

## **[Report of the Medical Officer of Health for Finchley].**

### **Contributors**

Finchley (London, England). Urban District Council.  
Taylor, Gerard C.

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The Urban Sanitary District  
OF  
FINCHLEY.

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REPORT  
OF THE  
MEDICAL OFFICER OF HEALTH  
FOR THE YEAR 1904.

BY  
**GERARD C. TAYLOR,**  
M.A., M.D., B.C. (CANTAB.), D.P.H.,  
MEDICAL OFFICER OF HEALTH,

TOGETHER WITH  
**THE REPORT**  
OF THE  
**SANITARY INSPECTOR.**

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Finchley :

J. H. WARDEN & Co., "Finchley and Hendon Times" Office,  
11, Regents Parade North Finchley.



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*TO THE CHAIRMAN AND MEMBERS OF THE  
FINCHLEY DISTRICT COUNCIL.*

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GENTLEMEN,

During the first half of the period covered by this Report your late Medical Officer of Health, Professor Kenwood, was responsible for the executive work of the Public Health Department, although during a part of this period I was assisting him; he has, therefore, revised my statements in so far as they deal with the earlier portion of the year, and he has appended to this Report a full statement dealing with the outbreak of illness (due to milk) at the beginning of last year.

The vital statistics of 1904 do not compare favourably with those of the preceding year, but when we come to compare the statistics of Finchley with those of England and Wales generally during the corresponding period, it will be seen that there is not much cause for anxiety.

The weather conditions in 1904 were decidedly trying to young children and old people; moreover, a widespread epidemic of measles and whooping-cough materially increased the mortality.

Despite the prevalence of Scarlet Fever, it is satisfactory to note that the cases were chiefly of a mild type.

Inspection of the District has been systematically carried out, and I am glad to take this opportunity of expressing my appreciation of the very satisfactory manner in which your Sanitary Inspectors, Mr. Franklin and Mr. Topping, have discharged their duties.

I am, Gentlemen,

Your obedient servant,

GERARD C. TAYLOR.

*February, 1905.*



### Vital Statistics.—Population and Acreage.

THE POPULATION at the Census of 1891 was 16,647, and at the Census of 1901, 22,126. Supposing the same rate of increase to have been maintained to the middle of last year, the population would then have amounted to 24,269. But the rate of increase has been far more rapid of late years than during the first eight years which elapsed between the two last Census enumerations. To arrive at an estimate of the population for the middle of 1904 I have therefore taken the number of inhabited houses, and allotted to each the average number of persons found to be occupying each house at the time of the last Census. It is on the figure thus obtained that the rates in this Report are based.

The approximate population for each of the sub-districts is as follows:—

EAST FINCHLEY	...	...	...	9,648
NORTH FINCHLEY	...	...	...	5,775
WEST FINCHLEY	...	...	...	7,047
WHETSTONE	...	...	...	3,094
Total				25,564

THE NATURAL INCREASE OF THE POPULATION by excess of births over deaths during the year was  $634 - 338 = 296$ , compared with 412 in 1903, and 319 in 1902. The great difference between the figures for 1903 and 1904 is accounted for by the exceptionally low mortality in the former year.

NUMBER OF PEOPLE TO THE ACRE.—The area of the District is 3,384 acres, and the average number of persons to each acre is 7.5.

The estimate for each sub-district is as follows:—

East Finchley	(1,219 acres),	7.9	people to the acre.
North Finchley	(788 „ ),	7.3	„ „
West Finchley	(1,002 „ ),	7.0	„ „
Whetstone	(373 „ ),	8.2	„ „

The average density of population per house at the last census was 5.6 for the whole District.

### Birth-Rate.

During the year 1904 there were 634 births registered in the District, *i.e.*, 310 males and 324 females. The birth-rate per 1,000 of population was therefore 24.8, the average for the preceding ten years was 24.9.

The rate for England and Wales in 1904 was 27.9, and that for the 76 Great Towns 29.1.

### Death-Rate.

GENERAL MORTALITY.—There were 338 deaths of parishioners registered, which number included 174 females and 164 males.

THE RECORDED GENERAL DEATH-RATE is therefore 13.2 per 1,000; in 1903 the death-rate was exceptionally low, *i.e.*, 9.7, the average for the ten years 1894 to 1903 being 10.6.

The rate for England and Wales was 16.2, and that for the 76 Great Towns 17.2.

THE CORRECTED DEATH-RATE.—The proportionate number of different sexes in any given population and the number of persons at the different age-periods have a marked effect on the mortality. In order to obtain more accurate figures for



comparing the death-rates of different Districts, allowance should be made for these variations in the composition of the populations concerned.

The so-called "factor for correction" in the case of Finchley is about 1.05, the sex and age distribution obtaining in England and Wales as a whole being taken as a standard. In other words, the sex and age-distribution of the population in Finchley slightly favours a low mortality, and the *Death-Rate Corrected for Age and Sex-Distribution* would be  $13.2 \times 1.05 = 13.8$ .

#### RECORDED DEATH-RATE OF EACH SUB-DISTRICT:—

		Number of Deaths.	Rate per 1,000 of Population.
East Finchley	...	142	14.7
North Finchley	...	91	15.7
West Finchley	...	76	10.7
Whetstone	...	29	9.3

Table A.

CAUSES OF AND AGES AT DEATH DURING THE YEAR 1904.

CAUSES OF DEATH. 1	DEATHS IN WHOLE DISTRICT AT SUBJOINED AGES.							DEATHS IN LOCALITIES (AT ALL AGES)				DEATHS IN PUBLIC INSTITUTIONS.
	All ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and Upwards.	North Finchley.	East Finchley.	West Finchley.	Whet- stone.	
Small-pox ...	...	...	...	...	...	...	...	...	...	...	...	...
Measles ...	17	8	7	2	...	...	...	10	4	2	1	...
Scarlet Fever ...	1	...	...	1	...	...	...	...	...	...	1	...
Whooping Cough ...	10	3	6	1	...	...	...	...	7	3	...	...
Diphtheria and Mem- branous Croup	3	...	1	2	...	...	...	...	3	...	...	...
Croup ...	...	...	...	...	...	...	...	...	...	...	...	...
Fever { Typhus	...	...	...	...	...	...	...	...	...	...	...	...
{ Enteric	...	...	...	...	...	...	...	...	...	...	...	...
{ Other continued	...	...	...	...	...	...	...	...	...	...	...	...
Epidemic Influenza ...	5	...	...	...	...	3	2	...	1	4	...	6
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa ...	13	12	1	...	...	...	...	2	5	5	1	...
Enteritis ...	6	4	...	...	...	...	2	...	4	2	...	2
Puerperal Fever ...	2	...	...	...	1	1	...	...	2	...	...	...
Erysipelas ...	2	2	...	...	...	...	...	...	2	...	...	...
Other Septic Diseases ...	10	1	...	3	1	5	...	4	2	3	1	...
Phthisis ...	24	...	...	...	4	19	1	7	12	3	2	...
Other Tubercular Diseases	14	5	3	2	2	2	...	5	7	2	...	3
Cancer, Malignant Disease ...	19	...	...	...	...	7	12	4	6	8	1	...
Bronchitis ...	21	5	3	...	...	4	9	2	11	4	4	...
Pneumonia ...	22	7	2	2	1	4	6	5	11	4	2	...
Pleurisy ...	1	...	...	...	...	1	...	...	...	1	...	...
Other Diseases of Res- piratory Organs	2	...	...	...	...	1	1	...	2	...	...	...
Alcoholism	10	...	...	...	...	8	2	4	5	...	1	...
Cirrhosis of Liver }												
Venereal Diseases	...	...	...	...	...	...	...	...	...	...	...	...
Premature Birth	12	12	...	...	...	...	...	4	4	3	1	...
Diseases and Accidents of Parturition	...	...	...	...	...	...	...	...	...	...	...	...
Heart Disease ...	33	1	...	...	3	14	15	11	9	10	3	...
Accidents ...	5	...	...	1	...	1	3	2	2	...	1	...
Suicides ...	1	...	...	...	1	...	...	...	1	...	...	...
Senile Decay ...	15	...	...	...	...	...	15	3	7	3	2	...
All other causes	90	27	6	1	2	32	22	28	36	18	8	3
All causes ...	338	87	29	15	15	102	90	91	142	76	29	14*

\* All non-residents.



Table A1.

SHOWING THE CAUSES OF DEATH AMONGST PARISHIONERS IN THE DISTRICT OF  
FINCHLEY DURING EACH OF THE FOUR QUARTERS OF THE YEAR 1904.

CAUSES OF DEATH.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Totals.	1903.
Small-pox ... ..	...	..	...	...	..	...
Measles ... ..	6	9	2	...	17	1
Scarlet Fever... ..	...	1	...	...	1	...
Whooping Cough ... ..	1	2	5	2	10	5
Diphtheria & Membranous Croup	1	..	...	2	3	2
Croup ... ..	...	...	...	...	...	1
Fevers { Typhus ... ..	...	...	...	...	...	...
{ Enteric ... ..	...	...	...	...	...	...
{ Other continued ... ..	...	...	...	...	...	...
Epidemic Influenza ... ..	3	...	...	2	5	4
Cholera ... ..	...	...	...	...	...	...
Plague ... ..	...	...	...	...	...	...
Diarrhoea ... ..	...	1	12	...	13	4
Enteritis ... ..	...	...	5	1	6	4
Puerperal Fever ... ..	...	..	1	1	2	...
Erysipelas ... ..	...	...	1	1	2	...
Other Septic Diseases ... ..	2	1	5	2	10	10
Phthisis ... ..	6	4	7	7	24	13
Other Tubercular Diseases ... ..	1	4	6	3	14	4
Cancer, Malignant Disease ... ..	6	5	4	4	19	22
Bronchitis ... ..	8	2	1	10	21	16
Pneumonia ... ..	7	4	2	9	22	15
Pleurisy ... ..	...	1	...	...	1	1
Other Diseases of Respiratory Organs ... ..	1	...	...	1	2	1
Alcoholism, Cirrhosis of Liver ... ..	1	1	6	2	10	6
Venereal Diseases ... ..	...	...	...	...	...	...
Premature Birth ... ..	3	2	5	2	12	13
Diseases & Accidents of Paturition	...	...	...	...	...	1
Heart Diseases ... ..	9	7	11	6	33	21
Accidents ... ..	1	...	2	2	5	12
Suicides ... ..	1	...	...	...	1	2
Senile Decay ... ..	5	7	1	2	15	12
All Other Causes ... ..	23	20	25	22	90	64
Totals .. ..	85	71	101	81	338	234

Table A2—SHOWING THE DISTRICT MORTALITY FOR EACH QUARTER OF 1904.

