

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

### **Contributors**

Woolwich (London, England). Metropolitan Borough.

### **Publication/Creation**

[1914?]

### **Persistent URL**

<https://wellcomecollection.org/works/aqymqnd8>

### **License and attribution**

You have permission to make copies of this work under a Creative Commons, Attribution, Non-commercial license.

Non-commercial use includes private study, academic research, teaching, and other activities that are not primarily intended for, or directed towards, commercial advantage or private monetary compensation. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>

C.I.

W0017

AC 4372

Metropolitan Borough of Woolwich.

---

---

# ANNUAL REPORT

OF THE

# MEDICAL OFFICER OF HEALTH

FOR

# WOOLWICH.

---

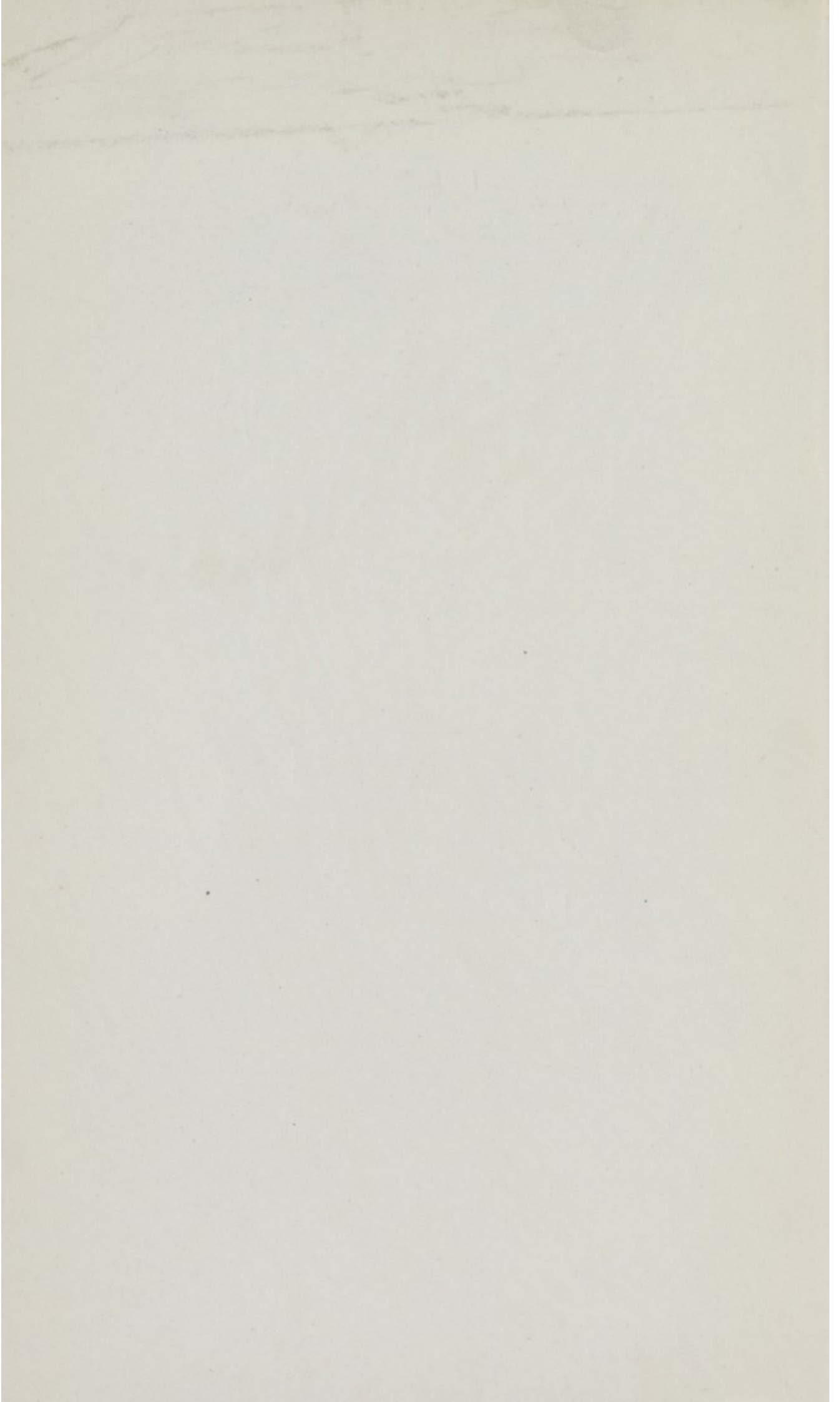
# 1913.

---

---

Woolwich:

PRYCE & SON, LTD., Printers (T.U. Federation), 31, 33 & 35, Powis Street.



Metropolitan Borough of Woolwich.

---

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR

WOOLWICH.

---

1913.

---

Woolwich.

Printed & Sold, Lrs., by Messrs. (T.G. Federation), 21, 22 & 23, Pavilions Street.





# Metropolitan Borough of Woolwich.

Public Health and Housing Committee  
The Mayor and Aldermen  
COUNCILLORS  
COUNCILLOR WILLIAM MARLOW (Vice-Chairman), 123, Park Road,  
Plumstead.  
St. Dunstons Dock (St. Dunstons Dock, Plumstead).  
Aldermen—

## ANNUAL REPORT

OF THE

# MEDICAL OFFICER OF HEALTH

FOR

## WOOLWICH.

1913.

Woolwich:

PRYCE & SON, LTD., Printers (T.U. Federation), 31, 33 & 35, Powis Street.

### Public Health and Housing Committee :

HIS WORSHIP THE MAYOR.

COUNCILLOR FREDERICK PENNY (*Chairman*), 8, Blendon Terrace,  
Plumstead.

COUNCILLOR WILLIAM MARLOW (*Vice-Chairman*), 123, Park Road.  
Plumstead.

#### *Aldermen :—*

JOSEPH PEMBERTON JACKSON, 2a, Wellington Street, Woolwich.

WILLIAM CHARLES MARTIN, 24, Herbert Road, Plumstead.

ALFRED JOHN WALKLIN, 17, Beechhill Road, Eltham.

#### *Councillors :—*

RICHARD MARSH WILLIAM ALLEN, 343, Eglinton Road, Plumstead.

WILLIAM WILLIAMS BULLWORTHY, 255, Eglinton Road, Plumstead.

LEON CHARLES CHASTEKAUNEUF, 224, Burrage Road, Plumstead.

WILLIAM HAYWOOD DAWSON, 15, Wrottesley Road, Plumstead.

HENRY ALFRED HART, 4, Chester Place, Plumstead.

THOMAS HENRY HUTCHINGS, "Hammerwood," Shooters Hill.

EDWARD MAYES, 20, Crookston Road, Eltham.

JAMES NEWMAN, 92, Rochdale Road, Plumstead.

SUSANNA TURNBULL (Miss), 14, Plumstead Road, Plumstead.

GERTRUDE ELIZABETH WALTERS (Miss), 73, Federation Road,  
Abbey Wood.

### Chief Sanitary Inspector :

ALBERT G. DUCK (Cert. San. Inst.).

### District Sanitary Inspectors :

JOHN W. RANCE (Cert. San. Inst.), Glyndon Ward.

WILLIAM LITTLE (Cert. San. Inst.), St. Nicholas Ward,

WILLIAM WOOD (Cert. San. Inst.), River Ward.



ALFRED G. POTTER (Cert. San. Inst.), Eltham Parish and St. George's Ward.

WILLIAM TEDHAM (Cert. San. Inst.), Central and St. Margaret's Wards.

THOMAS POWELL (Cert. San. Inst.) Burrage and Herbert Wards.

HARRY SHAW (Cert. San. Insp. Exam. Bd.), Dockyard and St. Mary's Wards.

### Women Sanitary Inspectors :

ALICE M. MIDDLEBROOKE,

(Cert. San. Inst. and San. Insprs. Exmn. Board).

MARION FITZGERALD

(Cert. San. Insprs. Exmn. Bd., and Sch. Hygiene (Univ. Coll.).

### Chief Clerk :

AMYAS BRITTER (Cert. R. San. Inst.)

### Assistant Clerks :

HARRY S. SMITH.

H. M. COLLYER.

Boy Clerk : H. T. PRESCOTT.

### Mortuary Keeper :

FRANK LEASON.

### Medical Officer of Health :

SIDNEY DAVIES, M.A., M.D. Oxon. ; D.P.H. Camb. ;

Fellow of the Incorporated Society of Medical Officers of Health, and Fellow of the Royal Sanitary Institute.



