

[Report of the Medical Officer of Health for Stoke Newington, The Parish of St. Mary].

Contributors

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THE
Parish of St. Mary, Stoke Newington.

REPORT
OF THE
Medical Officer of Health and
Public Analyst,
FOR THE
YEAR 1897.

BY
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TABLE OF CONTENTS.

VITAL STATISTICS—	Page
Population of the Parish and of each of the two Divisions ..	8-9
Number of people to the acre	8
Births and Birth-rate	9
Mortality, Death-rates and causes of Mortality,—with notes thereon	9-21
The Mortuary	21
Inquests held during the year	21
INFECTIOUS DISEASES AND THE MEASURES TAKEN TO PREVENT THEIR SPREAD—	
The Infectious Sickness Returns for the Year	22-25
Disinfection	26
Hospital Isolation	26-27
Return Cases	27
Summer Diarrhœa	27-28
Drinking Water Cisterns and Diarrhœa	29
Typhoid Fever	29
Measles and Whooping Cough	32-34
Small-Pox	34-36
Diphtheria	37-39
Scarlet Fever	39
How Disease is spread	39-40
NOTES UPON SANITARY WORK PERFORMED DURING THE YEAR	40-41
FOOD AND DRUGS	41-43
METEOROLOGY OF THE YEAR	44-45
THE PARISH OF ST. MARY, STOKE NEWINGTON—(APPENDIX)	46-48

TABLE OF CONTENTS

1	First Introduction—
2	Population of the Parish and of each of the two Hospitals
3	Number of burials in the year
4	Births and Deaths
5	Marriages, Deaths, and Burials of Children—
6	Deaths
7	Deaths
8	Deaths
9	Deaths
10	Deaths
11	Deaths
12	Deaths
13	Deaths
14	Deaths
15	Deaths
16	Deaths
17	Deaths
18	Deaths
19	Deaths
20	Deaths
21	Deaths
22	Deaths
23	Deaths
24	Deaths
25	Deaths
26	Deaths
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32	Deaths
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42	Deaths
43	Deaths
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100	Deaths



Parish of St. Mary, Stoke Newington.

REPORT OF MEDICAL OFFICER.

VESTRY OFFICES,

CHURCH STREET,

STOKE NEWINGTON, N.,

February, 1898.

To the Members of the Vestry of the Parish of St. Mary, Stoke Newington.

GENTLEMEN,

Although the general death-rate for *England and Wales* for the year 1897 was slightly in excess of that for 1896, it was 1·2 per 1,000 below the mean rate for the preceding 10 years. The deaths of infants under one year of age were also above the number registered in 1896, and the excess was mainly due to the circumstance that the relatively higher summer temperature of last year gave rise to an increased mortality from Summer Diarrhœa. On the other hand, the death-rates from Measles, Whooping Cough, Scarlet Fever, Diphtheria, and Typhoid Fever were all lower in 1897 than in 1896.

From a public health standpoint the year 1897 presented one great feature of surpassing importance. In the third quarter of the year the general mortality in England and Wales rose markedly above the average of that for a considerable term of years, and the excess

was mainly due to deaths which are recognised, on all hands, to be, in a measure, preventable. The excessive mortality was furnished entirely by Summer Diarrhoea, Measles and Whooping Cough, among the infant population; it was practically restricted to the children of the poorer classes, and was largely due to parental ignorance and neglect of the elementary laws of health and disease prevention. When our system of education also concerns itself with teaching every scholar the vital matters which are of the first importance to the individual and the community—even to the sacrifice of some of the purely ornamental matter that is now taught, the sooner will every parent in the land possess the knowledge that will help them to put into operation the essential laws of health and the rudimentary principles of infant rearing; and then there will come a great reduction in the infantile mortality. The increase due to Diphtheria was also a factor in promoting the excessive death-rate for the quarter referred to, and I am convinced that some of the increased mortality from this disease may be attributed to the manner in which children, of the most susceptible ages for the infection, are crowded together into our elementary schools, without any sufficient attempt—as by the systematic medical inspection of scholars—to ensure that they are free from infection. It is admittedly a difficult matter to put into operation, but the sort of medical inspection required may be—from my own experience—very rapidly performed and with very little hindrance to school work, and it is already being practiced on a large scale in America, with the most promising results.

The outbreaks of Typhoid Fever at Maidstone and Lynn have also been noteworthy incidents of the year. This subject is referred to in the body of the Report.

The vital returns of the *Parish of Stoke Newington* for 1897 show an increase in the general death-rate. It is satisfactory to find that this increase is almost entirely due to non-communicable disease among parishioners who have reached the later years of life. The deaths among those of 60 years and upwards furnished, for instance, 33 per cent. of the total deaths during 1897, whereas in 1896 they



formed 28 per cent. On the other hand, the year under review compares favourably with that preceding it, in the following very important particulars :—There was a great reduction in the number of cases of infectious diseases notified, and the deaths from infectious diseases and the rate of infantile mortality were also lower than the corresponding rates for the year 1896. The returns are, on the whole, satisfactory, and serve to maintain the Parish in the same high position (as to healthiness), when compared with the other London parishes, that it has held for several years.

I am, Gentlemen,

Your obedient servant,

HENRY KENWOOD.

POPULATION.

The population of the Parish in 1881 was 22,781, and in 1891 it had grown to 30,936. According to the result of the Poll-census of the Metropolis, which was taken at the end of the first quarter of 1896 for the purpose of the Equalisation of Rates Act, the population of the Parish was then 33,485. The population, calculated logarithmically, from the increase between the years 1891 and 1896, amounts to 34,136 for the middle of the year 1897.

The number of occupied houses in the Parish in the middle of 1897 amounted to about 5,600, and the average number of occupants to each house in the Parish is six; allowing one individual for each of the 115 empty houses (on account of care-takers and their families) the population, estimated in this way, would be about 33,715. This latter computation is likely to be the more correct, and it is, therefore, the one selected in this Report for the purpose of drawing out the mortality-rates of the Parish.

The estimated *population for each of the Sub-Districts* is as follows :—

In the Northern Division (North of Church Street) it is approximately 12,500, and in the Southern Division 21,215.

I believe this estimation, which I have taken some trouble to arrive at, is sufficiently close to serve as a just basis for computing the death-rates of the two Divisions.

The natural increase of population by excess of births over deaths during the year amounted to 362, as against 410 in the preceding year, and 366 in 1895.

Number of People to the acre.—The area of the Parish amounts to 639 acres, and this, divided among the parishioners, represents 52·7 people to the acre, as against 59·8 in London generally.

The area of the Northern Division amounts to 440 acres, and the estimate is only 28·4 people to the acre.

The area of the Southern Division amounts to 199 acres, and the estimate is 106·6 people to the acre.

It will be noted that owing to the large open spaces in the Northern Division, the number of people to the acre is only about one-fourth that of the Southern Division.

Births—Birth-rate.—During the year 1897 there were 835 births registered in the Parish; of these 401 were males, and 434 were females. The birth-rate per 1,000 per annum was therefore 24·7, as against 24·6 for the preceding year, and 23·7 for 1895. The rate for England and Wales was 29·7, that for London generally was 30·2, and that for the 33 great towns was 30·7.

The part which the rather low birth-rate plays in favouring the low general death-rate of the Parish is duly accounted for in arriving at the *corrected death-rate*.

MORTALITY.

General Mortality.—There were 404 deaths registered of parishioners who were resident in the Parish, and 69 of parishioners who died in Public Institutions without the Parish, making a total of 473 deaths of parishioners. Of these deaths 258 were of females, and 215 were of males.

The recorded general death-rate is therefore 14·0, as against 12·46 in the preceding year, and 13·1 in 1895. This ordinary death-rate, however, cannot be taken as a true index of the healthiness of the Parish, nor can it be justly compared with the rates of other Sanitary areas, unless some allowance is made for the relative proportions of males and females at different ages in the districts compared.

