spread from a hospital in the way that small-pox has done, and that whilst it is almost certain that hospitals for small-pox in London have proved injurious, those for scarlet fever tend to reduce the spread of that disease. The number of scarlet fever cases in each house invaded is greater than with small-pox, because there is no protection against its spread except isolation and efficient disinfection, whilst we can adopt vaccination and re-vaccination for preventing the spread of small-pox.

During the year I have received notification of an unusual number of cases of scarlet fever, but the ratio of attacks to deaths has been much smaller than in former epidemics. For instance, in 1882 there were 459 cases reported as having occurred in 287 houses situated in this district, whilst in 1886 there were 417 cases in 282 houses, with 144 deaths in 1882, and only 70 in 1886. The mildness of the epidemic is shown by the fact, that although the *cases* were considerably more numerous than usual, the *deaths*, 70, were below the average of the preceding 10 years, which amounted to 81. The comparatively small mortality from the disease can scarcely have been connected

with the removal of the patients to the Hospital, and the consequent diminution in the number of persons treated in a room, for, so far as I can ascertain, the proportion of removals to cases was not greater than in 1882. Whatever the cause may have been, it extended over the whole of London. Thus, in 1875-80, the deaths in the Asylum Board's Hospitals averaged 120 per 1,000 cases admitted, whilst in 1881-5, the mortality was only 96 per 1,000 patients. As regards 1881 and 1886, I cannot make a comparison, as the data for the latter years are not yet published. The mortality from this disease, for the 40 years during which I have paid especial attention to its statistics, including the death-rates and the meteorological causes affecting its fatality, has varied partly according to the diseases accompanying or following the fever, and partly according to the intensity of the poison, which varies very much. In some epidemics it is not unusual to meet with frequent deaths from this disease in a very short time after the attack, whilst in others, as in 1886, this rarely occurred. In some epidemics, during the fibrile or early stage, inflammation of the throat, either internal or external, frequently occurred; whilst in others, during the latter stage, dropsy caused very many deaths. As far as I can ascertain, deaths from these causes were not common in 1886, and as there is an evident connection between a particular kind of sore throat and bad drainage, I think we may fairly assume that the milder type of the disease, and its complications, are partly consequent upon the improved state of the drainage. During the last seven years bell-traps have been removed from as many as 11,311 premises, and yard gullies substituted; 6,858 waste-pipes from sinks have been cut off from direct communication with the drains; and 4,115 rain water-pipes, the hopper heads of which were near to living or sleeping rooms, have also been disconnected. There have also been a water supply and apparatus provided for, or apparatus repaired in, 5,364 closets during the same period, and a better supply provided in 2,504 houses.

The question whether or not the Hospital has acted injuriously on the district by assisting in the spread of scarlet fever, not having been examined on the same plan as that adopted for small-pox, I now proceed to lay before you the results obtained by making a spot map, that is to say, by laying down on a map the houses in which the disease occurred, and indicating each by a spot. There is, I may say, much greater difficulty in such an investigation than for small-pox, unless we take the death returns only as a guide, viz., that I do not receive notice of an equal proportion of cases in respectable houses as of small-pox cases, because the necessity for effectual disinfection is not so generally admitted. The reported cases which have chiefly occurred in the poorer streets show that in 1886, within the $\frac{1}{4}$ -mile radius of the centre of the Hospital, residents in 44 houses out of 283 invaded in the whole district were attacked, or 15.5 per cent. of the cases, against 6.1 per cent. of houses in the whole district; between the $\frac{1}{4}$ and $\frac{1}{2}$ -mile radii there were 112 houses invaded, or 39.6 per cent. amongst 15 per cent. of the total number of houses; between the $\frac{1}{2}$ and $\frac{3}{4}$ -mile radii there were 35 and between the $\frac{3}{4}$ and 1-mile radii 31 houses invaded, making a total of 23.4 per cent. of cases amongst 31.5 per cent. of the total houses, and outside the mile radius 61 houses were invaded, or 21.5 per cent. of all infected amongst 47.4 per cent. of the total number of houses. These figures seem to show that the Hospital had exerted an injurious effect on the population, but the map shows that if so, it must have been by traffic, *i.e.*, by personal rather than aërial infection (as in the case of small-pox), because the disease existed chiefly in the streets used as approaches to the Hospital, whilst the houses in the Clapton Park Estate near the Hospital were spared. Now, as the inhabitants of this estate are mostly as poor as the residents in the streets attacked, and their sanitary condition about the same, any suspicion of aërial infection was removed.

Being, however, doubtful as to the value of the figures I deemed it necessary to extend the investigation to another year, when the disease was epidemic, viz., 1882, and also to the deaths in 1882 and 1886, which has been done with the following results:—In 1882 cases were reported from 287 houses, of which 18 or 6·3 per cent. were in the $\frac{1}{4}$ -mile radius, the proportion of houses in this radius to the total number of houses in the district, being 6·1 per cent. Cases were reported also from 35 houses, or 12·2 per cent. of the total infected between the $\frac{1}{4}$ and $\frac{1}{2}$ -mile radii, which contained 15·0 per cent. of all the houses; 36 or 12·4 per cent. of the houses situated between the $\frac{1}{2}$ and $\frac{3}{4}$ -mile radii and 49 or 17·1 per cent. between the $\frac{3}{4}$ and 1-mile radii were infected, making 29·6 per cent. between the $\frac{1}{2}$ and 1-mile radii, in which there were 31·5 per cent. of the total houses. Fifty-one and nine-tenths per cent. of the houses infected were situated outside the 1-mile radius, whilst only 47·4 per cent. of all the houses were situated in this portion of the district. This return is quite different to the one for 1886, and goes far to show that the injurious influence of the Hospital, if any, is very small. There certainly was a difference in the Hospital arrangements in 1886 as compared with 1882, viz., that in the former year there were not any small-pox patients in the Hospital, whilst there were in the latter year, viz., 1882. Indeed, in 1882, no less than 12 small-pox cases occurred amongst the scarlet fever patients in the fever wards, some time after their admission, but so far as I know there were no cases of scarlet fever amongst the small-pox patients. Everything, therefore, points to a much greater risk of infection and consequent danger from small-pox than from scarlet fever patients, and the greater necessity for treating the former in hospitals situated away from crowded districts. I append a table showing the proportion of houses attacked in the different radii to the number of houses contained in each.

*Percentage of Houses infected by Scarlet Fever, of Deaths,
and the percentage of houses in the different radii in
1882 and 1886.*

RADIИ.	CASES.		Percentage of houses in radii.	DEATHS.	
	Percentage of houses infected.			Percentages of Deaths.	
	1882	1886	1884	1882	1886
Quarter mile	6·3	15·5	6·1	6·3	25·7
Between $\frac{1}{4}$ & $\frac{1}{2}$ -mile radii.	12·2	39·6	15·0	14·8	44·3
TOTALS within half a mile.	18·5	55·1	21·1	21·1	70·0
Between $\frac{1}{2}$ -mile and mile radii..... }	29·6	23·4	31·5	30·5	17·2
Outside mile radius	51·9	21·5	47·4	48·4	12·8
	100·0	100·0	100·0	100·0	100·0

The proportion of deaths in 1882 corresponded almost precisely with the proportion of houses in the different radii and outside the mile radius, whilst they differed almost entirely in 1886. The number of houses in the different radii is that ascertained in 1884, as they were sufficiently near for all practical purposes. The deaths for these years do not, when taken together, show any marked effect of the Hospital on the incidence of scarlet fever; but for 1886, if taken by itself, a deduction might have been drawn against the Hospital. A look at the accompanying map of deaths, however, shows a localization of the disease in different spots or centres of infection, in a different way to that of the small-pox map. I did not think it necessary to have a map of the deaths alone as well as of the infected houses printed,

although that of the deaths shows the manner in which the disease was spread about, more markedly than the other. Of course all the houses in which deaths occurred are noted on both maps, although they are not distinguished from the cases by a different colour.

The cause of the disease was ascertained only in a few cases. In two only was it traceable to persons coming from the Hospital. In both cases the disease appeared in houses three days after children treated in the Hospital returned home. In one patient there was a slight discharge from the ear, but in the other there was nothing to account for it. Considering the number of cases taken to and treated in the Hospital, and the time for which this disease may remain infectious in persons who have suffered from it, there is every reason to be satisfied with the care ordinarily taken to retain patients for a sufficiently long time after the fever has disappeared.

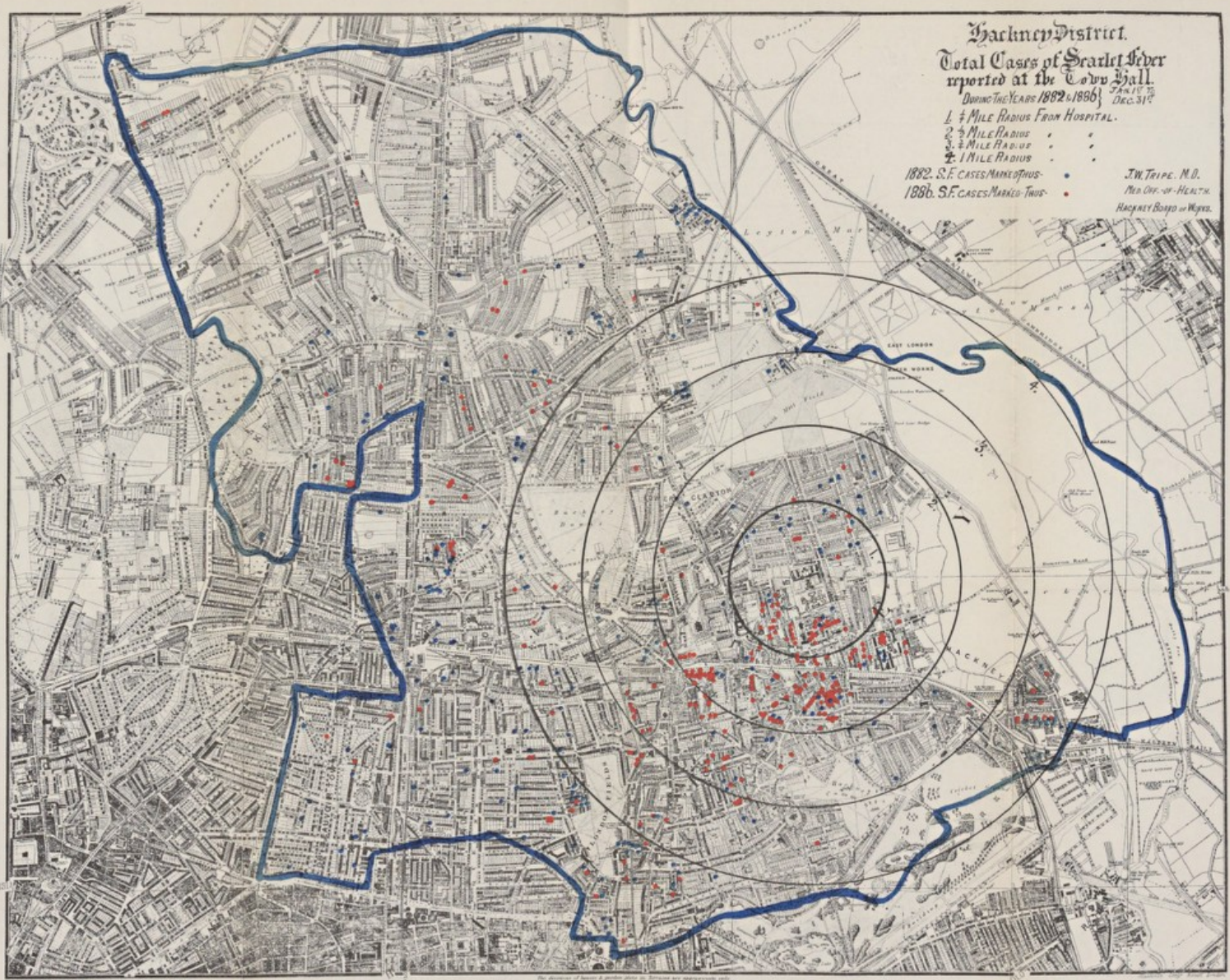
Typhoid or Enteric Fever.—The number of cases of this disease has always been rather large in this district. In 1886 there were 66 cases reported, including 53 deaths, so that very few non-fatal cases were brought to my knowledge. Indeed, if it had not been for the copies of the certificates of deaths, forwarded to the Board by the Registrars, I should have been in almost entire ignorance of the residences of the patients, and consequently unable to enquire into the sanitary state of the houses. As regards these, a very careful examination was made, and in 20, some sanitary defect or another was discovered; whilst in 46 the sanitary arrangements were good. The defects found in 12 houses consisted of either the sink waste-pipes being in direct communication with the drains, except for the intervention of a bell-trap; or the head of a rain-water pipe being near to a bedroom window. In 8 houses there were defective water-supply apparatus or defective paving, and in 2 houses there were 4 cases of the disease without any sanitary defect being discovered on examination.

Hackney District.
Total Cases of Scarlet Fever
reported at the City Hall.
 DURING THE YEARS 1882 & 1886. PART I.
 Dec. 31st

1. 7 MILE RADIUS FROM HOSPITAL.
 2. 3 MILE RADIUS : : :
 3. 2 MILE RADIUS : : :
 4. 1 MILE RADIUS : : :

1882. S.F. CASES MARKED THUS: •
 1886. S.F. CASES MARKED THUS: •

J.W. TRICE, M.D.
 MED. OFF. OF HEALTH.
 HACKNEY BOARD OF WORKS.