## Summary of Statistics, 1913.

Area of Borough	...	...	...	8,276·6 Acres
Population—Census, 1911	...	...	..	121,376
do. estimated to middle of 1913	...	...	...	125,686
Inhabited Houses—Census, 1911	...	...	..	21,463
Persons to an acre	...	...	...	14·7
Persons to a House—Census, 1911	...	...	..	5·65
Marriages	...	...	...	1,051
Births	...	...	...	2,876
Birth Rate	..	...	...	22·5
Deaths	...	...	...	1,580
Death Rate	...	...	...	12·3
Infantile Mortality	...	...	...	80 per 1,000 births

## TABLE OF CONTENTS.

	PAGE
Names of Members of Public Health Committee ...	2
Names of Members of Sanitary Staff ...	3
Summary of Statistics ...	4
Preface ...	10
PART I.—STATISTICS.	
Population ...	12
Census Tables, Quinquennial Age Groups ...	13
Houses ...	19
Births ...	20
Marriages ...	23
Deaths—Woolwich Death Rate compared with other Boroughs	23
Lives and Illness Saved ...	27
Infant Mortality—Preventive Measures ...	28
Still-births ...	29
Mortality under five years ...	30
Zymotic Death Rate ...	30
Inquests and Uncertified Deaths ...	31
Deaths in Public Institutions ...	32
Notification of Diseases ...	32
Small-pox ...	34
Chicken-pox ...	35
Measles ...	35
Whooping-Cough ...	38
Scarlet Fever—Deaths—Hospital Isolation—Return Cases— Isolation at Home—Sources of Infection—Schools Inci- dence ...	40
Diphtheria—School Outbreaks and Precautions taken ...	43
Mistaken Diagnosis ...	46
Source of Infection ...	46
Bacteriological Examination ...	46
Enteric Fever—Source of Infection ...	47
Bacteriological Diagnosis ...	48
Diarrhœa or Zymotic Enteritis—Notification—Statistics— Tables ...	49
Erysipelas ...	56
Cerebro-Spinal Meningitis ...	56
Anterior Polio-Myelitis ...	56



	PAGE
Puerperal Fever ... ..	57
Influenza, Bronchitis and Pneumonia ... ..	57
Tuberculosis--Deaths ... ..	57
Notification Regulations ... ..	60
Notification Statistics ... ..	61
Duration of Illness ... ..	62
Age and Sex Distribution—Table ... ..	62
Source of Infection—Occupation ... ..	62
Visiting ... ..	64
Bacteriological Diagnosis ... ..	65
Hospital and Sanatorium Treatment ... ..	66
Charge for Beds ... ..	66
Nature of Cases ... ..	69
Shelters for Consumptives ... ..	69
Tuberculosis Dispensary ... ..	71
History of Woolwich Tuberculosis Administration ... ..	72
Cancer—Classification ... ..	73
Causes of ... ..	76
Alcoholism ... ..	81
Syphilis ... ..	82
Ophthalmia Neonatorum ... ..	83
Meteorology ... ..	83

## PART II.—ADMINISTRATION.

Water Supply--Plumstead Well—Houses with no Water Supply inside the house ... ..	85
Tenement Houses ... ..	86
Food and Drugs Act—Percentage Milk Adulteration ... ..	86
Public Health (Milk and Cream) Regulations, 1912... ..	88
Informal Sampling... ..	90
Food Reform ... ..	90
Food Inspection ... ..	92
Dairies, Cowsheds, and Milk Shops ... ..	95
Tuberculosis in Cows—Order of the Board of Agriculture ... ..	96
Slaughterhouses ... ..	99
Nuisances—Complaints, Drains, Water-closets, Supervision of Drainage ... ..	99
Public-house Urinals ... ..	100
House Inspection ... ..	101

	PAGE
Nuisances—Medical Officer's Inspections ... ..	101
Overcrowding ... ..	102
Smoke Nuisance ... ..	102
Defective Light ... ..	102
Verminous Rooms ... ..	103
Dust Removal—Collection, Cost of ... ..	103
Trade Refuse—Offensive and Inoffensive ... ..	103
Housing of the Working Classes—	
Houses represented as Unfit for Habitation ... ..	104
North Woolwich—Vital Statistics ... ..	107
High Street Flats Area ... ..	107
North Woolwich—Dock Extension—Demolition and Displacement ... ..	112
Council's Houses ... ..	113
Houses Registered under the By-laws—Existing By-laws and proposed new By-laws ... ..	113
Inspections made ... ..	114
Inhabited House Duty ... ..	115
Common Lodging-houses ... ..	115
Underground Rooms ... ..	116
Factories and Workshops—Inspections—Outworkers ... ..	116
Bakehouses ... ..	116
Ice-cream Shops ... ..	117
Disinfection, Disinfectants ... ..	117
Health Shelter ... ..	118
Mortuaries ... ..	118
Cemeteries ... ..	119
Cleansing of Verminous Persons—Cleansing School Children... ..	119
Public Baths—Lavatories and Cleanliness ... ..	120
Tents, Vans and Sheds ... ..	123
Notices and Prosecutions under Public Health (London) Act ... ..	123
Bacteriological Examinations ... ..	123
Infant Consultation ... ..	123
Women Sanitary Inspectors' Work—	
Miss Middlebrooke's Report ... ..	124
Miss FitzGerald's Report ... ..	128
Prevention of Caries and Preservation of Teeth ... ..	132
Public Ambulance ... ..	137
National Insurance Act ... ..	138
Public Health Staff... ..	139



## LIST OF TABLES.

	PAGE
TABLE I. Population. Births and Deaths for the whole Borough, from 1902 to 1913, including deaths of non-residents in the district, also deaths in Public Institutions in the district, and deaths of residents registered beyond the district ...	141
Number of Inhabited Houses, the average number per house, and the acreage ...	142
„ IA. Institutions inside and outside the district receiving sick and infirm persons from the district	143
„ II. Cases of Infectious Disease notified at all ages, at various age groups, and distributed according to Registration Districts during 1913 ...	144
„ III. Deaths at all ages, at various age groups, from various causes, arranged by Registration Districts in 1913. Total Deaths in Public Institutions in District in 1913 ...	145
„ IV. Infantile mortality during the year 1913 ...	147
„ V. Case and Death Rate for various diseases per 1,000 population estimated to the middle of the year for the years 1891 to 1913 ...	149
„ VI. Vital Statistics for the various London Boroughs for 1913 ...	151
„ VII. Birth and Death Rates do. do. ...	153
„ VIII. Meteorology and Registered Deaths from all causes and from certain prevalent diseases in each week of the year 1913 ...	155
„ IX. Weekly Averages for Meteorology and Registered Deaths from all causes and from certain prevalent diseases ...	157
„ X. Summary of Statistics for the first Quarter of 1913 corrected for Public Institutions ...	158
„ XI. Summary of Statistics for the second Quarter of 1913, corrected for Public Institutions ...	159
„ XII. Summary of Statistics for the third Quarter of 1913, corrected for Public Institutions ...	161

	PAGE
TABLE XIII. Summary of Statistics for the fourth Quarter of 1913, corrected for Public Institutions ...	162
„ XIV. Deaths from various causes for the whole Borough in each week, corrected for Public Institutions ... ..	165
„ XVA. Summary of the General Work of the Public Health Department for 1913, the number of Nuisances abated, and Notices served in each Ward ... ..	167
„ XVB. Summary of Work of Chief Inspector, and Miscellaneous ... ..	169
„ XVC. Inspection of Factories, Workshops, and Workplaces ... ..	170
„ XVD. Proceedings during 1913 <i>re</i> Milk Shops, Cowsheds, Slaughterhouses, etc. ... ..	173
„ XVI. List of Streets Inspected—House to House—and number of houses where defects were found... ..	174
„ XVII. Prosecutions in 1913 under the Public Health (London) Act and By-Laws and Housing of the Working Classes Act ... ..	180
„ XVIII. Summary of Articles Analysed under the Sale of Food and Drugs Act ... ..	181
„ XVIIIA. Proceedings in 1913 under the Sale of Food and Drugs Act ... ..	182
„ XIX. Food seized or surrendered by owners as unfit for consumption ... ..	184
„ XX. List of Level Bakehouses in the Borough, 1913... ..	187
„ XXA. List of Certified Underground Bakehouses in the Borough, 1913 ... ..	188
„ XXB. List of Factory Bakehouses in the Borough, 1913 ... ..	189
„ XXI. List of Slaughterhouses in the Borough, 1913 ... ..	190
„ XXII. List of Cow-houses in the Borough, 1913 ... ..	191
„ XXIII. List of Milk-sellers ... ..	192
„ XXIV. List of Persons Registered as Purveyors of Milk during 1913 ... ..	195

#### CHARTS :—

Showing Death Rate, Birth Rate, and Infantile Death Rate, 1891-1913, facing Page 27.

Phthisis—Death Rate and Temperature, 1891-1913—England, London, Woolwich, Greenwich, and Lewisham, facing Page 60.



PREFACE.

*To the Mayor, Aldermen, and Councillors of the  
Metropolitan Borough of Woolwich.*

MR. MAYOR AND GENTLEMEN,

The Annual Report herewith presented is the Thirteenth it has been my duty to make on the Health of the Borough and the Twenty-second on the Health of Plumstead.

It contains full particulars of the population, numbers born and dying, and numbers affected with certain diseases supposed to be more easily preventable, together with some account of the efforts made to diminish the number of the dying. Tuberculosis and Cancer—two specially fatal affections—have received particular attention, and I would ask your consideration of the special enquiry into the causes of Cancer, which points to the injurious effects of excessive smoking.

1912 had the lowest recorded infantile mortality, but last year had the lowest childhood mortality, i.e., death-rate of children between the ages of one and five. The continued increase of vitality of those commencing life is a matter for congratulation.

The Report must be read in order to realize the large amount of work done by the Health Department, but I may point to the fact that 23,442 inspections and re-inspections were made, 4,010 notices of nuisances found were served, and 4,062 letters were written during the year. Very good work was done under the Housing, Town Planning, &c., Act.

Although it is difficult to make the Annual Report of a healthy town as interesting as a romance, I venture to think that this one, dealing with all the conditions which affect the health of yourselves, your friends, and the citizens, of whose welfare you are the trustees, will repay your careful perusal. Happy is the town which has no tragical epidemic to record.

I congratulate you that such is the case with Woolwich, and thank you for the kind support you have given to the work of the Public Health staff and myself.

I am,

Mr. Mayor and Gentlemen,

Your obedient Servant,

SIDNEY DAVIES.



**THIRTEENTH ANNUAL REPORT**  
 ON THE  
**HEALTH OF THE METROPOLITAN BOROUGH**  
**OF WOOLWICH,**  
 Year ending 31st December, 1913.

**PART I.**

**STATISTICS.**

1. The population of the Borough of Woolwich, as estimated at the Census of 1911, was 121,376. The estimated population to the middle of 1913 is 125,686.

