

**Report of the Medical Officer of Health for the year ending December 31st, 1896.**

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# BOARD OF WORKS, HOLBORN DISTRICT.

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METROPOLIS LOCAL MANAGEMENT ACT,  
AND  
PUBLIC HEALTH (LONDON) ACT.

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## Report

OF THE

MEDICAL OFFICER OF HEALTH,

For the Year ending December 31st, 1896.

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LONDON :  
PRINTED BY ORDER OF THE BOARD.

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1897.





REPORT  
ON THE  
VITAL STATISTICS AND SANITARY CONDITION  
OF THE HOLBORN DISTRICT,

FOR THE  
*Year ending December 31st, 1896,*

BY  
WILLIAM ARTHUR BOND, M.A., M.D.,

B.C. and D.P.H.CAMB., M.R.C.P.LOND.

*Fellow of the Society of Medical Officers of Health; Fellow of the British Institute of Public Health; Member and Demonstrator of the Sanitary Institute; Member of the Epidemiological Society, &c., &c.; Medical Officer of Health to the Board of Works for the St. Olave's District, Southwark, and*

**Medical Officer of Health**

TO THE  
BOARD OF WORKS FOR THE HOLBORN DISTRICT.





# REPORT

RELATING TO THE

## VITAL STATISTICS AND SANITARY CONDITION OF THE HOLBORN DISTRICT, LONDON.

*FOR THE YEAR ENDED 31st DECEMBER, 1896.*

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### TO THE BOARD OF WORKS FOR THE HOLBORN DISTRICT.

GENTLEMEN,

I have the honour to submit my Report for the year ending December 31st, 1896.

The year has been a memorable one, and the Report will show that a very large amount of work has been carried out for the improvement of the Sanitary condition of the District by the Health Department.

The necessity for the appointment of a Special Meat Inspector, so that there could be more constant and efficient inspection of the Meat Market, has been fully demonstrated. An enormous amount of diseased and unsound meat has been seized, especially during the first quarter of the year. Much time was involved in the careful examination of this, having it taken before a Magistrate for condemnation, and other attendances at Courts in connection with legal proceedings for the prosecutions of the offenders.

A very large amount of inspection of houses, bakehouses, workshops, &c., including much house-to-house inspection of streets, courts and areas, has taken place during the year; and very much Sanitary work has been done for remedying the insanitary conditions and nuisances that were found to exist, or concerning which complaints had been

received. In many cases the worst of the houses have been closed after notice either by the consent of the owners, or after a "closing order" was obtained.

The inquiry by the London County Council into the administration and Sanitary condition of the District also occupied much of the time of the Department. An Inspector and generally also myself accompanied Dr. Young during his inspections.

As each Member of the Board was supplied with a copy of the London County Council Report, and of my report upon it, I need not again enter into any details, especially as the consideration of these reports was adjourned to the beginning of this year.

In my report, I gave my reasons for agreeing in the main with the L.C.C. Report, and set forth facts which I hoped might help the Board to come to the same conclusion.

The Health Department is glad that the Board has had the independent and unbiassed report of Dr. Young, that, "as the result of this inquiry, evidence has been obtained that much work in the abating and removal of insanitary conditions is being carried out in the District," &c.

Much time also has been taken in the examination of many hundreds of tenements and their sanitary arrangements, for which owners asked for Certificates under the Customs and Inland Revenue Acts. In many cases the Certificate could not be given until a great deal of sanitary improvements had been effected.

I may mention some other changes that have taken place during the year, to which the Board kindly gave their consent.

Returns of births and deaths in the District are now sent to me by the Registrars.

A new notification form in accordance with the form prescribed by the Local Government Board was printed and circulated amongst the Medical Practitioners of the District.

A special feature that has been introduced by the Holborn Board, which assists in getting infectious cases promptly removed is the following: "If the Medical Practitioner will kindly at once make application to the Metropolitan Asylums Board, Norfolk House,



Norfolk Street, Strand, W.C. (by telegram or otherwise), and leave a Medical Certificate (or a copy of the Notification Certificate) for the ambulance nurse, the Holborn Board will pay 1s. 6d. extra fee."

The Board, after many ineffectual attempts to obtain suitable premises for a "shelter" or house accommodation for the use of persons who have been compelled to leave their dwellings for the purpose of enabling such dwellings to be disinfected, has again made arrangements with the Vestry of Clerkenwell for the conjoint use of the Shelter at 47, Northampton Road. From March 25th to the end of the year this was used by 16 families from the District."

Permission was given for a bacteriological examination of doubtful cases of Diphtheria to be made by the British Institute of Preventive Medicine, at the expense of the Board. Culture outfits were obtained, and during the last six months of the year 17 doubtful cases were examined.

A set of post-mortem instruments has been provided for the use of the medical practitioners who make post-mortems in the room adjoining the mortuary. Five additional shells have also been provided.

The Board's contract, dating from the 25th March, 1896, provided for the removal of house refuse at least once a week. This has not been strictly carried out, for as many as 1,361 notices for the removal of dust were received, an improvement, however, on the preceding year, when there were 2,114 such notices. Since the new contract, this year, the Contractor has appointed a special foreman to superintend this branch of the work, and I am glad to be able to say that the number of notices now received for the removal of house refuse is comparatively few.

The corrected death-rate from all causes, and also that from phthisis continue to be higher than the rates for London.

Statistics of the London Districts have shown that these rates increase with an increase of the conditions that are expressed by the word "overcrowding."

In the insanitary area between Leather Lane and the Gray's Inn Road that I specially reported upon to the Board last year, the death-rate was excessively high, namely 47·8 per 1,000, also the phthisis

death-rate which was 12·2 per 1,000 ; the corresponding rates for London being only 18·2 and 1·68 respectively.

The final Report of the Royal Commission on Vaccination was published the latter part of the year. I give a short abstract of this most important Report. It is to be hoped that this will give a stimulus to increased vaccination and re-vaccination.

I also give an abstract of the results of an inquiry by the Local Government Board concerning the Oyster Culture of Great Britain and its relation to disease.

Another Royal Commission on Tuberculosis is now sitting. It has to report principally upon what practical means can be taken to secure the extermination of tuberculosis from our meat and milk supplies.

The Board may be glad to know that Mr. Billing and I had the honour of giving evidence before this Commission.

The Metropolitan Asylums Board has again been unable to receive all the cases of scarlet fever and diphtheria that required to be removed to their hospitals, notwithstanding the continued efforts of the Managers to keep pace with the growing demands of the Metropolis.

Additional duties have recently been imposed upon the Managers by the Local Government Board for the amelioration of the infectious sick and insane poor children of the Metropolis.

These duties consist of providing for the care of children :—

- (a.) Suffering from ophthalmia or other contagious disease of the eye.
- (b.) Suffering from contagious disease of the skin or scalp.
- (c.) Requiring either special treatment during convalescence or the benefit of sea-side air.
- (d.) Who by reason of defect of intellect or physical infirmity cannot properly be trained in association with children in ordinary schools ; and
- (e.) Who are ordered by two justices or a magistrate to be taken under the Industrial Schools Act, 1866, to a workhouse or an asylum of the district.



By the Public Health Act of 1896, the Acts relating to quarantine have been repealed, and further provision made with respect to epidemic, endemic and infectious diseases.

By the new regulations of the Local Government Board, additional and more stringent precautions against the introduction of cholera are to be taken, and plague and yellow fever are now subject to the same regulations.

A new English Life Table was during the year issued by the Registrar General. This is founded on the Vital Statistics of England and Wales for the decennium 1881-90. It is the third which has been published, and it is worthy of remark that the successive tables bear evidence to the enormous saving of life and health which have been effected by the sanitary administration in this country.

The average life time of males and females, or the expectation of life at birth has been by the

		MALES.	FEMALES.
1st Life Table, 1838—54 ...	...	39·91 years.	41·85 years.
2nd „ 1871—80 ...	...	41·35 „	44·62 „
3rd „ 1881—90 ...	...	43·66 „	47·18 „

That is to say that since the period on which the first Life Table was founded, the average life of males has been increased  $3\frac{3}{4}$  years, and of females  $5\frac{1}{3}$  years.

I thank the Members and Officers of the Board for their kindness, courtesy and the co-operation that I have received ; and the Board also, for acknowledging the excessive amount of work performed last year, by granting me an additional honorarium of fifty guineas.

I am, Gentlemen,

Your obedient Servant,

W. A. BOND.



## AREA, POPULATION, HOUSES.

The area of the District is 168 acres.

The population according to the census of 1896 was 31,208; at the census of 1891 it was 33,414; at the census of 1881 it was 36,177. The figures for 1881, however, include the whole population of Glasshouse Yard, a part of which is under the jurisdiction of the Commissioners of Sewers. At the Registrar-General's Office, Somerset House, I was able to obtain the separate population at the census of 1891, which was the following:—Under the Holborn District Board, 708; under the City Commissioners of Sewers, 71; total, 779. The corresponding number for 1896 were 668 and 65; total, 733. The corresponding figures of the 1881 census were not available, except the total, 931.

The population for 1886, estimated in the usual way to the middle of the year, is 31,102.

The number of inhabited houses in the District at the census of 1898 was 3,437. In 1881 the number was 3,244.