The number of houses & garden plots in Britain are approximately 100,000,000. A square of 1000 ft. side contains 100,000 square feet.



The origin of the infection could not be discovered except in a few cases. As regards two persons residing in different houses in this district, they returned from Southend about the same time, and had lived whilst there in the same terrace, and both were ailing before they returned, the undoubted symptoms appearing in one case in 5 days, and the other in 7 days after their return. Another patient said he took the disease at Market Drayton. I was also informed by the Medical Officer of Health for Bethnal Green that he knew of some other cases of enteric fever in his district, said to have been contracted at Southend.

In connection with infectious diseases I desire to mention the arrangements for the removal of the sick by the Metropolitan Asylums Board's ambulances. During the year I visited the ambulance station here, and also, with a number of other Medical Officers of Health, inspected the new pattern ambulances at the Board's wharf, and then proceeded in the steam launch to the hospital ships. I was very much pleased with the new steam-ship, which I then saw for the first time, as everything necessary for the safe and comfortable transfer of the patients to the hospital ships was provided. The hospital ships are, in my opinion, much more suitable for the treatment of small-pox patients than the ordinary land hospitals, and judging from the statistics, afford better results than the latter, which would more than counteract injury, if any, arising from the patients' removal.

Considerable discussion has been going on for some time past respecting the erection of large buildings at Darent for the treatment of convalescents from and of slight cases of small-pox. It was proposed by one section of the Asylums Board to erect large brick buildings at a great cost, and by another either to utilise the wooden huts already in stock, and supplement them by brick huts, or small buildings capable of holding 20 patients each. I have already expressed my opinion adversely as to the

use of large wards and buildings for small-pox patients, and should therefore much prefer seeing wooden or brick huts being erected as being much cheaper, for the latter can be built for about £950 each, and need only be brought into use as required. When I visited the hospital ships I noticed a piece of ground surrounding the buildings for the staff and the mortuary, which it seemed to me might be utilised for the erection of huts, and thus save the heavy cost of moving patients to and from Darent. An objection might be made to this that the site is exposed to emanations from the marshes, but I made careful inquiry whether or not malarial symptoms had occurred amongst the patients or nurses, and was told, no. As the ships are only a short distance from the shore, I do not believe that the malaria, if any, would be deprived of its evil effects by passing over such a small surface of water, and that therefore the buildings on the land site would be as healthy as the ship.

There is one other point to which I would refer in connection with the removal and treatment of persons residing in the Metropolis, and afflicted with an infectious disease. At present a patient can be removed only on the certificate of a Poor Law Medical Officer, and an order from a Relieving Officer. As this involves much loss of time and makes the person, to a certain extent, a recipient of poor law relief, I am strongly of opinion, at any rate as regards small-pox, that patients should be removable on the certificate of any qualified medical practitioner. This has already been strongly advocated by all Medical Officers of Health, and is merely mentioned to show that my opinion remains unchanged.

I now propose to lay before you the sanitary statistics of the districts, commencing with the population, births, and deaths, upon which all our statistics are based.

TABLE I.

Showing the Population, Marriages, Births, Deaths, and Density of Population per Acre for the Year 1886 and Ten Years preceding.

CORRECTED GROSS NUMBERS.

The Year.	Estimated Population.	Marriages.	Registered Births.	CORRECTED NUMBER OF DEATHS.			Density of Population per Acre.
				Total all Ages.	Under One Year.	Under Five Years.	
1886	216,000	1466	6666	3693	954	1544	54.7
1876	152,648	1425	5469	2825	773	987	38.7
1877	160,000	1485	5562	3092	756	1212	40.7
1878	167,250	1441	5978	3392	858	1408	42.5
1879	174,350	1440	6207	3285	770	1298	44.5
1880	181,538	1425	6331	3321	918	1586	46.2
1881	188,240	1494	6377	3614	832	1543	47.8
1882	195,200	1488	6423	3505	768	1451	49.6
1883	200,200	1458	6502	3545	816	1402	51.1
1884	205,400	1433	*6827	3700	880	1510	52.3
1885	210,600	1496	6585	3682	897	1555	53.5
Means for the 10 Years 1876-85.	183,542	1458	6226	3396	826	1395	46.6

*Registered in 53 weeks.

	1871.	1881.
Population at Census	124,951	186,400
No. of Inhabited Houses at Census.....	19,347	27,503
No. of Persons on an average in each Inhabited House at do.	6.46	6.78
Total No. of Acres	3,935	3,935
No. of Acres of Water and Open Spaces, chiefly on the borders of the District	568	568

* NOTE.—The Deaths are corrected by adding on the Deaths of *Inhabitants* in the Small-pox and Fever Hospitals, in the German Hospital, which are situate in the Hackney District, and also the Deaths in other Metropolitan and the Asylums Board's Hospitals outside the District, and by taking out the deaths of all non-residents that have been registered in the District.

In estimating the population I have not added thereto at the same rate of increase since 1881 as between 1871-81, because the number of houses unlet has been of late years larger in proportion than in the former period. The number of births since 1880 in each year has increased very slowly, except in 1884, when the births for 53 weeks were entered against 52 in most other years. This low birth-rate is not confined to Hackney only, but occurred in London as a whole, and almost in all England, and has been more marked still in France. I am not therefore able to check the population

by the number of births, as I did before 1881, and have to take the number of houses assessed to the rates as a guide to a certain extent, and believe that the estimated population is below rather than above the true number. It will be noticed also that the marriages have not increased in proportion to population, having been in 1884 fewer than in any year since 1876 (exception, 1880), when the number was 8 less than in 1884. The density of population goes on increasing, being now 54·7 per acre against 36·9 in 1875. This is a matter of grave sanitary import, as the death-rate as a rule is found to correspond more closely with this than almost any other known permanent factor of mortality.

TABLE II.

HACKNEY DISTRICT.—*Showing the Annual Birth and Death Rates, and Death Rates of Children in a Thousand Deaths for the Year 1886, and Ten Years preceding.*

In Year.	Birth Rate per 1000 of the Population	Corrected Death Rate per 1000 of the Population.		Deaths of Children under 1 year, per 1000 of Registered Births.		Deaths of Children under 1 year, per 1000 of Total Deaths.	Deaths of Children under 5 years, per 1000 of Total Deaths.
	Hackney.	Hackney.	London.	Hackney.	London.	Hackney.	Hackney.
1886	30·5	17·1	19·9	143	159	258	418
1876	35·8	18·5	22·2	139	157	274	349
1877	34·7	19·3	21·9	136	146	244	392
1878	35·6	20·2	23·5	144	164	226	480
1879	36·0	18·8	23·1	122	148	233	395
1880	35·1	18·3	22·2	142	158	273	477
1881	33·9	19·2	21·2	130	148	230	424
1882	32·9	17·9	21·4	119	162	219	414
1883	32·3	17·6	20·4	125	146	230	396
1884	30·8	18·0	20·3	124	168	238	408
1885	30·9	17·6	19·7	137	148	246	422
Average of 10 years, 1876 - 85	33·8	18·5	21·5	131	154	241	415
MEANS, 1871—80	34·7	19·6	22·6	142	158	247	392
1861—70	33·8	20·4	24·4	143	162	—	—
1851—60	31·8	19·1	23·8	128	155	—	—

I have already referred to the birth-rate generally and therefore have only to notice it for this district. The table shows that the birth-rate was only 30·5 per 1,000 population against the average of 33·8 for the 10 years 1876-85; 34·7 for 1871-80; 33·8 for 1861-70; and 31·8 for 1851-60, when the population of servants to total population was much larger than at present. The reduced birth-rate is partly owing to the diminished proportion of marriages, and, probably, partly to marriages being deferred to a later period of life than previously. The last report of the Registrar General refers to these subjects at some length, and perhaps the last named cause acts more powerfully in Hackney than in London at large, as the proportion of the labouring class who marry early in life is smaller than in some other parts of London. The birth-rate in 1883 was 32·3; in 1884, 30·8; in 1885, 30·9; and in 1886, 30·5, showing the continued decrease in a very marked manner. Of course, if the calculated population be either above or below the true number, the assigned birth-rates as well as the death-rates are to that extent erroneous.

The corrected death-rate for the district in 1886, viz., 17·1, is the lowest I have recorded since I was appointed as your Medical Officer of Health, that for all London being 19·9, or 0·2 above the rate in 1885. As might have been expected, the death-rate for the district, as the density of population increases, and the population becomes more assimilated to that of London generally is gradually approaching that for all London, although not so quickly as in some other suburban districts, thus in 1851-60 the average death-rate in the Hackney District was 4·7 above that for all London, in 1861-70 it was 4·0 above; in 1871-80, 3·0 above; in 1876-85 also 3·0; whilst in 1886, although so low as 17·1, it was 2·8 per cent above the Metropolitan rate.

The number of deaths of children under 1 year per 1,000 registered births was rather above the average, chiefly in consequence of the large number of deaths of infants from diarrhoea

during the hot weather, viz:—150 against 97 in 1885. The number of deaths at this age in Hackney District was 143, and in all London 159 per 1,000 births, or 16 below that for London this year, against 23 below in 1876-85; 16 in 1871-80; 19 in 1861-70; and 27 in 1851-60. As the mortality of infants is nearly double amongst the poor as compared with the middle classes, when we consider the changed social status of a large proportion of the inhabitants since 1856, these figures are satisfactory. The percentage of deaths of infants to total deaths, was 258 in 1886, against 241 in 1876-85, and 247 in 1871-80; and of children under 5, including infants, 418 in 1886, against 415 in 1876-85, showing but little difference in the percentage.

TABLE III.

Showing the Number of Deaths at all Ages in 1886, from certain groups of Diseases, and the proportions to 1000 of Population and to 1000 Deaths from all Causes; also the Number of Deaths of Infants under One Year from other groups of Diseases, and the proportions to 1000 Deaths from all Causes under One Year, and of Deaths to 1000 Population.

HACKNEY DISTRICT.	Total Deaths, 1886.	Per millage of Deaths to Total Deaths, 1886.	Deaths per 1000 population.				
			1882	1883	1884	1885	1886
1. Zymotic Diseases	580	157	3·39	2·63	3·99	2·75	2·74
2. Pulmonary, (excluding Phthisis)	592	160	3·96	3·31	2·93	3·59	3·18
3. Tubercular	516	139	2·59	2·63	2·05	2·39	2·39
4. Wasting Diseases ..	311	84	0·98	1·19	1·06	1·23	1·47
5. Convulsive Diseases..							
	144	39	0·65	0·78	0·71	0·81	0·67

3. Includes Phthisis, Scrofula, Rickets, Tabes Mesenterica, and deaths registered as being caused by Tubercular Meningitis in children more than 1 year old.

4. Includes Marasmus or Tabes Mesenterica, Atrophy and Debility, want of Breast Milk, and Premature Birth, in children under 1 year.

5. Includes Infantile Hydrocephalus. Meningitis, Convulsions and Teething, under 1 year.

The deaths from the 7 principal zymotic diseases in proportion to population, was lower than of late years, viz:—2·74 per 1,000 population, against 2·75 in 1885; 3·99 in 1884; 2·63 in 1883; and 3·39 in 1882. The mortality from inflammatory affections of the lungs, was not so high as usual, having been 3·18 per 1,000, against 3·59 in 1885; 2·93 in 1884; 3·31 in 1883; and 3·96 in 1882. As regards tubercular diseases, the mortality varied but little, having been 2·39 per 1,000 population against 2·39 in 1885; 2·05 in 1884; 2·63 in 1883; and 2·59 in 1882, the mortality in 1886 having been below the average. The deaths from “wasting diseases of infants” which include *tabes mesenterica*, atrophy and debility, want of breast milk and premature birth, were larger than usual, 311 having been registered from these causes against 256 in 1885, and showed a greater proportion to population than in any of the years 1882-5. Convulsive diseases of infants produced rather less than the ordinary rate of mortality, which, as this group of diseases depends, to a certain extent, on want of proper nourishment, and good sanitary arrangements, is a satisfactory return. The proportion of deaths per 1,000 deaths from all causes from each of these groups of diseases is as follows:—175 from zymotic diseases; 160 from pulmonary diseases, excluding consumption, as that is a tubercular affection; 139 from tubercular diseases; 84 from wasting and 144 from convulsive diseases of infants.

TABLE IV.

Showing the Number of Deaths from the principal Zymotic Diseases in the Hackney District during the 10 Years 1876 to 1885, and in the Year, 1886.

DISEASES.	1876	1887	1878	1879	1880	1881	1882	1883	1884	1885	Annual Average of 10 Years, 1876-1885	Proportion of Deaths to 1000 Deaths in 10 Years, 1876-1885	Total Deaths in 1886	Proportion of Deaths to 1000 Deaths in 1886			
	Small-pox	92	179	86	10	69	225	13	19	210	86	98.9	29.1	1	0.3		
Measles	15	91	31	81	21	149	43	117	55	168	77.1	22.7	88	23.8			
Scarlet Fever	57	58	123	70	81	118	144	63	72	29	81.5	23.9	70	19.0			
Diphtheria	23	18	23	19	14	1	51	43	39	47	27.8	8.1	46	12.4			
Whooping Cough	126	43	135	110	141	70	182	56	157	85	110.5	32.5	123	33.3			
Fever. {	Typhus	44	62	70	47	27	64	63	46	84	37	54.7	53	14.3			
															Enteric	4	1.1
Diarrhoea	136	86	159	67	170	135	99	104	190	125	127.1	37.4	199	53.9			
Totals	493	537	627	404	523	762	595	448	807	589	577.6	169.8	584	158.1			
Totals—London	12565	12292	14734	12256	13681	13811	13558	10801	13629	13074	13040	160.3	11121	170.8			

NOTE.—Previously to 1885, all kinds of Fever were grouped together as "Fever."