The population of the four registration districts at the last three Censuses was as follows:—

	Census, 1891.	Census, 1901.	Census, 1911.
Woolwich Parish ...	40,848	41,625	36,710
Plumstead Parish (West) }	52,436	38,569	40,328
Do. (East) }		29,758	30,888
Eltham Parish ...	5,710	7,226	13,450
	98,994	117,178	121,376

The population to the middle of 1913 is estimated as follows:—

Parish.	Census 1911.	Additional houses occupied between April, 1911, and June 30th, 1913.	New houses, April 1st, 1911, to June 30th, 1913.	Estimated number of persons to a house.	Estimated increase of population.	Estimated population to middle of 1913.
Woolwich ...	36,710	214	14	5	1140	37,850
Plumstead (West) ...	40,328	221	9	5	1150	41,478
Do. (East) ...	30,888	129	77	5	1030	31,918
Eltham ...	13,450	44	154	5	990	14,440
Total ...	121,376	608	254	5	4310	125,686

The statistical year consists of 53 weeks ending January 3rd, 1914.

West Plumstead includes the Burrage, Herbert, Glyndon and St. Margaret's Wards, and East Plumstead the Central and St. Nicholas Wards.

The Registrar-General estimates the population as 122,382 on the assumption of a uniform increase proportional to that between the two last Censuses. There can be no doubt that the above estimate which takes into account the number of occupied houses is nearer the truth; it is probably too small, as there is evidence that the number of persons to a house has increased since the Census.

The following figures show how the number of persons to



a house in Plumstead has varied during the past four Censuses:—

Census 1891—6·08 persons to a house.

„ 1896—6·14 ditto  
 „ 1901—6·05 ditto  
 „ 1911—5·34 ditto

2. The following table gives the population, number of houses, and persons to a house, of each Ward, as found at the Censuses of 1901 and 1911:—

Wards.	CENSUS 1901.			CENSUS 1911.		
	Population.	No. of Inhabited Houses.	Persons to a House.	Population.	No. of Inhabited Houses.	Persons to a House.
Dockyard ...	8712	1325	6·57	7199	1211	5·94
St. Mary's ...	7833	1126	6·93	6666	1003	6·64
River—North ...	2991	441	6·78	4409	585	7·54
Do. South ...	11405	1671	6·83	9853	1656	5·65
St. George's ...	10684	878	12·13	9083	860	10·56
Burrage ...	9837	1735	5·67	8887	1688	5·26
Glyndon ...	9810	1697	5·78	9501	1769	5·37
Herbert ...	9080	1612	5·63	8780	1739	5·05
St. Margaret's ...	9842	1638	6·00	13160	2578	5·10
Central ...	10118	1805	5·61	9083	1831	4·96
St. Nicholas ...	19640	2805	7·00	21805	3729	5·84
Eltham ...	7226	1353	5·34	13450	2814	4·77
The Borough ...	117178	18086	6·47	121376	21463	5·65

The following tables from Vol. 7 of the Census, 1911, give particulars of the age, distribution and conditions as to marriage of the population (Tables 8, p. 96; 9, p. 234; 18, p. 407; 19, p. 418).

TABLE 8.

Ages of Persons, Males and Females, at each year of age under 21 and in Quinquennial Age Groups, in the Borough of Woolwich:—

Ages.	Males.	Females	Ages.	Males.	Females
All ages ...	61,271	60,105	Under 5 years...	6,465	6,396
Under 1 year ...	1,264	1,240	5 and under 10	6,561	6,624
1 ...	1,209	1,241	10 ,, 15	6,106	5,917
2 ...	1,298	1,341	15 ,, 20	6,485	5,264
3 ...	1,319	1,272	20 ,, 25	5,139	5,002
4 ...	1,375	1,302	25 ,, 30	4,886	4,859
5 ...	1,329	1,306	30 ,, 35	4,817	4,877
6 ...	1,337	1,302	35 ,, 40	4,740	4,526
7 ...	1,367	1,335	40 ,, 45	4,091	4,021
8 ...	1,254	1,315	45 ,, 50	3,334	3,309
9 ...	1,274	1,366	50 ,, 55	2,731	2,676
10 ...	1,258	1,233	55 ,, 60	2,103	1,987
11 ...	1,248	1,230	60 ,, 65	1,502	1,614
12 ...	1,190	1,184	65 ,, 70	1,002	1,234
13 ...	1,211	1,165	70 ,, 75	698	874
14 ...	1,199	1,105	75 ,, 80	383	537
15 ...	1,138	1,148	80 ,, 85	162	276
16 ...	1,100	1,028	85 ,, 90	51	89
17 ...	1,262	1,006	90 ,, 95	14	20
18 ...	1,540	1,000	95 ,, 100	1	3
19 ...	1,445	1,082	100 years and upwards ...	—	—
20 ...	1,187	1,013			

TABLE 9.

Condition as to Marriage and Ages of Males and Females at each year of age 15-20, and in Quinquennial Age Groups over 15 in the Borough of Woolwich:—

Ages.		Unmarried.	Married.	Widowed.
All ages ...	Persons ...	68,890	46,361	6,125
	Males ...	36,339	23,048	1,884
	Females ...	32,551	23,313	4,241
Under 15 years ...	Males ...	19,132	—	—
	Females ...	18,937	—	—



Ages.				Unmarried.	Married.	Widowed.
15	...	...	Males ...	1,138	—	—
			Females ...	1,148	—	—
16	...	...	Males ...	1,100	—	—
			Females ...	1,028	—	—
17	...	...	Males ...	1,261	1	—
			Females ...	1,005	1	—
18	...	...	Males ...	1,539	1	—
			Females ...	987	13	—
19	...	...	Males ...	1,443	2	—
			Females ...	1,037	45	—
20	...	...	Males ...	1,172	15	—
			Females ...	931	82	—
15 and under 20	...	...	Males ...	6,481	4	—
			Females ...	5,205	59	—
20	..	25 ...	Males ...	4,624	512	3
			Females ...	3,688	1,310	4
25	..	30 ...	Males ...	2,526	2,340	20
			Females ...	1,744	3,075	40
30	..	35 ...	Males ...	1,312	3,468	37
			Females ...	906	3,882	89
35	..	40 ..	Males ...	804	3,856	80
			Females ...	542	3,815	169
40	..	45 ...	Males ...	489	3,480	122
			Females ...	424	3,356	241
45	..	50 ...	Males ...	328	2,848	158
			Females ...	315	2,652	342
50	..	55 ...	Males ...	240	2,276	215
			Females ...	243	2,024	409
55	..	60 ...	Males ...	161	1,715	227
			Females ...	184	1,334	469
60	..	65 ...	Males ...	108	1,137	257
			Females ...	156	886	572
65	..	70 ...	Males ...	62	730	210
			Females ...	95	517	622
70	..	75 ...	Males ...	44	410	244
			Females ...	59	251	564
75	..	80 ...	Males ...	16	194	173
			Females ...	29	114	394
80	..	85 ...	Males ...	7	64	91
			Females ...	16	33	227
85	..	90 ...	Males ...	5	11	35
			Females ...	6	5	78
90	..	95 ...	Males ...	—	3	11
			Females ...	2	—	18
95	..	100 ...	Males ...	—	—	1
			Females ...	—	—	3
100 years and up- wards			Males ...	—	—	—
			Females ...	—	—	—

TABLE 18.

Proportion of Males and Females at each age to 100,000 population as compared with London (Administrative County:—

MALES.			FEMALES.		
Ages.	Metropolitan Borough of Woolwich.	London.	Ages.	Metropolitan Borough of Woolwich.	London.
All ages ...	50,480	47,025	All ages ...	49,520	52,975
Under 5 years ...	5,326	5,187	Under 5 years ...	5,270	5,150
5 and under 10...	5,405	4,774	5 and under 10	5,458	4,815
10    "    15...	5,031	4,401	10    "    15	4,875	4,489
15    "    20...	5,342	4,274	15    "    20	4,337	4,697
20    "    25...	4,234	4,225	20    "    25	4,121	5,261
25    "    30...	4,026	4,194	25    "    30	4,003	5,111
30    "    35...	3,969	3,848	30    "    35	4,018	4,452
35    "    40...	3,905	3,493	35    "    40	3,729	3,964
40    "    45...	3,371	3,008	40    "    45	3,313	3,403
45    "    50...	2,747	2,589	45    "    50	2,726	2,919
50    "    55...	2,250	2,144	50    "    55	2,205	2,408
55    "    60...	1,733	1,636	55    "    60	1,637	1,882
60    "    65...	1,237	1,275	60    "    65	1,330	1,514
65    "    70...	826	934	65    "    70	1,017	1,192
70    "    75...	575	575	70    "    75	720	856
75    "    80...	316	293	75    "    80	442	497
80    "    85...	133	125	80    "    85	227	243
85    "    90...	42	40	85    "    90	73	94
90 and upwards ...	12	10	90 and upwards	19	28



TABLE 19.