	NORTH.					EAST.					WEST.					WHETSTONE.				
	Quarters.				Total.	Quarters.				Total.	Quarters.				Total.	Quarters.				Total.
	1	2	3	4		1	2	3	4		1	2	3	4		1	2	3	4	
Small-pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles ...	6	4	...	...	10	...	3	1	...	4	...	2	...	...	2	...	...	1	...	1
Scarlet Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Whooping Cough ...	...	...	...	...	...	1	1	4	1	7	...	1	1	1	3	...	...	...	...	...
Diphtheria and Membranous Croup	...	...	...	...	...	1	...	...	2	3	...	...	...	...	...	...	...	...	...	...
Croup ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Epidemic Influenza ...	...	...	...	...	...	...	...	...	1	1	3	...	...	1	4	...	...	...	...	...
Diarrhœa ...	...	...	2	...	2	...	1	4	...	5	...	...	5	...	5	...	...	1	...	1
Enteritis ...	...	...	...	...	...	...	...	4	...	4	...	...	1	1	2	...	...	...	...	...
Puerperal Fever ...	...	...	...	...	...	...	...	1	1	2	...	...	...	...	...	...	...	...	...	...
Erysipelas ...	...	...	...	...	...	...	...	1	1	2	...	...	...	...	...	...	...	...	...	...
Other Septic Diseases ...	1	...	2	1	4	1	1	...	...	2	...	...	2	1	3	...	...	1	...	1
Phthisis ...	1	1	4	1	7	4	3	2	3	12	1	...	2	...	3	...	...	1	1	2
Other Tubercular Diseases	...	2	2	1	5	1	2	2	2	7	...	...	2	...	2	...	...	...	...	...
Cancer ...	1	2	...	1	4	2	1	2	1	6	3	2	1	2	8	...	...	1	...	1
Bronchitis ...	1	1	...	...	2	1	1	1	8	11	3	...	...	1	4	3	...	...	1	4
Pneumonia ...	1	...	2	2	5	5	1	...	5	11	1	3	...	...	4	...	...	...	2	2
Pleurisy ...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...
Other Respiratory Diseases	...	...	...	...	...	1	...	...	1	2	...	...	...	...	...	...	...	...	...	...
Alcoholism and Cirrhosis	...	1	2	1	4	1	...	3	1	5	...	...	...	...	...	...	...	1	...	1
Venereal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Premature Birth ...	1	...	2	1	4	1	...	2	1	4	...	2	1	...	3	1	...	...	...	1
Diseases and Accidents of Parturition	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Heart Diseases ...	1	4	5	1	11	4	1	1	3	9	3	1	4	2	10	1	1	1	...	3
Accidents ...	...	...	2	...	2	1	...	...	1	2	...	...	...	...	...	...	...	...	1	1
Suicides ...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...
Old Age ...	1	2	...	...	3	1	4	1	1	7	3	...	...	...	3	...	1	...	1	2
All Other Causes	8	4	12	4	28	7	10	7	12	36	4	4	6	4	18	4	2	...	2	8
Totals	22	21	35	13	91	32	29	36	45	142	22	16	23	15	76	9	5	7	8	29



If allowance is made for the fact that the populations of the various Sub-Districts differ as to number, it will be seen from Table A that Phthisis and other Tubercular Diseases accounted for an undue proportion of deaths in North and East Finchley; Whooping Cough, Bronchitis and Pneumonia in East Finchley; and Measles in North Finchley; whilst the recorded deaths from Cancer were actually as well as relatively most numerous in West Finchley.

On comparing Table A1 with the corresponding table for last year, one finds an increase in the number of deaths recorded under nearly every heading, this is especially noticeable in the case of Measles, Whooping Cough, Diarrhœa, Phthisis and other Tubercular Diseases, Bronchitis and Pneumonia.

INFANTILE MORTALITY.—There were 87 deaths of infants under 1 year of age registered, as compared with 634 births. The proportion which the deaths under 1 year of age bear to 1,000 births is therefore 137.2. The average for the preceding 10 years was 104.

The corresponding rate for England and Wales in 1904 was 146, and that for the 76 Great Towns 160.

In Finchley, the deaths under 1 year of age formed 25.9 per cent. of the total deaths at all ages.



Table A 3.

THE CAUSES OF INFANTILE MORTALITY, 1904.

	1st Quar.	2nd Quar.	3rd Quar.	4th Quar.	Totals
Wasting, Developmental Diseases and Debility ..	5	3	4	1	13
Premature Birth and Insufficient Vitality ... ..	3	3	5	3	14
Diarrhoea ... ..	...	1	11	...	12
Diseases of Lungs ... ..	6	2	...	4	12
Whooping Cough ... ..	...	1	2	...	3
Convulsions ... ..	2	1	1	...	4
Gastric Catarrh and Enteritis ...	...	...	3	1	4
Measles ... ..	3	4	1	...	8
Tuberculosis (other than Pulmonary) ... ..	1	...	3	1	5
Erysipelas ... ..	...	...	1	1	2
Tetanus ... ..	...	1	...	...	1
Meningitis ... ..	...	...	1	...	1
Other Causes ... ..	2	2	4	...	8
Totals ... ..	22	18	36	11	87

The Infantile Mortality-rate of the District during last year was exceptionally high, and was mainly accounted for by the prevalence of Measles and summer Diarrhœa, and by the large number of deaths grouped together under the terms wasting, developmental diseases and debility. As usual, premature birth and congenital weakness accounted for a considerable number of deaths.

SENILE MORTALITY.—Of the 338 deaths registered, 65 were of persons over 70 years of age. The proportion of deaths occurring among those over 70 years of age to the total deaths is therefore 19.2 per cent.

*Senile Mortality.*

		65 and under 70.	70 and under 80.	80 and under 90.	90 and upwards.	TOTALS.
First Quarter	...	4	11	9	..	24
Second Quarter	...	5	7	6	..	18
Third Quarter	...	8	11	3	..	22
Fourth Quarter	...	8	10	8	..	26
		—	—	—	—	—
		25	39	26	..	90

ZYMOTIC MORTALITY.—Included in the Zymotic Mortality are the deaths from the 7 principal Zymotic or Infectious Diseases, viz.:—Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever (including Enteric or Typhoid Fever, Typhus Fever and Simple Continued Fever), and Diarrhœa.

The Zymotic Death-Rate for 1904 was 1.72, as against 0.54 in 1903, and 1.03 in 1902.

In Table A4 several other infectious diseases are included, and the deaths occurring last year compared with those of the two preceding years.

In Table A5 the rates for each of the diseases comprised within the term "Zymotic" are given, along with the corresponding rates for England and Wales and the 76 Great Towns.

**Table A4.**

DEATHS FROM INFECTIOUS DISEASES IN THE YEAR 1904.

		Scarlet Fever.	Diphtheria.	Membranous Croup	Typhoid Fever.	Puerperal Fever.	Measles.	Whooping Cough.	Diarrhoea and Dysentery	Influenza.	Erysipelas.	Total.	Rate to every 1,000 Persons.
First Quarter	...	...	1	...	...	...	6	1	...	3	...	11	
Second "	...	1	...	...	...	...	9	2	1	...	...	13	
Third "	...	...	...	...	...	1	2	5	12	...	1	21	
Fourth "	...	...	2	...	...	1	...	2	...	2	1	8	
Totals	...	1	3	...	...	2	17	10	13	5	2	53	2.1
1903	...	...	2	1	...	...	1	5	4	4	...	17	0.7
1902	...	1	3	1	1	1	2	9	7	7	1	33	1.4



Table A5.

A COMPARISON OF THE RATES OF THE FINCHLEY DISTRICT WITH THOSE OF ENGLAND AND WALES, THE 76 GREAT TOWNS, AND LONDON GENERALLY, FOR THE YEAR 1904.

	General Death- Rate.	Rate of Infantile Mortality.	Birth-Rate.	Zymotic Death- Rate.
England and Wales ...	16·2	146	27·9	1·94
The 76 Great Towns ...	17·2	160	29·1	2·49
London Generally ...				
The Finchley District ...	13·2	137·2	24·8	1·72

  

	Small- pox.	Measles	Scarlet Fever.	Whoop- ing Cough.	Typh'd Fever.	Diph- theria.	Diarr'œa and Dysen- tery.
England and Wales	0·01	0·36	0·11	0·34	0·09	0·17	0·86
London generally ...							
The 76 Great Towns	0·01	0·47	0·12	0·40	0·10	0·19	1·20
The Finchley District	0·000	0·66	0·05	0·39	0·00	0·11	0·51

## DEATHS IN PUBLIC INSTITUTIONS WITHIN THE DISTRICT.

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Totals
Woodside Home ...	...	...	1	1	2
Home for Homeless Babies ...	6	1	3	..	10
National Hospital Convalescent Home	1	.	1	..	2
	<hr/> 7	<hr/> 1	<hr/> 5	<hr/> 1	<hr/> 14

These deaths were of persons who came to Finchley from other Districts, and who were non-parishioners; they have not, therefore, been included when estimating the Finchley Death-Rate.

### The Public Mortuary.

Twenty-three bodies were deposited during the year at the Public Mortuary, as against 26 in the preceding year; 19 of these had been parishioners of Finchley, and 4 of Friern Barnet.

### INQUESTS, 1904.

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.
Cerebral Hæmorrhage ...	1	..	..	..	1
Apoplexy ...	..	..	..	1	1
Intersusception of Bowel	1	..	..	..	1
Intestinal Obstruction ..	..	1	..	..	1
Pulmonary Apoplexy ...	1	..	..	..	1
Heart Disease ...	..	..	1	1	2
Rupture of Aneurism ...	..	..	1	..	1
Renal Disease ...	..	1	1	1	3
Cirrhosis of Liver ...	..	..	1	..	1
Hæmorrhage from Umbilical Cord	..	..	1	..	1
Diphtheria ...	..	..	..	1	1
Bronchitis ...	..	..	..	1	1
Epilepsy ...	..	1	..	..	1
Suicide ...	1	..	..	..	1
Accident ...	1	..	2	2	5
	<hr/> 5	<hr/> 3	<hr/> 7	<hr/> 7	<hr/> 22



Table A6.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1904 AND PREVIOUS YEARS.