Although the resident population is diminishing, the "daily" population is increasing, on account of the increase in the number of factories, workshops, and offices.

The following Table gives further details:—

PARISH.	POPULATION.			AREA IN ACRES.	INHABITED HOUSES	
	1881.	1891.	1896.		1881.	1891.
St. Andrew and St. George ... ..	28,874	26,228	24,991	111	2,423	2,573
Saffron Hill, Hatton Garden, Ely Rents	3,980	4,506	3,832	32	453	605
St. Sepulchre ...	2,392	1,972	1,717	19	275	190
Glasshouse Yard (St. Botolph, Alders- gate, part) ...	931	779*	668	6	93	69
Total ...	36,177	33,485	31,208	168	3,244	3,437

\*71 of the population of Glasshouse Yard are under the City Commissioners of Sewers.

Just half the population (49·8 per cent.), at the census of 1891, occupied tenements of only one or two rooms.

For registration purposes the "Holborn" of the Registrar-General is not the same as that under the jurisdiction of the Board of Works.

The former includes Lincoln's, Gray's, Staple, and Furnival's Inns, and excludes the Liberty of Glasshouse Yard.

There are many anomalies with regard to parts of "Holborn."

Glasshouse Yard, which is now included in the civil parish of St. Botolph without Aldersgate, is, for Poor Law purposes, included with that parish in the City of London Union, and for electoral purposes in the East Finsbury division, and for Local Government purposes is under the jurisdiction of the Holborn District Board for the greater part, and under the City Commissioners of Sewers for the rest.

The greater part of the Liberty of Saffron Hill, Hatton Garden, and Ely Rents, is under the jurisdiction of the Holborn District Board; a small portion of the Liberty, however (being part of Ely Place), is under the jurisdiction of the City Commissioners of Sewers for Local Government purposes, although it is included with the remainder of the Liberty in the Holborn Union for Poor Law purposes, and in the Holborn Division of Finsbury for electoral purposes.

Staple Inn and Furnival's Inn, and the Liberty of the Charterhouse are wholly in the Holborn Union for Poor Law purposes, and are with Gray's Inn and Lincoln's Inn (which are in no Union) included in Schedule C of the "Metropolis Management Act of 1855" for Local Government purposes. A small portion of Staple Inn and a portion of Furnival's Inn, are, however, in the City of London, and are included in the City for electoral purposes.

## VITAL STATISTICS.

The beginning of the year I obtained the sanction of the Board to have the returns of the births and deaths from the Registrars of the District, so that I can now append a table of deaths, classified according to diseases, ages, and localities, as required by the Local Government Board.



## BIRTHS.

The total number of births registered during the 53 weeks ending January 2nd, 1897, were 895, giving a birth-rate of 28·3. The corresponding rate for the whole of Registration London was 30·2. The Registrar General states that this is the lowest London birth-rate on record.

## DEATHS.

The total number of deaths of persons in the district, after making the usual corrections (*i.e.* excluding those of persons who died in public institutions, who did not belong to the district, and including those of persons who belong to the district, but died in public institutions outside the district), for the 53 weeks was 709, giving a corrected death-rate of 22·4 per thousand. The corresponding rate for London was 18·2.

If correction be made for age and sex distribution, the death-rate of Holborn was 24·3 per 1000.

## DEATHS OF CHILDREN UNDER ONE YEAR OF AGE.

There were 169 deaths of children under one year of age ; that is, the number of deaths of children under one year of age to 1,000 births was 189. The corresponding rate for London was 161 per 1,000 births.

## GLASSHOUSE YARD.

During the year there were registered 16 births and 10 deaths. Details are given in the Tables.

## CAUSES OF DEATH.

The following table shows, in a summary form, the amount of life in the whole of London saved, and the amount lost in the year, compared with the mean annual mortality of the preceding ten years, under each of the more important causes.

London :—Diminution of excess of deaths in 1896 compared with the average annual deaths in 1896-95, corrected for increase of population :—



Cause of Death.						Diminution in 1896.	Excess in 1896.
Small-pox	...	...	...	...	...	39	—
Measles	...	...	...	...	...	—	938
Scarlet Fever	...	...	...	...	...	146	—
Typhus ...	...	...	...	...	...	6	—
Influenza	...	...	...	...	...	543	—
Whooping Cough	...	...	...	...	...	—	256
Diphtheria	...	...	...	...	...	—	797
Simple Fever	...	...	...	...	...	23	—
Enteric Fever	...	...	...	...	...	50	—
Diarrhoeal Diseases	...	...	...	...	...	—	107
Cancer ...	...	...	...	...	...	—	483
Phthisis and other Tubercular Diseases	...	...	...	...	...	1301	—
Premature Birth	...	...	...	...	...	—	151
Diseases of Nervous System	...	...	...	...	...	1348	—
Diseases of Circulatory System	...	...	...	...	...	307	—
Diseases of Respiratory System	...	...	...	...	...	5030	—
Diseases of Urinary System	...	...	...	...	...	37	—
Childbirth and Puerperal Fever	...	...	...	...	...	26	—
Accident	...	...	...	...	...	—	108
Homicide	...	...	...	...	...	5	—
Suicide ...	...	...	...	...	...	24	—
All other Causes	...	...	...	...	...	809	—
Total ...						9694	2840
Balance of Diminution or Excess ...						6854	—

The net gain in life saved during the year was represented by 6,854 lives. In other words, had the average death rate of 1886-1895 prevailed throughout 1896, 6,854 lives would have been sacrificed in addition to those which were actually lost by death.

In the year 1896 there was, as compared with the decennial average, an excess of 938 deaths from measles, 797 from diphtheria, 256 from whooping-cough, 107 from diarrhoeal disease, 483 from cancer, 151 from premature birth, and 108 from accident. Under each of the other headings in the table the mortality in 1896 was below the average. This was notably the case in regard to diseases of the respiratory system, the deaths referred to which were 5,030 below the average.

#### ZYMOTIC DISEASES.

During the year the number of deaths from the principal zymotic diseases was 93, the rate being 3·0 per 1,000. The corresponding rate for London was 3·1.

Of these the number of deaths was from—

Measles	...	...	...	...	32
Small-pox	...	...	..	...	1
Scarlet Fever	...	...	...	...	0
Diphtheria	...	...	...	...	9
Whooping-Cough	...	...	...	...	26
Typhoid Fever	...	...	...	...	5
Typhus Fever	...	...	...	...	1
Diarrhoea	...	...	...	...	19

### PHTHISIS OR CONSUMPTION.

The number of deaths from phthisis during the year was 104, which is equivalent to a death-rate of 3·3 per 1,000. The corresponding rate for London was 1·68 per 1,000.

### INFLUENZA.

The deaths referred to influenza were only 4 in number, being rather more than the same rate for London, in which there were 496 deaths, a number which is considerably smaller than any year since 1890, the first year of the epidemic in London.

### THE NOTIFICATION AND PREVENTION OF INFECTIOUS DISEASE.

During the year their were notified 280 cases of infectious disease: the corresponding number for 1895 being 333.

The number of the separate diseases were :—

	1895.	1896.
Small-pox	31	1
Scarlet Fever	160	114
Diphtheria and Membranous Croup	60	67
Puerperal Fever	1	2
Typhus Fever	0	1
Typhoid or Enteric Fever	20	29
Continued Fever	0	1
Erysipelas	61	65
Total	<u>333</u>	<u>280</u>



And in Registration London :—

Small-pox ...	...	...	...	...	225
Scarlet Fever ...	...	...	...	...	25,647
Diphtheria ...	...	...	...	...	13,362
Membranous Croup ...	...	...	...	...	446
Enteric Fever ...	...	...	...	...	3,190
Typhus ...	...	...	...	...	6
Other continued Fevers ...	...	...	...	...	106
Puerpural Fever ...	...	...	...	...	277
Erysipelas ...	...	...	...	...	6,436
					<hr/>
					49,708
					<hr/>

### SMALL-POX.

During the year there was one case notified, a child eight months old, who died after only eleven hours' illness.

An inquest was held, and the cause of death was returned as "a convulsive fit, after some eruptive fever, probably small-pox." I afterwards found that another child in the same house had died three weeks previously of cerebro-spinal meningitis. I think, taking this into consideration and the nature of the eruption, that the above was a case of cerebro-spinal fever.

Printed cards, giving the hours and places of attendance of the Public Vaccinators, were distributed, and the house was thoroughly disinfected,

The statistics of all epidemics of small-pox show the enormous value of efficient vaccination and re-vaccination; notwithstanding this, the proportion of children that are not vaccinated has been increasing year by year since 1881, both in the Metropolis and the rest of England. In 1881 the proportion of children unaccounted for in regard to vaccination) including cases postponed) in the Metropolitan Unions was only 5·7 per cent. of the total births. In 1891 this proportion had risen to 16·4 per cent., and is still rising.

In the Holborn Union the corresponding rates were 6·2 and 12·7, and in 1893 had risen to 14·2 per cent.

The Royal Commission on Vaccination completed its final report last August. I give a short abstract of this on pages 73—81.