This table shows amongst other things, the great variations in the number of deaths from small-pox, during the 11 years 1876-86, the smallest number recorded having been 1 in 1886, (really none, as before mentioned, belonging to this district), and the highest, 225 and 210 in the two years 1881 and 1884 respectively. In 1879, it will be noticed that the number was very small, viz., 10; in 1882, only 13, in each case, preceding by one clear year, the outbreaks of 1881 and 1884. If the same should hold good, we may, as I have already mentioned, expect an outbreak in 1888, but as this rule did not obtain before the Small-pox Hospital at Homerton was used in 1871, I do not make any forecast, as the hospital is not again to be opened for the treatment of this disease. The mean for the 10 years was 99, against 15 for 1861-70.

Measles produced a large number of deaths, viz., 88, the average for the 10 years preceding, having been 77, the proportion of deaths to 1,000 deaths from all causes, having been 23·8. The smallest number of deaths in the 10 years, was 15 in 1876, and the highest, 168 in 1885, so that as we have had an excessive mortality in 1885 and in 1886, we may expect a considerable reduction in the number of deaths from this disease in 1887. The number of deaths from *Scarlet Fever* was below the mean of the 10 years 1876-85, having been 70 against a mean of 81, but, as before mentioned, there was a large number of cases, although a by no means large mortality. The highest mortality occurred in 1878, and in 1881-2, so that it is to be hoped that this epidemic has passed away for the present. *Diphtheria*, on the other hand, caused a large number of deaths, having been, unlike scarlet fever, unusually fatal, the mortality having reached 46, against a mean of 28 for the 10 preceding years. The number of deaths from diphtheria varied but little in each of the years, 1882-6, as it was 51 in 1882; 43 in 1883; 39 in 1884; 47 in 1885; and 46 in 1886. The proportion of deaths from this disease, to deaths from all causes, was 12·4 in 1886, and 8·1

in the 10 years 1876-85. The number of deaths from diphtheria in all London, was 863 in 1882; 951 in 1883; 973 in 1884; 896 in 1885; and 846 in 1886, showing how unlike its mortality is to that of ordinary infectious diseases.

Whooping Cough caused a large number of deaths in 1886, the number registered in this district having been 123, against an average of 111. The mortality, however, was greater in 1884, when it was 157; in 1882, when it reached 182; in 1878 when it was 135; and in 1876, 126. The smallest number of deaths was registered in 1877, viz., 43. There was not any deaths registered from *Typhus*, which is a very rare disease in this district, but there were 53 deaths from *Enteric Fever*, which was about an average. Very special enquiries were made as to the cause of this disease, but, as already stated, with little result, except a comparatively negative one. The deaths from enteric fever do not vary very largely in this district, as they were 64 in 1881; 63 in 1882; 46 in 1883; 84 in 1884; 37 in 1885; and 53 in 1886. It caused 14·3 deaths, in each 1,000 deaths from all causes.

The mortality from *Diarrhœa* was above the average, as 199 deaths were registered, against a mean of 127. This was a larger number than I should have expected, as the hot weather was not of long duration, but the number of deaths rose very suddenly in July, when the hot weather set in, and the highest temperature suddenly rose to 85·6, and reached 89, being much above the highest temperature for several years.

The annual average of deaths from these zymotic diseases in this district, during the 10 years 1876-85, was 578, giving 170 deaths out of each 1,000 deaths from all causes, whilst in London, the average number for these years was 13040, and the proportion to deaths from all causes, 160, being 10 less than for this district. The great mortality from small-pox, was the chief cause of this excess. In 1886, the number of deaths in all London from these diseases was 11,121, or more than 1,900 below the mean, and for the Hackney District, 584, or a little above

the mean, but the proportion of deaths to total deaths, was less in this district than in the whole of London, having been 158 per 1,000 deaths, against 171 for all London.

TABLE V.

The Deaths Registered at different Ages from all causes during the Years 1876-86, the Deaths of Non-Residents in the Fever and Small-pox Hospitals being excluded, but of Inhabitants in Hospitals and other Public Institutions outside the District being included

	AGE AT DEATH.											Totals	
	0	1	5	15	25	35	45	55	65	75	85 and upwards		
	—	—	—	—	—	—	—	—	—	—	—		
1886	Totals	954	590	163	173	204	252	264	332	387	294	80	3693
	Per cents	25.8	16.0	4.4	4.7	5.5	6.8	7.2	9.0	10.5	7.9	2.2	100
	Per cents. 1885..	24.3	18.8	4.7	4.2	5.7	6.4	7.6	8.5	10.9	8.0	1.9	100
	Ditto 1884..	23.8	17.0	6.3	5.9	6.9	6.8	7.6	8.9	8.2	6.7	1.9	100
	Ditto 1883..	23.0	16.5	4.5	4.6	6.3	7.7	8.3	9.2	10.6	7.6	1.7	100
	Ditto 1882..	21.2	19.5	6.6	4.3	6.0	7.5	7.8	8.3	9.3	6.7	2.1	100
	Ditto 1881..	23.0	19.7	6.5	5.5	6.7	6.7	6.6	7.1	10.3	6.6	1.3	100
	Ditto 1880..	27.7	17.1	4.1	4.6	6.7	7.2	6.6	8.1	9.0	7.0	1.9	100
	Ditto 1879..	23.4	16.1	4.6	4.2	6.0	7.9	8.8	9.6	10.8	6.8	1.8	100
	Ditto 1878..	25.3	16.2	4.9	5.7	5.8	7.5	7.3	8.9	9.5	7.0	1.9	100
	Ditto 1877..	24.4	14.8	5.0	6.2	7.2	7.0	7.1	9.1	9.5	7.6	2.1	100
	Ditto 1876..	27.4	14.1	4.8	5.4	7.0	7.5	7.4	8.6	8.4	7.3	2.1	100
	Per cents. of deaths 1876-85..	24.4	16.9	5.2	5.1	6.4	7.2	7.5	8.6	9.7	7.1	1.9	100
	Ditto 1866-75..	24.3	15.7	5.1	5.3	7.1	7.3	7.4	8.0	9.8	7.8	2.2	100
	Ditto 1856 65..	21.0	16.4	6.1	5.1	6.9	7.2	7.3	8.9	10.9	8.0	2.2	100

This table has less value attached to it now than when tables of deaths were first accurately formed, as it was considered that the mean age at death, which can be calculated

from such a table, was a good guide to the sanitary condition of a district; that is to say, that the higher the mean age at death, the healthier the locality was considered to be. A little consideration, however, showed this to be wrong, as in a place where there was a large number of children under 5 years, and especially under 1 year, a lower mean age at death would obtain than in districts where there were only a few children of this age. On the other hand, a district having a large proportion of servants, who are, as a rule, at the age period of life when a very low death-rate occurs, and who also usually go away to die, would necessarily show a high mean age at death, almost irrespective of its salubrity. One great use of a table such as this, is to show, by comparing one year with another in the same district, whether or not the ratio of deaths at $\frac{0}{1}$ and $\frac{1}{5}$ years increase, although, even for that purpose, it is of less use than one column in Table 2, which shows the proportion of children, under 1 year, who die out of 1,000 births. We see that in 1876, in 1880, and in 1885, the proportion of deaths under 1 year to deaths at all ages was unusually high, and an examination of other tables show that in 1876 and 1880 there was a large mortality from diarrhœa at this age period, whilst in 1885 there was a large excess from inflammatory diseases of the lungs, as well as a slight excess from diarrhœa, which, considering the weather, satisfactorily accounts for the increase. The ratio of deaths at $\frac{1}{5}$ depends materially on that at $\frac{0}{1}$, as a saving of life at $\frac{0}{1}$ is usually coincident with an increase at $\frac{1}{5}$. Thus, in 1876 the ratio at $\frac{0}{1}$ was 41·5 per cent. of all the deaths, that of $\frac{1}{5}$ being 27·4, and $\frac{1}{5}$, 14·1 per cent.; whilst in 1882, when the deaths at $\frac{0}{1}$ were fewer than in any other of these 11 years, the ratio was 21·2 per cent. for $\frac{0}{1}$ and 19·6 for $\frac{1}{5}$, making 40·7 per cent. for under 5 years. The table also shows that at the most active period of life, viz., from 15 to 55, the ratio of deaths has declined, having been 27·1 in 1866-75; 26·2 in 1876-85, and only 24·2 in 1886. The ratio of deaths above 85 was also larger in 1886 than in 1876-85, having been 2·2

against 1·9 per cent. If the death-rate at the most active period of life is reduced in a greater ratio generally, as it has been in this district, than at other ages, a very great gain has been obtained to the whole community.

TABLE VI.

Births in the Sub-Districts of Hackney, 1885—52 Weeks.

Quarters.	Stoke Newington	Stamford Hill.	West Hackney.	Hackney.	South Hackney.	TOTALS.
First	199	128	306	689	328	1650
Second	171	119	303	731	342	1666
Third	198	149	268	698	369	1682
Fourth	192	127	313	685	351	1668
Total	760	523	1190	2803	1390	6666
Per cent., 1886	11·4	7·8	17·9	42·0	20·9	100
„ „ 1885	12·4	6·4	17·9	42·7	20·6	100
„ „ 1884	12·0	6·6	19·0	41·3	21·1	100
„ „ 1883	11·9	5·4	20·0	41·2	21·5	100
„ „ 1882	12·2	5·4	19·6	40·6	22·2	100
„ „ 1881	12·2	5·2	20·2	40·8	21·6	100
„ „ 1871	7·6	4·9	23·4	38·2	25·9	100
Per Popultaion, 1881	12·2	4·9	20·2	41·2	21·5	100
„ „ 1871	7·9	5·3	22·4	40·1	24·3	100

The total number of births was larger than before, but the increase occurred chiefly in the Stamford Hill Sub-District, which includes Upper Clapton, where a large number of new houses has been erected. In Stoke Newington the number has diminished absolutely and relatively, as there were only 760 births registered during the year, against 816 in 1885, and the percentage to the whole district is only 11·4, against 12·4 in 1885, and 12·0 in 1884. In Stamford Hill Sub-Registration

District there were 523 births in 1886, against 424 in 1885, giving 7·8 per cent. of the total births, against 6·4 in 1885 and 5·2 in 1881, showing a great increase in the population since that year. In West Hackney Sub-District there were 1,190 births registered, against 1,177 in 1885, and 1,203 in 1884, so that the population has most probably not varied much in the last few years. The percentages of births in this sub-district during the last three years were 17·9, 17·9 and 19·0. In Hackney Sub-District, including the Workhouse, there were 2,803 births registered, against 2,811 in 1885, the percentages to total births being 42·0, 42·7 and 41·3 in each of the last three years. There was a decided increase in South Hackney, although not to so great an extent as in Stamford Hill Sub-District, as there were 1,390 births registered, against 1,357 in 1885; the percentages in 1886 being 20·9; in 1885, 20·6; and in 1884. 21·1, showing that although the total number has increased, it has not done so to as great an extent as in some of the other sub-districts.

TABLE VII.

Deaths in each Sub-District, 1881-86.

Year.	Stoke Newington	Stamford Hill.	West Hackney.	Hackney.	South Hackney.	TOTALS.
1881.....	360	148	678	1728	700	3614
1882.....	379	175	625	1698	628	3505
1883.....	369	176	659	1646	695	3545
1884.....	361	172	645	1827	695	3700
1885.....	424	196	621	1759	650	3650
1886.....	374	250	652	1656	732	3670

The total number of deaths given in this table does not correspond with those in the other tables, in consequence of 23 deaths having occurred in various Asylums outside the Metropolis without the precise address being known, so that I could not assign them to a particular sub-district. The total

number of deaths in Stoke Newington was 50 less than 1885, although larger than in 1884; whilst in Stamford Hill Sub-District they were more than 50 in excess of those in 1885, showing, as well as the births, the great increase of population that has occurred in this sub-district. In West Hackney, also, the number of deaths was greater than in 1885, having been 652, against 621 and 645 in 1884. In Hackney Sub-District there were only 1,656, or 103 deaths below those registered in 1885, and 171 less than in 1884, which, however, showed in that year the largest mortality I have recorded for the sub-district. In South Hackney the number of deaths, as well as of births, was larger than in 1885, having reached to 732, against 650 in 1885. This summary is unsatisfactory, as the deaths in the Union Workhouse cannot be distributed to the sub-districts from which the poor came; but it is more satisfactory than in former years, when the addresses of those who died in Hospitals and Public Institutions outside the district could not be obtained. Now, however, I distribute, as far as I can, all the deaths to the sub-districts to which they belong.

The number of bodies removed to the Mortuary was larger than usual, 77 having been brought in, against 69 in 1885. There was not any body received during the year, when the cause of death was an infectious disease, so that the special receptacle for such cases was not used at all. There were 26 cases of drowning, all of which were brought in by the Police, many in a decidedly offensive state; but the measures taken for preventing a nuisance, by placing the bodies under glass cases, with the free application of a strong solution of chloride of zinc to them, and repeated vaporization of Sanitas Oil in the chamber (which I find to be the most effectual means for destroying those offensive emanations), proved to be sufficient. The arrangements have been so successful, that I have not had any complaints this year from Jurymen as to offensive smells, or from the Police, which, considering the advanced state of decomposition in which some bodies were when brought in, is

very satisfactory. The accommodation is, however, very insufficient, and unsuitable for so large a parish, whilst the means of access are, to say the least, decidedly unsatisfactory.