YEAR.	Population estimated to middle of each year.	BIRTHS.		DEATHS UNDER ONE YEAR OF AGE.		DEATHS AT ALL AGES, TOTAL.		Deaths in Public Institutions.	Deaths of Non-residents registered in District.	Deaths of Residents registered beyond District.	DEATHS AT ALL AGES NETT.	
		Number.	*Rate.	Number.	Rate per 1000 Births registered.	Number.	*Rate.				Number.	*Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1891 ...	16,419	484	29.5	42	86.8	...	...	...	...	...	182	11.1
1892 ...	17,002	477	28.0	43	90.1	...	...	...	...	...	207	12.2
1893 ..	17,500	486	27.7	52	107.0	224	12.4	...	...	...	231	13.2
1894 ...	18,015	515	28.6	57	110.7	...	...	...	17	14	221	12.2
1895 ...	18,598	466	25.0	46	98.7	220	11.8	...	21	11	210	11.3
1896 ...	19,218	496	25.8	46	92.7	197	10.2	...	9	12	200	10.4
1897 ...	20,064	501	24.4	51	101.8	204	10.1	...	11	12	205	10.2
1898 ...	20,907	498	23.8	68	136.5	216	10.4	...	10	12	218	10.4
1899 ...	21,800	507	23.2	56	110.4	246	11.3	...	19	22	249	11.4
1900 ...	22,750	522	23.9	58	111.1	244	10.7	...	17	17	244	10.7
Averages for years 1892-1901	19,227	495	25.0	51.9	104.6	222	10.7	...	14.5	13.5	216.7	11.3
1901 ...	22,500	540	24.0	53	98.1	211	9.4	...	12	20	219	9.7
1902 ...	23,400	578	24.7	54	93.4	269	11.5	...	27	17	259	11.0
1903 ...	24,125	646	26.8	59	91.3	220	9.1	...	15	29	234	9.7
1904 ...	25,564	634	24.8	87	137.2	325	12.7	...	14	27	338	13.2

NOTE.—The deaths included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the District or division. The deaths included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term “non-residents” is meant persons brought into the district on account of illness, and dying there; and by the term “residents” is meant persons who have been taken out of the district on account of illness, and have died elsewhere.

The “Public Institutions” taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses, and lunatic asylums. A list of the Institutions in respect of the deaths in which corrections have been made is appended.

\* Rates calculated per 1000 of estimated population.

Table A6—Continued.

Area of district in acres(exclu- sive of area covered by water).	}	3.384	Total population at all ages —	22,126	} At Census of 1901.
			Number of Inhabited houses —	3,949	
			Average number of persons per house —	5'6	

1 Institutions within the District receiving sick and infirm persons from outside the District.	2. Institutions outside the District receiving sick and infirm persons from the District
Convent of the Good Shepherd. Woodside Home, Whetstone. National Hospital, Convalescent Home, East Finchley. Small-pox Isolation Hospital. Home for Homeless Babies. Fallow Corner, North Finchley.	Royal Free Hospital. St. Bartholomew's Hospital. Children's Hospital, Great Ormond Street. Salvation Army Maternity Home, Hackney. Great Northern Hospital. University College Hospital. London Hospital. Guy's Hospital. National Hospital, Queen's Square. Homœopathic Hospital, Great Ormond Street. Northern Hospital, Liverpool. Nursing Home, Marylebone. Bethnal House Asylum Middlesex Asylum, Wands- worth. City of London Lunatic Asylum, Stone. Camberwell House Asylum. Hornsey Isolation Hospital.



## Infectious Diseases and the Measures taken to Prevent their Spread.

It will be seen from Table B that 265 notification certificates of Infectious Disease were received from medical practitioners, as against 159 in the preceding year, and 189 in 1902.

The Infectious Sickness Rate of the District was 10.3 to each 1,000 of the population, as against 6.6 in 1903, and 8.0 in 1902.

The 265 cases represent infection in 203 different houses.

The cases removed to Hospital numbered 156, *i.e.*, 58 per cent. Most of these were isolated in the Hospital belonging to the Hornsey Borough Council, but on several occasions the full number of beds allotted to Finchley were occupied, and accommodation had to be sought elsewhere. The Enfield and Hendon District Councils were, fortunately, able and willing to receive cases from this District, and some eight patients were at one time and another sent to Enfield Isolation Hospital and five to Hendon.

DISINFECTION OF PREMISES, &c.—As soon as possible after a patient is removed to Hospital, or, when the patient is nursed at home, directly the medical attendant notifies that the patient is free from infection, the room is fumigated with formic aldehyde vapour, and the bedding, blankets, and wearing apparel which cannot be conveniently washed are passed through an "Equifex" steam-disinfector. Whenever considered necessary, directions are given to have the wall-paper stripped and the ceiling whitewashed.

NOTIFICATION OF SCHOOL AUTHORITIES.—This is done in order to assist the School Authorities in excluding children coming from an infected house.

ISOLATION HOSPITAL.—The agreement with the Hornsey Borough Council with reference to the conjoint use of their Isolation Hospital for Hornsey and Finchley patients came into operation on April 1st, 1903. By this arrangement, 25 beds are reserved for the use of Finchley residents, and cases of three different infectious diseases (Scarlet Fever, Diphtheria, and Enteric) can be isolated. This marks a great advance in the sanitary administration of the District, and a very much needed improvement of the previous state of things whereby only one disease (Scarlet Fever) could be isolated in a small building, which had ceased to be suitable for the reception of patients at all.

OTHER PRECAUTIONARY MEASURES.—Especial care is taken to prevent the spread of infection by those engaged in the milk trade, laundry work, or the manufacture of wearing apparel.

At least one visit is paid to every infected house by either the Medical Officer of Health or Sanitary Inspector, and the opportunity taken to examine the sanitary condition of the premises.



**Table B.**—CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1904.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.							TOTAL CASES NOTIFIED IN EACH LOCALITY.				NO. OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY.			
	At all Ages.	At Ages—Years.						1 East Finchley.	2 West Finchley.	3 North Finchley.	4 Whetstone.	1 East Finchley.	2 West Finchley.	3 North Finchley.	4 Whetstone.
		Under 1.	1 to 5	5 to 15	15 to 25	25 to 65	65 and upwards								
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria ..	68	..	20	31	10	7	..	41	13	11	3	29	4	2	3
Membranous Croup ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas ..	30	5	..	1	4	18	2	17	1	5	7	..	..	..	..
Scarlet Fever ..	161	..	39	104	10	8	..	80	23	49	9	60	16	37	3
Enteric Fever ..	4	..	..	2	2	..	..	3	..	1	..	1	..	1	..
Typhus Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Relapsing Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever ..	2	..	..	..	1	1	..	2	..	..	..	..	..	..	..
Plague ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals ..	265	5	59	138	27	34	2	143	37	66	19	90	20	40	6



Table B1.

SHOWING THE NUMBER OF CASES AND DEATHS FROM THE PRINCIPAL  
INFECTIOUS DISEASES NOTIFIED FROM AMONG PARISHIONERS  
DURING THE YEARS 1890—1904 (INCLUSIVE).

	Small-pox.		Scarlet Fever.		Diphtheria and Croup.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1890	..	..	53	1	31	4
1891	..	..	80	..	32	3
1892	..	..	125	2	37	6
1893	..	..	189	3	30	9
1894	9	1	57	..	66	4
1895	..	..	27	..	22	2
1896	..	..	33	..	25	5
1897	..	..	54	..	20	1
1898	..	..	91	..	12	..
1899	8	2	58	..	32	6
1900	1	..	94	2	12	1
1901	7	1	98	..	21	2
1902	15	1	115	1	31	3
1903	..	..	67	..	72	3
1904	..	..	161	1	68	3

  

	Erysipelas.		Puerperal Fever.		Typhoid Fever.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1890	16	..	..	..	7	1
1891	14	..	1	..	3	1
1892	17	..	2	..	3	1
1893	38	..	1	..	14	1
1894	22	..	4	4	12	1
1895	15	2	1	1	12	3
1896	14	..	1	..	12	2
1897	15	..	2	..	13	2
1898	6	..	..	..	9	3
1899	14	2	2	2	12	..
1900	16	2	1	..	7	3
1901	10	..	..	..	15	3
1902	13	1	1	1	13	1
1903	15	..	1	..	4	..
1904	30	2	2	2	4	..

Table B2.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING EACH MONTH  
OF THE YEAR 1904.

			Diphtheria.	Erysipelas.	Scarlet Fever.	Enteric Fever.	Puerperal Fever.	Totals.
January ...	...	...	6	1	11	2	...	20
February ...	...	...	7	6	3	...	...	16
March ...	...	...	6	5	11	...	...	22
April ...	...	...	12	1	5	...	...	18
May ...	...	...	3	3	...	...	...	6
June ...	...	...	1	2	20	...	...	23
July ...	...	...	6	1	24	..	...	31
August ...	..	..	2	3	15	1	1	22
September ...	...	...	1	1	13	1	...	16
October ...	...	...	15	2	25	...	...	42
November ...	...	...	3	2	19	...	...	24
December ...	...	...	6	3	15	...	1	25
Totals ...	...	...	68	30	161	4	2	265

### Scarlet Fever.

The 161 cases of Scarlet Fever notified were for the most part of a mild nature, and only one patient died. They represented infection in 112 houses.

An epidemic of this nature is particularly difficult to check, as the premonitory symptoms are often so slight that parents fail to suspect the disease, and consequently do not



at once seek medical advice; meanwhile no precautions are taken to isolate the child, and others become infected.

The number of cases notified was considerably in excess of the average for the past ten years, but in 1893 the cases amounted to 189.

### **Diphtheria.**

The 68 cases notified represented infection in 49 different households. Three deaths from this disease were recorded during the year.

The number of cases notified showed a slight decrease on that of the preceding year, but was considerably in excess of the average for the previous ten years.

### **Typhoid or Enteric Fever.**

Typhoid Fever was introduced into this District on four occasions, and it is satisfactory to record that no spread of the infection occurred.

### **Measles and Whooping Cough.**

Measles was very prevalent in all parts of Finchley during the first half of the year; the chief incidence appeared to fall on North Finchley.

Throughout the year cases of Whooping-cough occurred, most of these being in East and West Finchley.

### **Small-Pox.**

No cases of this disease occurred in the District during the year.