Death-rates vary very much in different districts according to the natures of the populations of these districts; for instance, in a district containing a large number of very young or very old people, the rate would be considerably higher than in a district consisting

almost entirely of people of middle age. Thus, in the country as a whole, taking the mean annual death-rate of persons of all ages and both sexes at 21.4 per 1,000, that of children under five is 63.1 per 1,000 of such persons, of those between 25 and 35 it is 8.9 per 1,000 of such persons, and of those over 75 it is 161.6 per 1,000 of such persons. So with regard to sex the rates per 1,000 are : —

			Males.		Females.
Under 5 years of age	...	...	68.1	...	58.1
10 to 15	"	...	3.7	...	3.7
25 „ 35	"	...	9.3	...	8.6
35 „ 45	"	...	13.7	...	11.6
45 „ 55	"	...	20.0	...	15.6
Over 75	"	...	169.1	...	155.8

It will thus be seen that the death-rates of different districts cannot be compared with one another or with the country at large, unless they are reduced to a common standard. There is, therefore, calculated by the Registrar General from the Government Census returns, a corrective factor for each district in the County of London, according to the sex and age distribution of the population of that district; the multiplication of the recorded death-rate of the district by this factor gives the death-rate which would obtain in that district if the sex and age distribution of the population of the district were in the same proportions as it is in the country as a whole; thus eliminating the accidental differences due to sex and age and affording a fair means of comparison, and a truer test of the healthiness of the district. The death-rate so ascertained is known as *the corrected death-rate*.

The so-called “factor for correction” for the Parish of Stoke Newington is 1.07283, and *the death-rate corrected for age and sex distribution is 15.0 per 1,000 per annum*.

In arriving at this corrected death-rate, the deaths (29) of non-parishioners who have died in Public Institutions within the Parish have, of course, been excluded.

The corrected death-rate of the Parish for the year in question is, therefore, above that of the preceding year (1896), when it was 13·3 In 1895 it was 13·7.

The rate is a very satisfactory one, even for Stoke Newington, when it is borne in mind that over practically the whole of England and Wales the death-rates for the year 1897 are higher than those of the preceding year.

What the preventive measures against disease have achieved during the past 50 years, despite the considerable growth of crowding upon area and the increased strain of the struggle for existence, is shown from a consideration of the difference in the average number of years lived by each individual. From 1838 to 1854 the average life-time was 39·9 years for males and 41·9 years for females (Farr); from 1871-80, it was 41·4 years for males and 44·6 for females (Ogle); and from 1881-90 it was 43·7 years for males and 47·2 for females (Tatham).

District Mortality—The deaths among parishioners of the Northern Division of the Parish numbered 117, and furnished a recorded death-rate of 9·3 per 1,000 per annum.

The deaths among parishioners of the Southern Division of the Parish numbered 356, and furnished a rate of 16·7 per 1,000 per annum.

The higher rate in the Southern Division is mainly due to the three following circumstances :—(1) There is more crowding upon area in this Division, (2) the birth-rate is higher, and (3) the large bulk of the poorer class parishioners are housed in this Division.

Infantile Mortality—There were 102 deaths registered of infants under 1 year of age, as against 835 births; the proportion which the deaths under 1 year of age bear to the 1,000 births is, therefore, 122·1—as against 125 in the preceding year.

The corresponding rate in England and Wales was 156, that in London generally 158, and that in the 33 Great Towns 177.

The Amended Infant Life Protection Bill became operative on the 1st of January, 1898. Valuable provisions have been introduced to ensure the notification to the Local Authority of children let out to be nursed, the periodical visitation of their homes, the respectability and *bona fides* of their nurses, and the sanitary state of their surroundings ; but it is regrettable that the clause allowing a woman to receive *one child* for hire and reward without coming under the Act is still partially retained, and that the value of the Bill should thus be materially curtailed. Those women who receive children—mostly illegitimate—and adopt them, one child at a time, for a sum down, do not come under the Act, providing they receive payment exceeding £20. Thus they are not affected by the provisions of the Act if they receive £20 and 1s. That is too small a price for the disposal of an illegitimate child to ensure that some women will not continue, by accepting one child at a time, for this remuneration, to rid themselves of their charges by ill-feeding, exposure and neglect, and thus to make a good living while snapping their fingers at the Authorities.

The deaths under 1 year of age form 21·5 per cent. of the total deaths at all ages, whereas for the preceding year they formed 24·7 per cent. ; the rate for England and Wales was 25·7 per cent. ; for London generally 26·2 per cent. ; and for the 33 Great Towns 28·4 per cent.

Senile Mortality.—Of the 473 deaths 129 were of persons over 65 years of age. The proportion of deaths occurring among those of over 65 years of age to the total deaths is therefore about 27 per cent. There were 100 deaths of persons over 70 years of age, and 34 of persons over 80. These figures denote an exceptionally high proportion of senile mortality.

The Causes of Death.—These are fully set forth in Table A, in which it will be noted that the deaths are also apportioned to different age-periods. Table A 1 is supplementary to Table A, and sets forth the causes of death in each of the two Divisions of the Parish a little more fully. Table A 2 shows the deaths during each of the four quarters of the year.

TABLE A 1.

Showing the Causes of Death among parishioners in the Northern and Southern Divisions of the Parish, respectively, during 1897.

CAUSES OF DEATH.	Northern Division.	Southern Division.
Scarlet Fever	..	1
Diphtheria	3	16
Membranous Croup	..	2
Typhoid Fever	3	7
Puerperal Fever	..	1
Measles	1	7
Whooping Cough	2	11
Diarrhoea and Dysentery	1	18
Rheumatic Fever	2	2
Erysipelas	..	1
Influenza.....	..	4
Phthisis (Consumption)	10	29
Other Tubercular Diseases.....	2	16
Diseases of Respiratory Organs other than Phthisis	12	50
Diseases of Circulatory Organs	15	40
Diseases of Digestive Organs.....	8	16
Diseases of Urinary Organs	6	11
Diseases of Reproductive Organs	..	3
Diseases of Nervous System (including Apoplexy and Convulsions).....	18	35
Cancer	12	16
Rheumatism	1	3
Premature Birth	2	14
Senility	9	22
Wasting and Debility and Developmental defects	5	15
Accidents (including Overlying)	4	8
Suicides	..	2
Pyæmia and Septicæmia (Blood-poisoning) ..	..	2
Syphilis	..	2
Alcoholism	..	2
Gout.....	1	..
TOTALS.....	117	356
	473	

TABLE A 2.

Showing the Causes of Death among Parishioners in Stoke Newington during each of the four quarters of the year 1897.

CAUSES OF DEATH.	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	TOTALS.	1896
Scarlet Fever.....	..	..	..	1	1	7
Diphtheria	5	5	4	5	19	18
Membranous Croup	..	..	..	2	2	3
Typhoid Fever	..	5	2	3	10	5
Puerperal Fever.....	..	..	1	..	1	3
Measles	3	1	2	2	8	5
Whooping Cough	3	4	3	3	13	16
Diarrhœa and Dysentery ..	..	1	18	..	19	24
Rheumatic Fever	..	1	1	2	4	3
Erysipelas	..	..	..	1	1	1
Influenza	1	3	..	..	4	4
Phthisis (Consumption)	9	7	10	13	39	20
Other Tubercular Diseases..	3	5	4	6	18	15
Diseases of Respiratory Organs other than Phthisis	18	17	9	18	62	62
Diseases of Circulatory Organs	14	15	10	16	55	45
Diseases of Digestive Organs.	4	6	6	8	24	20
Diseases of Urinary Organs .	4	2	9	2	17	18
Diseases of Reproductive Organs	1	1	..	1	3	4
Diseases of Nervous System (including Apoplexy and Convulsions)	11	10	17	15	53	40
Cancer	4	8	10	6	28	20
Rheumatism	1	1	1	1	4	1
Premature Birth	2	2	6	6	16	25
Senility	7	6	7	11	31	23
Wasting and Debility and Developmental Defects ..	4	3	8	5	20	21
Accidents (including Over- lying)	3	2	3	4	12	9
Suicides	..	1	1	..	2	3
Pyæmia and Septicæmia (Blood-poisoning)	..	1	1	..	2	2
Syphilis	..	1	..	1	2	1
Alcoholism	..	1	..	1	2	0
Gout.....	1	..	..	..	1	..
TOTALS.....	98	109	133	133	473	418

It will be seen from Table A 1 that there is a disproportionately high number of deaths in the Southern Division, after making allowance for the difference in the populations of the two Divisions. This is doubtless largely due to the fact that the birth-rate for the Southern Division is, and has been for years, considerably in excess of that for the Northern Division—for many of the diseases which are most fatal in the Southern Division are such as mainly give rise to mortality in early life. The Southern Division will, for other reasons, continue to furnish a disproportionately high mortality as compared with the Northern, for its population includes more of the poorer classes, and is much more dense both as regards the number of houses to a given area and the number of occupants to each dwelling.