TABLE VIII.

Articles Disinfected for the Years 1880 to 1886.

Years	Beds	Mattresses	Palliasses	Bolsters	Pillows	Blankets	Sheets	Quilts	Other Articles	Totals	Houses Disinfected
1880	339	153	106	248	684	375	312	197	2269	4483	415
1881	751	232	46	549	1204	782	510	424	2084	6582	1045
1882	172	104	88	119	258	332	148	69	1022	2312	366
1883	227	104	82	167	423	337	184	117	1086	2727	345
1884	785	227	59	616	1441	1101	747	550	1265	6791	1159
1885	332	132	16	290	690	765	439	284	605	3553	603
1886	96	50	15	74	195	299	50	55	206	1040	381

The number of beds, articles of bedding and clothing disinfected during the year was unusually small, partly because a larger number than usual were destroyed at the owner's request, and chiefly from the entire absence of small-pox cases. The total number of beds, mattresses and palliasses removed by men employed by the Board to the disinfecting chamber was 161; of bolsters, 74; of pillows, 195; of blankets, 299; of sheets, 50; of quilts, 55; and of other articles, 206, making a total of 1,040, and of houses partly or wholly disinfected by burning sulphur, 381.

River Lee.—In the early part of the year there was not anything to complain of as regards smell, or even look, but as the warm weather came on, an unfavourable change took place before the water was carried into the Board's Sewer. This was

caused by the badly purified effluent from Tottenham, which at one time contained as much free ammonia and organic matter in solution as ordinary sewage. The solid matters were fairly well precipitated, but, from the state of the effluent, it was evident that the sludge had remained in the tanks too long. The river was also fouled by the Moselle, a brook receiving the drainage from the Tottenham Brewery, which being poured in without disinfection, became very offensive before reaching the Lee. I wrote to the Engineer of the Tottenham Board and to the Clerk of the Lee Conservancy Board, and, eventually this drainage was carried into the Tottenham Sewers, and therefore, during the remainder of the summer, into the Metropolitan Board's System. The river was flushed by the East London Water Works Co., on two occasions, with very good results, as by scouring, the deposits of mud in the bed of the river were mostly removed, so that nearly everywhere, at the termination of the last flush, the natural bed of the river could be seen.

In the early part of October the river near the Tottenham outfall became very offensive, dark coloured, covered for some distance with a scum, and numerous dead fish could be seen floating on the surface. The effluent was offensive, and again contained as much ammonia and organic matter in solution as sewage, so that the river water close to the outfall gave results nearly as bad as a mixture of one part of fresh sewage with two parts of water. I wrote again to the Tottenham Engineer on the subject, after which the nuisance diminished, and as the cold weather came on the river ceased to be offensive, even near the outfall. During the winter the water has been fairly clear for such a river, without smell, and containing comparatively little free ammonia; although on analysis I found a larger amount of total solids, chlorine, organic matter in solution, and ammonia than there would have been if the sewage effluent had not been passed into it. I hope the river will not be any nuisance during this year (1887), although it would not be safe to bathe

in, until some time after the Tottenham sewage has been carried into the Hackney and Metropolitan Sewers.

Removal of Dust.—The number of loads of dust removed during the year ending March 25th, 1887, was 28,462 against 27,233 in 1885-6, showing an increase of more than 1,000 loads. As the winter has been very long, the cold weather continuing through the whole of March, this might have been expected, although there had been a large increase in 1885-6 as compared with former years. The district is divided in three divisions, with a Contractor for each, Mr. Iszard works the A division at 2s. 3d. per load, and removed 8,778 loads of dust; Mr. Potter took away 10,097 loads from the B division at 2s. per load; and Mr. Stevens removed 9,587 loads from the C division at 2s. 6d. per load. The prices varied according to distance of the divisions from shoots on the banks of, or beyond, the River Lee; and the excess in the number of loads was distributed pretty equally over all the divisions, the largest proportion being moved from the C division, which includes Dalston, De Beauvoir Town, and Shacklewell. The sum paid to Mr. Iszard was £987 10s. 6d.; to Mr. Potter £1,009 4s. 6d., and to Mr. Stevens £1,198 7s. 6d. Each Contractor provides the carts, horses, and implements, as well as one man for each cart, who drives and has charge of the horse and cart, although he is, when outside the stables, under the control of the Board's Dust Inspector. The Board provides a man for each subdivision to assist in loading the carts, and men to check the loads delivered at each of the Contractor's shoots. The various items of expenditure were as follows:—Paid to the Dust Contractors, £3,195 12s. 0d.; to the men engaged by the Board, £718 9s. 4d. (against £747 0s. 3d. last year) and to the Inspector, as salary, £104 12s. 0d. The Contractor's find their own shoots, subject to my approval, if within the district; and have had, so I am informed, to pay for the same, instead of receiving money for the dust as in most former years. The

number of requests for the removal of dust was 1,306, which, as many people will not have their dust removed except when they write, is by no means large. In 1885-6 the number was 1,238 against 1,306 in 1886-7.

Nuisances Abated. — The number of nuisances abated during the year was very large, viz., 9,047 ; but was less than in some of the preceding years, partly in consequence of the number of small houses visited having been fewer than usual ; partly in consequence of the long continued cold weather in winter and spring, which prevented the necessary works being carried out at that time ; and partly from the number of better class houses inspected to ascertain the state of their drainage arrangements, which take up comparatively much more time than inspections of small property. The number of nuisances from defective drainage was 3,059, being 200 less than in 1885, but a large proportion of the deficiency arose from there having been only 186 instances of choked closet pans against 249 in 1885. This is a satisfactory return, as it shows that the poorer classes are getting more careful as regards the water-closets than they used to be some years ago, when they so frequently blocked them up the pans by throwing all kinds of rubbish into them. The number of premises in which bell-traps were found and yard-gullies substituted still remains large, viz., 1,127 against 1,226 in 1885 ; whilst the number of sink waste-pipes disconnected from the drains remains nearly the same, having been 604 against 629 ; and 271 stack-pipes disconnected against 241 in 1885. The nuisances from defective paving of yards numbered 815, of broken dust-bins 617, and of dirty houses cleansed 1,678, which, with 10 houses where defective ventilation was improved, make a total of 3,120, which, with 3,059 instances of improved means of drainage, make 6,179 nuisances abated in these houses. The number of water-closets to which a supply of water was newly provided was less than in former years, viz., 205, against 356 in 1885 ; and the same remark applies to

defective water apparatus requiring repair, as there were 745 houses against 861 in 1885 in which these defects were remedied. The plan of having a length of pipe with a draw-off tap attached to the supply-pipe, in cases where the supply of water for household purposes was obtained from the same cistern as that supplying the closet, has been carried out in 249 houses, chiefly in those not occupied by the poor, so that a possible source of illness has been thus removed in many instances. These altogether make 7,410 nuisances abated in houses, or in the yards and water-closets adjoining houses. The number of houses, or rooms in houses, disinfected during the year was 425, against 608 in 1885; of overcrowding abated, 8; of pigs removed, 19; of accumulations of manure removed, 81; of dust and refuse removed, on special application or on complaint, 1,306; of filthy places cleansed, such as urinals, 73; and of other nuisances abated, not included in the above list, 1,031.

The number of houses inspected without complaint, under the Sanitary Act, including the Regulations, was 4,799; and of houses and other premises, visited on complaint, 1,203; which, with 425 houses visited in consequence of an outbreak of infectious disease, and 350 houses measured under the Regulations, make up a total of 6,777 premises visited during the year. In addition to these a large number of houses in the poorest streets were visited to enforce the periodical removal of dust, and 1,306 requests for removal of dust attended to. There were also 88 cow-sheds inspected (many on several occasions), 43 slaughter-houses; 139 greengrocers', 74 fishmongers' and poulterers' yards visited; as well as 126 bakehouses, making altogether a very large total. As to the bakehouses, I am glad to say that nearly all were in a fair condition, and the nuisances found were of a comparatively slight character, none being in so bad a state as many were when their oversight was transferred to the Sanitary Authorities of the Metropolis from the Inspectors of Factories, who for some time had them under their super-

vision. I have visited several manufacturing premises during the year, including Mr. Saunder's premises at Gainsborough Road, where the business of a gut-scraper and fat-melter's has been newly established, with the consent of the Metropolitan Board of Works. Also three small premises where the business of a gut-dresser or drier, or bladder-blower, was carried on in such a way as to be a nuisance. The business was discontinued in these last named cases. Although the cow-sheds were in fair order generally, yet repairs or improvements were required in 42 out of the 88, chiefly consisting of lime-whiting, repairs to the channels and paving of the sheds to a small extent, and more extensive repairs to the paving of the yards. It was necessary to oppose the renewal of the licenses to one cow-keeper only, on the ground of general neglect of the shed and yard, and he was informed by the Magistrates that his license would be refused on the next occasion if more care were not used in future. There was not any opposition to the renewal of the slaughter-house licenses. Application was also made for the granting of a new license, but it was withdrawn.

Very many of the nuisances removed under the notices were caused by wilful damage, ignorance, or carelessness of the tenants. As a specimen of the letters sometimes received in answer to notices, I append one sent to one of the Inspectors:—
 "I was at ——— Place yesterday afternoon superintending repairs at No. 6, the tenant of which maliciously broke the closet pan, totally destroyed the water-waste preventer, and put the copper door down the soil-pipe. With fair usage there should never be any stoppage in the pipe, which is a nine-inch (now stopped). I shall be there again on Monday, and you may depend on my attention. I have put the management into the hands of Messrs. ———, who are weeding out the worst tenants, who certainly contributed to hasten the death of my late collector, who had, with me, to invoke on more than one occasion the assistance of the Police. I should like to add that the late tenant of No. 5 put up a 3-inch post for clothes

lines, and the drains were subsequently frequently stopped, and on his leaving, it was found that the butt-end of the post had been driven into the main 9-inch pipe." Instances such as these are not so frequent now as they used to be, but are by no means uncommon, as the assistance of the Inspector is often invoked three or four times a year to release the same drain, or closet-pan, which has been blocked up by articles thrown down the closet by children or others, sometimes accidentally, as on washing days.

Mortuary—I have already stated that the number of bodies deposited in the Mortuary was 76, which is about the ordinary number. Most of the deaths were sudden, either from accident or disease, but some occurred after an ordinary illness, and the bodies were removed because there was not proper accommodation in the houses where the death occurred; indeed, in some instances, there was only one room for the living and dead. The entrance to the Mortuary, although improved, is by no means good, and the size of the rooms too small, so that a new Mortuary is urgently required. There was not any body removed there during the year where the death was caused by an infectious disease, as most of the poor who die from infectious diseases, expire in the Asylums Board's Hospitals, and are removed from thence for burial to a cemetery instead of being brought back to their late homes.

The applications for *disinfectants* has not been so large as in former years, as cases of infectious diseases have not been so numerous, but as many as 2,948 packets of powder, and 495 bottles of carbolic acid have been given away. The latter were given for mixing with water in a tub, for steeping infected body and bed linen in before washing, so as to prevent infection, and the former not only for infectious cases, but for drains and for washing the floors. I believe they are still used to a slight extent for sprinkling floors, and placing in saucers in rooms where the sick are treated, but used in this way can be of

little use except to purify the air, and perhaps assist in preventing the increase of infectious matter, as bacteria will multiply only, or at any rate chiefly, in a suitable soil. The infectious material or organism of small-pox, scarlet fever, &c., has not yet been isolated, so we can only reason from analogy and experience as to the agents which prevent or modify their spread, activity, and growth. In consequence of disinfectants being given away for these purposes a considerable number of infectious diseases come to my knowledge, of which I should not have otherwise any information.

Fairs.—A good deal of trouble has been given to myself and the Chief Sanitary Inspector by persons bringing vans to vacant pieces of ground in the district, and in some instances by setting up a kind of fair. As far as possible action was taken by communicating with the freeholder and renters of the ground, and by visiting the tents and vans, and serving notice of overcrowding on the proprietor of the van, in accordance with the Act passed in 1885. In this way several of the vans were moved, but in other instances lodgings were obtained, and the overcrowding abated. Notices were also served for removing accumulations of filth, filling up holes, &c., so as to remove nuisances; but when all was done, the annoyance from the congregation of unruly children, and noisy adults, continued for some time; indeed, in one or two cases, until the Overseers took action for their removal not only in Hackney but in Stoke Newington.

In addition to my other work I have attended 25 ordinary meetings of the Sanitary Committee, and obtained 571 different orders for the removal of nuisances, which included a very much larger number of premises and nuisances. Also 7 meetings of the View Committee for inspecting cow-sheds and slaughter-houses, and attending at the Sessions in reference thereto; and also 3 other meetings of Sub-Committees, besides those in connection with the proposed new Mortuary.

Table of Temperature and Rainfall for 1886.

MONTHS.	Absolute Temperature		Mean Temperature.	Difference from mean of 45 years.	Rainfall.	
	Highest.	Lowest.			TOTAL.	No. of Days
	°	°	°	°	Inches.	
January	52·4	21·6	36·1	— 2·4	3·12	17
February	47·6	20·0	33·7	— 6·0	0·55	9
March	63·8	22·2	39·6	— 1·5	1·18	17
April	70·2	32·2	46·4	— 0·7	1·29	16
May	75·0	31·0	53·3	+ 0·8	3·02	20
June	80·2	39·8	57·8	— 1·1	0·35	6
July	87·8	46·4	63·0	+ 0·8	2·12	12
August	88·4	47·2	62·0	+ 0·6	0·72	11
September	84·4	42·0	58·7	+ 0·6	1·47	13
October	80·2	41·8	53·3	+ 3·4	1·82	24
November	58·4	28·8	44·0	+ 0·5	2·37	18
December	55·0	20·6	36·5	— 2·3	3·52	24
TOTALS.....					*21·53	187

* The rain-gauge is placed in a wall, and therefore registers less than it would do on the ground, probably by 15 per cent.