The Hospital in Summers Lane, which has accommodated 24 patients, has been kept in readiness for immediate use. By an agreement with the Hornsey Borough Council this Hospital is available for cases from their District, but no patient was sent in during the year.

### Bacteriological Diagnosis.

During the year 1904, 48 Bacteriological Examinations were made in order to determine the existence of Diphtheria, Phthisis, and Enteric Fever in doubtful cases. The results were as follows:—

		Positive.	Negative.	Total.
Diphtheria	...	16	20	36
Enteric	...	—	4	4
Phthisis	...	2	6	8

### Consumption (Phthisis).

Towards the close of 1903 the Council decided to adopt a voluntary system of notification of cases of Phthisis within the District. The usual fees for notification are paid for information of the existence of any case which has not been previously notified from the same premises.

During 1904, eight notification certificates were received from medical practitioners.

As cases can only be notified with the consent of the patient or those in charge of the patient, the certificates received represent but a small proportion of those affected, and a very imperfect idea of the actual prevalence of the disease can be formed.

It is exceedingly difficult to make the uneducated portion of the community realise the infective nature of the malady, and the consequent need for precautions to prevent others taking the disease. Fortunately the communicability of the disease is but slight, except in those with hereditary predisposition, and the generally improved hygienic surroundings amidst which people now live appear to be exercising a favourable influence, as the mortality from Phthisis has undoubtedly declined during recent years throughout the country.

It would be of very considerable assistance if, in every case where a death from phthisis has occurred, the medical practitioner in attendance would induce the relations to consent to have the bedding and, where necessary, the room thoroughly disinfected. On information being received at the Council Offices, stating what day would be convenient, arrangements will be made for the disinfection to be carried out.

### **Middlesex Open-Air Sanatorium.**

A Committee has now been formed to establish a Sanatorium for the treatment of hopeful cases of Phthisis occurring among the inhabitants of the County who are unable to afford the fees of more expensive sanatoria.

The Provisional Executive Committee proposed that accommodation be provided for 100 patients, and recommended that Borough and District Councils should establish and maintain at least 50 beds, the Guardians should support 30, and the remainder should be established and maintained by public subscriptions, large trade firms, benefit societies and private individuals.



Early in December, 1904, the following list was issued of those Public Authorities who had already agreed to establish and maintain beds. In some cases it was stipulated that certain defined conditions should be complied with:—

Acton	Council	...	3	Beds.
Brentford	"	...	1	"
Ealing	"	...	3	"
Edmonton	"	...	3	"
Finchley	"	...	2	"
Harrow	"	...	1	"
Hornsey	"	...	5	"
Southgate	"	...	2	"
Tottenham	"	...	3	"
Wood Green	"	...	3	"
Edmonton Union		...	6	"

Although sanatoria are an essential part of any scheme directed against Tuberculosis, I would emphasise a point that was urged in the last Annual Report, *i.e.*, "It is by improving the conditions of life and the dwellings of the poorer section of the community that we shall achieve most in our crusade against the disease."

### **The Sanitary Authority as the Education Authority.**

**SCHOOL CLOSURE.**—Owing to the prevalence of epidemic disease, chiefly measles, it was found necessary to close one or more departments in most of the schools for periods varying from three to five weeks:—

Christ Church Infants'	...	25th Feb. to 30th March.
Long Lane Infants'	...	6th June to 3rd July.
Long Lane Mixed	...	16th June to 3rd July.
St. Mary's Infants'	...	20th June to 17th July.
Holy Trinity Infants'	...	20th June to 10th July.
St. John's, Whetstone	...	27th June to 24th July.



The difficulty of deciding when to recommend school closure with the view of preventing the spread of an epidemic is increased by the absence of any reliable data as to how many of the children have already suffered from the infectious disease in question. This might be met by keeping a record of each child. A simple method would be to have cards printed with the required headings, such as: Name, date of entering school, age on entry, date of Measles, Whooping-cough, Scarlet Fever, Vaccination; spaces being left for the dates, etc., to be filled in. When the system was once in working order the cards would merely have to be altered as occasion arose, and re-sorted according to classes at the commencement of each term.

### **Water-Supply.**

The District is supplied from the mains of the Barnet Water Company. The Company pump from five deep wells in the chalk,—three at Barnet, one at Potter's Bar, and one at East Barnet; and, in addition, obtain a certain quantity of water from the New River Company.

The service is at present intermittent to the greater portion of Finchley, but the Company are under an obligation to give a constant supply to the whole of the District within three years.

The quantity of water supplied has been estimated at about 20 gallons per head per day. No water-softening process is in use.

### **Drainage and Sewage-Disposal.**

The dual system has been adopted in the District, and a considerable portion of the surface water is now received into separate drains, which discharge into natural water-courses.

Sewage reaches the farm in Summers Lane by either the low or high level sewer. The sewage from the low level sewer passes through a screen, and is then pumped to join the high level sewage. The mixed sewage is screened, and, after the addition of lime and sulphate of iron, passed into one of three precipitation tanks (each having a capacity of 226,260 gallons). The tank effluent is next treated in a double set of bacterial contact beds, in each of which it remains standing about five hours. The effluent is finally run over several acres of meadow before entering the brook at the bottom of the valley.

The sludge is drawn off after a precipitation tank has been in use a week, and is pumped on to the land at the highest level of the farm. It is there left to drain and evaporate, and is then ploughed in, the land being used for crops of cabbages, etc.

The dry weather flow of sewage is estimated at about 700,000 gallons per diem. In wet weather a portion of the sewage is treated in the ordinary way, and the remainder by broad irrigation. The sub-soil of the farm is clay, and there is only a shallow surface soil over most of the area, so that considerably more land has to be utilised than would be required with more suitable soil.

The total area of the farm comprises close upon 80 acres belonging to the Council, and 33 acres rented from the Burial Board.

The filter beds number 16, and cover a total area of about 27,000 square feet. Nine of these beds are in fairly satisfactory working order; they are constructed of clinker and burnt clay to a depth of  $2\frac{1}{2}$  to  $3\frac{1}{2}$  feet, and underdrained; but



the effluent from them has to be treated on land before it is sufficiently pure to be discharged into the brook. The remaining seven beds are merely underdrained clay beds, the surface of which is periodically ploughed over.

There is no doubt in my mind that very considerable expenditure must shortly be incurred in order to continue dealing adequately with the sewage under the present system. Additional pumping plant is required, and many of the filter-beds need to be properly made up. The storm-water is also a constant source of anxiety, especially when the land is taxed by a long period of wet weather.

The problem to be faced is whether it will be more economical to expend money on the present system or to adopt a new scheme. Since our present scheme was devised great advances have been made in methods of sewage disposal, and I believe it will be found most advantageous to make use of detritus and septic tanks in place of chemical precipitation, to construct new primary and secondary bacterial beds on the land lying below the level of the low level sewer, and, in addition, to construct special storm-water filters. If this were done it is probable that the whole of the present sewage could be treated by gravitation without the need for pumping, a much smaller area of land would be required, and the offensive odour and other difficulties encountered in disposing of the sludge would be minimised.

### **Disposal of House-Refuse.**

The Council contract for a weekly removal of all house-refuse. The refuse is burnt in the open, on the sewage farm. It would be a distinct advantage from the public health point of view if all carts used in the removal were furnished with covers.



The Council undertake to remove trade-refuse; a small charge is made, based on the estimated cost of removal.

### Notes Upon Sanitary Work Performed During the Year.

During the year 1904, 1,236 premises were inspected for conditions injurious or dangerous to health, and insanitary conditions, varying in their nature from comparatively trivial to grave, were discovered in 754 instances.

A statement of the work done under the Nuisances Sections of the Public Health Act will be found in the appended report of the Sanitary Inspector.

ANALYSES performed during the year included:—

Samples of effluent from the Sewage Farm. These were chemically examined and found satisfactory in each case.

A sample of the public water-supply taken each month. These samples were drawn from stand-pipes in various parts of the District, and the results of analysis have, without exception, been very satisfactory.

A sample from a shallow well supplying four cottages. This showed evidence of pollution, and was condemned. The public water-supply has since been laid on.

DAIRIES, COWSHEDS, AND SLAUGHTERHOUSES.—These have been periodically inspected, and they are generally kept in a satisfactory condition. Structural improvements have been carried out in several instances. A full list of these premises (together with the *Bakehouses*) is appended.

### Factories and Workshops.

All the Workshops and Work-places in the District have been inspected during the year, and various sanitary defects remedied as a consequence.

Very little home work appears to be given out from Workshops in the District, and the *list of out-workers* consequently contains but few names. At some of the small Workshops the work done is for firms in London, and their occupants are technically out-workers, but their names are not included in the list of out-workers, as the rooms come under inspection in the ordinary routine.

The following is a list of the Workshops and Work-places on the Register at the end of 1904:—

Tailors	...	...	...	7
Dressmakers and Milliners				20
Bootmakers	...	...	...	16
Cycle Makers	...	...	...	6
Bakers	...	...	...	16
Laundries	...	...	...	12
Restaurant Kitchens			...	9
Picture Framers	...	...	...	2
Farriers	...	...	...	6
Ironmongers	...	...	...	3
Die Stampers	...	...	...	1
Saddlers	...	...	...	4
Blind Makers	...	...	...	2
Cabinet Makers	...	...	...	4
Wheelwrights	...	...	...	2
Total				110



## Bakehouses.

All the Bakehouses were inspected during the year. There are at present in the District three Underground Bakehouses. After certain structural alterations had been made these were certified by the Sanitary Authority at the commencement of 1904 as suitable in regard to construction, light, ventilation, and all other respects. The minimum requirements for the Council's Certificate included provisions against the entry of ground air and moisture, and provision for ventilation, light and cleanliness of the premises.

### List of Bakehouses.

#### *East Finchley.*

Burgess, High Road, East Finchley.  
 Price, Market Place, East Finchley.  
 Janes, Market Place, East Finchley.  
 Burrough, 1, Park Hall Place, East Finchley.  
 Ramsey, 5, Victoria Parade, East Finchley.  
 Buss and Son, 24, Market Parade, East Finchley.

#### *Church End.*

Battson Brothers, Albert Terrace.  
 Abery, Queen's Terrace.  
 Clarke, Prince's Parade.

#### *North Finchley.*

Purvis, The Parade, High Road.  
 Jones, 20, High Street.  
 Cooper, 5, Faversham Terrace, High Street.