## SCARLET FEVER.

There was a satisfactory reduction in the number of cases of scarlet fever notified, namely from 158 in 1895 to 114 in 1896, and there was no fatal case registered.

The Hospitals of the Metropolitan Asylums Board were unfortunately frequently full, both for scarlet fever and diphtheria patients, so that instead of being able to have a case at once removed, I had to carefully examine the urgency of each case, and report the same, day by day, to Norfolk House. I made arrangements for isolation as far as it was possible, but even the most urgent cases, those in tenements of only one room, could not be removed till after many applications. Two or three cases in the same tenement was of frequent occurrence.

On this account I wrote the following letter to the Managers, and asked Dr. Perry to do what he could in the matter :

“ As this Board cannot have even the most urgent cases of scarlet fever removed to your Board's Hospitals, I hope you will give your permission for a few more patients to be admitted to the larger wards of the hospitals.”

“ It must surely be a much less evil that patients should have only 1,600 cu. ft., say (instead of the 2,000 cu. ft., now allowed), than to be kept in crowded rooms with probably less than 150 cu. ft., and at the same time mixed with healthy children, and a source of danger to many others.”

“ A ward now having 24 beds would then accommodate 30 patients.”

I am glad to find that this recommendation was adopted, for whilst the certified normal accommodation for fever and diphtheria at the Board's disposal was less than 3,900 beds, this number was for many months largely exceeded, and that when scarlet fever and diphtheria were at their highest, 4,996 cases (or nearly 1,100 above the normal accommodation) were at one time warded in the Managers' Hospitals.

The upper hospital at Gore Farm, which was built for convalescent small pox patients, was also again appropriated to fever and diphtheria patients

Last Summer the Brook Hospital, Shooter's Hill, was opened for the reception of patients. The Park Hospital, at Hither Green, will, it is expected, be ready this Summer; and the Grove Hospital by the Spring of next year (1898).

A convalescent hospital for about 700 patients is also to be erected in the South of London, near Carshalton.

It is hoped that the provision of this additional accommodation will be sufficient to ensure the prompt removal to hospital of all insufficiently isolated cases of scarlet fever and diphtheria, and that this will lead during the next few years to a reduction in the number of cases, and a corresponding reduction in the annual mortality.

In several instances a mild case that had not been notified and isolated was the cause of several other cases.

### DIPHTHERIA.

During the year there were notified 67 cases of diphtheria and membranous croup and 9 deaths. The Metropolitan Asylums Board Hospitals were also sometimes full for diphtheria patients so that the same difficulties were experienced as for scarlet fever cases.

As it is sometimes difficult or impossible for a medical practitioner to be certain that a case of throat illness is diphtheria or not, I am glad that your Board gave its consent to allow medical practitioners to have a bacteriological examination made of the doubtful cases by the British Institute of Preventive Medicine.

Our knowledge of the disease, and of the time when the patient ceases to be a possible source of infection, has thereby been made much more accurate.

The medical practitioner probably would not notify any such case unless the bacteriological examination proved it to be diphtheria, and cases that are not really diphtheritic would not be sent to hospital, nor any further unnecessary preventive measures taken.

During the last half of year 17 doubtful cases have been examined. In 10 of these the diphtheria bacillus was isolated, and in the other 7 it was not.

The use of antitoxic serum in the treatment of diphtheria has again



during the past year been carried out in the hospitals of the Metropolitan Asylums Board.

The second report of the Medical Superintendents of these hospitals has just been issued. The following is their summary of the still further improved results in the diphtheria cases treated during the year 1896, which are indicated by their statistics and clinical observations:—

- (I.) A great reduction in the mortality of cases brought under treatment on the first three days of illness.
- (II.) The lowering of the combined general mortality to a point below that of any former year.
- (III.) The still more remarkable reduction in the mortality of the laryngeal cases.
- (IV.) The uniform improvement in the results of tracheotomy at each separate hospital.
- (V.) The beneficial effect produced on the clinical course of the disease.

They again emphasize the importance of commencing the treatment early—if possible, not later than the second day of the disease.

### TYPHUS FEVER.

There was one notification of typhus fever. The patient, F. W., aged 48, was removed to the London Homœopathic Hospital, where he died. I was kindly allowed to see the patient there, and the post-mortem examination which took place at our Mortuary.

The patient lived with his mother in a small room (at 14, L. Street), which was crowded with furniture, old bedding, and other household effects, so that the remaining air space was very small. Ventilation also was hindered by the crevices of the window sashes being blocked so as to exclude air.

I could not obtain any information of the occurrence of a previous case of typhus fever either in this house or in any other house in which the patient or his mother had resided.

In London there were only 5 deaths from typhus during the year.

### TYPHOID FEVER.

The number of cases of typhoid or enteric fever was 29, and in 1895 only 20.

There were 5 deaths from this disease during the year; no deaths in 1895; and in 1894 there were 7 deaths. In London there were 591 deaths, and in 1895, 596 deaths attributed to this disease.

### MEASLES.

This disease is not usually notified, and it is not so in this district. During the last year there were 32 deaths from this disease; last year there were 45 deaths.

In London there were 3,697 deaths from measles, and the Registrar-General states that measles appears to have been more fatal last year than in any previous year on record, with the single exception of the year 1864.

Moreover, there are many more deaths from measles than are represented by the above figures; for I have found, on investigating the history of many children that have been registered as having died of bronchitis, pneumonia, or pleuro-pneumonia, that they had, not long before death, been suffering with measles; and often other children in the same house were either ill, or had recently recovered from measles. In many cases a doctor is not in attendance until the child is seriously ill with a serious complication of measles like those mentioned above; the rash, by this time, has probably disappeared, and the mother considers that the child has recovered from measles, and when the child dies the cause of death is certified as due to the complication without any mention of the primary cause.

It is not surprising that there are so many cases as it is a very infectious disease, and, as a rule, not the least attempt is made to prevent its spread, healthy children generally being allowed to be in the same room with the sick, and even in the same bed.

Disinfection is carried out in those houses in which the existence of measles have come to our knowledge (by the death returns or otherwise), but this generally cannot be done until after the death or convalescence of the children.

### WHOOPING COUGH.

This, also, is not notified. It was the cause of 26 deaths. In 1895 there were only 8 deaths, and in 1894, 22 deaths.

In London there were 2,937 deaths from this disease, corresponding to a rate of 0.65 per 1,000 living, and considerably exceeded the rate in any recent year.



Disinfection is carried out when practicable in those cases that come to our knowledge.

### DIARRHŒA.

This was the cause of 20 deaths in this district. In London it was the cause of 3,223 deaths, or at a rate of 0·72 per 1,000 living. This rate was about the average of the preceding 10 years, which was 0·70. There were also 1,680 deaths from enteritis.

2,624, or 81 per cent. of the deaths from diarrhœa, took place in the third or summer quarter of the year. The great majority of these are hand-fed children under one year of age, living in insanitary dwellings on a polluted soil, which during the hot summer months gets heated to the requisite temperature. It has been found experimentally that there is always a sudden rise in the mortality from diarrhœa when the soil at a depth of 4 feet from the surface attains the temperature of 56° F.

### DISINFECTION.

During the year ending December, 1896—

322 rooms were fumigated.

174 premises stripped and cleansed.

2,528 articles were disinfected by Messrs. Armfield & Sons, viz., the following :—

193 Beds.	57 Frocks.
63 Mattresses.	102 Petticoats.
97 Palliasses.	99 Coats, &c.
138 Bolsters.	36 Suits of clothes.
334 Pillows.	12 Curtains.
308 Blankets.	18 Rugs
312 Sheets.	45 Shawls and carpets
173 Quilts.	17 Books.
207 Pillow cases.	1 Bassinette.
73 Cushions.	72 Bundles of sundries.
87 Shirts and nightshirts.	
27 Chemises.	2,528
24 Drawers.	

I have several times called the attention of the Sanitary Committee to the impossibility in many tenements, under present arrangements, of disinfecting the inmates and their clothing, and that this lack of complete disinfection often leads to the spread of disease.

#### TEMPORARY SHELTER OR HOUSE ACCOMODATION.

Section 60, Sub-section 4 of the "Public Health (London) Act, 1891," enjoins that the Sanitary Authority shall provide, free of charge, temporary shelter or house accommodation for the members of any family in which any dangerous infectious disease has appeared, who have been compelled to leave their dwellings for the purpose of enabling such dwellings to be disinfected by the Sanitary Authority.

I brought this subject to the notice of your Sanitary Committee, as such accommodation was often wanted in tenements where there had been small-pox, and during the epidemics of scarlet fever and diphtheria.

Several houses were inspected by the Committee, but suitable accommodation in the district, unfortunately, could not be obtained.

Meanwhile the Vestry of Clerkenwell had furnished its shelter at 47, Northampton Road, and supplied sleeping accommodation. The Committee therefore decided to try and make arrangements for the joint use of this shelter. The contract came into force March 25th, 1896, and from that date to the end of the year it was used by 16 families from this District.

#### REMOVAL OF HOUSE REFUSE.

The Board made a contract, which came into operation on the 25th March, 1896, which provided for the removal of house refuse at least once a week, in accordance with the Bye-Laws of the London County Council.