The loose manner in which the cause of death is sometimes registered makes it a difficult matter to compile tables such as the above with the absolute accuracy which is so desirable.*

For instance, in three cases during the year the cause of death was registered as from two distinct diseases, apparently co-existent, *i.e.*, "Scarlet Fever and Diphtheria," "Acute Rheumatism and Enteric Fever," "Pertussis and Diarrhœa." Doubtless the symptoms of one complaint were predominant just before death, and if this circumstance were indicated it would be far easier for those who have to classify these returns to decide which disease could be most justly credited with the death, for the purposes of such classification. Again, during the year seven deaths were ascribed solely to "old age," when the ages at death fell between 71 and 77 years. Deaths between 70 and 80 are mainly due to some defined malady, and surely some condition existed to which these deaths could be ascribed apart from a gradual decay of nature. "Convulsions," "Exhaustion," "Hypertrophy of Heart" are all further instances of loose certification. Each of these conditions is a *symptom* of some disease, the nature of which no indication was given. One infant was certified as dying from "Dentition" at the age of 1 month.

It will be noted that in Table A 2 a comparison of the number of deaths from different causes in the years 1897 and 1896 is shown,

and that in 1897 a noteworthy increase in the mortality from the following conditions is manifest:—Phtbisis (Consumption), Diseases of the Circulatory Organs and Nervous System, Cancer, Old Age, Typhoid Fever, Measles, and Rheumatism. On the other hand, there was a reduction in the mortality from Scarlet Fever, Premature Birth, Diarrhœa, Whooping Cough, and Puerperal Fever.

Much of the increase in Cancer mortality of late years is doubtless due to the improvement in diagnosis which has taken place; the fact that the mean duration of life has been extended of recent years would further account for a very small part of such increase—for if more people now live to the higher age periods, more will experience those degenerative changes which set in as age advances, one of which is cancer.

Deaths from Zymotic Diseases (including Influenza) in the
Year 1897.

	Scarlet Fever.	Diphtheria.	Membranous Croup.	Typhoid Fever.	Puerperal Fever.	Measles.	Whooping Cough.	Diarrhœa and Dysentery.	Influenza.	Erysipelas.	TOTAL.	Rate to every 1,000 persons.
First Quarter	..	5	..	..	..	3	3	..	1	..	12	0.35
Second „	..	5	..	5	..	1	4	1	3	..	19	0.56
Third „	..	4	..	2	1	2	3	18	..	..	30	0.88
Fourth „	1	5	2	3	..	2	3	..	..	1	16	0.47
	1	19	2	10	1	8	13	19	4	1	77	2.28
1896	7	18	3	5	3	5	16	24	4	0	85	2.52

Zymotic Mortality.—Included in the Zymotic mortality are the deaths from the seven principal Zymotic Diseases, viz, Small-pox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, “Fever” (including Typhoid Fever, Typhus Fever, and Simple Continued

Fever), and Diarrhœa. In Table A 3 the Zymotic rate, and the rates for each of the diseases comprising it, are given, along with the corresponding rates of England and Wales, the 33 Great Towns, and London generally. The comparison with the rates of London generally is very favourable to Stoke Newington, in almost every instance.

TABLE A 3.

A comparison of the Rates of Stoke Newington with those of England and Wales, the 33 Great Towns, and London generally, for the Year 1897.

	General Death-rate.	Diseases of Lungs (except Phthisis).	Phthisis-rate.	Rate of Infantile Morality.		Birth-rate.	Zymotic Death-rate.
				A*	B†		
England and Wales	17·4	..	..	156	25·7%	29·7	2·15
The 33 Great Towns	19·1	..	..	177	28·4%	30·7	2·87
London generally	18·2	..	..	158	26·2%	30·2	2·58
Stoke Newington	14·0	1·8	1·1	122·1	21·5%	24·7	2·0

	Small-pox.	Measles.	Scarlet Fever.	Whooping Cough.	Typhoid Fever.	Diphtheria.	Diarrhœa and Dysentery.
England and Wales	0·000	0·40	0·14	0·35	0·15	0·24	0·86
The 33 Great Towns	0·001	0·55	0·17	0·40	0·17	0·31	1·20
London generally	0·003	0·43	0·17	0·41	0·13	0·50	0·91
Stoke Newington	0·000	0·23	0·02	0·38	0·29	0·56	0·56

* The number of deaths under 1 year of age to every 1,000 births.

† The percentage which the number of deaths under 1 year of age form to the total number of deaths.

The General Zymotic Death-rate for the Parish was 2·0 per 1,000 per annum, as against 2·3 in the preceding year. The corresponding rate for England and Wales was 2·15, that for London generally was 2·58, and that for the 33 Great Towns was 2·87.

Deaths in Public Institutions within the District.—St. Anne's Home, Manor Road, 15 deaths; Northumberland House Asylum, Green Lanes, 12 deaths; the Invalid Asylum, 187, High Street, 2 deaths. Not one of these 29 deaths was of a parishioner; they were all of persons who came to Stoke Newington from other parts; they have not, therefore, been reckoned in estimating the death-rate of the Parish.

The Causes of Infantile Mortality are set forth in Table A 4. Most of these causes are greatly influenced by wholesome surroundings and the proper observance of the laws of health as they apply to infants. The lack of intelligent parental management of the infant in the matter of feeding and nursing, which is responsible for so much infant mortality, is seen reflected in the number of deaths from Wasting and Debility and from Diarrhœa.

TABLE A 4.
The causes of Infantile Mortality.

	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	TOTALS.
Wasting, Developmental Diseases, and Debility	4	3	9	4	20
Premature Birth and insufficient vitality	3	2	6	7	18
Diarrhœa	..	..	17	..	17
Diseases of Lungs ..	3	1	2	3	9
Whooping Cough....	2	4	2	1	9
Convulsions	2	1	2	2	7
Gastric Catarrh and Enteritis	..	..	2	..	2
Tuberculosis	2	1	..	2	5
Measles	3	..	1	..	4
Overlying	1	1	2	1	5
Other causes.....	1	1	1	3	6
Totals.....	21	14	44	23	102

TABLE A 5.

A comparison of the Health Records of the several
Metropolitan Sanitary Areas.

Sanitary Area.	Crude or Recorded Death-rate.	Factor for correction for age and sex distribution.	Corrected Death-rate.	Rate of In- fantile Mor- tality.	Infectious Sickness- rate from Notifiable Diseases.
London	17.7	1.0656	13.8	158	10.2
Paddington	14.4	1.08070	15.5	149	8.0
Kensington	15.7	1.10184	17.2	166	8.5
Hammersmith	16.7	1.06094	17.7	171	6.6
Fulham	17.0	1.04817	17.8	162	11.3
Chelsea.....	17.8	1.06685	18.9	161	9.9
St. George, Hanover Square ..	13.2	1.10438	14.5	133	4.9
Westminster	18.9	1.13046	21.3	166	7.4
St. James, Westminster	17.5	1.11597	19.5	166	9.9
Marylebone	18.3	1.07464	19.6	136	6.9
Hampstead	11.8	1.15153	13.6	127	5.3
St. Pancras.....	18.7	1.07043	20.0	168	8.8
Islington	15.8	1.03983	16.9	136	8.6
Stoke Newington	14.0	1.07283	15.0	122	6.7
Hackney	16.5	1.04645	17.2	147	12.3
St. Giles	18.5	1.10886	20.5	146	10.5
St. Martins-in-the-Fields.....	16.3	1.21665	19.8	178	6.4
Strand	21.3	1.17919	25.1	161	9.1
Holborn	23.1	1.03683	23.9	184	11.5
Clerkenwell	22.1	1.10822	24.4	184	13.3
St. Luke	25.7	1.08070	27.7	149	13.4
City of London	21.3	1.15015	24.4	130	7.0
Shoreditch	21.6	1.03794	22.4	183	11.0
Bethnal Green	21.4	1.04133	22.2	171	13.8
Whitechapel	20.4	1.07948	22.0	148	12.3
St. George in the East.....	26.4	1.03907	27.4	197	11.8
Limehouse	25.1	1.08869	27.3	193	13.1
Mile End.....	18.7	1.03068	19.2	149	13.4
Poplar	19.8	1.03569	20.5	170	13.1
St. Saviour, Southwark	24.6	1.04702	25.7	195	11.2
St. George, Southwark	23.7	1.10375	26.1	189	11.7
Newington	21.2	1.04531	22.1	177	11.1
St. Olave, Southwark	22.1	1.03963	22.9	154	12.1
Bermondsey	22.1	1.05801	23.3	190	11.0
Rotherhithe	18.9	1.03569	19.5	174	11.7
Lambeth	17.5	1.04989	18.3	151	9.0
Battersea	16.2	1.07584	17.4	162	15.0
Wandsworth	13.4	1.06804	14.3	135	10.0
Camberwell	16.6	1.05801	17.5	159	11.1
Greenwich	17.2	1.02791	17.6	157	10.2
Lewisham	12.8	1.06864	13.6	129	7.5
Woolwich	17.7	1.12713	19.9	157	10.4
Lee	13.2	1.03376	14.3	135	10.0
Plumstead	13.7	1.03458	14.1	117	9.6

THE MORTUARY.