#### *Whetstone.*

Harper, High Road.  
 Cook, High Road.



## List of Slaughterhouses.

### *East Finchley.*

Mudd, Market Place.  
 Wilson, Market Place.  
 Pulham, High Road.  
 Express Dairy Company, Kenwood Farm.

### *Church End.*

Galpin, 7, Albert Terrace.  
 Randall, The Broadway.

### *North Finchley and Whetstone.*

Lane, 3, Fortnum Terrace, High Street.  
 Watson, 25, High Street.  
 Ware, Torrington Place.  
 Tansley, 2, High Street.  
 Friday, High Road, Whetstone.

## List of Dairies, Cowsheds, and Milkshops.

### *East Finchley.*

Adams, 11, Cavendish Terrace.  
 Manor Farm Dairy Company, 9, Park Hall Place.  
 Friern Manor Dairy Company, 1, Victoria Parade.  
 Arnold, Cable and Co., The Creamery, Market Parade.  
 Vivers, Lodge Farm, Bishop's Avenue.  
 Express Dairy Company, Kenwood Farm.  
 Walker, Church Lane.  
 Coppen, Market Place, East Finchley.  
 Clark, Vale Farm Dairy, High Road.  
 Burrough, 1, Park Hall Place.

*Church End.*

Adams, Courthouse Farm Dairy, Ballard's Lane.  
 Harriman, 21, The Broadwary.  
 Manor Farm Dairy Company, The Broadway.  
 Collins, 11, Queen's Terrace.  
 Friern Manor Dairy Company, 9, Station Road.  
 Express Dairy Company, College Farm, Regent's  
 Park Road.  
 Chaney, Glebe Farm, Dollis Park.  
 Manor Farm Dairy Company, 5, King's Parade.

*North Finchley and Whetstone.*

Collins, 3, Faversham Terrace.  
 Manor Farm Dairy Company, High Street.  
 Floyd, Friern Lane, Whetstone.  
 Collins, Courthouse Farm, Nether Street.  
 De Rivaz and Tucker, A 1 Dairy Farm, Whetstone.  
 Holloway, The Alderney Dairy, High Street.  
 Brinkler, 42, High Street.  
 Morgan, Brook Farm, Whetstone.  
 Hill, High Road, Whetstone.

**Adoptive Acts, Byelaws, and Regulations.**

The following *Adoptive Acts* are in force in the District:—

The Infectious Diseases (Prevention) Act, 1890.  
 „ Public Health Amendment „ 1890.

The following *Bye-laws* are in force:—

The cleansing of footways and pavements; the removal of house-refuse; and the cleansing of earth closets, privies, ash pits, and cesspools.



The prevention of nuisances arising from snow, filth, dust, ashes, and rubbish, and the keeping of animals on any premises as to be injurious to health.

Common lodging houses.

New Streets and buildings.

Slaughterhouses.

Houses let in lodgings.

Offensive trades.

Paving of yards and open spaces.

Management of Mortuary.

Drainage of buildings.

*Regulations* are in force with respect to:—

Dairies, cowsheds and milkshops.

### **The Revenue Act of 1903.**

In 1890 the Customs and Inland Revenue Act granted exemption from Inhabited House Duty to all houses used solely for providing separate dwellings at rents not exceeding 7s. 6d. per week for each dwelling, if the Medical Officer of Health certified that the premises afforded suitable accommodation for each of the persons inhabiting them, and that due provision was made for their sanitary requirements. This exemption was in order to encourage the erection of Artisans' Dwellings on good lines, and it has proved a useful piece of legislation.

The Revenue Act of 1903 extends the provisions of the former Act, and now where a dwelling house is used for the sole purpose of providing separate dwellings: (a) Any dwelling which is of an annual value of below £20 shall be exempt from Inhabited House Duty; (b) The rate of Inhabited House Duty in dwellings of an annual value of £20, but not exceeding £40, is reduced to 3d.; and (c) The rate in respect of dwellings beyond an annual value of £40, and not exceeding £60, is reduced to 6d.

**Report upon an Outbreak of Illness due to Milk  
in the Finchley District. in January, 1904.**

BY

HENRY KENWOOD, LATE MEDICAL OFFICER OF HEALTH.

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On the 18th January, 1904, I was informed of an outbreak of illness among the Residents in North Finchley, Whetstone and West Finchley. From the 16th to the 20th quite 100 cases of illness had come before the notice of the local medical practitioners. The outbreak continued for a fortnight, and there does not appear to be any clear evidence of fresh infection subsequent to January 30th. During this period some 500 persons were affected in the Finchley District, and, so far as I can gather, probably another 50 in the adjoining districts of Hornsey, Friern Barnet, and Mill Hill. The main incidence of the illness fell upon the districts of North Finchley and Whetstone. Its characters were as follows:—

After an incubation period, which appeared to be commonly 24 hours but occasionally 48, the sufferer complained of enlargement and tenderness of the sub-maxillary glands, together with soreness of throat and marked malaise. One marked characteristic of the complaint was the frequency with which the tonsils were inflamed and enlarged, and in the worst cases the patients' temperature was invariably high, reaching in some cases to nearly 104 degrees F. From each sufferer there was much complaint of feeling weak and ill. In one or two patients the tonsils suppurated, and in some cases the posterior cervical and supra clavicular glands were enlarged. The complications which were most frequent were gland



abscesses, cellulitis and neuralgia; and it was repeatedly observed by medical practitioners that after apparent improvement in the patient's condition there was a recrudescence of fever and gland enlargement. In a few cases a measly eruption on the lower limbs was observed. Some of the cases were comparatively mild, others very severe, but only one death occurred.

In a few cases the symptoms were nothing more than a simple sore throat, and in one or two instances it was certainly impossible to distinguish the condition from Mumps. I do not intend to imply necessarily that there was specific cynanche parotidis in these latter cases, but there was certainly a swelling of the facial extension of the parotid gland in one or more of them.

As the result of my enquiries I quickly came to the conclusion that milk was the agency by which the bulk, at any rate, of the infection was being disseminated.

In dealing with the number of cases it is not necessary to divide them into primary and secondary cases for the purpose of arriving at an estimate of the magnitude of the actual milk-borne infection, because although personal infection from case to case undoubtedly occurred, the condition cannot be regarded as having given rise to much secondary infection.

The nature of the infection in the milk is an extremely difficult thing to determine. There is very little doubt that it is due to a living organism, but the circumstance that cases were reported to me in which the infection took place after the milk had been boiled appears to indicate that the products of the organism were also capable of producing the condition.

It would appear that weather conditions (or "season") play some part in determining the onset of these outbreaks. I know of no record of any such outbreak which did not begin in the Autumn or Winter of the year. During the Finchley outbreak the daily ranges of temperature were excessive, and varied from 6 degrees to 19 degrees F. The atmosphere was frequently almost, if not quite, saturated with moisture, and frequent drizzly rains and mists prevailed. On the other hand, on the 15th and 16th of January, when many of the first cases were infected, the weather was bright and fine. The weather, therefore, during the period of the outbreak, was very favourable to chills and sore throats; but it does not, of course, afford any sufficient explanation of the fact that the cases were, in the first place, mainly restricted to Finchley, and, in the second place, that they occurred almost exclusively amongst the customers of a particular milk supply.

In these milk outbreaks there are always a few cases occurring in households which are not served by the recognised infected supply. This circumstance does not necessarily prove that more than the one supply is affected; for the other cases can be accounted for by the practice amongst milkmen to borrow or purchase milk of each other on their rounds, by the householders themselves buying other extra milk occasionally in the mornings, by the fact that the disease is doubtless communicable from individual to individual (quite apart from the milk), and by the circumstance that there are usually at the same time cases of ordinary sore throat not due to milk (but most of which are ascribed to milk) during the prevalence of such an epidemic.

The Measures taken to trace the source of the infection and to deal with the danger may be classified as follows:—



- (1) A veterinary examination of every cow supplying milk to the infected supply was made and the results reported to me.
- (2) Samples from each of the churns of milk which furnished both the morning and evening supplies from different farms were submitted to bacteriological examination at University College.
- (3) All the employees of the infected supply were carefully examined.
- (4) All the precautions taken with reference to the storage of the milk and its delivery were closely investigated by myself.

The results of these measures were as follows:—

- (1) As the result of a veterinary examination of every cow supplying milk to the infected supply, the Veterinary Expert reported that all the animals were in "a condition of perfect health with the exception of two cows which had contracted a chill; the chill had affected their udders, causing their milk to become curdled," and probably these animals had been in that condition for several days prior to his inspection on the 27th January. Both these cows were at once removed from the herd, and no further case of infection occurred after January 30th.
- (2) The results of the bacteriological examination of numerous samples of the milk at University College were on the whole of a negative character—that is to say, although the samples came from different and often widely

distant sources, a careful examination failed to find evidence of any micro-organism in any one sample which which was not common to other samples derived from cows reported by the Veterinary Expert to be in perfect health.

- (3) I satisfied myself that the employees of the infected supply had not been spreading the complaint by reason of any one of them suffering from a bad sore throat at the period when the outbreak commenced.
- (4) Lastly, with reference to the precautions taken for the safe storage and delivery of milk, I found that these were quite satisfactory—indeed, they were in many respects exceptional as to care and stringency.

CONCLUSIONS.—In my opinion the outbreak was in all probability due to the two cows which were suffering from an obscure condition of ill-health towards the middle of January. Although the evidence of the cows' ill-health was not manifest at the time, and although, doubtless, their milk would have been collected and distributed by any milk vendor, yet, slight as the symptoms were, the milk yielded by these two animals contained the material which was responsible for the outbreak. These outbreaks are very regrettable, and, in my opinion, nothing short of a veterinary inspection of the cows, undertaken at very short intervals, more especially through the autumn and winter months, will prevent them; and it is a singular circumstance that since I have been Medical Officer of Health for the Finchley District, the only two such outbreaks which have been experienced were in connection with the milk supply of two large Companies which doubtless take exceptional precautions to guard the health interest of their customers.



I should like to make a brief reference to the last Finchley outbreak. This occurred early in November of the year 1894. The only source of infection which could be traced then was three cows which were evidently out of health, with slightly ulcerated teats, and one of the cows had an inflammatory condition of the udder. I ascertained in that case that the supply involved was distributed to 17 per cent. of the total houses in West Finchley, but of the number of houses infected it supplied 94 per cent. The conclusions which I then arrived at (10 years ago) are similar to those which forced themselves upon me as the result of my investigation of the recent outbreak.