However, during the year ending December 31st, 1896, 1,361 notices for the removal of house refuse were received and attended to. During the first six months of 1895 there were 1,309, and during the second half 805 notices, making 2,114 during the year.

This large number of notices, although considerably less than the number last year, shows that the contract has not been strictly carried out. Soon after the new contract this year the contractor appointed a special foreman to superintend this branch of the work, and see that a call is made for house refuse at each and every house or premises in the



district, in accordance with and on the days mentioned in the regulations for that purpose once in every week at the least.

Since the appointment of this additional foreman there has been a great reduction in the number of notices received for the removal of house refuse.

A *daily* collection of house refuse in the Italian colony has been carried out since June last year. It now works very satisfactorily. The sanitary pails were provided at the expense of the owners (a Building Society).

It is desirable that all the old large house dust-bins, and public dust-bins in courts and alleys, which are a constant source of nuisance, should be demolished, and replaced by sanitary galvanized-iron dust-pails. These can easily be moved and at once emptied by the dustmen, with much less labour and nuisance to the occupiers and neighbours. Many such bins have been demolished during the year.

### THE MEAT MARKET.

The necessity for the appointment of a special Meat Inspector, so that there could be more constant and efficient inspection of the Meat Market, has been fully demonstrated. A large amount of diseased and unsound meat was seized, especially during the first quarter of the year.

During the year 1896, there were 258 "seizures" of *diseased* meat, *excluding* unsound and decomposed meat, and diseased, unsound, and decomposed "offal."

The amount of meat "seized," *offal excluded*, was :—

1896.				DISEASED.		DECOMPOSED.		TOTAL.	
				st.	lbs.	st.	lbs.	st.	lbs.
1st Quarter	...	...		4,069	3	378	4	4,447	7
2nd	"	...	...	710	1	1,215	4	1,925	5
3rd	"	...	...	653	6	3,476	4	4,130	2
4th	"	...	...	1,701	5	311	3	2,013	0
				7,134	7	5,381	7	12,516	6
1897.									
1st Quarter	...	...		912	3	209	3	1,121	6
Total for the 5 Quarters				8,047	2	5,591	2	13,638	4

I give the figures also for the first quarter of this year, so that the very marked change effected in the state of the Meat Market can be

demonstrated. The figures show that less than one-fourth the amount of diseased meat was "seized" during the first quarter of this year than during the corresponding period last year.

Since Easter, when one of the meat salesmen was sent to prison for four months hard labour without the option of a fine, there have been very few "seizures" of diseased meat.

#### DISEASED MEAT AND OFFAL SEIZED DURING 1896.

514 Quarters of Beef	4 Carcases of Lamb
87 Pieces of Beef	4 Pieces of Lamb
58 Carcases of Mutton	6 Pieces of Horseflesh
8 Pieces of Mutton	(23 st.)
48 Carcases of Pork	254 Sheep's Livers
5 Carcases of Veal	21 Bullocks' Livers
3 Quarters of Veal	14 Pairs of Bullocks' Lungs
4 Carcases of Slink Veal	4 Pairs of Bullocks' Kidneys
Total Weight (less Offal) <b>7134</b> st. <b>7</b> lbs.	

#### DECOMPOSED MEAT AND OFFAL SEIZED DURING 1896.

94 Quarters of Beef	30 Calves' Heads
145 Pieces of Beef	30 Bullocks Melts
21 Carcases of Mutton	200 Bullocks' Heels
88 Pieces of Mutton	18 Bullocks' Hearts
23 Carcases of Pork	6 Bullocks' Tails
47 Pieces of Pork	128 Stone of Pigs' Kidneys
4 Carcases of Veal	6 Barrels of Pigs' Kidneys
3 Pieces of Veal	1 Barrel of Pigs' Hearts
1 Carcase of Lamb	1 Barrel of Livers
626 Bullocks' Livers	2 Barrels of Heads
2356 Sheep's Livers	1 Barrel of Sweetbreads
840 Pairs of Sheep's Lungs	8 Bags of Sheep's Hearts
400 Pairs of Pigs' Lungs	11 Cases of Ostend Rabbits
1119 Pairs of Bullocks' Lungs	16 Cases of Ostend Rabbits
2569 Sheep's Plucks	29 Pieces of Ostend Rabbits
480 Calves' Plucks	8 Bushels of Sprouts
2228 Sheep's Heads	A quantity of Bacon
40 Bullocks' Heads	
Total Weight (less offal) <b>5381</b> stone <b>7</b> lbs.	



Of the 258 "Seizures" of Diseased Meat, exactly one-third or 86, were tubercular carcasses. Nearly all were those of cows, only six being carcasses of pork.

The average weight of the carcasses of beef was only 43 stone 6 lbs., all of them were markedly tubercular.

The Clerk will give a list of the many prosecutions. I may say that during the year I had to attend various Courts of Law on 116 separate occasions. This you will readily understand occupied a great deal of time.

The Board may be glad to know that Mr. Billing and I had the honour of giving evidence before the Royal Commission on tuberculosis that is now sitting.

### BAKEHOUSES.

All the twenty-two bakehouses have been inspected and re-inspected. All the sanitary defects have been attended to.

"The Factory and Workshops Act, 1895," which came into force on January 1st, 1896, enacts in Section 27 (3) the new provision that "A place underground shall not be used as a bakehouse unless it is so "used at the commencement of this Act . . . ."

### COW-HOUSE AND SLAUGHTER-HOUSES.

The cow-house has been inspected several times, and the licence again renewed after enquiry) by the County Council. It is a portion of the ground floor of the tenements called Union Terrace; the remaining parts of the ground floor are used as stables. The cow-house is in the midst of an insanitary area that I reported details of to the Board last year.

I must also call your attention to the fact that tuberculosis is very frequent in cows kept in town cow-houses, and that the consumption of milk thus contaminated is especially liable to produce tuberculosis in children, men and animals.

The two slaughter-houses, one at the back of 29, Red Lion Street, and the other in the Yorkshire Grey Yard, have been inspected by me and the Meat Inspector, and the licences again renewed by the County Council.

Dairies and milkshops are under the supervision of the London County Council.

In accordance with the desire of the County Council, certificates of satisfactory disinfection after infectious disease occurring at dairies or milkshops are now forwarded by me to the occupiers, thus preventing unnecessary delay.

### FACTORIES AND WORKSHOPS.

There is a large and increasing number of factories and workshops in the District.

The Board has at present no register of them.

Mr. Bennett has inspected 29, and Mr. Freeman 71 of these during the year, and the sanitary defects have been remedied.

The Factory Inspectors supplied the Board with information concerning some of these.

In many cases, premises called a factory or workshop, really include *several tenement* factories or workshops.

### HOUSING OF THE WORKING CLASSES ACT, 1890.

EVELYN BUILDINGS.—I reported to the Sanitary Committee the insanitary state of these buildings and the defective lighting of some of the rooms, and the very defective lighting and ventilation of the passages. The ends of the passages were so dark that not only one could not see the numbers on the doors of the tenements, but in many of them not even the doors themselves, nor a person standing close beside one. After a visit by the Sanitary Committee a summons for a closing order under the above Act was taken. At the time of the Magistrate's visit much work had already been done, and most of the tenements were then unoccupied. The Magistrate refused to make an order, but adjourned the summons from time to time until the work required to be done was completed.

### CLOSING ORDERS UNDER THE PUBLIC HEALTH (LONDON) ACT, 1891.

Half Moon Court, 1, 2, 3, 4, 5

Verulam Street, 35, 36, 37.

---

Gray's Inn Passage, 1, 2

Richbell Place, 2, 3, 4, 5

Emerald Street, 6, 8, 12, and

Red Lion Street, 26,

were not closed till the early part of this year.



## HOUSES CLOSED AFTER SERVICE OF NOTICE OR VOLUNTARILY.

Dove Court, 1, 2, 3, 4, 5, 6, 7, 8. Nos. 1, 2, 3, and 4 have been demolished and rebuilt.

Boswell Court, 5.

Verulam Street, 9. Rebuilt.

Leather Lane, 31, 36. No. 36 demolished, and new premises being erected.

Glasshouse Yard, 21. Demolished, and new premises being erected.

Kingsgate Street, 16.

Baldwin's Gardens, opposite Evelyn Buildings. Houses demolished, and a factory is being erected.

## AREAS REPORTED UPON.

On March 23rd I presented a report to the Board on *an insanitary area between Leather Lane and the Gray's Inn Road.*

This was ordered to be printed, and each member had a copy, I shall therefore not again give the details, but only my general statement, which was as follows:—

I beg to report upon an insanitary area as shown in the accompanying plan, and the plan of the same on a larger scale which the surveyor has kindly prepared for me.

The area contains the houses of Portpool Lane, Nos. 9 to 23 inclusive, Half-Moon Court, Crown Court, Verulam Street, Nos. 15 to 21 inclusive, Baldwin's Place, Providence Place, Union Terrace, Union Buildings, Dove Court, and Leather Lane, Nos. 66 to 71 inclusive.

The above houses of Portpool Lane project beyond the line of frontage of the buildings east and west of them, and are overshadowed by the lofty premises of the brewery opposite.

No. 66, Leather Lane is in a line with the northern houses of Union Buildings, and No. 71 is in a line with the back areas of the southern houses of Dove Court.