Proportion of Male and Female Population in Woolwich and in the Administrative County at each Quinquennial Age Groups compared with the corresponding proportions in England and Wales taken as 100:—

MALES.			FEMALES.		
Ages.	Metropolitan Borough of Woolwich.	London.	Ages.	Metropolitan Borough of Woolwich.	London.
All ages ...	104	97	All ages ...	96	103
Under 5 years ...	99	97	Under 5 years ...	99	97
5 and under 10...	106	93	5 and under 10	106	94
10 ,, 15...	104	91	10 ,, 15	100	92
15 ,, 20...	116	93	15 ,, 20	93	101
20 ,, 25...	102	101	20 ,, 25	89	113
25 ,, 30...	100	104	25 ,, 30	89	114
30 ,, 35...	104	101	30 ,, 35	97	107
35 ,, 40...	112	100	35 ,, 40	100	106
40 ,, 45...	113	101	40 ,, 45	103	106
45 ,, 50...	107	101	45 ,, 50	98	105
50 ,, 55...	106	101	50 ,, 55	95	104
55 ,, 60...	103	97	55 ,, 60	88	101
60 ,, 65...	94	96	60 ,, 65	88	101
65 ,, 70...	82	92	65 ,, 70	83	98
70 ,, 75...	88	88	70 ,, 75	82	97
75 ,, 80...	90	83	75 ,, 80	87	98
80 ,, 85...	85	80	80 ,, 85	93	100
85 ,, 90...	82	78	85 ,, 90	82	106
90 and upwards...	100	83	90 and upwards	76	112



The following table from Vol. VI. of the Census shows the number of buildings of various kinds and the population in each kind :—

WOOLWICH—CLASSIFICATION OF BUILDINGS.

Columns 1	1901.	1911.											
	Total.	Total Cols. 4—11.	Buildings used as Dwellings.									Buildings not used as Dwellings.	
			Ordinary Dwelling Houses.	Blocks of Flats.	Shops.	Hotels, Inns, and Public Houses.	Offices, Warehouses, Workshops, Factories.	Institutions.	Others.	Vessels, Sheds, Vagrants, &c.	Separate Flats (included in Col. 5)	Kind of Building.	No.
2	3	4	5	6	7	8	9	10	11	12	13	14	
<b>Metropolitan Borough of Woolwich.</b>													
Number Inhabited ...	18,086	21,176	19,131	207	1,449	169	52	98	70	—	495	Places of Worship ...	62
Separate Occupiers ...	24,585	26,504	23,906	498	1,560	171	54	121	93	101	498	Government and Municipal Buildings	41
Population...	117,178	121,376	102,052	2,057	6,761	1,040	224	8,303	414	525	2,057	Shops ...	272
Uninhabited ...	410	1,211	1,009	12	175	2	5	4	4	—	34	Offices ...	45
Being Built ...	517	38	35	—	1	—	—	—	2	—	—	Warehouses, Workshops, Factories	141
												Theatres and other places of Amusement	5

3. The following table shows the number of new houses certified for water each year since the Census of 1911:—

New houses, April 1st to June 30th, 1911	...	34
do. July 1st, 1911, to June 30th, 1912		93
do. July 1st, 1912, to June 30th, 1913		141
New houses, 1912-13:—		
Woolwich	...	14
West Plumstead	...	9
East Plumstead	...	63
Eltham	...	55

4. At the 1901 Census there were 234 unoccupied houses in the Borough, viz., 46 in Woolwich, 86 in Plumstead, and 102 in Eltham.

At the 1911 Census there were 1,296 unoccupied houses in the Borough, viz., 450 in Woolwich, 387 in West Plumstead, 250 in East Plumstead, and 209 in Eltham.

In May, 1913, the Rate Collectors found 468 houses empty, viz., 152 in Woolwich, 119 in West Plumstead, 111 in East Plumstead, and 86 in Eltham. The empty houses have still further filled up since that date, and at the present time (January) persons seeking a house have very considerable difficulty in finding one.

#### BIRTHS.

5. The number of births was 2,876, viz., 1,029 in Woolwich parish, 831 in West Plumstead, 773 in East Plumstead, and 243 in Eltham (corrected for children born in the Infirmary, the Female Hospital, and the Wood Street Home for Mothers and Babies, whose parents reside outside



the Borough, and births in outlying institutions added on). The birth rate, 22·5, compared with 22·3 in the previous year, and with 25·8, the average for the ten years 1903-12. The rate for the County of London was 24·8.

It is satisfactory to note an apparent arrest in the fall of the birth rate, but it may possibly be due to an underestimate of the population.

*Notification of Births.* 2,637 live births were notified under the Notification of Births Act. This is at the rate of 92 per cent. of the registered births, compared with 83, 88, 93, 91, and 94 per cent. in the five preceding years. 1,588 births were notified by midwives, 298 by the Home for Mothers and Babies and Military Families Hospital, 500 by medical practitioners, and the remainder by other persons. 79 still-births were notified.

The Notification of Births Act was adopted on March 1st, 1908. There were 239 births last year which were not notified. Two midwives were warned for neglect to notify.

976 live births, or 95 per cent., were notified in Woolwich parish, 1,442, or 90 per cent., in Plumstead parish, and 219, or 90 per cent., in Eltham.

A card of instructions is sent to the mother of every child at once on notification, and the Lady Health Visitor visits in the course of the next two weeks those mothers who are considered to most need instruction. With very few exceptions the advice is welcomed.

All mothers are invited to bring their infants for weighing and advice at the Town Hall, where an Infant Consultation

is held every Wednesday afternoon by the Lady Health Visitor and Medical Officer of Health. (See also Health Visitor's Report.) This consultation is becoming increasingly popular. The numbers attending averaged 30 last year. The results are most satisfactory.

6. The following table gives the birth-rate of the Borough during the years 1901-5, 1906-10, 1911, 1912, and 1913, and, for the purpose of comparison, the corresponding rates of the neighbouring Boroughs, London, and England:—

#### BIRTH-RATE.

	1901-5.	1906-10.	1911.	1912.	1913.
Greenwich Borough ...	27·6	26·5	24·9	25·0	26·0
Lewisham ...	25·7	23·3	21·2	20·4	20·5
West Ham ...	33·1	31·4	29·9	29·6	31·0
East Ham ...	33·8		25·8	25·8	24·9
Erith ...	34·1		25·7	23·6	26·4
London ...	28·2	26·51	25·5	24·7	24·5
England and Wales ...	28·2	26·0	24·4	23·8	23·9
<b>Woolwich Borough ...</b>	<b>29·2</b>	<b>25·3</b>	<b>23·2</b>	<b>22·3</b>	<b>22·5</b>

7. The following table gives the birth-rate for the Borough and each registration district for the four past Quinquennia, and last three years. Correction has been made for births in the Infirmary, Female Hospital, the Wood Street Home for Mothers and Babies, and outlying institutions, and the births distributed to the parishes to which they properly belong.

West Plumstead and Eltham had the lowest birth-rate of the four registration districts, the rates being the lowest recorded for these parishes.



	1891-1895.	1896-1900.	1901-1905.	1906-1910.	1911.	1912.	1913.
Woolwich Borough ..	32.5	30.2	29.2	25.3	23.2	22.3	22.5
Woolwich Parish ..	31.1	30.1	29.0	27.9	27.1	24.8	26.6
Plumstead—							
West } ..	33.3	31.0	30.1	24.7	20.6	21.9	19.7
East } ..					23.4	21.3	23.7
Eltham Parish ..	22.8	20.6	24.0	21.6	18.5	19.0	16.5

8. *Illegitimate Births.* 65 of the births registered were illegitimate, giving a rate of 23 per 1,000 births, compared with 20, 24, 19, 13, and 17, in the five preceding years. The illegitimate birth-rate in London was 38 in 1912.

#### MARRIAGES.

9. There were 1,051 marriages. The marriage-rate was 16.4, compared with 15.0, 16.4, and 16.0 in the three preceding years. In 1912 the marriage-rate in London was 18.6.

#### DEATHS.

10. Table I. gives the gross and net deaths and death-rates in 1913, and each of the past ten years, and shows how the net deaths are arrived at.

The net death-rates (which are the only ones referred to unless otherwise specified) are obtained by distribution of deaths in public institutions, deaths upon which inquests were held, and certain other deaths, to their proper locality, according as they occur outside or inside the Borough. But

in order to institute a fair comparison between one district and another, it is necessary to further correct the death-rate for sex and age distribution, for it is obvious that a population containing a large number of young persons between the ages of five and thirty, when the death-rate is very low, should have a lower death-rate than one containing an excess of aged persons. The population of London is taken as the standard, and factors are calculated which when multiplied by the death-rate of any Metropolitan Borough, give the death-rate that Borough would have if the age distribution of its population were the same as in the Metropolis. The factor for the correction of the Woolwich death-rate is 1·0249.

11. The net deaths were 1,580, and the net death-rate 12·3, compared with 12·8 and 11·5 in the two preceding years, and 12·7 the average of the ten preceding years.

12. By multiplying by 1·0249, the factor for age distribution, we get the corrected death-rate, viz., 12·6, which rate should be used in comparing Woolwich with other places in which the death-rate is similarly corrected. The following table shows the net and corrected death-rates of Woolwich, compared with London and the adjoining Boroughs:—

	Net.	Standard.
England and Wales ...	13·7	13·4
95 Great Towns ...	14·3	14·7
London ...	14·2	14·2
Greenwich ...	14·2	14·0
Lewisham ...	10·6	10·4
West Ham ...	14·5	—
East Ham ...	10·0	—
Erith ...	9·9	—
<b>Woolwich ...</b>	<b>12·3</b>	<b>12·6</b>



Five Metropolitan Boroughs had a lower death-rate than Woolwich, viz., Lewisham, Wandsworth, Hampstead, Stoke Newington, and Fulham.

13. The following table gives the average death-rate in each registration district of the Borough during the past five quinquennial periods and during 1911, 1912 and 1913.

In 1913 Woolwich Parish had the highest death-rate and Eltham Parish the lowest of the four districts. The greatest decrease has occurred in Woolwich and Eltham Parishes.

	1886-1890.	1891-1895.	1896-1900.	1901-1905.	1906-1910.	1911.	1912.	1913.
Woolwich Borough	—	17·2	16·9	13·9	12·5	12·8	11·5	12·3
Woolwich Parish*	20·4	19·3	20·1	16·5	14·8	15·6	13·2	14·0
Plumstead—								
West	16·4	16·0	15·1	12·9	12·0	(13·4	11·5	12·6
East								
Eltham Parish ..	—	13·0	14·6	10·2	10·1	8·3	8·4	8·8
London .. ..	20·0	19·8	18·5	16·1	14·9	15·0	13·6	14·2

\* Three years—1888, 1889 and 1890.