During the year 33 bodies were deposited in the Public Mortuary; 13 of these were females and 20 were males. Post-mortem examinations were performed upon 15 of these cases, and inquests upon 29.

SICK NURSING.

The importance of good nursing in the treatment of disease can scarcely be exaggerated, and a very great deal has been done in the direction of affording nursing facilities for the sick poor in most large centres of population during the past few years.

The nurse (Miss Norton), whose services were secured by the Parish in commemoration of the Jubilee of Her Majesty, has done good work, although her services have not been in such great demand as was anticipated.

INQUESTS.

The following inquests upon deaths of parishioners were held during the year:—

6 deaths from accident—including 2 from burns and 3 from		“overlying.”
7	„	„ heart disease, and weakness of heart.
5	„	„ convulsions (2 from teething, and one each from cerebral softening, meningitis and bronchitis.)
3	„	„ apoplexy.
2	„	„ tuberculosis.
2	„	„ suicide (poisoning and cut-throat).
1	„	„ epilepsy.
1	„	„ spasm of glottis.
1	„	„ pneumonia.
1	„	„ phthisis.
1	„	„ senile decay.
1	„	„ diabetic coma.
1	„	„ peritonitis.
1	„	„ as the result of a surgical operation.
1	„	„ poisoning (accidental).
Total	34	

(B.) Table of Population, Births, and of New Cases of Infectious Sickness, coming to the knowledge of the Medical Officer of Health, during the year 1897, in the Parish of St. Mary, Stoke Newington, classified according to Diseases, Ages, and Localities.

NAMES OF LOCALITIES.	POPULATION AT ALL AGES.		Registered Births.	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 Hospitals.					
	Census 1891.	Estimated to middle of 1897.			Small-pox.	Scarlatina.	Diphtheria.	Membranous Croup.	FEVER.		Erysipelas.	Totals.	Small-pox.	Scarlatina.	Diphtheria.	FEVERS.		Totals.
									Enteric or Typhoid.	Puerperal.						Enteric or Typhoid.	Erysipelas.	
(1) Northern Division ..	33,485	33,715	835	Under 5	..	8	4	..	..	..	..	12	..	1	..	..	..	1
5 upwds.				..	29	12	..	11	1	4	57	..	12	2	3	..	17	
(2) Southern Division ..				Under 5	..	21	17	1	..	..	..	39	..	9	9	..	..	18
5 upwds.				2	50	20	..	27	2	18	119	2	30	7	9	..	48	
TOTALS	..	..	..	..	2	108	53	1	38	3	22	227	2	52	18	12	..	84

The "Notification of Infectious Disease" has been compulsory in the district since October 30th, 1889. Cases have been isolated at the Homerton Fever Hospital, St. Anne's Fever Hospital (Tottenham), the London Fever Hospital (Liverpool Road. N.), and the Hospital Ships (Small-pox).

INFECTIOUS DISEASES AND THE MEASURES TAKEN TO PREVENT THEIR SPREAD.

It will be seen from Table B that 227 *Notification Certificates of Infectious Illness* were received from medical practitioners, as against 354 during the preceding year

These 227 cases represent infection in 194 different houses, each of which was subsequently disinfected. In 159 instances the disinfection was performed by the Sanitary Authority, and in the other cases by the householders, to the satisfaction of their medical attendant. A visit was paid to every house, and it was ascertained that cases of infectious illness occurred in 18 houses where there were "grave" sanitary defects, 21 in which the sanitary defects were "slight," and 155 in which there were no such defects.

In forming these conclusions I have considered whether any sanitary defect was of a nature which is generally held by health officers to predispose to, or directly bring about, the particular disease in question.

Thus apart from the measures that have been taken to prevent the spread of infectious illness, the notification of such illness was the means during the year of bringing about a sanitary inspection of 194 premises, and the abatement of insanitary conditions in 39.

Table B. 1. shows the number of cases, and of deaths, from the Infectious Diseases notified during the years 1892-7; and Table B. 2. the cases of Infectious Diseases notified during each month of the year 1897. It will be noted that there was a marked reduction in the number of cases of sickness from Scarlet Fever, Diphtheria, and Erysipelas, but a marked increase, for which it is difficult to account, in the sickness from Typhoid Fever when the years 1896 and 1897 are compared.

The Infectious Sickness Rate of the Parish was only 6·7 to each 1,000 of the population, as against 10·5 for the preceding year.

TABLE B 1.

Table showing the number of Cases and Deaths from the Infectious Diseases notified from among Parishioners during the years 1892-1897.

	Small-pox.		Scarlet Fever.		Diphtheria.		Continued Fever.	
	Cases.	Deaths.	Cases	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1892.....	2	—	232	6	59	9	2	—
1893.....	8	—	354	4	84	5	—	—
1894.....	3	—	91	4	55	5	—	—
1895.....	—	—	129	1	57	6	—	—
1896.....	1	—	220	7	71	18	—	—
1897.....	2	—	108	1	53	19	—	—

	Erysipelas.		Puerperal Fever.		Typhoid Fever.		Membranous Croup.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1892.....	30	4	3	2	31	2	2	—
1893.....	37	—	—	—	31	2	1	1
1894.....	25	—	2	2	12	3	2	1
1895.....	28	—	1	—	29	3	5	4
1896.....	41	—	1	3	17	5	3	3
1897.....	22	1	3	1	38	10	1	2

TABLE B 2.

Cases of Infectious Disease notified during each month of the year 1897.

	Small-pox.	Scarlet Fever	Diphtheria	Membranous Croup.	Typhoid Fever.	Puerperal Fever.	Erysipelas.	TOTALS.
January	..	11	5	..	2	..	..	18
February	2	7	2	..	4	1	2	18
March	..	10	7	..	3	..	1	21
April	..	10	3	..	1	..	1	15
May	..	9	3	..	1	1	..	14
June	..	1	6	..	4	..	1	12
July	..	14	3	..	..	1	2	20
August	..	8	4	..	1	..	2	15
September	..	9	1	..	6	..	5	21
October	..	18	8	1	9	..	2	38
November	..	8	4	..	3	..	4	19
December	..	3	7	..	4	..	2	16
TOTALS	2	108	53	1	38	3	22	227

The Infectious Sickness Rate for London generally was 10·2, and of the 43 Sanitary Areas situated within the Metropolis, the lowest rates were those of Chelsea (4·9), Marylebone (5·3), St. Giles (6·4), Hammersmith (6·6), and Stoke Newington (6·7), and the highest were, Battersea (15·0), Bethnal Green (13·8), St. Luke's and Mile End (13·4), Clerkenwell (13·3), Limehouse and Poplar (13·1)

84 of the cases notified were removed from their homes to Isolation Hospitals.

DISINFECTION.

Doubtless disinfection is demanded too early on many occasions to be safe, and where the certificate of the Medical Attendant is produced that, in his opinion, disinfection may be carried out, we have, of course, no option but to comply. Thus, during the past year we disinfected at two different premises only 14 days after a case of diphtheria was notified, and in five other cases after only about three weeks had elapsed from the onset of symptoms. It is extremely rare that a case of Scarlet Fever, nursed at home, is free from every trace of the complaint in less than from 6 to 7 weeks, yet we were asked to disinfect 6 different premises at about a month from the onset of symptoms, and 10 more at only 5 weeks' interval.

HOSPITAL ISOLATION.

On more than one occasion during the year the hospital accommodation for infectious cases proved insufficient for the needs of the Metropolis, and it was impossible to get patients isolated with anything approaching the dispatch which is essential. More especially was it in the autumn of the year that the dearth of accommodation was severely felt by this Parish. In one case over 15 unsuccessful applications were made to the Central Offices of the Metropolitan Asylums Board. The remedy for this state of things is an expensive one, but it will have to be applied; it entails the making of such an amount of provision to meet the calls of an exceptional temporary prevalence of infectious disease that a considerable number of the beds provided will lie empty during the greater part of the year.

The Board has now the means of accommodating about 6,000 patients suffering from Diphtheria, Scarlet Fever, and Typhoid Fever, irrespective of about 750 beds at Gore Farm, generally available in the absence of Small-pox. For Small-pox patients the accommodation is, or will be, to the extent of nearly 1,900 beds.