Under the "Housing of the Working Classes Act, 1890," sec. 39, sub-sec. 1 (b):—

"Where it appears to the local authority that the closeness, narrowness, and bad arrangement or bad condition of any buildings, or the want

of light, air, ventilation, or proper conveniences, or any other sanitary defect in any buildings, is dangerous or prejudicial to the health of the inhabitants either of the said buildings or of the neighbouring buildings, and that the demolition, or the reconstruction and rearrangement, of the said buildings or of some of them is necessary to remedy the said evils, and the area comprising those buildings and the yards, outhouses, and appurtenances thereof, and the site thereof, is too small to be dealt with as an unhealthy area under part I. of this Act ;

“ The local authority shall pass a resolution to the above effect, and direct a scheme to be prepared for the improvement of the said area.”

In nearly all of the houses of this area the drainage is defective ; the drains are not ventilated, and in many of them there is no water supply, and other defects. For a large number of the houses and tenements there is not a sufficient w.c. accommodation. In some the w.c.'s are placed in an insanitary position.

All the houses of Half-Moon Court, Providence Place, and Dove Court have no ventilation under the ground floors, and no damp courses ; the basements of the houses of the area which have them are in a very dirty and insanitary state—some of them have not been cleansed for several years.

Some of the houses in Half-Moon Court, Union Terrace, and Union Buildings have no through ventilation.

Many of the rooms in the area are very badly lighted on account of the close proximity of other buildings ; some of them being almost in darkness, having only borrowed light.

Many of the houses have only small areas at the back, and some have no back area at all.

Many of the houses are dangerous on account of fissures in the walls, or the bulging of them in part, or the walls being out of the perpendicular from sinking of the foundations and other causes ; or on account of the broken and delapidated condition of the stairs, passages floors, walls, roofs, or chimneys.

Many of the tenements are dangerous to health on account of dampness of the walls.

In most, the dustbins are defective ; some have no proper dustbins at all. In many, refuse and dust is allowed to accumulate.

The paving of the back yards is generally defective, and the yard walls very filthy.



Many of the rain-water pipes and gutters are defective, and in some altogether absent.

In some the rain-water pipes are not disconnected from the drains.

In many of the tenements the rooms are dangerously overcrowded, and so badly ventilated that on entering one is almost stifled by the foul and poisonous and polluted air.

Many of the rooms and passages are in a foul, dirty, and filthy condition, and some have not been cleansed for years.

The ground floor of Union Terrace is a large cowshed, and at No. 70, Leather Lane, there is an underground bakehouse.

On account of our inspection and action with regard to Dove Court, I am glad to learn that these houses are soon to be demolished.

A small area, south of Crown Court and to the north of Union Terrace, is already cleared.

Many of these grave sanitary, structural, and architectural defects can only be remedied by rearrangement and reconstruction.

The only way of effecting a satisfactory and permanent improvement is to treat the whole as an insanitary area, and for this Board to pass a resolution and direct such a scheme to be prepared.

If any other course be adopted, at the most only a partial and patchwork amelioration will be the result. New buildings will be more or less unsatisfactorily intermingled with the old, and, like the proposed reconstruction of Dove Court, which has already been sanctioned by the Board, the new paths will be still more devious than the old, and factories or warehouses take the place of dwellings.

I am sorry I cannot give you the death-rate of this area, as this Board does not possess the requisite death returns, and it was only at the beginning of this year that I obtained the consent of the Sanitary Committee, confirmed by the Board, to have the mortality returns sent to us from the Registrars. I know, however, that in insanitary areas in which statistics have been taken, the death-rate invariably is very high in comparison with that of hygienic and sanitary areas.

The population of this area was, at the time of our enumeration, 965 persons, 225 being under 10 years old.

From the death returns for 1896, I find that there were 43 deaths of persons belonging to this area, 11 of whom died from phthisis, or a death-rate of 44·6, and a phthisis death-rate of 11·4 per 1,000

But taking into consideration the houses and rooms that were closed, the average population for the year was less than 900: taking it at 900, would give a very high death-rate of **47·8**, and a phthisis death-rate of **12·2** per 1,000.

The above report was considered by the Sanitary Committee and the Board, and it was decided that the sanitary defects should be dealt with under the "Public Health (London) Act, 1896."

Notices, accordingly, for every house in the area, were served for the abatement of the insanitary conditions that could be dealt with under that Act.

The proposed diversion of Dove Court, and erection of a warehouse on part of the site, was abandoned; and instead all the eight houses have been closed: and the four on the north side have been demolished and rebuilt.

Nos. 1, 2, 3, 4, and 5, Half Moon Court, and Nos. 15 and 17, Portpool Lane adjacent, have been closed and demolished, and a large warehouse is now being built on the site.

The rooms in Union Buildings in which light and ventilation were defective, are no longer used for human habitation.

Most of the back areas are small, and some have no back area at all.

The great majority of the houses are let in lodgings, and require constant supervision to maintain in a sanitary state. They are houses which it is desirable to have registered, as they require, at least, a thorough annual cleansing, and the rooms ought to be measured and a record kept of their cubic capacity, so that the landlord may know how many persons each room may at most accommodate, and make it easier for an inspector to know when a room is overcrowded.

#### GRAY'S INN PASSAGE AREA.

This area includes the houses on both sides of Gray's Inn Passage, and the triangular area formed by Gray's Inn Passage, Sandland Street and Red Lion Street; and was reported upon the beginning of December last.

For 4, Gray's Inn Passage, which is also 24, Sandland Street, a "closing order" under the Public Health (London) Act, 1891, was obtained the latter part of 1895; 3, Gray's Inn Passage, which is also



25, Sandland Street, was closed after service of notice that it was unfit for human habitation.

23, Sandland Street, the corner house, had been closed previously. On account of the narrowness of the Passage most of the front basement, ground and first floor rooms are dark.

Nos. 1, 5, 6 and 8, Gray's Inn Passage, 27, Sandland Street, and 17, Red Lion Street, have no back areas; and 2, 7 and 9, Gray's Inn Passage, 26, Sandland Street, and 16 and 18, Red Lion Street, have very small back areas.

The drainage of all the houses was defective. I gave details of the many other sanitary defects.

I was instructed to have notices served under the Public Health (London) Act.

Notices, accordingly, were served for the abatement of the nuisances at 16, 17 and 18, Red Lion Street; and in addition for all the other houses to make them fit for human habitation.

For Nos. 1 and 2, Gray's Inn Passage, a closing order was obtained in January this year.

### HOUSE TO HOUSE INSPECTION.

The Sanitary Inspectors and I have made house to house inspections of the following parts of the district, and in the great majority of the sanitary defects found have already been remedied.

Portpool Lane  
Verulam Street  
Providence Place  
Baldwin's Place  
Half Moon Court  
Dove Court  
Union Buildings and Terrace  
Evelyn Buildings  
Feather Lane Buildings  
Mitre Court  
Hat and Mitre Court  
White Horse Alley  
Pump Court  
Richbell Place

Emerald Street

Gray's Inn Passage

Elm Place

Bishop's Head Court.

Also the greater part of the following :—

Italian Colony (Eyre Street Hill, Back Hill, Summer Street,  
Eyre Place, and Eyre Court)

Benjamin Street

Glasshouse Yard

Fann Street

Hatton Wall

Peter's Lane

Fox Court

Laystall Street

Great Saffron Hill

Little Saffron Hill

Greville Street

And a large number of the model dwellings.

#### CUSTOMS AND INLAND REVENUE ACTS.

During the last four months of the year Certificates under the above Acts were asked for by the owners of the following premises :—

Griffin Buildings	...	...	...	26	tenements
Reid's Buildings	...	...	...	6	"
Portpool Buildings	...	...	...	19	"
16, Little James Street	...	...	...	8	"
Gray's Inn Buildings	...	...	...	149	"
Gray's Inn Residences...	...	...	...	25	"
Thanksgiving Buildings	...	...	...	84	"
Cranmer House	...	...	...	19	"
Victoria Dwellings	...	...	...	131	"
St. Alban's Buildings	...	...	...	180	"
Duncan Buildings	...	...	...	126	"
Leather Lane Buildings	...	...	...	48	"
Evelyn Buildings	...	...	...	46	"
11, 19 and 21, Portpool Lane...	...	...	...	22	"
6, 7, 8 and 9, Half Moon Court	...	...	...	28	"
Total	...	...	...	917	"



A large proportion of the above are one or two room tenements.

Griffin, Reid's and Portpool Buildings, and the flats at 16, Little James Street, were found to be in a good sanitary condition, and Certificates were soon given. At Gray's Inn Buildings very little was found that required to be attended to. In all the remaining premises there were sanitary defects, and in many cases much work had to be done before Certificates could be granted. At St. Alban's, Duncan, Leather Lane, and Evelyn Buildings, 11, 19 and 21, Portpool Lane, our requirements were not completed till this year.

I have not been able to give Certificates for 6, 7, 8 and 9, Half Moon Court.

### HOUSES LET IN LODGINGS.

Last year there were 35 houses registered as "Houses let in lodgings." The Board made an order that these were all to be inspected and reported upon every month.