14. The following table gives the numbers dying at various ages in the past eleven years from all causes, and the deaths at all ages from certain diseases not hereafter referred to:—

DEATHS - 1903 TO 1913.

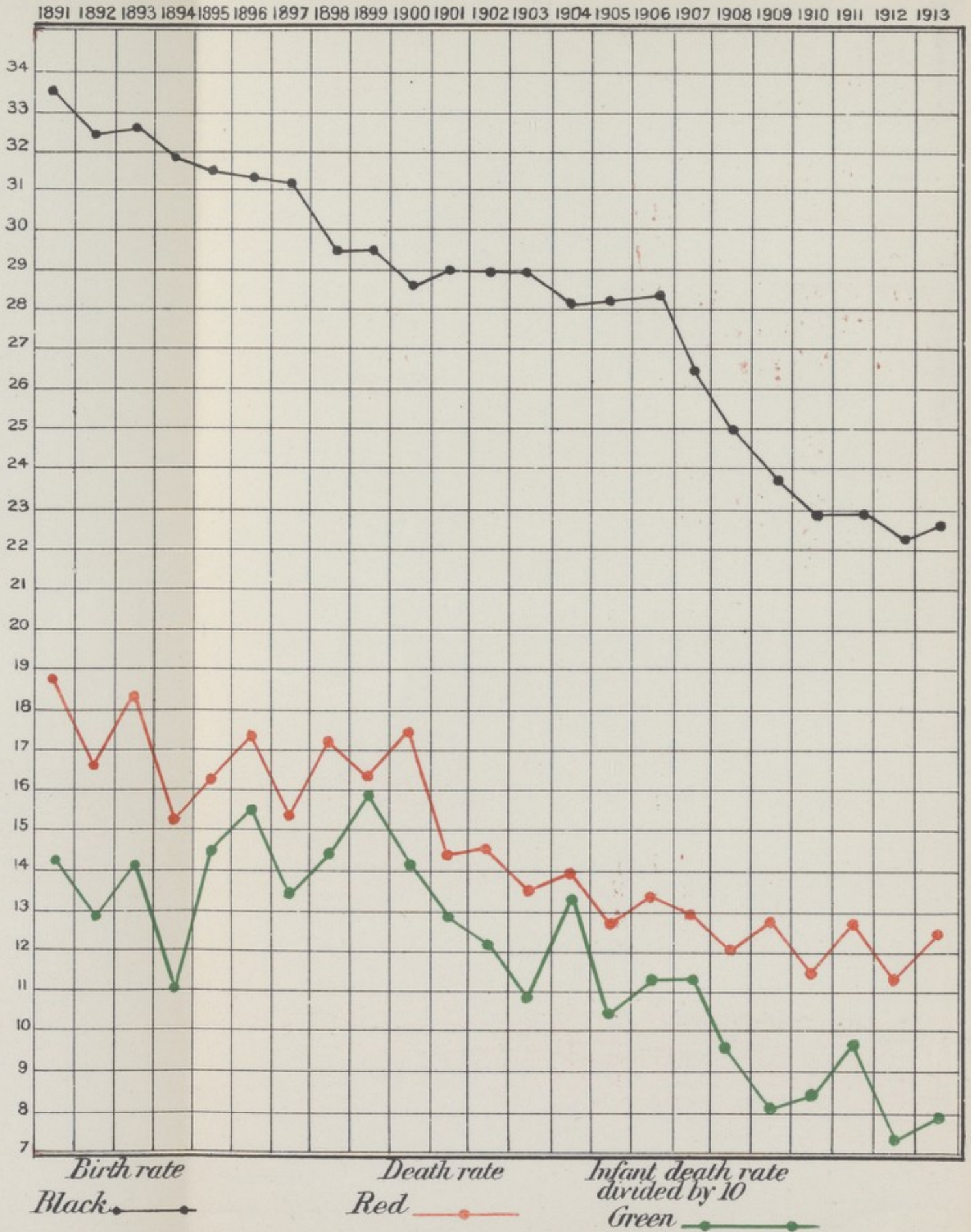
Year.	AGE PERIOD.											
	Under 1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65-75	75 and over
1903	399	155	30	26	20	50	110	141	142	187	212	165
1904	479	174	53	24	25	44	105	143	158	182	182	194
1905	366	139	47	32	38	40	121	140	156	154	206	166
1906	396	139	50	25	31	38	110	139	174	191	205	168
1907	372	207	37	28	43	52	75	129	148	160	202	162
1908	298	134	51	21	36	33	96	123	134	166	212	212
1909	240	163	55	20	40	37	93	130	165	183	244	167
1910	240	105	35	25	26	34	81	127	131	202	201	203
1911	273	136	37	27	24	36	85	132	168	211	214	218
1912	201	119	30	24	40	26	82	123	135	234	187	219
1913	229	93	34	25	44	48	109	134	177	208	240	239

Deaths from	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Apoplexy and all other diseases of the heart and blood vessels ..	212	215	227	216	217	243	268	248	265	270	312
Nephritis and Bright's disease ..	38	35	46	52	49	42	50	43	43	57	57
Respiratory diseases — all forms (except Phthisis) .. ..	269	285	264	277	209	234	250	236	206	216	254





CHART SHOWING DEATH RATE AND BIRTH RATE PER 1000 POPULATION.  
AND INFANTILE DEATH RATE PER 1000 BIRTHS 1891/1913.





Compared with the average of the last ten years there was a diminution of deaths under 15, but an increase at ages between 15 and 55, and over 65. Over 75, the number of deaths was the highest recorded. The number of deaths also from nephritis (kidney diseases), apoplexy, and diseases of the heart and blood vessels, was the highest recorded, and those from respiratory diseases (bronchitis and pneumonia) reached the highest number since 1906.

There has been a remarkable saving of life at ages under 15, and more people survive to die in old age of diseases resulting from the wear and tear of life.

Table III. shows the number of deaths in 1913 from 57 principal causes at various ages.

Appendicitis caused 9 deaths in 1913, compared with 3, 8, and 18, in the three preceding years. Of the 9 deaths, 6 were males and 3 females; 6 were between 10 and 25 years of age and 3 over 25. There is a great increase in the number of deaths attributed to this disease, but it would be a mistake to think that actually more persons die of appendicitis than formerly. Illnesses formerly called peritonitis, enteritis, etc., are now called appendicitis, and as a fact there has been a marked reduction in the total deaths from inflammatory affections of the abdomen.

15. The chart on the opposite page shows graphically how the birth and death rates have varied in the past 23 years. It is seen that while the birth-rate has come down to 67 per cent. of what it formerly was, the death-rate has been reduced lower still, viz., to 65 per cent. of its figure in 1891.

16. The infantile death-rate has been reduced even more, viz., to 56 per cent., or roughly one-half, of what it was in 1891. These results have, it will be admitted, exceeded the expectations of the most sanguine sanitary reformers, and whatever objections may be made by the cautious and the economical in future, they cannot, in the face of such figures as the above, say that the deaths of the young are not to a large extent preventable. Fewer deaths mean less sickness; efficient sanitary administration causes the people to have life more abundantly.

#### INFANT MORTALITY.

17. The deaths under one year were 229, compared with 201 in 1912. The infant mortality (deaths under one year per 1,000 births) was 80, compared with 73 in 1912, and with 98 in 1911. With the exception of 1912 this is the lowest rate recorded.

The following table gives the infantile mortality in the Borough since 1901, compared with the neighbouring Boroughs, London, and England:—

	1901-5.	1906-10.	1911.	1912.	1913.
Lewisham ... ..	112	92	104	70	78
Greenwich ... ..	107	112	129	84	103
West Ham ... ..	158	126	141	102	107
East Ham ... ..	131	106	119	71	64
Erith ... ..	112	80	70	69	81
London ... ..	138	114	128	90	105
95 Great Towns ...	—	127	140	101	116
England and Wales ...	135	115	130	93	109
<b>Woolwich Borough ...</b>	<b>119</b>	<b>97</b>	<b>98</b>	<b>73</b>	<b>80</b>



Two Metropolitan Boroughs only had a lower infantile mortality than Woolwich, viz., Hampstead and Lewisham.

18. The following table gives the infantile mortality during 1911, 1912, and 1913, and the five preceding quinquennia in the Borough and each registration district:—

	1886-1890	1891-1895	1896-1900	1901-1905	1906-1910	1911	1912	1913
Woolwich Parish	*151	157	170	134	109	110	94	85
Plumstead—								
West }	121	120	132	113	91	104	53	67
East }						82	81	84
Eltham .. ..	—	163	160	97	89	64	52	62
Woolwich Borough	—	140	146	119	97	98	73	80

\* 1888, 1889 and 1890.

The Eltham rate has not exceeded 70 since 1908. In 1911 Erith had the lowest infantile death-rate of any English town, viz., 70.

19. Table IVa. gives full details as to the ages at death and causes of death of the 229 infants dying in 1913 under one year. It shows that 42 per cent. of those who died under one year were under one month old, compared with 45 per cent. in 1912, and 37 per cent. in the previous eight years. 41 deaths were from premature birth, compared with 72, 41, 51, 51, and 52, in the five preceding years. The number of deaths under one week in the past five years was 55, 72, 62, 61, and 58 respectively.

The number of deaths from suffocation or overlying was only one. In the previous four years the deaths from suffocation in bed averaged 4 a year, and in the four years 1904-7 they averaged 7. This speedy diminution has no doubt been aided by the Children's Act.