Many circumstances have contributed to increase, year by year, the demand among the public for admission to the Fever Hospitals. Among these circumstances are:—

- (1.) The depauperisation of medical relief in the Hospitals ;
- (2.) The admission to the Hospitals of all classes of the people ;
- (3.) The gratuitous isolation and treatment ;
- (4.) The increasing popularity of the Hospitals ; and
- (6.) The growing recognition by the public of the many advantages, both to the patient and to the rest of the family, accruing from the prompt and complete isolation of infectious illness.

Return Cases.—During the year there were good grounds for belief that the infection in 3 instances was communicated by a patient who had been recently discharged, as free from infection, from one of the Metropolitan Asylums Board's Fever Hospitals. This is a rare occurrence, for every possible effort is made to prevent it, but the circumstance is worthy of note by parishioners, who will always do well to isolate children for at least a few days after they have returned from a Fever Hospital.

In case A, a boy who had just been discharged from a Fever Hospital re-introduced the infection of Scarlet Fever into his own dwelling and into that next door, within a week of his return.

In case B, a child who was discharged from Hospital was, on the same night, made to occupy the same bed with another child. The other child became infected within a week.

In case C, a child showed symptoms of Scarlet Fever in 5 days after the return of his brother, who had been suffering from the same complaint, from Hospital.

SUMMER DIARRHŒA.

The mortality from Diarrhœa for the Country as a whole shows a marked increase upon that of the year 1896, but, strange to say,

Stoke Newington did not share in that increase. There is no doubt that Summer Diarrhœa is a special form of Diarrhœa and must be thought of as something quite apart from the Diarrhœa which figures as a cause of death all the year round. The investigations of Ballard and others may be taken as having established that fact, and to have made it practically certain that this epidemic form of Diarrhœa is a true infective process in which specific micro-organisms are concerned. The death rate from Diarrhœa remains remarkably constant through the winter and spring when the ordinary agency of injudicious dieting is almost alone concerned in its production, but, with little preliminary warning, as the hot summer weather sets in, an extensive outburst of the summer type of Diarrhœa occurs, from which very few of those at the extremes of life, or who are enfeebled, escape—although the death rate is mainly swelled by the children of the poorer people who do not obtain prompt and skilled attention and treatment until it is too late.

This Summer Diarrhœa is the most fatal of all the Zymotic diseases and (especially during the year in review) it exercises a considerable influence in determining the death-rate of the Kingdom. There are good reasons for believing that the essential cause of the complaint resides in the soil and that under favourable meteorological conditions (more especially of temperature) the infection leaves the earth and gains access to air, water and food. It is very important, therefore, to take every measure which will ensure the utmost possible freedom of these necessities from contamination—especially in the summer months. Infants who are fed artificially for the first 9 months of life suffer much more from the complaint than those fed naturally from the mother's breast, and where such artificial feeding is necessary, much mortality would be prevented if parents followed two golden rules :—(1) Give nothing but well boiled fresh milk, or milk and water, for the first 9 months of life, and (2) keep all milk vessels and feeding bottles scrupulously clean. Artificial feeding, and the uncleanly and insanitary conditions of the child's surroundings, were responsible for thousands of deaths under one year of life during the past year.

DRINKING WATER CISTERNS AND DIARRHŒA.

During the year there was one well-marked outbreak of Diarrhœa and general gastro-intestinal disturbance in a house in Church Street. Of 21 persons who slept in the house 16 suffered. The drinking water cistern was found to be very foul and to contain upwards of one inch of deposited matter, and the water showed pollution which was very evident to the senses. By a bacterial examination it was seen to be teeming with micro-organisms. The patients quickly recovered when the cistern was cleansed.

It is a pity that parishioners do not more generally avail themselves of the provision of a draw-off tap on the main, and thus collect the water used for drinking purposes before it enters the cistern. In default of this provision the cistern commonly requires more frequent cleansing than it is likely to get in the large majority of houses.

TYPHOID FEVER.

The problems connected with the life-history of the bacillus of Typhoid Fever outside the human body are now being scientifically attacked, and recent work by Lösener, Martin, Pfeiffer, Kolle, Robinson, and others, tends to establish the view which is supported by so much circumstantial evidence, that polluted soil is the great medium in which the germ thrives; and the fact that the death-rate from Typhoid Fever in this and some other countries has been markedly reduced during recent years, may safely be attributed, in the main, to two circumstances, *i.e.*, firstly, that the pollution of soil has generally been diminished, and secondly, that the increased precautions taken of late years to guard our drinking water and milk from pollution have had the effect of materially reducing the extent, *by spread*, of a filth disease which is so frequently water or milk borne.

To reduce Typhoid incidence every effort must be made by the proper sanitary control of encampments of itinerants, &c., and by the abolition of leaky and defective drains, cesspools, midden pits, &c., *to guard the soil*—more especially that around houses and in the

neighbourhoods of collecting areas for drinking water—from an infection which may doubtless grow and remain active in such soil for long periods under certain favourable conditions; and the possibility of water acting as a carrier must be removed in the only certain way, *i.e.*, by going to a pure source for a pure supply, and sparing no pains and expense to guarantee the continued purity of the water from the site of its collection until it reaches the consumer.

The principle of attempting to purify a polluted water is wrong if it can possibly be avoided, and having regard to the tremendous issues at stake, indefensible. Purification through sand, for instance, is at best imperfect and by consequence dangerous, for our methods of detecting the infectious power of water, where Typhoid is concerned, are still very unreliable; chemical and bacteriological examination may both fail, and even if the latter succeeds the information can rarely be furnished under a week, and think of the mischief which may, and does, result in the meanwhile; our only real safety lies in selecting a pure water, and in keeping it pure.

Typhoid Fever can only become markedly epidemic in this country when the infection gains access to a widely distributed carrier such as water and milk, and this circumstance sufficiently indicates the main lines of our defence against the disease. The recent outbreak at Maidstone has set every Authority a question to answer—What security have they that the means adopted to protect their district from such an outbreak are sufficient? In London every thinking individual must have his misgivings. The purity of a water supply must always be measured from the stand-point of the worst sample distributed; and, especially in time of flood, the drainage areas of the Thames and Lea, furnish considerable pollution to the river waters, and a sand filter is asked to protect London from the almost constant danger of water borne disease. Certainly the death-rate from Typhoid Fever is low for London, but as Prof. Corfield, and Mr. Shirley Murphy have shown, there is an exceptional incidence of the disease on those parts of London supplied by Thames water during flood time, and the chemist to the London County Council and the bacteriologist to the Local Government Board have

demonstrated that, at these times, living animalculæ, considerable larger than the Typhoid germ, may pass through the filters into the filtered water.

In non-epidemic periods a considerable number of isolated cases crop up in every community, the cause of which can only be conjectured by the Medical Officer of Health, and in which it is very exceptional to be able to trace the infection to a preceding case ; but when the infection is traced to a preceding case we are no nearer the scientific truth of the real origin of the infection itself. How did the preceding case contract it? There is undoubtedly a great difficulty in arriving at the probable cause of these sporadic cases, and this is largely due to a fact which I commented upon in my last Report, *i.e.*, that in the majority of cases one learns, on enquiry, that the patient was ill or ailing for several weeks before the condition was diagnosed, and in consequence it is impossible to determine the actual period of infection with any degree of precision, and, therefore, to hit upon its most probable cause. The origin of these isolated cases is very generally a matter of pure conjecture ; the tendency is all too common to ascribe the cause to any marked insanitary condition of drainage and water supply noticed when the house is inspected. That such are concerned in the appearance of the disease is, to my mind, unquestionable ; but since almost every house in this Parish, when house-to-house inspected, was found to present one or more such insanitary conditions, and the sickness from Typhoid Fever gives no indication of a material reduction as these conditions are removed, it cannot be held that when in one of such houses a case of Typhoid Fever occurs, that the condition is *certainly* due to the insanitary conditions which may be found. We must not rest content with those sham investigations which are satisfied with the mere discovery of a preceding case, and which conclude, haphazardly, that one of those insanitary defects which exist in so many houses are *necessarily the cause* of the infection, though drain and sewer gases certainly contain poisonous substances, either of the nature of gases or vapours, which strongly predispose those subjected to them to disease in many forms—among which one may safely include Typhoid Fever and Diphtheria.

There are a few outbreaks recorded in which the infection appears to have been borne on dust particles, but it is doubtless most generally conveyed by water, milk, or shell-fish, and, when there is already a case in the house, by infected hands, linen, and food.