The conclusions which I then came to were:—"That the outbreak was favoured by the excessive rainfall and variable temperature of the preceding fortnight, upon a cold, damp soil, at a season of the year when throat trouble is generally markedly in evidence. Under these favourable conditions a mild infection, probably conveyed in milk, was sufficient to give rise to throat illness beyond its usual type and amount, and to give it the property of infectiousness. I then recommended the residents in the district, by means of posters, to boil all milk during the ensuing fortnight, and in the meantime steps were taken to ensure that the affected cows were adequately dealt with, when the epidemic ended as suddenly as it commenced." I was called to account on both occasions for not acquainting residents of the particular milk supply concerned in the outbreak. I purposely maintained a reticence upon this point for the reason that I could not see what good could result, and it was easy to see how harm might be worked; for it is a general practice among milk vendors, if they run short of milk, to buy of other vendors *en route*; so

that if one supply should be infected and named there is no guarantee that others which would be assumed to be safe are so. All dairy supplies are liable—some, it is true, more than others—to such a visitation of disease; and unless there is some very tangible advantage to be gained, one hesitates to take any step that might mean a heavy financial loss to persons who take the same precautions as others, but who are less fortunate. It was, therefore, judged safer and better in the interests of all not to advertise the particular milk supply involved, seeing that so soon as the outbreak came before my notice a probable cause was discovered and promptly dealt with.

There is a stern lesson which such outbreaks teach us:—An epidemic occurs; we find unhealthy cows; and from other very positive evidence we condemn the milk as the source of the infection; and after many people have been exposed to suffering, if not death, we are able to take measures that stamp out disease. This is not as things should be. We should take the necessary steps to *prevent the epidemic*. To my mind a thorough and systematic inspection of all cows in each district at regular and short intervals should be undertaken, and to that end a veterinary expert should be appointed by several sanitary authorities in combination. It is a monstrous thing that with these milk epidemics cropping up nothing whatever is done to prevent their recurrence, and that the whole of our action is based upon the lines of preventing the spread of the outbreak after it has already worked a vast amount of harm, when it is an easy matter to proceed upon these lines of true prevention that would aim at removing the possibility of future outbreak. In the absence of such a preventive measure as that indicated above, our only alternative is to stand by with folded arms and await the next epidemic.



Milk is such an important article of diet that extra precautions to guard its purity are urgently demanded in this country where the milk supply is by no means so well protected as it is in some other countries (notably Denmark). In the near future public opinion will demand such further protection, and having regard to the value of the measure suggested, the small cost incidental to its adoption should not be allowed to prove an obstacle.

I have only one further point to make: it affects the large Dairy Companies; and the Company concerned in the recent outbreak has favourably received my recommendation. It is the general practice to mix together the milk from several different farms before it is distributed, and hence the milk from one farm, being infected, may infect the whole of the remainder. This fact is not only responsible for an outbreak being distributed over a wide area, but it complicates the work and expense of tracing the source of the infection. It would therefore be a valuable step if, in the case of large supplies, the milks from different farms were not mixed, and the small area of supply of the milk for each separate farm were carefully recorded. I recognise that there are difficulties in carrying out this recommendation in its entirety, but a partial application would be very advantageous.

It must be confessed that the real cause of these outbreaks is wrapped in considerable obscurity. If a condition of the cow is really the cause, then the main symptom of that disease appears to be Mammitis. I do not believe that ordinary Mammitis can give rise to such outbreaks, although it is conceivable that if out of a herd of cows several of them may be suffering from the condition at the same time, the large numbers of pyogenic organisms present might be capable of

producing the condition. In addition to the inspection of the cows at frequent intervals (or if that valuable measure cannot be put into operation, then in default of it), it would be a great gain if the recommendation of the Royal Commission on Tuberculosis were given legal expression to. I refer to the recommendation that notification of every disease in the udder should be made compulsory (under penalty) on the owners of all cows.

**Report on the Outbreak of 1894, taken from the Report Presented to the Finchley Local Board of that Year.**

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"A marked epidemic of throat-illness made its first appearance on the 8th and 9th of November, 1894. Although the weather during the preceding fortnight was such as would in itself account for many so-called "sore throats," there was much in the appearance of the throats in question and in the rapid onset of acute symptoms, as well as in the course that the disease ran, to stamp them as something more than simple catarrhal conditions. Further, these particular cases of throat affection appeared to possess the property of infectiousness. There were several houses in which the complaint cropped up among as many as 4 or 5 members of the same household, in succession, under conditions that strongly supported the probability of spread from case to case.

"There was no question of the undoubted fact that in its origin the disease assumed the characters of a true epidemic; for 16 cases occurred suddenly within 12 hours.

"One significant fact in connection with the outbreak was the grouping of those initial cases in and around Hendon Lane. Subsequent to November 11th information of fresh



cases was received daily, and by November 18th they had numbered nearly 100, which were distributed mainly, in about equal numbers, over Church End and East Finchley. North Finchley was affected only to about one-third of the extent of these other districts, and in Whetstone there were only two cases.

"In investigating such an outbreak one first turns to unhealthy odours, such as may arise from defective sewer ventilation, from sanitary defects in households, and from accumulations of dung, manure, and other putrifying organic matter. I failed, however, to find any condition that could have proved operative in the production of serious cases of sore throat, nor anything to explain why Hendon Lane should have suffered more than any other part of the district.

"It was impossible to accept the theory that any climatic conditions alone could have been responsible for the outbreak, although these had been sufficiently remarkable. In addition to the excessive variations in rainfall and temperature, the humidity of the air had averaged 90.4 per cent. of complete saturation. These atmospheric conditions, especially in the autumn of the year, and in a district naturally somewhat cold and damp by reason of its clay soil, would be expected to give rise to sore throat, and it undoubtedly did so; but the sore throat under investigation was something more than the sore throat generally brought about by those conditions, and, moreover, it was at first restricted to a small area of the District.

"The reasons that impelled me to attribute the outbreak to milk infection were the following:—

- "1. It was easy to my mind to exclude all other conditions to which an epidemic of such throat illness has ever been ascribed.

- "2. The disease cropped up, with scarcely an exception, in good class property, where, of course, most cows' milk is consumed.
- "3. On inspecting all the cows which furnished milk in the area, I discovered three which were evidently out of health, and in each case the teats were slightly ulcerated, and one of the cows had a small chronic abscess in the udder. I also carefully examined the throats of those who milked the cows, but found them, without exception, healthy.
- "4. I then ascertained that the supply to which these cows contributed was distributed to 17 per cent. of the total houses in the district, but of the number of houses infected it supplied 94 per cent.
- "5. The unfavourable climatic conditions had prevailed for at least a fortnight prior to the appearance of these throat cases, which undoubtedly cropped up in far less than a week after exposure to the exciting cause; indeed, there were strong reasons for believing that the so-called "incubation period" did not exceed 48 hours. Under these circumstances, and after the other possible causes had been excluded, the sudden outcrop of many cases in a localised area pointed to a milk epidemic.
- "It may be of further interest to briefly state the main reasons that made me hesitate before I pronounced the milk to be the cause of the infection:—
- "1. The outset of the outbreak was not characteristic of milk infection. Instead of there being 5 infected



houses on November 9th, and 8 more on November 10th, one would have expected nearer 10 times this amount, seeing that the supply was a very large one.

"2. The theory of milk infection did not explain away the very marked and special fall of the outbreak upon Hendon Lane, since we should expect to find the infection carried all along the track of supply of the particular carts that served Hendon Lane. What really happened was that, at the commencement of the outbreak, of 22 houses supplied in Hendon Lane five were infected, whereas of 56 houses supplied in other streets from the same carts only six were infected.

"3. Children were not mainly affected. Among the cases of which I was informed there were nearly twice as many people over 20 as there were children under 10.

"4. I had been able to satisfy myself that in Hampstead, St. Pancras and Stoke Newington there were at the time many somewhat similar throat cases."

In the beginning of October of last year, Dr. R. C. Pierce, the Medical Officer of Health of Guildford and Woking, reported upon a similar outbreak at Woking. The symptoms shown by the sufferers in that outbreak were analagous to those I have described in the recent Finchley epidemic; but whereas there was but one fatal case in Finchley, there were several deaths (seven) in the Woking outbreak. Ninety-eight households were infected, the sufferers being mainly adults; and of these households 77 per cent. were supplied by two

dealers who derived part of their milk supply from one common source. On examining the common source of supply it was found that the farmer and family had had sore throats for some two weeks before the outbreak, and that four cows were delivering thick and curdy milk, in some cases of a pinkish tint. Dr. Pierce points out that it was only by the actual milking of the cows that the inflammatory condition of the udder was revealed. Directly the infected supply was stopped, the outbreak, which had lasted six weeks, ceased.

The disease from which the four cows were suffering was pronounced by the Veterinary Surgeon to be Mammitis. This is a very common complaint of milch cows, and it seems highly improbable, having regard to its general prevalence, that that condition alone is really responsible for the rare outbursts of epidemic sore throat to which milk undoubtedly may give rise. The fact, moreover, remains that, as Dr. Brind, the Medical Officer of Health of the District in which the farm was situated, ascertained, that three out of the four cows affected had been in the same condition for many months prior to the epidemic.

It will be seen that the farmer's illness preceded the commencement of the outbreak of sore throat, and the question may naturally arise with reference to this epidemic as to whether the farmer's illness may not have been the actual starting point. He certainly at times helped with the milking of the cows, but the occasions were rare.

This outbreak continued over six weeks. Both the outbreaks in Finchley were stopped in a fortnight.



*Addenda.*—At the first meeting in March, 1904, the Council “instructed the Clerk to write to the County Council of Middlesex with reference to the veterinary inspection of cows, as suggested by the Medical Officer of Health.”—(Extract from Minutes of Council.)

Extract from paper read by myself at the Annual meeting of the British Medical Association in 1895:—

“Practically present action is restricted to preventing the further spread of the outbreak after it has already worked a varying amount of harm, but it is easily practicable to proceed upon lines of true prevention that would aim at removing the possibility of future outbreak. The necessity for further steps is a growing one, for the reasons—1. That the cowkeepers were becoming less and less generally the milk retailers, and they were not, therefore, affected to anything like the same extent as the latter by the consequences of a milk epidemic; moreover, cowkeepers did not (and it seemed would not) recognise the necessity of excluding the milk of cows suffering from those transitory, often slight and generally obscure, ailments that might furnish an infective quality to the milk. 2. The establishment of large companies with large and irregular areas of distribution was gradually displacing the small man with a small and circumscribed area to supply, and the result was a much greater difficulty in tracing the origin of a milk epidemic.”