The death-rate per 1,000 births from premature birth in Woolwich Borough was 14·2, compared with 14·0, 17·9, 18·1, and 18·9 in the four preceding years. In London it was 18·8 in 1912.

There were 14 deaths of illegitimate infants. The death-rate of illegitimate infants under one year was 215 per 1,000 births, and that of legitimate children 77.

20. Compared with 1912, the past year had among infants more deaths from diarrhoea and enteritis, gastritis, syphilis, convulsions, and pneumonia, and fewer from measles, whooping-cough, premature birth, suffocation, tuberculosis, and bronchitis.

21. 79 still-births were notified, compared with 54, 68, and 64, in the three previous years.

22. *Deaths between One and Five Years.* 55 deaths occurred between one and two years, and 38 between two and five. The corresponding figures in 1912 were 68 and 51 respectively. The death-rate between one and five was 9·0 per 1,000 children of that age found at the Census.

23. *Zymotic Death Rate.* The number of deaths from scarlet fever, diphtheria, measles, whooping-cough, enteric fever, and from diarrhoea and enteritis, under two years of



age, was 94, and the death-rate per 1,000 population 0·74, compared with 1·27 and 0·77 in the two previous years.

The Zymotic death-rate has fallen steadily since 1901, and is now less than half what it was then.

24. *Inquests.* There were 123 inquests, compared with 121, 128, 115, 105, 107, 123, and 105, in the seven preceding years.

The following table gives particulars as to the cause of death:—

1. Natural causes	...	...	...	64
2. Alcoholism	...	...	...	1
3. Accidental causes:				
Burns and Scalds	...	...	...	1
Drowning	...	...	...	8
Falls	...	...	...	12
Fractures	...	...	...	6
Run over	...	...	...	3
Suffocation, overlying	...	...	...	1
Poison	...	...	...	1
Other accidental causes	...	...	...	5
				— 37
4. Homicidal cases:				
Suicide	...	...	...	20
Murder and Manslaughter	...	...	...	1
				— 21
				—
			Total	123
				—

The "Accidental Causes" were 49, 23, 42, 44, and 35, in the five preceding years. The "Homicidal Causes" were 15, 14, 6, 11, and 11, in the same years.

25. *Deaths in Public Institutions.* Table I. shows the actual number of deaths occurring in public institutions in the Borough, viz., 298, compared with 289, 276, 272, 326, and 292, in the five preceding years. These deaths nearly all occurred in the Poor Law Infirmary; they were 18·9 per cent. of total deaths, compared with 19·4, 18·8, and 20·6, in 1910-11-12. Table IA. shows the institutions, inside and outside the Borough, receiving sick and infirm persons belonging to the Borough, and Table IV. shows the number of deaths from each disease occurring in public institutions. Over one-third of the total deaths occurred in the Infirmary or hospitals.

25A. *Notification and Admission to Hospital of Infectious Diseases.* Information as to the occurrence of disease is obtained partly by death returns and partly by notifications of illness. The former are received from the Registrars of Births and Deaths; the latter are made principally by medical practitioners, but also by school teachers, and very occasionally by other persons.

The following diseases were made compulsorily notifiable by the Public Health (London) Act:—Small-pox, cholera, diphtheria, erysipelas, scarlet fever, typhus, typhoid or enteric fever, relapsing fever, continued fever, and puerperal fever. Exposure of persons and articles infected with these diseases is penal, and disinfection can be enforced.

By order of the London County Council, approved by the Local Government Board, made under Section 56 of Public Health (London) Act, the following diseases have since been added to the list:—Polio-myelitis, cerebro-spinal fever, ophthalmia neonatorum, glanders, anthrax, and hydrophobia.



In 1911 the Local Government Board made pulmonary tuberculosis notifiable by an order under Section 130, Public Health Act, 1875, (treatment and prevention of spread of cholera, and any other epidemic, endemic, or infectious diseases), and under a similar order all forms of tuberculosis were made notifiable on February 1st, 1913. In the case of all these latter diseases the notification is for the information of the Health Department only; exposure is not penal nor disinfection compulsory. The object is to get such measures carried out voluntarily as the circumstances of the case demand.

The following notifiable diseases are admitted to the Asylums Board Hospitals:—Small-pox, scarlet fever, diphtheria, enteric fever, continued, typhus, and relapsing fevers, puerperal fever (under special conditions).

The following non-notifiable diseases are also admissible under special conditions:—Measles and whooping-cough. The special conditions are that pauper cases have the priority, and that the case is specially recommended by the Medical Officer of Health.

In June I presented the following report:—

“*Compulsory Notification of Zymotic Enteritis.* Voluntary notification of zymotic enteritis in Woolwich has been in force since 1905, and the usual fees paid by the Borough Council. When this was first introduced no other Borough had commenced or proposed to institute notification of this disease, and the Local Government Board would not probably have approved of making the disease compulsorily notifiable in Woolwich alone, the policy then being not to allow the notification of disease

to be specially enforced in only one of the London Boroughs. That policy, however, has now been changed. Several diseases are notifiable in only one of the London Boroughs, *e.g.*, measles in Stepney, and whooping cough and zymotic enteritis in Greenwich. The disease may be made notifiable under Section 56, Public Health (London) Act, by resolution passed at a meeting of the Council of which due notice has been given. The Order for compulsory notification must first receive the approval of the Local Government Board. The effect of the Order will make failure to notify on the part of a medical man or other person responsible an offence but will not entail any obligation on the patient notified. Probably making notification compulsory will cause a larger number of cases to be notified, and it will also enable the Borough Council to recover half the notification fees from the Metropolitan Asylums Board. I recommend that the necessary action be taken for making zymotic enteritis notifiable under the Public Health (London) Act."

This was done, and zymotic enteritis is now compulsorily notifiable.

Children absent from school on account of measles and whooping-cough are notified by the school teacher or attendance officer. Thus some form of notification is in existence for, altogether, 19 diseases.

#### SMALL-POX.

26. Not a single case of small-pox was notified.

27. The number of cases of small-pox notified in London was 3. There were no deaths.



## CHICKEN-POX.

28. 157 cases of varicella were notified by school teachers, compared with 243, 327, 232, and 385, in the four preceding years. 28 were under five years, 115 between five and ten, and 14 over ten years.

## MEASLES.

29. There were 9 deaths from measles, giving a rate of 0·07, compared with 0·16, 0·23, and 0·24, in the three preceding years. This is the lowest rate yet recorded in the Borough. The rate in London County was 0·34, compared with 0·40 in 1912.

30. Of the 9 who died from measles, 7 were under five years of age; 5 were males and 4 females.

31. 387 notifications were received from school teachers, compared with 519, 768, 396, 801, and 775, in the five preceding years. The mortality per cent. of notifications was 2·3, compared with 1·9, 7·2, 5·3, 3·5, and 3·9 in the five preceding years.

12 cases were removed to the Fever Hospital on the certificate of the Medical Officer of Health that hospital isolation was necessary.

32. The following table gives the number of deaths and death-rates from measles for the past three years, and four preceding quinquennia in each parish, and the death-rate in London:—

Year.	Woolwich.		Plumstead.		Eltham.		The Borough.		London
	Aver. No.	Rate.	Aver. No.	Rate.	Aver. No.	Rate.	Aver. No.	Rate.	Rate.
1891-5 ...	20	0·49	29	0·51	Not recorded		49	0·51	0·59
1896-1900	34	0·31	36	0·57	Not recorded		70	0·67	0·57
1901-5 ...	9	0·22	15	0·22	1	0·13	26	0·21	0·44
1906-10...	17	0·43	18	0·23	3	0·20	37	0·30	0·40
1911 ...	7	0·19	17	0·24	4	0·30	23	0·23	0·57
1912 ...	12	0·32	17	0·24	1	0·07	30	0·24	0·40
1913 ...	3	0·08	3	0·04	3	0·21	9	0·07	0·34

The actual reduction in measles mortality is not quite so large as appears from the above table, owing to the fact that the falling birth-rate has caused a diminution in the number of children living under five years.

The following table giving the deaths and death-rate per 1,000 births shows the reduction more accurately:—

	No.	Rate.
1891-95 (average) ...	49	14·7
1896-1900 ,, ...	70	20·9
1901-05 ,, ...	26	7·2
1906-10 ,, ...	37	11·8
1911 ... ..	28	10·0
1912 ... ..	30	10·9
1913 ... ..	9	3·1

It appears from these tables that whereas from 1891-1900 Woolwich had a somewhat higher measles mortality than London, since that date the measles death-rate in Woolwich



has greatly diminished, and was in the last two years less than half that of London, and that of Woolwich between 1891 and 1900.

33. Owing to the prevalence of measles, all unprotected children below the age of five were excluded from 15 London County Council schools in the Borough at various dates, and for periods varying from two to eight weeks (usually four weeks). The Medical Officer of the London County Council closed or excluded unprotected children from numerous classes. In many cases this was done immediately on the occurrence of one case. The period of exclusion or closure was usually for a few days only, in some cases for two weeks.

Measles is usually a disease which runs its course in less than two weeks, and, in children over five, occasions most often only a moderate amount of discomfort; but it often leaves behind it tuberculosis, inflammation of the eyes, and other diseases, especially if there has been neglect in treatment. In children under five, measles is much more serious, and has a higher death-rate than scarlet fever. It follows, then, that public health administration must aim at postponing the infection till after the age of five and at securing, as far as possible, the hygienic treatment of those who are attacked.

In order to postpone the infection, every effort is made to prevent children under five from attending school when measles is prevalent, and, to secure the latter object, instructions as to sanitary measures for dealing with measles are left at the home of all notified cases, and, where possible, the Woman Inspector pays a visit to enforce personally the directions.

These measures have now been in force in Woolwich for more than 10 years, and have no doubt had a large share in the reduction of the measles death-rate.