Of the 38 cases notified during the year, 36 occurred in different houses, in 7 of which there were grave insanitary conditions; in 5 the insanitary conditions were slight, and in the remaining 24 there were no insanitary conditions; 4 of the cases were doubtless imported, and 5 were ascribed, by the sufferers, to the eating of oysters.

MEASLES AND WHOOPING COUGH.

During the year there was a considerable outbreak of Measles and Whooping Cough in the Church Ward. Although the outbreak occasioned a great deal of sickness there was but little increase in the annual mortality from these two complaints. This circumstance is largely attributable to the fact that the outbreak occurred at a period of the year when the climatic conditions were very favourable to the sufferers; but it may be partly the result of the distribution of handbills of advice dealing with the simple precautionary measures which should be taken to ward off a fatal issue from these two complaints.

It was not thought necessary to close any school, as the number of absentees from Measles and Whooping Cough from any one school scarcely warranted such a step, and the summer vacation was near to hand; but, thanks to the co-operation of the head teachers, I was able to learn from day to day of the number of absentees from the two complaints, and of their addresses, and the Sanitary Committee sanctioned the measure of distributing handbills of advice and caution along every street in which I learnt that a case existed.

Although it is not easy, owing to the peculiar nature of the disease, for parents to always successfully ward off attacks from their children, it is so easy, with a little knowledge, to ensure that the

patient makes a good recovery, that it is believed that the handbills were of value in preventing the Parish from swelling the thousands of preventable deaths from Measles which are registered in London alone, each year.

Whereas I acknowledge with gratitude the willing assistance rendered me by the head teachers of the Board and other Schools in ascertaining the number and addresses of the absentees from Measles and Whooping Cough, I consider it a matter for regret that the Regulation of the School Board for London, requiring that the Medical Officer of Health of the District shall be informed of a child's exclusion on account of symptoms of infectious disease, is not given effect to as a routine practice, for it would often materially assist the Medical Officer of Health in taking prompt measures to remove further risks of school infection.

It may be useful to bring Measles under the Notification Act in rural districts and in small isolated communities, if in these cases every advantage is taken of the information thus obtained, if efforts also be made to detect unnotified cases, and the means of hospital isolation be provided ; but in larger communities, especially when not adopted in neighbouring districts, the measure is not to be recommended in the absence of sufficient isolation provision, a large permanent staff, and the adoption of other means than "notification" of bringing the existence of cases to the knowledge of the sanitary authority. In short, if it were possible, in urban districts, to deal with every case notified with the same care and thoroughness as in a case of Small-pox, it would prove of value.

The effect which the greater care exercised by the better-class inhabitants in guarding against exposure has upon the mortality from Measles among that class, is shown by the circumstance that the mortality during epidemics is always very largely borne, and sometimes wholly, by the poor.

What we have, then, to face is a largely preventable mortality due to ignorance, a mortality which is very high among the poor, and very low among the better classes. Surely the best remedy lies not

in notification, but in the education of the masses, and in the taking of certain precautions against school infection.

The slow and sure remedy is to make our educational system a rational one, in which, in the selection of the matter that is taught, sufficient consideration is given to that which is of vital importance. There are subjects taught at schools which not only might, but *ought* to give place, on the score of expediency, usefulness, and even of humanity, to such matters as the Laws of Health, the precautions that may be taken against disease—infectious and otherwise, and special instruction should be given to girls on the healthy rearing of children.

The active co-operation of school authorities with the local authorities should always prove of value, but many experiences show that teachers either frequently fail to notify cases of suspicious illness, or only do so after many cases have occurred. If, then, we are to reap the greatest benefit in the direction of checking the spread of Measles through schools, it appears to me that we must *act up to* the knowledge we now possess, *i.e.*, that several infectious diseases largely spread through schools. The scholars in each school would then be examined by a medical man, at frequent intervals during even inter-epidemic periods, and almost daily during epidemic prevalence; all suspects would be sent home and requested to see a doctor, and all absentees visited and the true cause of their absence ascertained. A scheme which thus fully takes advantage of all the means which schools offer of (*a*) educating the future parents and of (*b*) gaining early information and of checking the spread of infection, appeals to me as likely to offer the surest means of reducing Measles mortality.

SMALL-POX.

A case of Small-pox was notified early in the year. The patient was a young seamstress, who made up some sleeves while in bed suffering from what was thought to be a bad bilious attack. These

sleeves were subsequently passed on to another person to fit and sew into bodices, three days before the supposed bilious attack was diagnosed as Small-pox. In the family to which these sleeves were sent was a boy who, unlike its other three members, had never been vaccinated. He alone caught the complaint and suffered from a severe attack. By means of thorough disinfection, and the quarantine of all those who were judged to have been exposed to the infection, the disease was promptly stamped out. It was thought probable that the first case contracted the disease in Islington, as there were three cases in a neighbourhood which she sometimes visited, but it was quite impossible to trace the origin of the infection with any precision.

The Royal Commission on Vaccination has issued its final Report, and the questions considered, and the opinions arrived at by all save two dissentient Anti-vaccinators, may be well summarised in the form of questions and answers :—

Q. Has Small-pox diminished since the introduction of vaccination?

A. Yes.

Q. In those households attacked, does the disease differentiate between the vaccinated and the unvaccinated members?

A. Yes. The vaccinated escaped and the unvaccinated suffered out of all proportion to their respective numbers.

Q. In an affected community, does Small-pox make the same differentiation as in infected households?

A. Yes.

Q. Are those classes who are re-vaccinated, *i.e.*, postmen, policemen, nurses, specially protected as compared with the rest of the community?

A. Yes.

Q. Small-pox in pre-vaccination days claimed about 80 % of its victims among children, but since infantile vaccination was inaugurated has the mortality been very largely transferred to the latter periods of life—when the protective power of infant vaccination has largely worn out?

A. Yes.

Q. Among those attacked, do those who have been vaccinated have milder attacks and furnish fewer deaths than those who have not been vaccinated?

A. Yes.

Q. Does vaccination well and properly performed afford greater protection from Small-pox than vaccination insufficiently or ill-performed?

A. Yes.

The Commission collected abundant evidence to warrant an emphatic answer in the affirmative to each of these questions, and all those who read the report in an impartial spirit will agree that it constitutes a tower of evidence which is quite impregnable.

Germany presents a fine object lesson of the value of vaccination. Surrounded as it is on three sides by others among whom Small-pox is always rife, it enjoys a freedom from the disease which is unequalled in any other country. There, vaccination is compulsory before the end of the year following that in which the infant is born, and re-vaccination is enforced on leaving school and on entering the army. From the Official Returns it appears that in 1895 there were only 27 deaths from Small-pox in a population of about 45 millions, 14 of which occurred on the frontiers, and at least 5 others from a case imported direct from Russia. Those who so foolishly argue that the question of the extermination of Small-pox is one of sanitation alone will scarcely contend that Germany compares favourably with England in this respect.

DIPHTHERIA.

The 53 cases of Diphtheria occurred in 47 different houses; and in only 4 instances were sanitary defects of a grave nature found to exist in the home of the patient. In all probability 4 of the cases resulted from such insanitary conditions in the homes of the patients as gave rise to the escape of offensive odours. Thus 7·5 per cent. of the total cases arose from this cause, as against 19·7 per cent. in the preceding year.

School attendance is either alleged by the parents or surmised by myself, on good grounds, to be the cause of 4 attacks during the year, and to be responsible for 7·5 per cent. of the cases as against 12·7 per cent. in the preceding year.

Three cases of the infection were imported into the Parish. In two cases it was very clear that a preceding tonsilitis of several weeks' duration predisposed to an attack of Diphtheria. Two unhealthy cats were destroyed, but a bacterial examination of their throats failed to detect the germ of Diphtheria.

In as many as 39 cases I was unable to trace the origin of the disease in any satisfactory manner; that is to say, after carefully ascertaining all the facts, the origin of the infection could only be conjectured, and it was impossible to do more.

It is discomfoting that the increase in the death-rate from Diphtheria cannot be checked. As a matter in Preventive Medicine it is the question of the day, and its great importance demands the adoption of further measures of coping against the origin and spread of this disease.