The absolute temperature, and the rainfall observations shown in the above table, are those taken by me in the Richmond Road, but the mean temperatures are those of Greenwich, as there are not any tables for Hackney for a sufficient number of former years which can be used as a standard of comparison. From observations I have taken the mean temperature here is about three-tenths (0.3°) of a degree above that of Greenwich, so that the difference between the means of the last 45 years, as shown in the table would represent the same for Hackney fairly well. It will be seen, on reference to the table, that the first four months of the year, and especially February, were unusually cold, and also June

and December; whilst the other six months were above the mean, and especially October, but as the excess of warmth did not equal the reduction in temperature it was, on the whole, a cold year.

The weather in *January* was unusual, not only as regards the prevalence of cold, but in the frequency with which snow fell, and the total quantity of snow and rain which amounted to 3.12 inches. This, however, does not represent the rainfall at the level of the ground, as my guage is placed 7 feet above ground, so as to get a good exposure, and, therefore, about 15 per cent. should be added on for comparison with other rainfalls. The highest temperature recorded here was 52.4 deg., and the lowest 21.6 deg. In *February* the highest temperature here was 47.6 deg., and the lowest 20.0 deg. The mean temperature for the month at Greenwich was 33.7 deg., or 6.0 deg. below the average of the preceding 45 years, and was the coldest February since 1855; the latter being the coldest February for this century. In the first half of *March* the weather was very cold, being nearly 10 degrees below the average, when a sudden change took place on the 18th and the temperature was much above the mean, but not sufficiently to balance the previous cold, as the temperature for the month was 1.5 deg. in deficit. The highest temperature recorded here was 63.8 deg., and the lowest 22.2 deg. Rain or snow fell on 17 days, the total fall having been 1.18 inches. The mean temperature was 39.6 deg., being 1.5 below the average of the last 45 years. *April*.—The highest temperature recorded here was 70.2, and the lowest 32.2, giving a range of 38.0 deg. The weather was variable, having been warm at first, then cold and stormy, and at the end most variable, the temperature at 9 a.m. on the 29th having been 20 deg. colder than at the same time on the 28th. The mean temperature was 46.4 deg., being rather more than half a degree below the average. The rainfall amounted to 1.29 inches, and occurred on 16 days. *May*.—The mean temperature for this month was a little above the average, viz.,

53·8 deg.; the highest having been 75·0 deg, and the lowest 31·0 deg., giving the large range of 44·0 deg. The rainfall was very large, viz., 3·02 inches, and fell on 20 days. *June*.—More than one inch fell on the 13th and on the 24th. This month was cold, but some high temperatures occurred, viz., 80·2; the lowest having been 39·8, or a range just over 40 deg. The mean was 57·8, being 1·1 deg. below the average. The rainfall was only 0·35 inches, which fell on 6 days. The last week in June and the first in *July* were warm, the temperature having run up to 87·8 deg. here, and as high as 90 deg. at other places, but afterwards was chiefly dull and cold, with much rain, 2·12 inches having fallen in 12 days. The mean was 63·0 deg., or 0·8 deg. in excess. During the first three weeks in *August* the weather was generally wet and cold, but without any heavy rainfall, which amounted to 0·72 inches only during the month. The highest temperature recorded was 88·4 deg. here (the highest in the year), and the lowest 47·2 deg.; the mean being 62·0 deg., and 0·6 deg. above the average. *September* was generally fine and warm, the thermometer having registered 84·4 deg. on the first, the lowest was 42·0 deg., and the mean 58·7 deg., being an excess of 0·6 deg. above the average. The total rainfall was 1·47 inches, which fell on 13 days. *October* was unusually warm, the mean temperature having been 53·3 deg., or 3·4 deg. in excess, although rain fell on 24 days to the extent of 1·82 inches. The highest temperature recorded was 80·2 deg., and the lowest 41·8 deg., giving a range of nearly 40 deg. *November*.—The weather was mostly unsettled, but the mean temperature was about the average, having been 44·0 deg., or half a degree in excess. The highest temperature recorded in the month was 58·4 deg., and the lowest 28·8 deg., giving a range of nearly 30 deg. There were 18 days on which rain fell, and the total rainfall amounted to 2·37 inches. *December*.—This month was remarkable for extreme oscillations of the barometer, the very low reading of 28·14 inches having occurred on the 8th and 9th, remaining nearly stationary for

36 hours. This was nearly one-fifteenth less atmospheric pressure than when the barometer stands at 30·0 inches, and yet no one, not looking at the barometer, would have been aware by his personal experience that the pressure had been reduced at all. The lowest barometric readings previously recorded at Greenwich are as follows:—On March 6, 1783, 28·22 inches; on December 17th, 1809, 28·20 inches; on December 25th, 1820, 27·89 inches; on January 13th, 1843, 28·096 inches. The mean temperature was below the average for the month, having been 36·5 deg., or minus 2·3 deg. The highest temperature recorded was 55·0 deg., and the lowest 20·6 deg., giving a range of 34·4 deg. The rainfall was as large as 3·52 inches, which fell on 24 days.

I remain, Gentlemen,

Yours obediently,

JOHN W. TRIPE, M.D.,

Medical Officer of Health for the Hackney District.

April 6th, 1887.

Received, and ordered to be printed
and circulated in the usual manner,

GEO. A. HASLER, *Chairman.*

April 27th, 1887.

Streets and other Places Inspected in 1886.

Number of Cases of Epidemic Diseases.

Name of Street or Road.	Number of Houses Inspected	Number of Rooms	Number of Families	Number of Inmates	No. of Houses in which Nuisances were found	Number of Cases of Epidemic Diseases.				
						Small Pox	Scarlatina	Diphtheria	Typhoid Fever	Typhus
Abbott street .....	..	..	..	..	..	..	..	..	..	..
Abney gardens	20	45	20	86	13	..	..	1	..	..
Acton street .....	..	..	..	..	..	..	..	..	..	..
Ada street .....	..	..	..	..	..	..	..	..	..	..
Albert grove .....	..	..	..	..	..	..	..	..	..	..
Albert street	20	86	28	123	19	..	4	..	..	..
Aldham place	8	47	13	60	4	..	..	..	..	..
Amherst terrace .....	..	..	..	..	..	..	..	..	..	..
Anderson road	25	196	33	182	21	..	2	..	..	..
Andrews road	1	5	2	10	1	..	1	..	..	..
Antwerp street .....	..	..	..	..	..	..	..	..	..	..
Arthur street	5	22	6	31	5	..	4	..	..	..
Ash grove	1	6	1	9	1	..	..	1	..	..
Assembly row	12	48	12	48	9	..	..	1	..	..
Austin buildings .....	..	..	..	..	..	..	..	..	..	..
Ballance road	117	704	166	840	85	..	..	5	..	..
Balcorne street .....	..	..	..	..	..	..	..	..	..	..
Ball's buildings	2	8	2	12	2	..	2	..	..	..
Barn street .....	..	..	..	..	..	..	..	..	..	..
Bartrip street	2	8	2	9	2	..	1	1	..	..
Bath row	22	132	41	172	7	..	..	..	..	..
Baileys lane .....	..	..	..	..	..	..	..	..	..	..
Bay street .....	..	..	..	..	..	..	..	..	..	..
Baxter's court	3	8	3	13	1	..	..	..	..	..
Bentley road	17	68	28	119	13	..	..	..	1	..
Bentham road	1	6	1	8	1	..	3	..	..	..
Benn street, H. W.	3	12	3	17	3	..	..	4	..	..
Berger road	52	258	69	323	45	..	16	..	..	..
Bishop's road	18	126	38	154	18	..	..	..	..	..
Blackshaw place	4	8	4	21	4	..	..	..	..	..
Blackstone road .....	..	..	..	..	..	..	..	..	..	..
Blanchard street .....	..	..	..	..	..	..	..	..	..	..
Blanchard road	1	6	1	9	1	..	3	..	..	..
Blinco road	29	..	..	..	20	..	..	..	..	..
Blurton road	57	..	..	..	48	..	9	..	1	..
Boleyn road .....	..	..	..	..	..	..	..	..	..	..
Boreham street .....	..	..	..	..	..	..	..	..	..	..
Bowling Green street ..	..	..	..	..	..	..	..	..	..	..
Bowling Green place ..	..	..	..	..	..	..	..	..	..	..
Bower road .....	..	..	..	..	..	..	..	..	..	..
Bradbury street .....	..	..	..	..	..	..	..	..	..	..
Brampton road	20	137	31	112	12	..	..	..	..	..
Bridge street .....	..	..	..	..	..	..	..	..	..	..
Brooksby's walk	1	6	1	8	1	..	2	..	..	..
Brown's place	26	120	36	175	16	..	..	..	..	..
Brunswick street .....	..	..	..	..	..	..	..	..	..	..
Bushberry road, H. W. ..	54	324	84	365	52	..	..	..	..	..
Coach yard, S. H. ....	..	..	..	..	..	..	..	..	..	..
Cadogan terrace	23	189	29	130	17	..	..	..	..	..
Carried forward..	544	2575	654	3036	420	..	47	13	2	..

Name of Street or Road.	Number of Houses Inspected.	Number of Rooms.	Number of Families.	Number of Inmates.	No. of Houses in which Nuisances were found	Number of Cases of Epidemic Diseases.				
						Small Pox.	Scarlatina.	Diphtheria	Typhoid Fever.	Typhus.
Brought forward ..	544	2575	654	3036	420	..	47	13	2	..
Cambridge cottages.....	..	..	..	..	..	..	..	..	..	..
Caroline cottages	16	36	16	69	16	..	..	..	..	..
Caroline place	11	48	14	52	9	..	..	..	..	..
Caroline street, Clapton.	33	114	33	179	29	..	..	..	..	..
Cassimer terrace	20	120	32	145	20	..	..	..	..	..
Cas-land road	33	160	48	202	29	..	..	4	..	..
Casterton street.....	4	16	70	11	4	..	4	..	..	..
Castle street .....	..	..	..	..	..	..	..	..	..	..
Chalgrove road.....	9	42	12	59	9	..	15	..	2	..
Chapel court	5	10	5	18	1	..	..	..	..	..
Chapel road, S. H. ....	..	..	..	..	..	..	..	..	..	..
Chapman road .....	..	..	..	..	..	..	..	..	..	..
Charles street	2	8	2	16	2	..	..	..	..	..
Chippendale road .....	..	..	..	..	..	..	..	..	..	..
Church road, Homerton.	2	10	3	14	2	..	1	..	1	..
Church road, W. H.....	..	..	..	..	..	..	..	..	..	..
Church terrace	10	40	12	73	8	..	8	..	..	..
Churchyard, Hackney..	3	12	3	17	3	..	7	..	..	..
Churchill road	2	..	..	..	2	..	7	..	..	..
Clarence cottages	7	28	10	30	7	..	..	..	..	..
Clarence road.....	74	..	..	..	70	..	1	..	..	..
Clarence terrace & place	16	92	25	95	10	..	..	..	..	..
Clevedon street .....	..	..	..	..	..	..	..	..	..	..
Clifden road	1	..	..	..	1	..	6	..	..	..
College lane	9	36	16	73	9	..	2	..	..	..
College place.....	13	52	20	97	9	..	4	..	..	..
College street	47	206	53	241	37	..	6	..	..	..
Colenso road	15	..	..	..	10	..	..	..	..	..
Coopersale road.....	..	..	..	..	..	..	..	..	..	..
Conduit street and place	30	159	40	183	28	..	..	..	..	..
Conrad street.....	15	90	29	106	6	..	..	..	..	..
Cottage place.....	..	..	..	..	..	..	..	..	..	..
Cowday street .....	..	..	..	..	..	..	..	..	..	..
Cross street, Homerton	5	20	6	35	5	..	4	..	..	..
Cross street, S. H.....	1	4	2	12	1	..	1	..	..	..
Crozier terrace	61	308	98	471	56	..	8	..	..	..
Culford road	2	12	2	14	2	..	1	..	1	..
Cambridge Lodge villas	1	..	..	..	1	..	1	..	..	..
Daintry street	1	5	1	6	1	..	..	..	..	..
Davis' cottages .....	..	..	..	..	..	..	..	..	..	..
De Beauvoir road.....	..	..	..	..	..	..	..	..	..	..
De Beauvoir crescent	40	232	86	256	35	..	..	..	..	..
Derby road	35	210	75	328	33	..	..	..	..	..
Digby road.....	12	..	..	..	12	..	17	4	..	..
Downham road	3	18	3	16	3	..	..	1	2	..
Dunn street	40	190	65	260	36	..	1	..	..	..
Duncan street .....	..	..	..	..	..	..	..	..	..	..
Duncan terrace .....	..	..	..	..	..	..	..	..	..	..
Carried forward ..	1122	4853	1435	6114	926	..	141	22	8	..