### WHOOPING-COUGH.

34. There were 10 deaths from whooping-cough, compared with 15, 25, 6, and 28, in the four preceding years. The death-rate was 0·08, compared with 0·20, 0·05, and 0·25, in the three preceding years, and 0·17 in the County of London. 9 of the deaths were under two years of age.

The following table gives the deaths and death-rates per 1,000 population since the Borough was formed, compared with London.

	<i>Woolwich.</i>		<i>London.</i>	
	No.	Rate.	Rate.	
1901-05 (averages) ...	34	0·28	...	0·35
1906-10            ,, ...	26	0·21	...	0·29
1911     ...     ... ...	6	0·05	...	0·23
1912     ...     ... ...	28	0·23	...	0·22
1913     ...     ... ...	10	0·08	...	0·17

Owing to the fact that whooping-cough almost entirely falls on children under five, and that the diminution of birth-rate since 1900 has caused a smaller population under five years, the rates calculated per 1,000 population show a larger diminution of mortality than has actually occurred. While the number of births has diminished 20 per cent. between the Census of 1901 and that of 1911, the population under five has only diminished 7 per cent. The rate should be given per 1,000 population under five, but the figures for each year are not available. In the following table the rates have been calculated per 1,000 births; there is still shown



a very marked reduction in the mortality of the disease. The real reduction lies between that shown by the two tables:—

	No.	Rate.
1901-05 (averages) ...	34	9·4
1906-10       "       ...       ...	26	8·3
1911       ...       ...       ...	6	2·1
1912       ...       ...       ...	28	10·2
1913       ...       ...       ...	10	3·5

265 cases were notified by school teachers, compared with 361, 377, 41, and 439, in the four previous years. 65 were under five years of age, 197 between five and ten, and 3 over ten.

An order was issued by the Local Government Board giving permission to the Asylums Board to admit to their hospitals children under 14 suffering from whooping-cough, on the recommendation of the Medical Officer of Health. One case was admitted during the year.

Whooping-cough being much more serious and fatal in children under five it is important to protect them from infection as long as possible. For this purpose when this disease is prevalent in a district it is desirable to exclude from school all children under the age of compulsory attendance. Last year on my advice children under five were excluded from seven County Council schools, for the prevention of whooping-cough, for periods not exceeding one month.

Instructions printed on cards are left at houses where cases are notified by school teachers. The instructions were printed in the Annual Report for 1910.

It is satisfactory to note a further great reduction in the mortality of this disease in the four years during which this practice has been in force.

### SCARLET FEVER.

35. There were 614 cases of scarlet fever notified (deducting 12 cases of mistaken diagnosis), equivalent to a rate of 4.80 per 1,000 population, compared with 3.80 in 1912.

36. The following table shows the case-rates of scarlet fever in the Borough and each registration district during the past thirteen years, compared with London.

		<i>Average.</i>				
		1901-5.	1906-10.	1911.	1912.	1913.
Borough	...	3.15	5.90	4.09	3.80	4.80
Woolwich Parish	...	2.99	5.66	2.89	2.41	5.44
Plumstead, West	...	3.24	6.33	3.77	4.96	4.68
„ East	...			7.51	4.88	5.11
Eltham Parish	...	3.21	4.94	2.09	2.64	4.36
London County	...	3.57	4.22	2.32	1.76	3.89

37. Table 3 gives the age distribution, the number in each parish, and the number removed to hospital. Woolwich parish was most affected.

38. *Deaths.* There were 8 deaths, giving a death-rate of 0.06 per 1,000 population, compared with 0.03 in 1912, 0.02 in 1911, 0.09 in the five years 1906-10, and 0.19 in the ten years 1891-1900. The death-rate in London was 0.04, compared with 0.04 in 1911 and 1912 and 0.10 in 1906-10. It appears, then, that although proportionately more



cases are notified in Woolwich, the death-rate from this disease is usually lower than in London. The case mortality (or deaths per cent. of notifications) was 1·3, compared with 2·6, 0·6, and 0·8, in the three preceding years.

39. *Hospital Isolation.* Of the 626 cases notified, 561 (or 90 per cent.) were removed to one of the Fever Hospitals, compared with 86, 94, 90, 80, and 88, per cent. in the five preceding years. 12 cases were reported, after observation at hospital, not to be scarlet fever.

The percentage of cases removed to hospital was again very high. A large proportion of notified cases are removed to hospital, not because they cannot be sufficiently isolated at home, but because the parents cannot afford the cost of medical attendance and nursing. Much might be saved to the rates if there was power to provide this at the public cost.

40. *Return Cases.* There were 31 cases (or 5 per cent. of notifications) in which infection was attributed to patients recently returned from hospital, compared with 38, 58, 27, 29, and 37, in the five preceding years. The interval between the return of the infecting case and commencement of illness varied from three to 27 days. Of the 21 infecting cases, 5 had some form of rhinitis on or after their return.

As a rule, the children returning from hospital are quite well at the moment of leaving, but in many cases develop some nasal discharge on arriving home, or within a few days. Illustrative cases of this were given in the 1908 Report.

The parents of all children with any discharge are recommended to obtain medical attendance, and the district nurse is

often requested to visit and syringe the ear or nose. Parents are always advised as to treatment, and children suspected to be infectious are kept at home and from association with other children.

The hospital superintendents forward the names of any children discharged while still suffering from rhinorrhœa.

41. *Home Isolation.* 12 certificates of efficient home isolation were given to enable men to continue their employment in the Arsenal, and so obviate unnecessary removal to hospital, compared with 13, 18, and 25, in the three preceding years.

In the Annual Report for 1911 a comparison was made between home and hospital isolation, showing that, whereas there were only 1·6 per cent. of failures in home isolation, there were 4·6 per cent. in hospital isolation. Failure means the occurrence of secondary cases attributed to the primary case.

42. *Other sources of Infection.* In addition to return cases, a probable source of infection was found in 134 cases. In 63 cases infection was attributed to other inmates of the house. Some of these were never notified and had no distinct symptoms of scarlet fever, but a history of sore throats made it probable that they had had a slight attack of this disease.

43. In 17 cases infection was attributed to friends and neighbours, in 45 cases to school attendance, in 6 to the Fever Hospital, and in 3 to other hospitals.



44. The Annual Report for 1905 contained a special report on a statistical investigation into school incidence of scarlet fever and diphtheria during the ten years 1896-1905.

45. In the 1910 Annual Report I described an investigation into the incubation period of scarlet fever. The result was to show: (1) That the period of incubation varies from one day to six months; (2) That it is barely the majority of the total cases in which incubation is under seven days (3) That in a considerable proportion of cases it is over four weeks; and (4) That the days from the second to the fifth after exposure are those in which most secondary cases occur.

#### DIPHTHERIA.

46. 244 cases of diphtheria were notified (excluding 77 cases of mistaken diagnosis), compared with 147, 204, and 381, in the three preceding years. The case-rate (number of cases per 1,000 population), corrected for cases of mistaken diagnosis was 1.91, compared with 1.15, 1.68, and 3.09, in the three preceding years, and 2.13, the average of the ten preceding years. 4 of the cases were bacteriological, *i.e.*, had no symptoms.

47. There were 17 deaths, compared with 5, 11, and 20, in the three preceding years. The death-rate was 0.13, compared with 0.16 in 1912, 0.09 in 1911, and with 0.14 the average of the five preceding years. The London death-rate was 0.09, compared with 0.10 in 1912, 0.14 in 1911, and 0.14 in the five preceding years.

48. 171 of the total cases notified were in Woolwich parish, 98 in West Plumstead, 33 in East Plumstead, and 19 in Eltham. The following table shows the case-rate, in each registration district (not corrected for mistaken diagnosis) in the past thirteen years, compared with London and the Borough:—

	1901-05.	1906-10.	1911.	1912.	1913.
Borough ... ..	1·71	2·20	1·68	3·09	1·91
Woolwich Parish ...	1·63	2·34	2·40	4·38	4·43
Plumstead Parish ...	1·87	2·40	{ W. 1·19    3·79    2·32 E. 2·33    2·81    1·02		
Eltham Parish ...	1·62	2·22	2·30	1·71	1·29
London ... ..	1·90	1·63	1·64	1·57	1·70

The table shows that since 1910, diphtheria has prevailed more in Woolwich parish than in the rest of the Borough, and this was particularly so last year. Wood Street school, the largest school in this parish, was again affected in a special degree, so as to cause concern to several persons in its vicinity. Such persons are inclined to suspect that some special insanitary conditions must be present in the school or in its vicinity to cause such prevalence of infectious disease. It is quite a mistake to seek for such an explanation. The true explanation is in the habits of the disease. Diphtheria (like scarlet fever) is well known to haunt a particular locality persistently for several years. As shown in my Annual Report for 1905, page 34, during the years 1901-5 Wood Street school had the lowest incidence of scarlet fever, and the lowest incidence but one of diphtheria among the provided schools in the Borough. Both these diseases were then haunting the neighbourhood of Elizabeth Street and Ancona Road schools, and leaving Wood Street school alone. Now the condition is reversed.



49. 370 cases, or 93 per cent. of total notifications, were removed to hospital, compared with 89, 81, 92, and 81, per cent. in the four preceding years. A certificate of efficient home isolation was given in one case, compared with 7, 1, 1, 3, and 12, in the five preceding years.

The case mortality was 7.0 per cent., compared with 5.5, 10.4, 3.4, 5.4, and 5.2, in the five preceding years.

Many of the cases were very mild, and in several cases there were no throat symptoms, but discharge or soreness of the nose. Such cases rarely have medical attendance, and would escape detection if other cases in the family or school did not lead to a search for the source of infection. The search for, and detection of, these nasal cases is one of the most important duties of the Public Health Department.