In this disease the spread of the infection (and by consequence the mortality) are largely concerned with the unfortunate circumstance that the early diagnosis of the disease *from clinical symptoms* is frequently difficult and impossible, and it is therefore highly desirable that every Sanitary Authority should contrive to make such arrangements as would provide practitioners with the promptest possible answer to the problems—Is this a case of Diphtheria? Bacteriology alone can furnish the answer in many cases, and every

practitioner should have the means of availing himself of this. Diphtheria is now such a scourge and the cost which the sickness entails upon the community amounts to such a heavy burden, that no reasonable outlay in measures that will check its origin and spread can be regarded as aught but the truest economy.

Ample time has now been afforded for testing the efficacy of "Antitoxine" in the treatment of Diphtheria, and the opportunities have been all too frequent during the past 6 or 7 years. Good reports upon its employment come from all quarters of the globe, and the very few contrary statements which have come to hand have either been based upon inadequate trial or improper employment of the serum. The remedy is too generally used as a "dernier resort" after the patient is moribund or requires tracheotomy, and even then it is notorious how rapidly the distressing symptoms, as a rule, melt away. It is thought by some that although it does such a great deal of good during the acute attack, it does not diminish, even if it does not increase, the subsequent tendency to fatal heart failure. I know of no convincing statistics in support of this point, but it is conceivable that if antitoxine is the means of bringing a patient over the acute attack, it may appear to increase the number of deaths from subsequent heart failure from the circumstance that it enables many to reach the dangerous period following the acute attack, who otherwise would have died beforehand.

The Medical Superintendents of the Hospitals of the Metropolitan Asylums' Board have contrasted the mortality among the Diphtheria patients admitted—where antitoxin was not used, and where it was—during the year 1896, and the comparison has been extended to the mortality which obtained in the year immediately preceding the introduction of the antitoxin into those Hospitals. These figures are in harmony with the general experience that the death-rate among Diphtheria patients has been reduced since the introduction of the remedy, and the conclusion arrived at, on statistical and clinical grounds, is very favourable to the value of the remedy in cutting short the attack and in reducing the severity of the symptoms.

The improved results in the cases treated may be thus summarised:—(1) A great reduction in the mortality of those cases brought under treatment on the first and second day of illness. (2) The lowering of the combined general mortality to a point below that of any former year. (3) The still more remarkable reduction in the mortality of the laryngeal cases. (4) The uniform improvement in the results of tracheotomy at each separate Hospital. (5) The beneficial effect produced on the clinical course of the disease.

SCARLET FEVER.

The 108 cases of Scarlet Fever occurred in 86 different houses, in 7 of which there were grave insanitary conditions ; in 6 the insanitary conditions were slight, and in the remaining 73 there was an absence of such conditions.

School attendance was ascribed as the origin of the infection in 15 cases ; infection in a preceding case (apart from school) in 4 ; and in three cases there were the strongest possible reasons for believing that the infection was communicated by a patient recently dismissed from a Fever Hospital.

One milk shop was closed for many weeks on account of this disease.

It will be noted that the cases of Scarlet Fever notified during 1897 numbered only about one half of those notified during the preceding year ; the actual figures being 108 and 220, respectively.

HOW DISEASE IS SPREAD.

One frequently finds on visiting a house in which an infectious disease has occurred, that upon learning the nature of the complaint, the parents have sent the other children to the home of a relative, without first waiting to satisfy themselves that these other children are not incubating the infection. By this way the disease is not infrequently introduced into other families.

Some people regard Scarlatina as a disease which does not demand the same strict precautions against spread as Scarlet Fever; and many parishioners have expressed great surprise on being informed that Scarlatina is essentially Scarlet Fever of a mild type, and that serious and even fatal cases of the latter can be communicated by a patient suffering from the former. On this account it would be a gain if medical practitioners referred to all such cases, not as Scarlatina but as mild attacks of Scarlet Fever. During the year, one patient notified as suffering from Scarlatina answered the door herself when we made our visit.

The Board Schools give medals to those who have paid the greatest possible number of attendances punctually on every occasion on which the school has been open during the school year. This often leads to children keeping up their attendances regardless of consequences to their health, and one has known instances where children with sore throats (one of which subsequently proved to be Diphtheria) have continued school attendance for as long as they possibly could in order not to lose the medal. There have also been cases in which infectious disease in a house was kept a secret in order not to destroy the chances of another member of the family in securing a medal. In the absence of some form of medical inspection of the scholars, the giving of these medals thus becomes a source of danger.

NOTES UPON SANITARY WORK PERFORMED DURING THE YEAR.

It will be seen from the Appended Report of Mr Burgess that a large amount of sanitary work has been performed during the year 1897. 1,900 premises were inspected for conditions injurious or dangerous to health, and insanitary conditions varying in their nature from slight to very grave, were discovered in a large number of instances. 1,046 Intimation Notices, followed in 234 cases by Statutory Notices, were complied with.

Of this number only 187 inspections were made as the result of complaints by householders and others, and this circumstance will serve to accentuate the importance of prosecuting a fairly constant system of house-to-house inspection in at least the poorer parts of the Parish. It is difficult to over-estimate the value such a measure has in preventing the origin and spread of preventable sickness.

The Slaughter-houses, Bake-houses, Cowsheds and Dairies situated in the Parish were all duly inspected throughout the year.

The Factories and Workshops have also been inspected during the year, and I have kept the list of out-workers up to date.

I have repeatedly made analysis of the drinking water supplied to the Parish by the New River Water Company and the results have invariably been satisfactory.

FOOD AND DRUGS.

Under the Sale of Food and Drugs Act, 48 samples of Food and Drugs were taken and analysed. The results are shown in Table C. It will be seen that seven of the samples were not genuine, and therefore the percentage of non-genuine samples amounted to 14·5—a figure which is higher than that for the country generally. Including two cases where margarine was sold in contravention to the provisions of the Margarine Act, six vendors were prosecuted during the year. Five of the vendors had to pay, in addition to costs, £10 for fines, and the prosecution in the sixth case was dismissed because the vendor (of milk) produced a warranty that he sold it as he received it from another vendor. I found this sample to be deficient in fat to the extent of 16·7 %, and as the correctness of the analysis was disputed, the third sample was sent to Somerset House, the authorities of which agreed with my results.

The Sale of Food and Drugs Act was passed in 1875, and of the articles analysed in 1877, 19·2 % were adulterated. From 1877-1881 the adulterated samples averaged 16·2 %; from 1882-1886, 13·9 %;

from 1887-1891, 11·7 %; and from 1892-1896, 10·6 %. In 1896 the adulterated samples formed 9·2 %. The salutary effect of the Act in reducing the adulteration of food and drugs is thus seen to be considerable, and it must be further borne in mind that almost all those articles of a nature injurious to health, which were previously employed for purposes of sophistication, have now completely dropped out of employment.

The only way to entirely stamp out adulteration is to render it unprofitable, yet over a third of the fines inflicted during 1896 were of 10s. and under. (*Annual Report of the Local Government Board for 1896-7.*)

London does not succeed in reducing its high rate of milk adulteration. In 1896, 17·7 % of the samples taken were adulterated, as against 9·1 % for the rest of England. The necessity for the supervision of the milk supply on Sundays is particularly great in London, and during the year six Sunday samples were taken in Stoke Newington.

It is extremely rare that anything besides chicory is used for the adulteration of coffee, and this form of adulteration has considerably waned during the past year or two ; it amounted to 8·7 % of the samples taken in England and Wales during the year 1896. For the same year butter samples were found to be adulterated to the extent of 8·8 %; spirits, 15·6 %; and drugs, 11·3 %. In this Parish, therefore, the extent to which adulteration of food and drugs is practiced is very low, if one excludes milk and butter.

The number of cheap brands of condensed milk upon the market in which the milk has been previously skimmed or partly separated, has materially increased ; and I would repeat the warning contained in my last Annual Report, that parishioners will do well to abstain from purchasing them.

TABLE C.

ANALYSIS PERFORMED UNDER THE SALE OF FOOD AND DRUGS ACTS, DURING THE YEAR.