Streets and other Places Inspected in 1886.						Number of Cases of Epidemic Diseases.				
Name of Street or Road.	Number of Houses Inspected	Number of Rooms	Number of Families	Number of Inmates	No. of Houses in which Nuisances were found	Small Pox.	Scarlatina.	Diphtheria.	Typhoid Fever.	Typhus.
Brought forward ..	1122	4853	1435	6114	926	..	141	22	8	..
Duncan square & road ..	5	20	9	31	5	..	2	..	2	..
Dunlace road.....	1	6	1	8	1	..	..	..	1	..
Durham grove	7	20	7	40	7	..	..	..	..	..
Dyssel street	21	126	39	177	20	..	..	..	..	..
Eaton place	1	4	1	6	1	..	2	..	..	..
Edwards lane .....	..	..	..	..	..	..	..	..	..	..
Elderfield road	121	..	..	..	121	..	..	..	..	..
Elgin street	41	214	87	386	39	..	2	..	..	..
Eleanor ^o road .....	..	..	..	..	..	..	..	..	..	..
Elsdale road	30	151	42	163	17	..	..	..	..	..
Elsdale street.....	15	90	23	77	5	..	..	..	..	..
Essex street	1	4	2	9	1	..	1	..	..	..
Exmouth place	1	3	1	4	1	..	1	..	..	..
Englefield road.....	14	118	21	107	9	..	..	..	..	..
Fairfield road	9	54	14	58	9	..	..	..	1	..
Fairey street .....	..	..	..	..	..	..	..	..	..	..
Falcon court and place..	9	37	12	43	9	..	..	..	..	..
Felstead street .....	..	..	..	..	..	..	..	..	..	..
Fenn street	1	..	..	..	..	..	1	..	..	..
Fishers place.	2	8	2	7	2	..	3	..	..	..
Florefield road	4	16	4	21	4	..	2	1	1	..
Fords buildings.....	2	12	3	16	2	..	3	..	..	..
Fortesque avenue	37	220	65	266	22	..	..	..	1	..
Frederick place, Hag. ..	16	64	30	126	16	..	..	..	..	..
Frampton park road ..	86	560	148	507	81	..	3	..	..	..
Fulham place	8	32	8	34	6	..	..	..	..	..
Gainsboro' cottages ....	..	..	..	..	..	..	..	..	..	..
Gainsboro' road .....	..	..	..	..	..	..	..	..	..	..
Gainsboro' square .. .	21	126	34	181	17	..	..	..	..	..
George place, S. Hill ..	..	..	..	..	..	..	..	..	..	..
Gillett street .....	..	..	..	..	..	..	..	..	..	..
Gibsons buildings.....	..	..	..	..	..	..	..	..	..	..
Glaskin street	12	78	17	74	12	..	..	..	..	..
Glenarm road.....	3	18	3	21	3	..	2	..	..	..
Glaskin road	47	255	59	241	43	..	..	..	..	..
Glynn road.....	12	12	2	14	12	..	5	..	..	..
Gloucester road.....	14	90	90	22	14	..	..	..	..	..
Goring street.....	..	..	..	..	..	..	..	..	..	..
Green lanes	1	6	1	9	1	..	..	1	..	..
Grove, Homerton	32	128	43	184	25	..	1	..	..	..
Grove lane, Hackney ..	..	..	..	..	..	..	..	..	..	..
Grove lane, S. Hill .....	..	..	..	..	..	..	..	..	..	..
Grove road, S. Hill .....	..	..	..	..	..	..	..	..	..	..
Grove passage and place, Hackney.....	..	..	..	..	..	..	..	..	..	..
Gomer terrace	6	48	10	46	6	..	..	..	..	..
Gransden avenue	29	172	46	184	4	..	..	..	..	..
Carried forward ..	1731	7545	2259	9176	1441	..	169	24	14	..

Name of Street or Road.	Streets and other Places Inspected in 1886.					Number of Cases of Epidemic Disease.				
	Number of Houses Inspected.	Number of Rooms.	Number of Families.	Number of Inmates.	No. of houses in which nuisances were found.	Small Pox.	Scarlatina.	Diphtheria.	Typhoid Fever.	Typhus.
Brought forward..	1731	7545	2259	9176	1441	..	169	24	14	..
Haggerston road .....	..	..	..	..	..	..	..	..	..	..
Hamburg street .....	..	..	..	..	..	..	..	..	..	..
Hartwell street	3	12	3	16	3	..	..	..	..	..
Hassett road, Homerton	91	546	127	577	33	..	..	3	1	..
Havelock road	1	5	2	13	1	..	1	..	..	..
Haywoods buildings ..	..	..	..	..	..	..	..	..	..	..
Hayes buildings .....	..	..	..	..	..	..	..	..	..	..
Hedgers grove	45	214	71	333	71	..	..	..	..	..
Helmsley street & place	..	..	..	..	..	..	..	..	..	..
Hertford road	65	368	105	388	46	..	..	..	1	..
Heslop place	1	4	1	7	1	..	1	..	..	..
High hill ferry	172	675	191	890	..	..	..	..	..	..
High street, Homerton..	5	28	8	35	5	..	4	..	2	..
High street, S. New ..	..	..	..	..	..	..	..	..	..	..
Hill street .....	..	..	..	..	..	..	..	..	..	..
Hindle street	33	152	49	168	24	..	..	..	..	..
Hockley street	17	64	23	102	3	..	..	..	1	..
Holmbrook street	65	260	116	659	52	..	4	..	..	..
Holly street .....	..	..	..	..	..	..	..	..	..	..
Homer road .....	..	..	..	..	..	..	..	..	..	..
Homerton row	2	..	..	..	..	..	2	..	..	..
Homerton terrace	51	293	86	337	36	..	3	..	..	..
Homfray street	1	4	1	7	1	..	1	..	..	..
Isabella road .....	..	..	..	..	..	..	..	..	..	..
Jarvis' buildings	16	39	16	95	13	..	3	..	..	..
Jacksons buildings	6	29	7	29	5	..	..	..	..	..
Janes place	7	14	7	37	5	..	..	..	..	..
Jerusalem gardens	42	136	63	246	40	..	..	..	..	..
John street, Homerton..	21	84	21	124	16	..	1	..	..	..
John street, Shacklewell	..	..	..	..	..	..	..	..	..	..
John street, S. New .....	..	..	..	..	..	..	..	..	..	..
Jolly Butcher's yard ..	4	8	4	16	2	..	..	..	..	..
Kynaston avenue	6	24	7	29	4	..	..	..	..	..
Kenton road	44	264	65	263	36	..	..	..	..	..
Lamb lane	34	169	53	218	13	..	2	..	..	..
Landfield street	40	240	73	344	..	..	..	..	..	..
Lark row	10	37	14	58	10	..	..	..	..	..
Lauriston road	2	12	2	11	2	..	..	3	..	..
Lawrence buildings .....	..	..	..	..	..	..	..	..	..	..
Lea bridge road	74	276	79	388	..	..	1	..	..	..
Lenthall road .....	..	..	..	..	..	..	..	..	..	..
Lime grove .....	..	..	..	..	..	..	..	..	..	..
London lane & terrace..	45	257	61	260	16	..	..	..	..	..
Lockhurst street Priory	..	..	..	..	..	..	..	..	..	..
Lordship road .....	..	..	..	..	..	..	..	..	..	..
Carried forward ..	2634	11759	3514	14825	1879	..	192	30	19	..

Name of Street or Road.	Streets and other Places Inspected in 1886.					Number of Cases of Epidemic Diseases.				
	Number of Houses Inspected	Number of Rooms	Number of Families	Number of Inmates	No. of Houses in which Nuisances were found	Small Pox	Scarlatina	Diphtheria	Typhoid Fever	Typhus
Brought forward .	2634	11759	3514	14825	1879	..	192	30	19	..
Loddiges road	87	513	154	586	70	..	..	..	..	..
McLaren street . . . . .	..	..	..	..	..	..	..	..	..	..
Mallard street . . . . .	..	..	..	..	..	..	..	..	..	..
Market row	7	32	8	37	3	..	..	..	..	..
Martello terrace, L. F..	7	42	10	38	7	..	..	..	..	..
Mainwand street	21	105	21	128	21	..	..	..	..	..
Mandeville street	6	..	..	..	6	..	..	..	..	..
Margaret street, S. H..	..	..	..	..	..	..	..	..	..	..
Margaret street . . . . .	..	..	..	..	..	..	..	..	..	..
Marian street	1	3	1	9	1	..	..	..	..	..
Marlow road	56	273	82	386	32	..	5	..	..	..
Mason's court and place	10	31	13	55	7	..	..	..	..	..
Matthias street . . . . .	..	..	..	..	..	..	..	..	..	..
Mayfield road . . . . .	..	..	..	..	..	..	..	..	..	..
Mead's place	1	4	1	6	1	..	..	..	1	..
Meadow street . . . . .	..	..	..	..	..	..	..	..	..	..
Mehtable road	1	6	2	11	1	..	..	..	5	..
Middle street	5	22	7	30	3	..	..	..	..	..
Middlesex place & square	..	..	..	..	..	..	..	..	..	..
Millington street	33	198	57	254	..	..	..	..	..	..
Morning lane	27	136	36	139	22	..	5	..	..	..
Montague road	6	32	8	36	6	..	5	..	5	..
Montague terrace & place	1	4	1	6	1	..	1	..	..	..
Median road	98	..	..	..	90	..	..	..	..	..
Nesbitt street	66	309	85	401	54	..	6	..	1	..
New street	1	6	2	11	1	..	2	..	..	..
New Tyssen street . . . . .	..	..	..	..	..	..	..	..	..	..
North street	70	315	101	440	44	..	..	..	..	..
Northwold road	110	489	115	559	73	..	..	..	..	..
Nursery row and place.,	..	..	..	..	..	..	..	..	..	..
Orchard cottages	12	46	16	79	12	..	..	..	..	..
Orchard place	45	222	69	293	45	..	2	..	..	..
Osborn road . . . . .	..	..	..	..	..	..	..	..	..	..
Oswald street	28	226	41	217	27	..	..	..	..	..
Ottaway street	38	228	70	291	30	..	..	..	..	..
Overberry street	2	10	3	16	2	..	6	..	..	..
Palace road	4	20	8	21	4	..	..	..	..	..
Paragon road	15	..	..	..	15	..	7	..	..	..
Park place, Homerton..	..	..	..	..	..	..	..	..	..	..
Park street, S. N. . . . .	..	..	..	..	..	..	..	..	..	..
Pear Tree place . . . . .	..	..	..	..	..	..	..	..	..	..
Pedro street . . . . .	..	..	..	..	..	..	..	..	..	..
Percy road, Well street.	2	10	3	9	2	..	..	..	..	..
Plover street . . . . .	..	..	..	..	..	..	..	..	..	..
Powerscroft road	120	..	..	..	108	..	..	..	..	..
Carried forward . .	3524	15041	4428	18883	2567	..	231	30	31	..

Name of Street or Road	Streets and other Places Inspected in 1886.					Number of Cases of Epidemic Diseases.				
	Number of Houses Inspected	Number of Rooms	Number of Families	Number of Inmates	No. of houses in which nuisances were found	Small Pox	Scarlatina	Diphtheria	Typhoid Fever	Typhus
Brought forward..	3524	15041	4428	18883	2567	..	231	30	31	..
Pembury grove.....	41	..	..	..	31	..	..	..	..	..
Pemberton place .....	..	..	..	..	..	..	..	..	..	..
Percy terrace.....	46	184	53	311	44	..	2	..	..	..
Pickles buildings	6	12	6	35	6	..	..	..	..	..
Pleasant place .....	..	..	..	..	..	..	..	..	..	..
Plough lane	1	4	1	8	1	..	2	..	..	..
Poole road	42	282	72	317	39	..	..	..	..	..
Pond lane	21	..	..	..	21	..	..	..	..	..
Prouts road	62	308	86	402	54	..	3	8	1	..
Presburg street.....	1	5	1	6	1	..	1	..	..	..
Queen Anne's road	36	227	56	239	35	..	..	..	..	..
Queen's court .....	..	..	..	..	..	..	..	..	..	..
Rayner street	11	66	20	82	11	..	..	..	..	..
Railway crescent	4	20	4	5	4	..	..	1	..	..
Red Lion lane .....	..	..	..	..	..	..	..	..	..	..
Redwald road, Priory ..	..	..	..	..	..	..	..	..	..	..
Retreat place	36	241	58	260	31	..	5	..	1	..
Ridley road	1	3	1	6	1	..	..	2	..	..
Rigby's buildings.....	3	6	3	14	1	..	..	..	..	..
Rochester place.....	4	12	4	13	..	..	..	..	..	..
Roseberry place	1	6	1	9	1	..	1	..	..	..
Rosina cottages.....	16	64	16	67	16	..	..	..	..	..
Rosina street.....	20	80	35	131	10	..	6	..	..	..
Rossington street.....	..	..	..	..	..	..	..	..	..	..
Rushmore road.....	50	..	..	..	40	..	5	..	..	..
St. John's Church road	34	..	..	..	26	..	..	..	..	..
Saratoga road	8	..	..	..	8	..	..	..	..	..
St. John's place .....	..	..	..	..	..	..	..	..	..	..
St. Thomas cottages ..	..	..	..	..	..	..	..	..	..	..
Sanford lane .....	..	..	..	..	..	..	..	..	..	..
Saxony cottages .....	..	..	..	..	..	..	..	..	..	..
Sedgwick street	46	241	66	302	31	..	2	..	2	..
Sewdley street .....	..	..	..	..	..	..	..	..	..	..
Shacklewell row	27	108	40	186	17	..	5	..	..	..
Shepherd's place	2	8	2	13	2	..	..	..	..	..
Shepherd's lane	1	..	..	..	..	..	1	..	..	..
Sheep lane .....	..	..	..	..	..	..	..	..	..	..
Silk Mill place and court	8	30	9	30	7	..	..	..	..	..
Stanboro' yard .....	..	..	..	..	..	..	..	..	..	..
Stelman street	20	121	32	141	16	..	..	..	..	..
Stockmar road	39	241	76	373	36	..	11	..	..	..
Stonebridge common ..	..	..	..	..	..	..	..	..	..	..
Sussex street .....	..	..	..	..	..	..	..	..	..	..
Suther street .....	..	..	..	..	..	..	..	..	..	..
Swiss cottages	4	16	4	22	4	..	..	..	..	..
Sutton place, Kingsland	5	20	5	26	5	..	..	..	..	..
Carried forward..	4120	17346	5079	21881	3066	..	275	41	35	..