**REPORT**  
OF THE  
**SANITARY INSPECTOR**  
For the Year 1904.

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*To the Chairman and Members of the Finchley Urban  
District Council.*

GENTLEMEN,

I beg to submit my third Annual Report, dealing with the sanitary work accomplished during the year 1904.

During this period the usual systematic inspection of the District has been well maintained, and the necessary steps have been taken to enforce the proper observance of the Council's Bye-laws and Regulations, and to secure the abatement of nuisances where found to exist.

In all, some 5,379 inspections were made in connection with the work of the department. In 754 of the houses and premises visited, nuisances to the number of 1,511 were dis-



covered, and, in dealing with the sanitary defects from which they arose, 416 "Intimation" and 182 "Statutory" notices were served. At the end of the year 1,361 of the nuisances had been abated, the work of remedying 69 was in hand, and the remaining 81 were still outstanding. In order to ascertain that the notices above referred to were properly complied with, 1,833 visits were paid to the respective premises while the necessary work was in progress. The number of letters written and received in connection with the business of the department was respectively 785 and 751.

The Dairies, Cowsheds, and Milkshops, and more particularly the Slaughterhouses, were, unfortunately, not visited so frequently as is desirable. This was largely due to the absence of clerical assistance in the department, which necessitated a considerable amount of time being devoted to office work by your Inspectors. With a view to obtaining some relief in this direction, the matter was brought to the notice of the Public Health Committee by your Medical Officer of Health at the latter end of the year, and, as a result of their recommendation to the Staff Committee, a junior clerk was appointed by the Council to commence his duties at the beginning of 1905.

During the year, 131 complaints were received with reference to the alleged existence of nuisances, and each complaint was promptly investigated. The practice of persons making written or verbal communications to the Local Authority with regard to existing nuisances is always encouraged, for we are thus often enabled to at once deal with insanitary conditions which otherwise might have remained a source of danger and annoyance for a considerable period before being discovered in the ordinary course of inspection.

I am pleased to state that there was, on the whole, very little opposition on the part of property owners in carrying out your Council's requirements, and it is very gratifying to be able to report that, despite the contentious nature of a large number of the cases dealt with, especially those relating to combined drainage, it was unnecessary to institute legal proceedings, either to enforce the abatement of any nuisance, or to recover expenses incurred for works executed in default.

### Summary of Work Done.

#### INSPECTIONS.

House to house inspections	...	...	...	246
Re-inspections after Order or Notice	...	...	...	1706
Special inspections	...	...	...	953
Visits to works in progress	...	...	...	1833
Do. do. Workshops and Bakehouses	...	...	...	246
Do. do. Slaughterhouses	...	...	...	43
Do. do. Cowsheds, Dairies and Milkshops	...	...	...	76
Do. <i>re</i> Infectious Disease	...	...	...	276
				—
Total number of inspections and re-inspections	...	...	...	5379
Total number of different houses and premises inspected	...	...	...	1236

#### NOTICES, &c.

Number of Notices served—

Intimation	...	...	...	416
Statutory	...	...	...	182
				—
Letters written	...	...	...	598
Letters received and dealt with (excluding Complaints)	...	...	...	785
Complaints received	...	...	...	751
	...	...	...	131



## DRAINAGE.

Nnnumber of Drains examined, tested, exposed, etc.	...	203
Number of Houses and Premises re-drained	...	154
Defective Drains repaired	... ..	18
Drains unstopped and cleansed	... ..	46
Length in yards of Stoneware Pipe Drains laid	...	4110
Length in yards of Heavy Cast-iron Pipe Drains laid	...	364
Manholes provided	... ..	98
Intercepting traps fixed	... ..	68
Stoneware Gully Traps fixed	... ..	384
New Soil Pipes and Ventilating Shafts fixed	...	150
Soil Pipes and Ventilating Shafts repaired	...	21
Dip and Bell Traps removed	... ..	8
Cesspools abolished	... ..	7
Water Tests applied	... ..	532
Smoke Tests applied	... ..	195
Number of Plans of Drainage drawn	... ..	56

## WATER CLOSETS AND SANITARY CONVENIENCES.

New W.C. Pans of the "Washdown" type fitted	...	187
W.C.'s cleansed or repaired	... ..	15
New Flushing Boxes fitted to W.C.'s	... ..	71
Existing Flushing Boxes to W.C.'s repaired	...	72
New W.C. Apartments erected against External Walls		14
Public House Urinals re-constructed	... ..	1

## MISCELLANEOUS.

Roofs repaired	... ..	94
Eaves Guttering renewed	... ..	78
Rainwater Pipes disconnected from Drains, and made to discharge clear of House Walls on proper Gullies	... ..	30

Damp Walls remedied	...	...	...	...	9
Yards paved	...	...	...	...	71
Paving of Yards and Floors repaired	...	...	...	...	37
Stagnant Water in Cellars removed, and provision made for Sub-Soil Drainage	...	...	...	...	3
Rooms repaired, cleansed and lime-washed	...	...	...	...	178
Workrooms cleansed and lime-washed	...	...	...	...	13
Bakehouses cleansed and lime-washed every Six Months.					
Alterations to Bakehouses	...	...	...	...	3
Cowsheds re-constructed	...	...	...	...	2
Cowsheds re-drained	...	...	...	...	1
Slaughterhouses cleansed and lime-washed every Three Months.					
Slaughterhouse Floors repaired	...	...	...	...	1
New Impervious Sinks provided	...	...	...	...	5
New Waste Pipes fixed	...	...	...	...	53
Waste Pipes disconnected from drains	...	...	...	...	3
Waste Pipes repaired	...	...	...	...	13
Cisterns repaired, cleansed and covered	...	...	...	...	34
New Cisterns provided	...	...	...	...	6
Movable Sanitary Dustbins provided	...	...	...	...	98
Nuisances from Overcrowding abated—					
Houses	...	...	...	...	1
Workrooms	...	...	...	...	1
Nuisances from Animals abated	...	...	...	...	15
Accumulations of Manure and Refuse removed	...	...	...	...	10
Dirty Houses cleansed	...	...	...	...	1
Dirty Yards cleansed	...	...	...	...	1
New Pig-styes constructed	...	...	...	...	6
Piggery Floors repaired	...	...	...	...	6
Insanitary Pig-styes disused	...	...	...	...	11
Mews paved	...	...	...	...	2



Stables re-paved	...	...	...	...	4
Nuisances from Temporary Privies abated	...	...	...	...	2
Ventilation under Floors provided	...	...	...	...	28
Surface Water Wells cleansed	...	...	...	...	2

### INFECTIOUS DISEASE AND DISINFECTION.

Cases of Infectious Disease notified	...	...	...	269
Number of Rooms fumigated	...	...	...	266
Number of Rooms stripped and cleansed	...	...	...	27
Articles disinfected—Number of Ovens	...	...	...	276

### UNSOUND FOOD DESTROYED.

Carcase of a Tubercular Pig.

20 lbs. of Sprats.

19 Crabs.

1 Bullock's Heart.

A number of organs affected with parasites, cirrhosis, pneumonia, etc.

### HOUSE INSPECTION.

The total number of houses inspected was 1,117. Of this number 246 were house-to-house inspections, and 203 were visits paid to houses where infectious disease had occurred.

It gives me much pleasure to here refer to the progress that has been made in renovating the 28 houses at East Finchley known as the Field's Estate. The insanitary condition of this property has been the subject of several reports to the Public Health Committee and to the Council, and there was unquestionably considerable delay on the part of the responsible persons in commencing the necessary repairs. Much of

this delay was due, however, to certain legal complications which required to be settled before the work could be commenced. Pending this settlement the agents voluntarily closed several of the houses which I had represented to them as being unfit for human habitation. Ultimately, the Chancery Court decision was given, and arrangements were then made for all the houses to be thoroughly overhauled. At the end of the year the walls and ceilings of all the rooms of the various houses had been properly cleansed, the ceilings whitened and the walls re-papered or colour-washed. The yards in connection with the premises had been paved, the roofs, eaves, gutterings and stack-pipes repaired, cisterns re-covered, new dustbins provided, and the flushing apparatus to W.C.'s put into proper working order, and the spaces beneath the ground floors ventilated. The drains of five of the houses were entirely re-laid, and a large number of sanitary defects of a minor character had received attention.

### HOUSE DRAINAGE.

During the year 126 complaints, stating that the drains of certain premises were a nuisance or injurious to health, were submitted to the Public Health Committee, and in each instance they directed me to open the ground, examine the drains, and report as to their condition. Of the above number 125 were duly reported as being defective, and notices requiring the proper re-laying of the drainage were accordingly served on the owners.

In addition to the above, the drains of 77 other houses were examined or smoke-tested, and of these 54 were found to be wholly or partially defective. On the facts being communi-



cated to the persons responsible, they immediately gave instructions for the execution of the works detailed in the specifications sent with the letters.

Altogether, the drains of 154 houses were entirely reconstructed under the supervision of your Inspectors, and in 18 other cases the existing drains were properly repaired. This work involved the laying of 4,110 yards of stoneware, and 364 yards of heavy cast iron drains; 384 stoneware gullies, 68 intercepting traps, 187 W.C. basins, and 150 soil pipes and ventilating shafts were fixed, and 98 manholes were built, the whole necessitating the application of 532 water tests and 195 smoke tests.

In order to ensure that the re-construction of the defective drainage was properly carried out, frequent inspections of the work were made while it was in progress. On these occasions, owing chiefly to the employment of unskilled workmen, your Inspectors in some cases found sanitary fittings of an objectionable type being fixed, the drains being laid with an insufficient fall, traps of various kinds being fixed without a proper seal, and that the superfluous cement had not been removed from the insides of the pipes after jointing. By making visits at short intervals, errors of this kind are discovered before the work is far advanced, and can consequently be rectified with a minimum amount of trouble and expense.

The thorough cleansing of the interior of the pipes as the drains are laid is particularly important, for, if this is not carefully done, the cement which is forced inside the pipes in the process of making joints, forms a series of ridges which obstruct the free flow of the sewage, resulting ultimately in a complete blockage. For the purpose of removing any cement which

may have been accidentally or carelessly left in the pipes, I designed, and had made, a steel disc, which is passed by means of light rods through every drain re-laid, and it effectively cuts out any projecting cement without in any way impairing the soundness of the drain.