No.	Sample Analysed.	Opinion Formed.	Action Taken.
1	Milk	Satisfactory.....	Nil.
2	Milk	"	"
3	Butter	"	"
4	Butter	"	"
5	Porter	"	"
6	Milk	Deficiency of 4% fat	Vendor cautioned
7	Milk	Satisfactory.....	Nil.
8	Butter	"	"
9	Coffee	"	"
10	Porter	"	"
11	*Margarine	Sold in contravention to Act	Vendor fined 5/- & costs.
12	*Margarine	"	Vendors fined £5.
13	Milk	Satisfactory.....	Nil.
14	Milk	"	"
15	Lard	"	"
16	"Partly separated Milk"	"	"
17	Seidlitz Powders...	"	"
18	Milk	Deficiency of 7% fat	Vendor cautioned.
19	Milk	" 30% "	Vendor fined 10/- & costs.
20	Vinegar	Satisfactory.....	Nil.
21	Demerara Sugar	"	"
22	Milk	"	"
23	Milk	"	"
24	Butter	"	"
25	Butter	"	"
26	Milk	"	"
27	Butter	75% of Margarine ..	Vendor fined £4 & costs.
28	Lard	Satisfactory.....	Nil.
29	Butter	"	"
30	Coffee	"	"
31	Butter	"	"
32	Vinegar	"	"
33	Milk	50% Deficiency in fat ...	Vendor fined 5/- and costs
34	Spirits of Nitre ...	Satisfactory.....	Nil
35	Laudanum	"	"
36	Milk	"	"
37	Milk	4% Deficiency in fat	Vendor cautioned
38	Butter	Satisfactory.....	Nil
39	Milk	"	"
40	Porter	"	"
41	Coffee	"	"
42	Lard	"	"
43	Flour	"	"
44	Milk	"	"
45	Milk	"	"
46	Butter	"	"
47	Milk	16·7% Deficiency in fat...	Analysis disputed and supported at Somerset House. Warranty produced, and case dismissed
48	Gin	Satisfactory.....	Nil
49	Mixed Sweets	"	"
50	Coffee	"	"

* Taken under the Margarine Act.

METEOROLOGY IN AND AROUND LONDON DURING THE YEAR 1897.

January.—The weather was generally wet and dull, with very little sunshine ; the mean temperature was above the average until the 12th., but the remainder of the month was cold ; the rainfall was below the average.

February.—The weather was cold until the 8th., after which the temperature rose and continued above the average until the end of the month ; the rainfall was above the average.

March.—The weather was changeable, with frequent rain, the temperature being generally above the average ; the rainfall was above the average.

April.—The weather was very similar to that of the preceding month, but the rainfall was below the average.

May.—The weather was mostly dull with very little sunshine ; the temperature was below the average during the greater part of the month ; the rainfall was below the average.

June.—The weather was generally warm, fine and bright, the temperature being above the average for the greater part of the month ; the rainfall was below the average.

July.—The temperature was below the average up to the 9th, then the weather was fine and warm. The rainfall was below the average.

August.—The weather was fine and warm up to the 11th, after which date it became dull and cool. The rainfall was above the average.

September.—The weather was dull and cool, with very little sunshine ; the temperature was below the average and the rainfall slightly above.

October.—The weather was generally dry but dull ; the mean temperature was above the average, and the rainfall was below.

November.—The weather was very similar to that of the preceding month.

December.—The weather was very similar to that of November, but, the rainfall was slightly above the average.

Meteorological Observations taken during the year 1897, at Camden Square (by G. J. Symons, Esq., F.R.S.).

The observations have been reduced to mean values by Glaisher's Barometrical and Diurnal Range Tables, and the Hygrometrical results from the Sixth Edition of his Hygrometrical Tables.

Month.	Temperature of Air.				Mean Tem- p'rature of Air.	Rain.		Rela- tive Humid- ity. Satura- tion. 100.
	Highest	Lowest.	Mean.			No. of Days it fell.	Amnt. Collected.	
			Of all Highest	Of all Lowest.				
January	41·7	23·4	39·8	31·7	35·7	20	2·0	93
February.....	58·0	27·9	48·4	39·0	43·6	14	2·7	86
March	61·7	26·8	52·3	39·2	45·2	17	3·4	81
April	67·3	27·8	55·3	39·6	46·7	16	1·5	78
May	78·0	33·9	63·7	43·2	52·2	9	1·0	67
June	87·8	43·3	71·7	53·0	60·9	11	1·8	74
July	83·6	44·0	75·8	55·3	63·8	8	0·6	68
August	88·4	48·1	73·6	54·8	62·9	16	2·9	73
September	70·6	38·1	64·0	48·5	55·5	13	2·7	77
October	67·2	31·9	58·4	44·3	50·5	9	0·5	83
November	59·1	28·0	51·0	40·3	45·7	14	1·0	88
December	55·9	23·7	45·5	35·7	41·1	17	2·2	87

The Parish of St. Mary's Stoke Newington.

MEMBER OF PARLIAMENT FOR THE DIVISION.

W. R. Bousfield, Q.C., M.P., Crown Office Row.

PAROCHIAL OFFICERS.

RECTOR AND CHAIRMAN OF VESTRY.—Rev. Prebendary Shelford, M.A., J.P., The Rectory, Stoke Newington.

CHURCHWARDENS.—Runtz, J. J., J.P., 131, Lordship Road.
Eve, W., 195, Albion Road.

OVERSEERS.—Davies, A. C., 11, Brodia Road.
Glass, J., 4, Lordship Park.
Nunn, E. P., 82, Lordship Park.
White, S., B.A., LL.D., 133, Lordship Road.

CLERK.—Webb, G., Vestry Offices, 126, Church Street.

MEDICAL OFFICER OF HEALTH AND PUBLIC ANALYST.—Kenwood, H., M.B., D.P.H., F.C.S., Vestry Offices, 126, Church Street.

SURVEYOR AND CHIEF SANITARY INSPECTOR.—Burgess, S. E., A.M.I.C.E., Vestry Offices, 126, Church Street.

RATE COLLECTORS—

Northern Division : Cone, H. K., 171, Church Street.
Southern Division : Hankey, J. D., 130, Green Lanes.

REGISTRAR OF BIRTHS, DEATHS AND MARRIAGES.—Cone, H. K., 171, Church Street.

Hours : Every morning 8—10 a.m., and on Tuesdays and Fridays, 6—8 p.m.

RELIEVING OFFICER.—Pease, W., 38, Harcombe Road.

PUBLIC VACCINATOR.—Lewis, D. T., M.R.C.S., 150, Stoke Newington Road.

Attends at Spencely Hall, Brooke Road, every Tuesday afternoon at 3 p.m.

GUARDIANS.—Allardyce, N. L., 43, Allerton Road.

Bishop, A., 9, Gravebrook Road.

McDonnell, A., M.D., 39, Stamford Hill.

Rev. Howlett, T. E., M.A., Fountayne Road.

Newton, L. A., 20, Harcombe Road.

Rev. Shelford, L. E., M.A., J.P., The Rectory.

A LIST OF THE STREETS SITUATED IN THE PARISH
OF STOKE NEWINGTON.

ADEN Grove
Aden Terrace
Allerton Road
Albion Road
Albion Grove
Amhurst Park
Ayrsome Road

BARN Street
Barrett's Grove
Bethune Road
Bouverie Road
Boleyn Road
Brodia Road
Broughton Road
Burma Road

CASTLE Street
Carysfort Road
Chapel Place
Church Street
Chesholm Road
Church Path
Clonbrook Road
Clissold Road
Cressington Road
Church Road

DEFOE Road
Dumont Road
Dynevior Road

EADE Road
Edward's Lane

FAIRHOLT Road
Falcon Court
Fleetwood Street

GRANGE Court Road
Grazebrook Road
Grayling Road
Green Lanes (from 22 to 378)
(„ 11 „ 107)

HAWKSLEY Road
Harcombe Road
Hayling Road
Heathland Road
Hermitage Road
High Street
Howard Road

KERSLEY Road
Knebworth Road
Kynaston Road
Kynaston Avenue

LONDESBOROUGH Road
Lordship Road
Lordship Grove
„ Park
„ Terrace
Lancell Street
Lavell Street
Laver's Road
Lidfield Road
Lillian Street
Listria Park

MANOR Road
Martaban Road
Mason's Court
Marton Road
Matthias Road
Meadow Street
Millard Road
Milton Road

NEVILL Road
Newington Green

OLDFIELD Road
Osterley Road

PAGET Road
Painsthorpe Road
Park Street
Park Lane

Park Lane Terrace
Paradise Row
Park Crescent
Palatine Road
Pellerin Road
Prince George Road
Princess May Road

QUEEN Elizabeth's Walk

REEDHOLM Road
Rochester Court

SANDBROOK Road
Salcombe Road
Seven Sisters' Road
Shellgrove Road
Shakespeare Road
Summerhouse Road

Springdale Road
St. Kilda's Road
St. Andrew's Road
St. John's Place
Stamford Hill
Stoke Newington Road
Statham Grove

TRUMAN'S Road

WHITE Hart Yard
Winston Road
Wiesbaden Road
Wordsworth Road
Woodland Road
Woodlea Road
Woodberry Down
Woodberry Grove