Streets and other Places Inspected in 1886.						Number of Cases of Epidemic Diseases.				
Name of Street or Road.	Number of Houses Inspected	Number of Rooms	Number of Families	Number of Inmates	No. of Houses in which Nuisances were found	Small Pox	Scarlatina	Diphtheria	Typhoid Fever	Typhus
Brought forward..	4120	17366	5079	21881	3066	..	275	41	35	..
Taylor's buildings.....	1	..	..	..	1	..	..	..	..	..
Templar road	4	16	6	29	4	..	11	..	..	..
Thomas street	19	76	24	112	11	..	1	..	..	..
Tottenham rd. & square	102	436	137	613	69	..	3	..	..	..
Tower street, L. F.....	38	252	62	283	34	..	..	..	..	..
Tranquil place .....	..	..	..	..	..	..	..	..	..	..
Trelawney road	2	..	..	..	2	..	3	..	..	..
Triangle road	1	4	1	5	1	..	1	..	..	..
Tudor grove .....	..	..	..	..	..	..	..	..	..	..
Tudor road	1	..	..	..	..	..	1	..	..	..
Tryons court.....	..	..	..	..	..	..	..	..	..	..
Tyssen passage & place	16	64	18	81	10	..	..	..	..	..
Tyssen street.....	34	154	54	255	25	..	..	..	..	..
Union road, S. H.....	32	215	49	197	30	..	..	..	..	..
Union street, W. H. ..	..	..	..	..	..	..	..	..	..	..
Urban place .....	..	..	..	..	..	..	..	..	..	..
Valentine road	32	200	62	233	31	..	..	..	..	..
Victoria grove .....	..	..	..	..	..	..	..	..	..	..
Vyner street	64	275	106	442	44	..	..	..	..	..
Wallis road .....	..	..	..	..	..	..	..	..	..	..
Warburton rd. & square	..	..	..	..	..	..	..	..	..	..
Warburton street .....	..	..	..	..	..	..	..	..	..	..
Warwick villas.....	1	4	1	6	1	..	1	..	..	..
Water lane	1	5	1	8	1	..	2	..	..	..
Wellington street.....	..	..	..	..	..	..	..	..	..	..
Well street.....	4	16	4	..	..	..	5	1	..	..
West street, Triangle ..	..	..	..	..	..	..	..	..	..	..
Western place .....	..	..	..	..	..	..	..	..	..	..
Wetherell road .....	..	..	..	..	..	..	..	..	..	..
Wharf road .....	..	..	..	..	..	..	..	..	..	..
White Hart court	3	6	3	12	1	..	..	..	..	..
White Post lane .....	..	..	..	..	..	..	..	..	..	..
Whitmore road.....	..	..	..	..	..	..	..	..	..	..
Wick lane	7	46	10	44	7	..	..	..	..	..
Wick road.....	142	738	897	198	97	..	6	..	3	..
Williams cottages.....	..	..	..	..	..	..	..	..	..	..
Willman grove .....	..	..	..	..	..	..	..	..	..	..
Winchester place .....	..	..	..	..	..	..	..	..	..	..
Windsor road	1	4	2	11	1	..	1	..	..	..
Winslade road .....	..	..	..	..	..	..	..	..	..	..
Woodland street .....	..	..	..	..	..	..	..	..	..	..
Woolpack place	18	74	22	107	11	..	1	..	..	..
York place	10	20	10	37	5	..	..	..	..	..
Carried forward..	4653	19971	6548	24554	3452	..	311	42	38	..

SUPPLEMENTAL LIST OF STREETS IN WHICH MORE THAN TWO
CASES OF SMALL POX &c., OCCURRED IN 1886.

Name of Street or Road	Number of Houses Inspected	Small-Pox	Scarlet Fever	Diphtheria	Typhoid	Typhus
Brought forward.....	4653	..	311	42	38	..
Albion Road, Stoke Newington	1	..	1	..	1	..
Albert Road, Dalston	1	..	4	..	..	..
Albion Road, Dalston.....	2	..	1	..	..	..
Alkham Road, Stoke Newington	1	..	..	3	..	..
Amherst Road, Hackney	2	..	2	..	..	..
Amherst Park, Stamford Hill	1	..	..	1	..	..
Annis Road, South Hackney.....	1	..	..	..	1	..
Ayrsome Road	1	..	..	..	1	..
Balmes Road, Kingsland	1	..	..	..	1	..
Bethune Road, Stoke Newington	1	..	1	..	..	..
Benthall Road	1	..	2	..	..	..
Beecholme Road, Clapton	1	..	..	1	..	..
Bishop's Road, South Hackney	1	..	1	..	..	..
Brett Road, Hackney	1	..	1	..	..	..
Bremen Street	1	..	2	..	..	..
Brooke Road, Clapton.....	1	..	1	..	..	..
Broughton Road, Stoke Newington.....	1	..	..	..	1	..
Bouverie Road, Stoke Newington.....	2	..	..	1	2	..
Cawley Road, South Hackney.....	1	..	1	..	..	..
Cazenove Road, Stamford Hill.....	2	..	1	..	1	..
Christie Road, South Hackney.....	1	..	..	..	3	..
Clapton Square.....	1	..	1	..	..	..
Clonbrook Road, Stoke Newington	1	..	4	..	..	..
Colenso Road	1	..	2	..	..	..
Cotterell Road	2	..	2	..	..	..
Clapton High Road	4	..	2	3	2	..
Dalston Lane	2	..	1	..	1	..
Darnley Road	2	..	1	..	1	..
Darenth Road	3	..	..	2	2	..
Darville Road	3	..	2	1	..	..
Downs Road	1	..	..	1	..	..
Dynevor Road	1	..	..	1	..	..
Edenbridge Road.....	1	..	..	2	..	..
Elderfield Road	2	..	..	..	2	..
Enfield Road South	1	..	..	..	1	..
Evering Road	2	..	2	..	..	..
Carried forward.....	4705	..	346	58	58	..

SUPPLEMENTAL LIST OF STREETS, &c., 1886—*continued.*

Name of Street or Road	Number of Houses Inspected	Small-Pox	Scarlet Fever	Diphtheria	Typhoid	Typhus
Brought forward.....	4705	..	346	58	58	..
Farleigh Road	2	..	2	..	..	..
Fassett Road.....	1	..	1	..	..	..
Field View Place ..	1	..	..	..	1	..
Foulden Road	2	..	3	..	1	..
Fremont Street.....	1	..	1	..	..	..
Gloucester Road	2	..	..	..	1	..
Graham Road	4	..	..	3	2	..
Greenwood Road	1	..	..	..	1	..
Grayling Road	1	..	1	..	..	..
Gotha Street	1	..	1	..	..	..
Glaskin Road	1	..	..	1	1	..
Hackney Union	1	1	6	..	..	..
Hawksley Road	1	..	1	..	..	..
Heyworth Road	1	..	2	..	..	..
Ickburgh Road.....	1	..	..	..	1	..
Kenninghall Road	1	..	1	..	..	..
King Edward's Road.....	2	..	..	1	1	..
Kynaston Road	1	..	1	..	..	..
Kyverdale Road	1	..	4	..	..	..
Landsdowne Road	1	..	1	..	..	..
Loddiges Road	2	..	4	..	..	..
Londesboro' Road	2	..	4	..	..	..
London Road	1	..	1	..	..	..
Mare Street	2	..	2	..	1	..
Maury Road	1	..	1	..	..	..
Mortimer Road.....	2	..	1	1	..	..
Mountford Road	1	..	1	..	..	..
Muston Road	1	..	1	..	..	..
Median Road	1	..	..	2	..	..
Navarino Road.....	1	..	..	..	1	..
Nightingale Road	2	..	1	2	..	..
Olinda Road	1	..	..	..	1	..
Osterley Road	1	..	..	1	..	..
Osbaldeston Road ..	1	..	..	..	1	..
Carried forward.....	4751	..	387	69	71	..

SUPPLEMENTAL LIST OF STREETS, &c., 1886—continued.

Name of Street or Road	Number of Houses Inspected	Small-Pox	Scarlet Fever	Diphtheria	Typhoid	Typhus
Brought forward.....	4751	..	387	69	71	..
Perch Street, Shacklewell	1	..	..	..	6	..
Penpoll Road, Hackney	1	..	1	..	..	..
Poole Road, South Hackney	1	..	..	..	1	..
Queens Downs Road	1	..	..	..	1	..
Rectory Road	1	..	..	..	1	..
Reighton Road.....	1	..	..	..	1	..
Richmond Road	4	..	5	..	1	..
Saint Thomas' Square.....	1	..	..	..	1	..
Shakspeare Road.....	1	..	1	..	..	..
Shrubland Road ..	2	..	2	..	1	..
Sigdon Road, Dalston.....	1	..	..	5	..	..
Sidworth Street	1	..	2	..	..	..
Southgate Road	1	..	..	1	..	..
Southboro' Road	2	..	4	1	..	..
Sydney Road.....	2	..	10	..	..	..
Sylvester Road	1	..	1	..	..	..
Speldhurst Road	1	..	..	1	..	..
Stamford Hill	1	..	..	1	..	..
Terrace Road	1	..	1	..	..	..
Woodberry Grove	2	..	3	..	..	..
Other Places	21	..	..	..	..	..
TOTALS	4799	..	417	78	84	..

TABLE OF DEATHS

Of Inhabitants of the Hackney District between Jan. 1st. and Dec. 31st, 1886.

AGES.....	Under 1 year.	1 to 5.	5 to 15.	15 to 25.	25 to 35.	35 to 45.	45 to 55.	55 to 65.	65 to 75.	75 to 85.	85 and upward.	Totals.
Small-pox. { Vaccinated..	..	..	..	..	..	..	..	..	..	..	..	1
Unvaccinated	..	..	..	..	..	..	..	..	..	..	..
Vaccn doubtfl	..	..	..	..	1*	..	..	..	..	..	..
Measles	20	59	9	..	..	..	..	..	..	..	..	88
Scarlet Fever.....	2	48	18	1	..	1	..	..	..	..	..	70
Typhus Fever .....	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough...	47	70	6	..	..	..	..	..	..	..	..	123
Diphtheria	3	20	20	1	1	1	..	..	..	..	..	46
Simple Fever .....	..	2	1	..	..	..	..	..	..	1	..	4
Enteric Fever .....	..	3	9	19	11	4	4	3	..	..	..	53
Other Miasmatic Diseases .....	..	1	..	..	..	..	..	..	..	..	..	1
Simple Cholera	2	1	..	2	..	..	1	..	..	..	..	6
Diarrhœa, Dysentery.	150	32	1	..	1	1	..	1	5	8	1	200
Ague, Remittent Fever	..	..	..	..	..	..	..	..	..	..	..	..
Hydrophobia .....	..	..	..	..	..	..	..	..	..	..	..	..
Syphilis, &c.	8	2	..	1	..	..	..	1	..	..	..	12
Erysipelas	3	..	..	1	..	..	..	2	3	..	..	9
Pyæmia, Pupereal Fever .....	..	..	..	1	6	1	..	..	..	..	..	8
Thrush, Vege Parasites	2	..	..	..	..	..	..	..	..	..	..	2
Worms, Hydatids..	..	..	..	..	..	..	..	..	..	..	..	..
Want of Breast Milk..	..	..	..	..	..	..	..	..	..	..	..	..
Alcoholism .....	..	..	..	1	8	4	9	1	..	..	..	23
CONSTITUTIONAL DISEASES.												25
Rheumatic Fever ....	..	..	2	2	3	..	..	2	..	..	..	9
Rheumatism .....	..	..	..	..	..	..	1	1	..	..	1	3
Gout .....	..	..	..	..	..	..	2	1	3	2	..	8
Rickets .....	..	..	..	..	..	..	..	..	..	..	..	..
Cancer .....	..	..	..	..	1	11	26	47	26	7	..	118
Tabes Mesenterica ..	56	22	3	1	..	..	..	..	..	..	..	82
Tubercular Meningitis	17	38	9	1	..	..	1	..	..	..	..	66
Phthisis	1	10	9	61	78	87	43	36	10	..	..	335
Scrofula, Tuberculosis	26	10	10	3	..	..	..	1	..	..	..	50
Purpura Hæmorrhagica	1	..	..	1	..	..	..	..	..	..	..	2
Anæmia, Leucocytha..	..	..	1	1	..	1	..	..	2	1	..	6
Diabetes .....	..	..	..	1	1	3	..	4	1	..	..	10
Other Constitutional Diseases .....	..	..	..	..	..	..	..	..	..	..	..	689
Premature Birth	128	..	..	..	..	..	..	..	..	..	..	128
Malformations	9	1	..	..	..	..	..	..	..	..	..	10
Old Age .....	..	..	..	..	..	..	..	1	32	81	37	151
Carried forward..	475	319	98	98	111	114	87	101	82	100	39	1624
												1624

* A Casual not belonging to Hackney.