Although this order was not strictly carried out, a great deal of sanitary improvements have been effected. Eight of them were "closed" last year, and four more about two months ago.

As the question of the registration of houses let in lodgings is such an important one, I will repeat what I said in my Report on the London County Council Report.

I will next deal with the recommendation that the Board "should proceed more largely to regulate houses let in lodgings."

I have given this question my most anxious and careful consideration.

You are aware that very few of the houses let in lodgings are at present registered.

By Section 94 of the "Public Health (London) Act, 1891," every Sanitary Authority is required to make and *enforce* bye-laws as to such houses.

As I have previously mentioned, three-fourths of the population live in tenements, therefore, in order to comply with the Act, a large additional number of houses require to be registered.

In 1885 this Board made regulations which were confirmed by the Local Government Board, and by Section 142 (2) (6) "Public Health (London) Act, 1891," these regulations have the force of bye-laws under

the Act. In several points these are below the standard of the bye-laws now generally adopted.

The advantages to be obtained by *enforcing* such registration and regulations are—the greater facility of ensuring and maintaining the proper cleanliness of the passages, areas, basements, and rooms of such houses, and their proper ventilation more effectually promoted; overcrowding is more easily detected and dealt with, and by their regular inspection other sanitary defects can be more promptly remedied, and additional precautions in case of any infectious disease secured.

In every district where bye-laws or regulations have been given a fair trial by having a sufficient staff to adequately enforce them, experience has shown that they are of great value in remedying the insanitary conditions just mentioned; most of which can only with difficulty be dealt with under the general provisions of the “Public Health Act.”

#### COMMON LODGING HOUSES.

18 Fulwood's Rents, Holborn ... ..	50 lodgers
20 Fulwood's Rents, „ ... ..	114 „
40 Eagle Street, „ ... ..	50 „
7 Castle Street, „ ... ..	57 „
12 Took's Court, „ ... ..	70 „
19 Fulwood's Rents „ ... ..	32 „
13 Took's Court, „ ... ..	61 „
4 Greville Street, „ ... ..	55 „
7 Little Saffron Hill, „ ... ..	12 „
65 Mount Pleasant, „ ... ..	9 „
39 Hatton Wall, „ ... ..	101 „
28 Red Lion Square, „ ... ..	70 „

These are under the supervision of the London County Council.

#### LONDON COUNTY COUNCIL INQUIRY.

This occupied much of the time of the Health Department.

The consideration of the report on this Inquiry was adjourned to the beginning of this year, see page 42.



## SICKNESS RETURNS.

Details of the cases of sickness under the care of the District Medical Officers are given in Table IV. at the end of this report. The total the year during was 1,909.

During the six years 1891 to 1896 the number of cases of sickness under the care of the District Medical Officers was the greater, the higher the death rate, thus :—

—				Corrected Death Rate.	Number of cases of Sickness under care of District Medical Officers.
1891	...	...	...	33·6	2,816
1892	...	...	...	29·7	2,462
1893	...	...	...	29·6	2,461
1894	...	...	...	22·2	1,817
1895	...	...	..	28·1	2,092
1896	...	...	...	24·3	1,909

The above may be stated as—

Other things being equal, the higher the death rate the greater the amount of sickness.

Thus by improving the sanitary condition of the District, not only will the death rate be diminished, but the health, happiness, well being and power of working, and ability to do better work will be increased, and there will be fewer paupers, and less number in Fever and other Hospitals.

## TRADE NUISANCES.

Joseph's rag business, Farringdon Road, at corner of Cross Street, has been closed.

The Board made a complaint under Section 21 of the Public Health (London) Act, 1891, which was part heard at the Clerkenwell Police Court, August 23rd, 1895, and was adjourned for three months, as defendant stated that he was building new premises out of the District. The case was again adjourned, and the premises were finally given up by the defendant about Midsummer last year.

Messrs. Johnson, Matthey & Co., Metal Refiners, Hatton Garden.

Additional condensers have been constructed in order to prevent the nuisance caused by the escape of noxious gases.

Messrs. Birkin & Son, tripe boilers and dressers, Leather Lane, have reconstructed their coppers and tanks, so that no nuisance may be caused.

Fried Fish Shops. Several nuisances complained of have been abated.

### SANITARY WORK.

The following is an abstract of nuisances abated and sanitary work accomplished during the year ending December 31st, 1896:—

- 107 Written complaints received attention.
- 5571 Premises inspected and re-inspected.
- 379 Preliminary notices have been served for the abatement of nuisances.
- 67 Statutory notices ditto.
- 397 Houses have been cleansed, repaired, lime-whited, &c.
- 49 Houses have had their overcrowding abated.
- 24 Underground rooms illegally and separately occupied have been closed.
- 322 Premises disinfected and cleansed after infectious disease.
- 263 New drains have been laid.
- 167 Drains repaired, ventilated, etc.
- 14 Cesspools filled up.
- 220 Water-closets reconstructed.
- 198 New water-closets constructed.
- 174 Water-closets cleansed and repaired.
- 38 Water-closets supplied with water.
- 18 Houses supplied with water for domestic purposes after water being cut off.
- 130 Yards re-paved and repaired.
- 198 Dustbins repaired and provided.
- 86 Accumulations of offensive refuse has been removed.
- 23 Bakehouses inspected and re-inspected
- 2 Slaughterhouses inspected and re-inspected at various times, and defects remedied
- 1 Cow-shed ditto.
- 1361 Notices have been received for the removal of dust.

There are 35 houses registered as "Houses let in lodgings."



Also a considerable amount of sanitary work has been done in the district (such as new buildings, etc.) without notices being served, but done under the supervision of the Inspectors.

### UN SOUND FOOD, ETC.

Details of diseased and decomposed meat "seized" during the year are given on pages 58 to 60.

In addition to this there were seized and destroyed as unfit for human food.

638 cases of currants that had been sunk in the Thames near London Bridge. They weighed in the sodden state about 10 tons.

20 ducks and 8 bushels of sprouts, 6 pieces of horseflesh, and 120 lbs. tomatoes.

### SMOKE INSPECTION.

The Smoke Inspector, Mr. Thomas Madden, reports that there are 59 furnaces and boilers on the register, and that he makes periodical inspection of them to see that they are in a proper working order, and consume their own smoke. There are 10 kinds of smoke consumers in the district which are as follows:—

Ventilated Doors	...	...	...	...	...	8
Martin's Patent	...	...	...	...	...	5
Dr. Annan's Patent	...	...	...	...	...	4
Nicholson's	"	...	...	...	...	4
Caddy's	"	Bars	...	...	...	2
Juke's	"	...	...	...	...	2
Galloway's	"	...	...	...	...	2
Hyde's	"	Revolving Bars	...	...	...	2
Watt's	"	...	...	...	...	1
Gregory and Veal's Patent	...	...	...	...	...	1
Total of Smoke Consumers						<hr/> 31 <hr/>

The number of furnaces and boilers without smoke consumers is 28. There has therefore been an increase of one smoke consumer (Gregory and Veal's) during the year.

Three notices were served during the time reported on, all of which have been complied with.

### THE MORTUARY.

There were 157 bodies brought into the mortuary from 1st January to December 31st, 1896.

Coroner's inquests were held on 51 of these.

The verdicts returned were :—

Natural causes	...	...	...	...	...	32
Accidental death	...	...	...	...	...	8
Suffocation	...	...	...	...	...	6
Suicide	...	...	...	...	...	4
Manslaughter	...	...	...	...	...	1

#### AGE OF BODIES.

Under Ten years of age, 60. Ten years and upwards, 97.

#### LEGAL PROCEEDINGS.

##### FOOD AND DRUGS AND MARGARINE ACTS.

Particulars of legal proceedings will be given by the Clerk to the Board in his report; and the Public Analyst gives you details of analyses under the Food and Drugs and Margarine Acts in his report.

#### REPORT OF THE ROYAL COMMISSION ON VACCINATION.

AFTER a prolonged and exhaustive inquiry of more than seven years' duration the final Report of the Royal Commission on Vaccination was completed last August (1896), just a century after Jenner's first vaccination.

The late Mr. Charles Bradlaugh, M.P., died at an early stage of the inquiry, and was replaced as a member of the Commission by Mr. Bright (late M.P.), in 1891.

Sir Wm. Savory and Dr. Bristowe died at a later period, and their places were not filled.

The final Report was signed by the following eleven of the remaining thirteen Commissioners :—

LORD HERSCHELL.

SIR JAMES PAGET.

SIR CHARLES DALRYMPLE, M.P.

SIR W. GUYER HUNTER, M.D.

SIR E. H. GALSWORTHY.

MR. J. S. DUGDALE, Q.C.

PROFESSOR MICHAEL FOSTER, M.D.

MR. JONATHAN HUTCHINSON, F.R.S., F.R.C.S.

JUDGE MEADOWS WHITE, Q.C.

MR. SAMUEL WHITBREAD; and

MR. JOHN A. BRIGHT.



The Commission was authorised and appointed to inquire and report as to—

(1) The effect of vaccination in reducing the prevalence of, and mortality from, small-pox.

(2) What means other than vaccination can be used for diminishing the prevalence of small-pox; and how far such means could be relied on in place of vaccination.