Of the 154 houses re-drained during the year, no less than 113 were provided for by combined systems of drainage. In dealing with these, some difficulty was experienced in convincing the owners of their responsibility for the work, in the majority of cases an attempt being made to place the liability of re-laying the drains upon the Council. This action probably arose from the confusing state of the law on the subject, and was also undoubtedly influenced by the conflicting High Court decisions on the point. The contention that the Council was liable was, however, in each case repudiated, the provisions of the law being explained as carefully as possible to the interested parties, who, with one exception, ultimately carried out the necessary works. In the case of the exception mentioned, the Council executed the works, and steps have since been taken for the recovery of the costs incurred.

In two other instances the Council was legally liable for the re-laying of the main drains, and the Surveyor was accordingly instructed to execute the work, and when this was completed the owners were required to re-lay the connections.

During the year 7 combined drains were abolished, and separate drains for each house provided.



## INSPECTIONS OF WORKSHOPS AND WORK-PLACES.

The number of Workshops and Work-places now on the Register is 110—an increase of 22 on the number recorded in my last Annual Report.

Each of the premises has been periodically inspected, and as a result the following nuisances were discovered, viz. :—

Defective Drains ... ..	1
Defective Water-closets ... ..	1
Defective Flush Boxes to W.C.'s	6
Defective Floors ... ..	4
Blocked Drains ... ..	4
Foul W.C. Basins ... ..	6
Dirty Workrooms ... ..	19
Overcrowding ... ..	1
Insufficient means of Ventilation provided ... ..	1
Drain opening in Bakehouse ...	1
Defective Roofs ... ..	3
Defective Sink ... ..	1
No Refuse Receptacles ... ..	3

I am pleased to be able to report that very little difficulty was experienced in having these insanitary conditions remedied by the responsible parties, and, in fact, I may say that, as a rule, the general provisions of the Factory and Workshops Act are well observed.

During the course of inspection it was gratifying to find that overcrowding was practically non-existent, that the

Workrooms were usually kept in a cleanly state, and that the Wash-houses attached to Laundries were properly drained, and foot-boards provided for the workers.

The exemption from control under the Factory and Workshops Act of laundries where not more than two persons from outside are employed, leads, in a district like this, to a considerable amount of laundry work being done in premises not adapted for it. Cottagers, to increase the small family income, take in washing, and this has necessarily to be done in the scullery or living room. From time to time these places are discovered in the course of general inspections, and steps are then taken to secure the carrying on of the work in such a manner as to prevent unhealthy conditions arising therefrom. It is to be regretted, however, that for such places there is no system of legal registration, which, while not being used for exercising unreasonable supervision, might have beneficial results, both for the workers and for those for whom the work is done.

The general condition of the kitchens in connection with the Restaurants was satisfactory, but it was necessary, in two or three instances, to request the occupiers to provide suitable covered receptacles for their refuse, and also to arrange for its more frequent removal.

The improvement in the sanitary condition of the Workshops and Work-places which come under the jurisdiction of your Council cannot be gainsaid, and this would appear to be largely due to the periodical visits paid to these premises.



## SLAUGHTERHOUSES.

During the year two applications were received for licences to erect certain premises for use as Slaughterhouses. In one instance the proposed building was intended for the slaughtering of animals for human food, but the Council, on the recommendation of the Public Health Committee, decided to refuse the application on the grounds that the premises would not conform with the "memorandum" issued by the Local Government Board for the guidance of Local Authorities in the exercise of their licensing powers, inasmuch as the suggested Slaughterhouse would be considerably within 100 feet of dwelling-houses.

In the other case it was intended to use the building for slaughtering horses. Previous to giving any decision in this instance, the Committee directed that the Medical Officer of Health (Dr. Kenwood) and I should bring up a joint report on the matter. In this report the nature of a knackery business, and the nuisances which most frequently arise therefrom, were briefly referred to, and it was mentioned that in connection with such premises it was usual to establish one of the legally-defined offensive trades, viz:—bone boiling. Suggestions were also made with regard to the structure of the proposed building, but, owing to the entire absence of any evidence pointing to the necessity of such an establishment in the district, we recommended that the application for a licence be refused. Your Council, after giving the matter further consideration, resolved that a licence should not be granted.

One other application was received for a licence to use an existing building as a Slaughterhouse, and, the premises being satisfactory, a licence was granted for a period of 12 months.

There are at present 11 licensed Slaughterhouses in the District, and the Bye-laws with reference to these premises have been, as far as is practicable, well observed during the year. On the occasion of the inspections, which were made as far as possible while slaughtering was in progress, none of the carcasses were found to be diseased, but several of the organs were found to be affected with hydatids, flukes, pneumonia, cirrhosis, etc., and these were accordingly destroyed.

A much more frequent inspection of all premises where human food is prepared is greatly to be desired, not only to see that the premises are kept in a sanitary condition, but also to ascertain if the meat or other food is sound and free from disease. I have every reason to believe that it will be possible to devote more time to this important branch of our work during the coming year, now that your Council has provided clerical assistance in the department.

#### DAIRIES, COWSHEDS AND MILKSHOPS.

The usual periodical inspection of the Dairies, Cowsheds and Milkshops has been well maintained, and a number of sanitary improvements have been effected in order to bring certain of the premises up to the standard required by your Council's regulations.

Early in the year it was found that some old buildings at a farm in Whetstone were in use as Cowsheds. The sheds were badly lighted and ventilated, and the water supply insufficient. The floors were also in a most insanitary condition,



rendering satisfactory cleansing impossible. Representations were immediately made to the owner and occupier, resulting in new floors being laid, the provision of proper means of drainage, lighting and ventilation, and to the water supply being laid on direct to the Cowsheds.

The floors of two Milkstores and one other Cowshed were properly repaired, and in another instance additional means of lighting and ventilation were provided in a Cowshed.

The immediate surroundings of two Cowsheds were much improved by the removal of large accumulations of manure, and arrangements were made to prevent the recurrence of similar accumulations in the future.

In several instances steps were also taken to enforce the regulations with regard to the cleansing of the cows and lairs.

There were six applications for Registration as Dairy-men, Cowkeepers or Purveyors of Milk, all the applications being granted.

In one case a person who proposed to use a certain building for the storage of milk, was advised not to apply for Registration, owing to the premises being quite unfit for this purpose.

There are at present 18 Dairies and Milkshops, and nine Cowsheds in the District.

## PAVING OF YARDS, &c.

In all cases where it is necessary for the prevention or remedy of insanitary conditions, the Council's Bye-law, relative to the above, requires the owner of every dwelling-house in connection with which there is any yard or open space to properly pave the same with hard, durable and impervious flagging, paving bricks, asphalte or concrete.

It will be noted that forecourts, side entrances, and all open spaces about dwelling-houses come within the scope of the Bye-law above referred to, and that action may be taken in order to "prevent" or "remedy" insanitary conditions.

The efforts of your inspectors have so far been chiefly directed to the "remedying" rather than the "prevention" of nuisances arising from the absence of paving, as in the poorer class property, which is chiefly dealt with under this heading, an unpaved yard is practically never found to be in a proper sanitary condition. This latter fact clearly demonstrates the keen necessity of paving a sufficient area of the ground surface near the dwelling.

The execution of this class of work is very much appreciated by the tenants, and, from the fact that it makes dirty conditions more evident and cleansing more easy, it unquestionably leads to the immediate surroundings of the house being kept in a state of cleanliness, which must have a salutary effect on the health and comfort of the inmates.

During the year, 117 yards were found to be in an insanitary condition. Seventy-one of these were properly paved, and the defective paving of eight other yards was effectively



repaired. At the year's end the work of paving 34 yards was in hand, and the remaining four were outstanding.

In addition, the mews at the rear of two blocks of property at North Finchley were paved with granite setts and provision made for surface drainage. The floors of four rows of stabling were also concreted and paved with blue Broseley paving bricks.

### GAME LICENCES.

Applications were received under section 27 of the Local Government Act, 1894, from the following shopkeepers in the District, for Licences to deal in Game, viz.:—

- G. R. E. Brown, 8, The Broadway, Church End.
- Mrs. Emma Collip, 8, Grove Terrace, Church End.
- J. Sainsbury, Prince's Parade, Church End.
- W. R. H. Russell, 10, Seymour Terrace, High Street,  
North Finchley.
- R. G. Weston, 17, Regent's Parade, North Finchley.
- W. Marshall, 6, Park Parade, North Finchley.
- W. J. March, 32, High Street, North Finchley.
- Mrs. E. Dodd, 4, Cavendish Terrace, East Finchley.

As a result of an inspection of the respective premises it was found that the requirements of the Act were properly observed, and that suitable provision was made for the storage of game. Reports to this effect were accordingly made to the Public Health Committee, and the Council, on their recommendation, granted the Licences in each instance.

## STORAGE OF PETROLEUM.

There are seven premises in the District which are licensed for the storage of Petroleum. These have been periodically visited, and on several occasions it was necessary to call the licensees' attention to the regulations of the Council relative to the storage of this material. In one instance it was found that a quantity of rubbish had recently been burnt in close proximity to the store, and in another case a large accumulation of firewood was stacked close to the place where the Petroleum was kept. These matters were promptly dealt with, and the responsible persons were warned that the regulations must be strictly adhered to in the future.

Owing to structural alterations which were carried out at the rear of a shop at North Finchley, it became dangerous to continue the storage of petroleum on the premises. The attention of the licensee was, therefore, drawn to this fact, and as a result a new store was constructed in a more suitable position.

On visiting a motor establishment which had recently been opened in the district, and which was unlicensed for the storage of Petroleum, I found, in an old disused stoke-hole at the rear of the premises, about twenty 2-gallon cans of motor spirit. The Company's Manager was acquainted of this breach of the Petroleum Acts, but as he immediately made application for a licence, and proceeded forthwith to build a suitable store, it was not considered necessary to institute legal proceedings.

During the year, ten applications for Licences were received and reported upon to the Public Health Committee.



Seven of the applications were granted, one was refused, and two were withdrawn when the applicants were supplied with specifications of the work required to be executed before such Licences would be granted.

I am, Gentlemen,

Your obedient servant,

E. J. FRANKLIN,

*Chief Sanitary Inspector.*