TABLE OF DEATHS.—Continued.

AGES	Under 1 year.	1 to 5.	5 to 15.	15 to 25.	25 to 35.	35 to 45.	45 to 55.	55 to 65.	65 to 75.	75 to 85.	85 and upward.	Totals.	
Brought forward..	475	319	98	98	111	114	87	101	82	100	39	1624	1624
NERVOUS DISEASES.													
Inflammation of Brain or Membranes	30	30	11	5	3	7	9	4	13	4	..	116	
Apoplexy, Hemiplegia Insanity, General	1	..	..	6	2	8	25	32	38	27	4	143	
Paralysis.....	..	..	..	1	3	7	5	9	15	13	1	54	
Epilepsy .....	..	..	2	2	3	2	1	3	4	2	..	19	
Convulsions	88	26	..	..	..	..	..	..	..	..	..	114	
Laryngismus Stridulus	8	3	..	..	..	..	..	..	..	..	..	11	
Diseases of Spinal Cord	..	3	2	1	2	1	3	4	2	1	..	19	
Paraplegia .....	..	..	..	..	..	..	..	..	1	2	..	3	
Other Nervous Diseases	1	..	..	2	..	1	..	5	2	1	..	12	
													491
DISEASES OF CIRCULATING ORGANS.													
Peri and Endo-Carditis	..	1	2	4	..	3	3	2	..	..	..	15	
Valvular Disease of Heart .....	..	..	2	6	3	2	2	6	7	4	..	32	
Other Diseases of Heart	3	1	8	13	9	14	20	40	43	24	3	187	
Aneurism .....	..	..	..	..	1	4	5	2	4	1	..	17	
													251
RESPIRATORY ORGANS.													
Laryngitis	1	7	1	..	..	..	..	1	..	..	..	10	
Croup	2	21	2	..	..	..	..	..	..	..	..	25	
Asthma .....	..	..	..	..	..	..	1	3	5	1	1	11	
Bronchitis	91	70	3	2	2	13	22	34	68	76	21	402	
Pneumonia.....	41	51	11	6	17	16	17	15	20	8	3	205	
Pleurisy .....	..	4	2	..	4	5	3	3	3	..	2	26	
Other Respiratory Dis.	..	2	..	..	1	1	1	2	1	..	..	8	
													687
DISEASES DIGESTIVE SYSTEM.													
Dentition	9	12	..	..	..	..	..	..	..	..	..	21	
Quinsy, Sore Throat..	3	1	..	1	..	..	..	1	..	..	..	6	
Disease of Stomach ..	1	..	..	1	..	..	2	4	2	..	..	10	
„ of Bowels....	1	..	..	1	1	1	2	2	..	1	..	9	
Enteritis	11	4	..	..	1	1	1	..	1	..	..	19	
Obstruction of Intes- tines	4	..	1	1	2	..	5	2	5	3	1	24	
Peritonitis	1	2	2	1	3	1	1	..	2	..	..	13	
Spleen .....	..	1	..	2	..	..	1	1	1	..	..	6	
Jaundice, Liver Disease	6	1	..	..	4	13	15	14	17	6	1	77	
													185
DISEASES OF URINARY SYSTEM.													
Kidney Disease.....	..	..	..	1	1	1	2	4	9	2	..	20	
Nephritis .....	..	1	1	..	1	2	5	1	9	2	..	22	
Bright's Disease .....	..	..	..	1	5	10	8	15	9	7	1	56	
Other Kidney Diseases	..	..	..	..	..	..	..	..	..	..	..	..
Bladder and Prostate..	..	..	..	..	..	2	1	1	6	4	..	14	
													112
Carried forward..	777	560	148	155	179	229	256	311	369	289	77	3350	3350

TABLE OF DEATHS--Continued.

AGES	Under 1 year.	1 to 5.	5 to 15.	15 to 25.	25 to 35.	35 to 45.	45 to 55.	55 to 65.	65 to 75.	75 to 85.	85 and upwards	Totals.	
Brought forward..	777	560	148	155	179	229	256	311	369	289	77	3350	3350
Disease of Uterus....	..	..	..	..	..	..	..	1	..	..	..	1	
Abortion, Flooding ..	..	..	..	2	10	7	..	..	..	..	..	19	
Puerperal Convulsions	..	..	..	3	1	3	..	..	..	..	..	7	
Ovarian Dropsy .....	..	..	..	..	1	1	1	..	1	..	..	4	
					.								31
BONES AND JOINTS, &c.													
Caries, Necrosis	1	4	5	3	2	1	1	1	..	..	..	18	
Arthritis, Ostitis .....	..	..	..	..	..	..	..	..	..	..	..	..
Carbuncle, Phlegmon	..	..	..	1	..	1	..	1	1	..	..	4	
Other Skin Diseases..	1	..	..	..	..	..	..	..	..	..	..	1	
													23
VIOLENCE.													
Accidents and Violence	27	13	7	6	5	6	2	10	4	1	..	81	
Homicide	3	..	..	..	..	..	..	..	..	..	..	3	
Suicide .....	..	..	..	1	2	4	2	1	4	1	..	15	
													99
ILL-DEFINED CAUSES													
Dropsy .....	..	..	..	..	1	..	2	2	3	1	1	10	
Debility and Atrophy	135	10	..	..	..	..	..	..	..	..	..	145	
Mortification	1	..	..	..	..	..	..	2	3	2	2	10	
Tumour .....	..	..	..	..	1	..	..	..	1	..	..	2	
Abscess	7	3	3	1	2	..	..	2	1	..	..	19	
Hæmorrhage	2	..	..	..	..	..	..	1	..	..	..	3	
Sudden Deaths)doubt- ful) .....	..	..	..	..	..	..	..	..	..	..	..	..
Causes not specified..	..	..	..	1	..	..	..	..	..	..	..	1	
													190
Totals.....	954	590	163	173	204	252	264	332	387	294	80	3693	3693
Per centage	25·8	16·0	4·4	4·7	5·5	6·8	7·2	9·0	10·5	7·9	2·2	100	

Cesspools emptied, filled up, and drained into the Sewer	5
Choked drains cleansed, repaired, or reconstructed .	744
Number of Premises in which choked Water-closet Pans were released	186
Number of Premises in which Yards were drained	122
Number of Premises in which new Traps were provided	1127
Number of Premises in which Sinks were dis- connected from the drains	604
Number of Premises in which Stack Pipes were cut off from drains	271
Total number of Nuisances from defective means of drainage abated	— 3059
Number of Premises in which Yards were newly paved or the paving relaid	815
Number of Premises in which Dust Bins were pro- vided, or old Dust Bins repaired	617
Number of Houses repaired, whitewashed, &c. . .	1678
Number of Houses in which the Ventilation has been improved	10
	— 3120
	<u>6179</u>
Number of Water-closets to which a supply of water has been given	205
Number of Houses supplied by Closet-cistern in which a Flushing-box was provided	21
Number of Houses supplied by butt only, and Cistern substituted	11
Number of Closets in which defective apparatus was repaired	745
Number of Screw-down Taps and lengths of Pipe provided to enable occupiers to draw water from the main of the house	249
Total number of Nuisances from defects in water-supply	— 1231
Carried forward	7410

Brought forward	7410
Number of Houses disinfected	425
Number of Cases of overcrowding abated	8
Number of Premises from which Pigs and other animals were removed	19
Number of Premises from which stable dung and other refuse were removed (excluding dust) ..	81
Number of filthy places cleansed	73
Number of other Nuisances removed (not included under other headings)	1031
	— 1637
Total number of Nuisances abated in 1886 ..	<u>9047</u>
Number of Accumulations of Dust specially removed..	1306*
" " Lodging Houses measured	350
" " Notices for disinfecting premises	425
" " Preliminary Notices served	3710
" " Peremptory " "	937
" " Statutory " "	1099
Number of Letters sent out	1938
" " Persons summoned before a Magistrate ..	29
" " Copies of Summonses and Orders made out..	174
" " Bodies deposited and taken to the Mortuary	76
" " Houses from which Bedding, &c., was removed to be disinfected at the Board's apparatus	296
" " Articles disinfected at the Board's apparatus	1040
" " 2948 Packets and 495 Bottles of Disinfectants supplied to the Poor..	3443
" " Fish condemned unfit for human food (pads)	42

* Many persons send requests here for removal of dust instead of placing the D cards in the window. All these, as well as complaints of non-removal, are included in the above.

1886—87.

LIST OF LICENSED COW-SHEDS IN THE
HACKNEY DISTRICT.

NAME.	ADDRESS.	No. of Sheds
Williams, W.	6, Arthur Street, Hackney	1
Whitby, J. J.	12, Bay Street, Dalston	3
Stevens, E.	Bridge Street, Homerton	1
James, R.	46, Brooksby's Walk, Homerton.	1
Jenkins, J.	2, Buckingham Road	2
Powell, T. H.	1, Chalgrove Road	1
Bansfield, R. C.	Chapel Road	1
Bennett, W.	61, Church Road, Kingsland	1
French, T.	72, Church Road, Homerton	1
Preston, H. J.	1, Clifden Road	3
Richards, R.	176, Culford Road	2
Taylor, E.	67, Downham Road	1
Webb, S. H.	Devonshire Place	1
Abbott, J. & G.	71, Digby Road	1
James, Mrs.	11, Downham Road	1
Jones, J.	3, Elsdale Street	2
Jones, J. L.	3, Enfield Road North	1
Coxhall, T.	Fenn Street, Homerton	1
Motts, E.	6, Florefield Road	1
Bowers, W.	100, Frampton Park Road	1
Larter, J. T.	1, Gloucester Road	2
Crane, M.	17, Hertford Road	1
Snewin, W. H.	3, Hill Street, Clapton	1
Rumball, J. & J.	High Road, Clapton	4
Jones, J.	69, Holly Street	1
Bates, T.	46A, Leswin Street	1
Cashford, W. G.	Jerusalem Square	4
Reynolds, C. & E.	Landfield Road	2

NAME.	ADDRESS.	No. of Sheds
Strong, J.	Lea Bridge	1
Dear, A. S.	Lea Bridge Road	1
Wingrove, J. T.	London Lane	1
Stevens, W. E.	Marsh Farm, Temple Mills	1
Low, W.	Manor Farm, Hackney Wick	1
Warner, J. C.	23, Mare Street	1
Bush, J.	Marsh Gate, Homerton	1
Low, E.	Marsh Hill, Homerton	1
Jones, J. R.	2, Mayfield Road	1
Powell, T. H.	14, Morning Lane	1
Stapleton, A.	Brooklands, Stoke Newington	5
Lewis, J.	6, Palace Road, Hackney	1
Abbott, J. & G.	13, Paradise Place	1
Chandler, J.	3, Park Place, Hackney	1
Horning, J.	Pond Lane, Hackney	4
Briggs, A.	65, Pritchard's Road	2
Harper, D. P.	257, Queen's Road	1
Camp	79, Shacklewell Lane	2
Frost, G.	Sigdon Road	2
Clifton, F.	33, Southgate Road	1
Sharp, B.	Spring Hill, Clapton	3
Webb, S. H.	T'wemlow Terrace	1
Briggs, J.	180, Victoria Park Road	2
Dover, J.	3, Warburton Road	1
Seabrook, G.	Water Lane	1
Brace, A. E.	133, Well Street	1
Lillicrap (Oldacre and Haynes)	167, Well Street	2
Matthews, T.	Wellington Street	1
Fenton, F.	Wick Road	1
Evans, J.	271, Wick Road	1
Roper, R.	37, Wilton Road	1
	Total Sheds	88

1886—87.

LIST OF LICENSED SLAUGHTER HOUSES IN
THE HACKNEY DISTRICT, OCT., 1886.

NAME.	ADDRESS.
Pattenden, H. E.	235, Amherst Road
Wildsmith, S.	Brookfield Road
Raymond, J.	186, Cassland Road
Teat, J.	37, Church Road
Woolven, W. H.	Clapton Road
Abbott, A. R.	16, Duncan Place
Hazlewood, W. A.	3, Felix Place
Sharman, J.	90, Frampton Park Road
Witherden, W.	5, High Street, Homerton
Fowler, T. C.	Hill Street
Wragg, W.	57, Holly Street
Nixon, E.	49, High Street, Kingsland
Gooch, H.	71, High Street, Kingsland
Johnstone, E.	323, Kingsland Road
Scott, G.	418, Kingsland Road
Moore, C. W.	531, Kingsland Road
Fish, T.	Lea Bridge Road
Witherden, C. A.	Lower Clapton
Tyler, A.	80, Mare Street
Maffey, F. C.	142, Mare Street
Hilton, J.	177, Mare Street
Geary, C. J.	266, Mare Street
Shaw, J.	296, Mare Street
Jackson, J.	312, Mare Street
Capon, J.	Morning Lane
Harold, G.	119, Mortimer Road
Brock, C.	Plough Lane
Scott, W.	200, Queen's Road

NAME.	ADDRESS.
Miall, J.....	211, Queen's Road
Murton, C.....	103, Rendlesham Road
Browning, J.....	129, Richmond Road
Nokes, G.	53, Southgate Road
Ebbells, E.....	94, Southgate Road
Row, R.....	130, Stoke Newington High Street
May, A.....	220, Stoke Newington Road
Stoneman, P.....	3, Terrace Road
Ginger, E. W.	Upper Clapton
Tyler, W.	92, Well Street
Powell, F. J.....	113, Well Street
Rolfe, R. K.	169, Well Street
Butcher, F.....	216, Well Street
Prince, C.	241, Well Street
Raymond, G.....	51, Wilton Road