(3) The objections made to vaccination on the ground of injurious effects alleged to result therefrom, and the nature and extent of any injurious effects which do, in fact, so result.

(4) Whether any, and, if so, what means should be adopted for preventing or lessening the ill effects, if any, resulting from vaccination; and whether, and, if so, by what means vaccination, with an animal vaccine, should be further facilitated as a part of public vaccination.

(5) Whether any alterations should be made in the arrangement and proceedings for securing the performance of vaccination, and, in particular, in the provisions of the Vaccination Acts with respect to prosecutions for non-compliance with the Law.

The Commission held 136 meetings for the examination of witnesses, and examined 187 witnesses, many of whom were opposed to vaccination.

They caused investigations to be made of many of the important local outbreaks of small-pox which had occurred since 1890, including the one in Gloucester in 1895-6. Also a large number of cases of alleged injury from vaccination were the subject of careful investigation by competent observers.

The Commission thus sums up its investigations:

*A.—As to the effect of vaccination in reducing the prevalence of, and mortality from small-pox—*

1. That it diminishes the liability to be attacked by the disease.

2. That it modifies the character of the disease, and renders it (*a*) less fatal, and (*b*) of a milder or less severe type.

3. That the protection it affords against attacks of the disease is greatest during the years immediately succeeding the operation of vaccination. It is impossible to fix with precision the length of this period of highest protection. Though not in all cases the same, if a period is to be fixed, it might, we think, fairly be said to cover in general a period of nine or ten years.

4. That after the lapse of the period of highest protective potency, the efficacy of vaccination to protect against attack rapidly diminishes, but that it is still considerable in the next quinquennium, and possibly never altogether ceases.

5. That its power to modify the character of the disease is also greatest in the period in which its power to protect from attack is greatest, but that its power thus to modify the disease does not diminish as rapidly as its protective influence against attack, and its efficacy during the later periods of life to modify the disease is still very considerable.

6. That re-vaccination restores the protection which lapse of time has diminished, but the evidence shews that this protection again diminishes, and that to ensure the highest degree of protection which vaccination can give, the operation should be at intervals repeated.

7. That the beneficial effects of vaccination are most experienced by those in whose case it has been most thorough. We think it may fairly be concluded that where the vaccine matter is inserted in three or four places, it is more effectual than when introduced into one or two places only; and that if the vaccination marks are of an area of half a square inch, they indicate a better state of protection than if their area be at all considerably below this.

*B — As to the objections made to vaccination on the ground of injurious effects alleged to result therefrom, and the nature and extent of any injurious effects which do, in fact, so result.*

This is obviously a matter of great importance. Not only has the utility of vaccination been denied, but it has



been asserted that mischievous effects have been due to it, resulting in personal injury and in loss of life. If the practice has been productive of substantial benefit in limiting the ravages of small-pox, and mitigating the severity of the disease, the fact that vaccination may lead in certain cases to personal injury or death would of course not be a conclusive argument against its use. Danger of personal injury, and even of death, attends many of the most common incidents of life, but experience has shown the risk to be so small that it is every day disregarded. A railway journey, or a walk in the streets of any large town certainly involves such risks, but they are not deemed serious enough to induce anyone from refraining from that mode of travelling, or from frequenting the public streets. And to come within the region of therapeutics, it cannot be denied that a risk attaches in every case where chloroform is administered; it is nevertheless constantly resorted to, where the only object is to escape temporary pain. The admission, therefore, that some risk attaches to the operation of vaccination, an admission which must without hesitation be made, does not necessarily afford an argument of any cogency against the practice, if its consequences be on the whole beneficial and important; the risk may be so small that it is reasonable to disregard it. Everything depends, then, upon the extent and character of the risk.

The Commission thus sums up this portion of their inquiry (paragraph 434).

A careful examination of the facts which have been brought under our notice has enabled us to arrive at the conclusion that, although some of the dangers said to attend vaccination are undoubtedly real and not inconsiderable in gross amount, yet when considered in relation to the extent of vaccination work done they are insignificant. There is reason further to believe that they are diminishing under the better precautions of the present day, and with the addition of the further precautions which experience suggests will do so still more in the future.

*C.—As to whether any, and if so what means should be adopted for preventing or lessening the ill effects, if any, resulting from vaccination; and whether, and if so by what means vaccination with animal vaccine should be further facilitated as a part of public vaccination.*

With regard to this question the Commission report—

- (437) We put the use of calf-lymph in the forefront because, as we have said, this would afford an absolute security against the communication of syphilis. Though we believe the risk of such communication to be extremely small where humanized lymph is employed, we cannot but recognize the fact that however slight the risk the idea of encountering even such a risk is naturally regarded by a parent with abhorrence.
- (438) We have come to the conclusion that it would be well at all events to extend the age period, within which vaccination is obligatory, to six months from the date of birth, as it is in Scotland.
- (442) It is desirable that the Local Government Board should draw up clear and simple rules for guidance in the care of the vaccinated arm, and for the avoidance of any likely source of injury or irritation of that part. If this were done untoward incidents might, we think, be largely diminished.
- (443) If children were vaccinated and inspected at their own homes instead of being brought to a public station, we believe the risk of injury would be sensibly lessened.
- (448) We think that safety would be increased by preserving the lymph in tubes instead of on "dry points."
- (449) No instrument should be used for the operation which has not been boiled or otherwise sterilised for the purpose, and the simpler the instrument employed the better.
- Care should be exercised, too, not to place the insertions too near together, so as to injure the vitality of the tissues between them.



- (450) A second inspection in the third week after vaccination should be obligatory, and parents should have the right of summoning the public vaccinator in case of any unfavourable symptoms prior to the time fixed for inspection.

*D.—As to what means other than vaccination can be used for diminishing the prevalence of small-pox, and how far such means could be relied on in place of vaccination.*

The Commission thus sums up the first part of this inquiry :—

- (499) We think that a complete system of notification of the disease, accompanied by an immediate hospital isolation of the person attacked, together with a careful supervision or, if possible, isolation for sixteen days of those who had been in immediate contact with them, could not but be of very high value in diminishing the prevalence of small-pox. It would be necessary, however, to bear constantly in mind as two conditions of success, first, that no considerable number of small-pox patients should ever be kept together in a hospital situate in a populous neighbourhood; and, secondly, that the ambulance arrangement should be organised with scrupulous care. If these conditions were not fulfilled the effect might be to neutralise, or even do more than counteract the benefits otherwise flowing from a scheme of isolation.

Of course, also, thorough disinfection, and measure, calculated to promote the public health, the prevention of overcrowding in dwellings or on areas, cleanliness, the removal of definite insanitary conditions, &c.

The latter part of the question is thus answered :—

- (503) *We can see nothing then to warrant the conclusion that in this country vaccination might safely be abandoned, and replaced by a system of isolation.* If such a change were made in our system of dealing with small-pox, and that which had been substituted for vaccination proved ineffectual to prevent the spread of disease (it is not suggested that it could diminish its severity in those attacked), it is impossible to contemplate the consequences without dismay.

To avoid misunderstanding, it may be as well to repeat that we are very far from under-rating a system of isolation. We have already dwelt upon its importance. But what it can accomplish as an auxiliary to vaccination is one thing, whether it can be relied on in its stead is quite another thing.

As outbreaks of small-pox have not unfrequently had their origin in the introduction of the disease to common lodging-houses by tramps, further control over such houses and common shelters is recommended.

*E.—As to whether any alterations should be made in the arrangements and proceedings for securing the performance of vaccination, and, in particular, in those provisions of the Vaccination Acts with respect to prosecutions for non-compliance with the Law.*

(529) We have no hesitation in expressing the opinion that the Scotch system is in some respects, to which we have called attention, superior to that prevailing in the other parts of the United Kingdom. Its great merit lies in this, that the defaulters are sought out in their own homes by the official vaccinator, and then and there vaccinated by him, unless the parents object or circumstances render postponement desirable.

(531) We have already said that in our opinion the State is bound to see that a supply of calf lymph is within the reach of every vaccinator.

(533) In view of the great importance of re-vaccination, we think it should be in every way encouraged. If an adequate fee were allowed in every case of successful revaccination, by whatever medical man it was performed, we think there would probably be a large extension of the practice. We think steps should be taken to impress on parents the importance of having their children revaccinated not later than at the age of twelve years. We recommend further, that when small-pox shows signs of becoming epidemic, special



facilities should be afforded both for vaccination and re-vaccination.

It is in connection with the last part of their inquiry, namely—whether any alterations should be made in the Vaccination Acts with respect to prosecutions for non-compliance with the Law—that the greatest differences of opinion have been expressed.

The majority who sign the Report state—

(524) After careful consideration and much study of the subject, we have arrived at the conclusion that it would conduce to increase vaccination if a scheme could be devised which would preclude the attempt (so often a vain one) to compel those who are honestly opposed to the practice to submit their children to vaccination, and at the same time, leave the law to operate, as at present, to prevent children remaining unvaccinated owing to the neglect or indifference of the parent. When we speak of an honest opposition to the practice, we intend to confine our remarks to cases in which the objection is to the operation itself, and to exclude cases in which the objection arises merely from an indisposition to incur the trouble involved. We do not think such a scheme impossible.

(525) It must of course be a necessary condition of a scheme of this description that it should be such as would prevent an objection to the practice being alleged as an excuse to save the trouble connected with the vaccination of the child. We may give the following as examples of the methods which might be adopted. It might be provided that if a parent attended before the Local Authority and satisfied them that he entertained such an objection no proceeding should be taken against him. Or again a statutory declaration to that effect before anyone now authorized to take such declaration, or some other specified official or officials, might be made a bar to proceedings. We do not think it would be any real gain to parents, who had no conviction that the vaccination of their children was calculated to do mischief, to take either of these steps rather than submit them to the operation.

Two of the Commissioners, Sir W. Guyer Hunter and Mr. Jonathan Hutchinson, F.R.C.S., do not recommend relaxation of the law as is implied in the above paragraphs. They state :

We think that in all cases in which a parent or guardian refuses to allow vaccination the person so refusing should be summoned before a magistrate as at present, and that the only change made should be to permit the magistrate to accept a sworn deposition of conscientious objection, and to abstain from the infliction of a fine.

We are also of opinion that a second vaccination at the age of twelve ought to be made compulsory.

Four of the Commissioners, Dr. Collins and Messrs. Whitbread, Bright & Picton express their dissent from the proposal to retain in any form compulsory vaccination. They sign the following statement :

We cordially concur in the recommendation that conscientious objection to vaccination should be respected. The objection that mere negligence or unwillingness on the part of parents to take trouble might keep many children from being vaccinated would be largely, if not wholly, removed by the adoption of the Scotch system of offering vaccination at the home of the child, and by providing for medical treatment of any untoward results which may arise.

We therefore think that the modified form of compulsion recommended by our colleagues is unnecessary, and that in practice it could not be carried out.

The hostility which compulsion has evoked in the past toward the practice of vaccination is fully acknowledged in the Report. In our opinion, the retention of compulsion in any form will in the future cause irritation and hostility of the same kind.

The right of the parent on grounds of conscience to refuse vaccination for his child being conceded, and the offer of vaccination under improved conditions being made at



the home of the child, it would, in our opinion, be best to leave the parent free to accept or reject the offer.

Dr. Collins and Mr. Picton also make a lengthy statement of their grounds of dissent from the Report.

## OYSTER CULTURE IN RELATION TO DISEASE.

A interesting report on the above subject was published the latter part of the year in a Supplement to the Report of the Medical Officer to the Local Government Board for the year 1894-95.

Several doctors in England and America had reported cases of typhoid fever which appeared to be due to the consumption of oysters; and also Dr. Thorne, in his report on "Cholera in England in 1893," showed that the distribution of certain shell-fish from Cleethorpes and Grimsby had been concerned in the diffusion of scattered cases of cholera over a somewhat wide area in England.

These reports, receiving much prominence in the press, had a serious effect upon the oyster industry, and led to the above inquiry.

Dr. Bulstrode investigated the conditions under which oysters and certain other edible molluscs are cultivated and stored along the Coast of England and Wales; and Dr. Klein conducted the Bacteriological researches.

The Supplement also contains a copy of the Report by Professor Conn, on an outbreak of typhoid fever at Wesleyan University, Middletown, Connecticut, and extracts from the proceedings of the Academy of Medicine of Paris on the spread of the disease through the agency of oysters.

Dr. Thorne reports that in many places the oyster "layings" are exposed to the risk of sewage pollution, especially at Southend Cleethorpes, and the Medina River in the Isle of Wight; Penryn River, Cornwall; Brightlingsea, Essex; and Southwick, near Shoreham.

And what is still more important in many localities the means of storage (whether in beds, ponds, pits or otherwise) immediately antecedent to the distribution of oysters for human consumption, come under distinct condemnation, particularly at Southend; Wivenhoe; Grimsby

Fish Docks; Poole; Warsash, near Southampton Water; Southwick, and Emsworth, near Havant.

By way of contrast, Dr. Thorne turns with satisfaction to some of our most celebrated fisheries on the Coast of Essex and Kent, and mentions particularly the Rivers Crouch and Roach, and Whitstable, as now particularly free from the risk of sewage contamination.

Dr. Klein thus sums up the result of his experiments—

“It follows, therefore, from these experiments, that oysters from various localities and of diverse origin, which are kept for a while in sea water previously infected with culture of the typhoid bacillus, and which remain living and fresh, may and do harbour in their interior the living typhoid bacillus at intervals of 4, 9, 16, and even 18 days from commencement of experiment; and that these oysters on being opened show no abnormal condition, but appear fresh and quite unaltered. Further it appears that *the typhoid bacillus which was recovered from these oysters, as also from the tank water, retains unimpaired all the characters of the typical typhoid bacillus that was used for the experiment.*”

These experiments certainly show that oysters should not be allowed to be either laid or stored in places that are liable to sewage contamination.



TABLE OF DEATHS during the Year 1896 (for the 53 weeks ending June 2nd, 1897), in the Holborn (London, W.C.) District, classified according to DISEASES, AGES, AND LOCALITIES.

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TABLE II. (as required by the Local Government Board.)

TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1896, in the Holborn (London, W.C.) District; classified according to DISEASES, AGES, AND LOCALITIES.

NAMES OF LOCALITIES adopted for the purpose of these Statistics; public institutions being shewn as separate localities.	POPULATION AT ALL AGES.				Aged under 5 or over 5.	NEW CASES OF SICKNESS IN EACH LOCALITY, COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.													NUMBER OF SUCH CASES REMOVED FROM THEIR HOMES IN THE SEVERAL LOCALITIES FOR TREATMENT IN ISOLATION HOSPTL.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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TABLE IV.

Cases of Sickness under the care of the District Medical Officers during the 52 weeks ending December, 1896.

Names of the Medical Officers.			Small Pox.	Chicken Pox.	Measles.	Scarlatina.	Whooping Cough.	Diarrhoea.	Continued Fever. (Typhus and Typhoid).	Cholera.	Erysipelas.	Influenza.	Puerperal Fever.	Carbuncle.	Acute Pulmonary Inflammation.			Rheumatic Fever.	Ague.	Dysentery.	Diphtheria.	Delirium Tremens.	Insanity.	Syphilis.	Congenital Syphilis.	Lead Poison.	Other Diseases.	All Diseases.
															Bronchitis and Catarrh.	Pleurisy.	Pneumonia.											
Dr. Gabe	...	...	...	1	6	1	54	21	...	...	1	5	...	...	182	6	4	40	...	...	...	...	2	...	...	...	402	725
Mr. Taylor	...	...	...	...	29	2	3	14	...	...	4	...	...	...	174	3	5	65	...	...	4	...	8	...	...	...	375	686
Mr. Gahagan	...	...	...	...	4	6	9	13	...	...	1	23	...	...	98	8	2	24	1	...	...	1	3	...	...	...	305	498
Total	...	...	...	1	39	9	66	48	...	...	6	28	...	...	454	17	11	129	1	...	4	1	13	...	...	...	1082	1909
Corresponding weeks, 1895.	4	...	...	...	56	6	92	79	2	...	4	69	...	...	567	20	21	142	...	...	...	1	8	4	...	...	1017	2092



TABLE V.

1895. MONTHS.	Mean Reading of the Barometer.	TEMPERATURE OF THE AIR.								RAIN.	
		Highest by Day.	Lowest by Night.	Range in Month.	Mean of all Highest.	Mean of all Lowest.	Mean Daily Range.	Mean for the Month.	Departure from Average of 125 Years, 1771—1895.	Number of Days it Fell.	Amount Collected.
January ...	in. 30·173	52·9	28·3	24·6	44·4	36·2	8·2	40·5	+ 3·9	9	in. 0·64
February ...	30·152	56·2	24·3	31·9	45·5	35·2	10·3	40·3	+ 1·6	6	0·35
March ...	29·641	67·7	32·1	35·6	53·1	39·7	13·4	45·7	+ 4·6	22	3·00
April ...	29·976	69·0	33·6	35·4	57·4	41·1	16·3	48·6	+ 2·5	10	0·56
May ...	30·046	78·4	35·8	42·6	66·1	44·5	21·6	54·8	+ 2·2	5	0·27
June ...	29·766	86·7	39·8	46·9	75·3	53·5	21·8	63·4	+ 5·1	14	1·94
July ...	29·843	91·1	47·3	43·8	77·6	54·8	22·8	65·2	+ 3·6	7	1·07
August ...	29·848	76·2	45·7	30·5	69·0	51·7	17·3	59·2	— 1·7	15	2·06
September ...	29·592	71·5	40·3	31·2	64·5	51·2	13·3	56·7	+ 0·1	23	5·54
October ...	29·557	63·4	31·5	31·9	53·5	40·7	12·8	46·5	— 2·9	19	2·80
November ...	29·958	50·9	26·5	24·4	45·6	35·8	9·8	40·6	— 1·9	9	1·19
December ...	29·611	51·5	26·9	24·6	43·8	35·6	8·2	40·2	+ 1·2	22	3·00
Means ...	29·847	68·0	34·3	33·6	58·0	43·3	14·7	50·1	+ 1·6	161 sum.	22·42 sum.