In addition to the notified cases (many of which never complained of illness), 5 (66 in 1912) cases were found to be carriers of the infection in their throat or nose without having any symptoms. 15 carrier cases, with or without slight symptoms, were discovered by your Medical Officer of Health. The usual steps were taken—school absentees were visited and medical attention obtained; children in affected classes were medically and bacteriologically examined, as were also a large number of contacts and suspected cases, and all cases found to be infectious strictly isolated.

50. A table giving details as to cases notified, cases bacteriologically examined, and deaths, was published in the Annual Report for 1912. The large number of cases with Klebs Löffler bacillus but no symptoms during that year was noteworthy. Last year the number of purely bacteriological cases was much lower, and the fatality of notified cases higher.

51. *Mistaken Diagnosis.* 77 cases, or 19 per cent. of notifications were, after removal to hospital, stated to be not diphtheria. The percentage of the four preceding years was 10, 10, 15, and 11, respectively.

52. *Source of Infection.* In 79 cases a probable source of infection was noted, viz.: In 31, other inmates of the house were known or suspected to be the source; in 22, schools; 14, neighbours and friends; 4, return cases; 1, general hospital; and in 6 the infection was due to the Fever Hospital. In two of the returned cases there were sore nares or rhinorrhœa on discharge, and a bacteriological examination showed the presence of diphtheria bacilli. In the other two the bacteriological examination was negative.

53. *Bacteriological Diagnosis.* In January, 1913, I recommended that the Council's bacteriological work should be given to the Bacteriological Department of the Seamen's Hospital, Greenwich, and this was done. That Hospital being much nearer than the Lister Institute, the results of examinations can be obtained more quickly. The Seamen's Hospital is fully equipped for this work, and the new arrangement has worked satisfactorily. 921 (1,231 in 1912) swabs were sent to the Seamen's Hospital and Lister Institutes to be examined in the presence of diphtheria bacilli. In 85 (320 in 1912) the true Klebs Löffler bacillus was found; in 67 (128 in 1912) Hoffman's bacillus was found, and 769 were found free from either the Klebs Löffler bacillus or Hoffman's.

Of the 921 swabs examined, 327 were taken from school children by myself. Of these, 16 contained the true Klebs



Löffler bacillus (so-called positive cases). Most of the children were contacts seen about ten days after notification of a primary case for the purpose of preventing pupils returning to school in an infectious state. Others were examined with the object of finding possible sources of infection, *e.g.*, where the first case notified in a house was a child not attending school; others again were children suspected to have diphtheria by the School Teacher, the Attendance Officer, or Sanitary Inspector. In 6 cases without symptoms the bacillus disappeared within two or three weeks.

9 positive cases had symptoms of running or sore nose or sore throat; these were notified and sent to hospital or strictly isolated. Positive cases without any symptoms were excluded from school and from mixing with other children outside the house.

#### ENTERIC FEVER.

54. There were 8 cases of enteric fever, not including 6 cases of mistaken diagnosis notified as enteric. The case-rate was 0·06, compared with 0·06, 0·10, and 0·15, in the three preceding years. For the ten years 1892-1901, the rate never fell below 0·41. The case-rate in London was 0·17. Out of a total of 14 cases notified, 10 went to hospital. The case-rate is the lowest recorded in the Borough.

55. There was 1 death from this disease, giving a death-rate of 0·01. The death-rate in London was 0·02.

In the preceding five years the death-rate in Woolwich was 0·02, and in London 0·03.

56. The following are the cases notified in each parish during the past thirteen years:—

		<i>Average.</i>				
		1901-05.	1906-10.	1911.	1912.	1913.
Woolwich	...	12·6	7·6	10	10	7
Plumstead	...	21·2	11·4	W. 3 E. 2	4	3
Eltham	...	8·6	2·8		1	4

57. In my last Annual Report it was stated:—"6 cases occurred in one family. The first was the mother, who was treated in a general hospital for pneumonia. On her return home her four children sickened one after another with enteric. The mother was consequently examined bacteriologically, and the typhoid bacilli found. She was accordingly notified and sent to the Fever Hospital, but was, in spite of protest, discharged while still excreting the disease germs. A week later the husband began with enteric. This woman was therefore responsible for infecting the whole family. She has been specially warned as to steps she should take to avoid infecting other persons, and will be kept under observation. She is what is called a 'carrier case,' though fortunately discovered to be such at an early stage."

Two of last year's cases were infected by this same woman, one being another daughter, and one a man who was boarding with her. Another was infected on board the S.S. "Balaclava" from South America. In not one case was the infection attributed to shell fish.

58. *Bacteriological Diagnosis.* 16 samples of blood were sent to the Lister Institute and Seamen's Hospital to be examined for Widal's reaction. A positive result was obtained in 1.



## DIARRHŒA OR ZYMOTIC ENTERITIS.

59. The deaths from diarrhœa and enteritis (all forms) under two years of age were 46, or 17·4 per 1,000 births, compared with 3·65 in 1912. The rate for London was 27·50. The total number of deaths from these diseases at all ages was 49. Owing to the change in nomenclature, the diarrhœa death-rate cannot be strictly compared with that of years previous to 1912, but the rate was probably below the average of previous years.

*Notification.* Voluntary notification of zymotic enteritis during July, August, and September, commenced in Woolwich in 1905. The results of four years' notifications were fully reported (see Council's Minutes, February 11th, 1909), and they were so satisfactory that it was resolved to continue voluntary notification, and, from and including 1909, to extend the period to June and October, thus making the disease notifiable during five months instead of three. In 1913 an Order was made under Section 55, Public Health (London) Act, making the disease compulsorily notifiable, and the Order was confirmed by the Local Government Board. Compulsory notification commenced 25th August, 1913.

338 cases were notified in the past year, compared with 866 and 129 in the two preceding years. 10 cases were notified in June, 13 in July, 110 in August, 163 in September, 38 in October, 4 in November, and none in December.

The fatality (deaths under two years per 100 notified cases under two) was 23·1.

60. The following tables give full particulars of the cases notified each year since notification commenced:—

NOTIFIED CASES OF ZYMOTIC ENTERITIS.

TABLE A.

*Age and Sex.*

NOTIFICATIONS.

Year.	Total.	M.	F.	Under 3 months.	3 to 6 months.	6 to 9 months.	9 to 12 months.	Total under 1 year.	1 to 2 years.	2 to 5 years.	Over 5 years.
1905	212	112	100	18	39	34	29	120	56	25	11
1906	366	187	179	31	52	52	59	194	99	39	34
1907	93	48	45	6	18	14	11	49	23	3	18
1908	173	96	77	11	28	25	27	91	55	12	15
1909	149	79	70	12	10	20	22	64	35	18	32
1910	102	54	48	5	10	12	13	40	31	17	14
1911	866	434	432	28	69	79	89	265	240	171	190
1912	129	61	68	4	4	16	6	30	26	22	51
1913	338	181	157	16	30	41	28	115	84	54	85
Total 1905-13	2428	1252	1176	131	260	293	284	968	649	361	450



TABLE B.  
CLEANLINESS OF HOUSES.

Year.	Total Houses of which information was obtained.	Clean.	Dirty.	Indifferent.
1905	205	166	39	—
1906	360	289	71	—
1907	93	53	13	27
1908	156	51	22	83
1909	145	89	11	45
1910	100	57	6	37
1911	697	520	24	153
1912	104	83	2	19
1913	297	198	12	87
Tot. 1905-13	2157	1506	200	451

TABLE C.  
DIET OF CASES UNDER 1 YEAR AT TIME OF NOTIFICATION.

	1905	1906	1907	1908	1909	1910	Ttls. 1905- 1910	1911	1912	1913
Breast only ..	15	12	4	9	4	5	49	24	3	9
Breast and other foods	10	28	9	10	15	6	78	43	7	15
Hand-fed only	92	150	37	59	42	28	408	179	17	80
No information	5	4	1	13	2	1	26	16	3	11
	122	194	51	91	63	40	561	262	30	115

N.B.—Of 35 children under 1 year having fresh cow's milk, 33 had it boiled, or were said to do so.

TABLE D.  
 NUMBER OF CASES NOTIFIED EACH WEEK, WITH MEAN TEMPERATURE OF 3 FEET  
 GROUND THERMOMETER DURING WEEK, SEPTEMBER QUARTER.

*Cases.*

Year	1st Week	2nd Week	3rd Week	4th Week	5th Week	6th Week	7th Week	8th Week	9th Week	10th Week	11th Week	12th Week	13th Week
1905	3	3	10	8	24	34	27	36	30	12	11	9	4
1906	1	3	5	5	13	38	65	56	27	52	58	28	15
1907	2	1	0	5	2	7	5	7	17	10	8	12	17
1908	5	4	2	6	11	27	24	30	20	13	7	10	13
1909	—	4	1	2	4	7	14	24	23	18	11	7	8
1910	3	3	0	2	4	3	8	9	11	9	5	6	9
1911	—	—	7	18	57	82	189	207	156	48	57	17	10
1912	4	10	48	19	4	11	3	6	5	2	2	—	1
1913	2	3	1	2	7	16	15	32	43	48	52	25	40
Total	20	31	74	67	126	225	350	407	332	212	211	114	117

*Temperature.*

1905	60.68	62.17	63.59	64.21	64.19	63.04	62.62	62.37	61.33	60.97	59.96	58.47	57.43
1906	59.16	60.68	61.29	62.26	63.25	64.00	63.80	62.80	63.08	63.83	62.89	60.80	59.24
1907	56.71	57.00	58.53	59.67	60.10	60.34	60.84	60.26	59.67	59.45	59.43	58.77	58.18
1908	61.34	60.97	60.47	62.15	62.65	62.18	61.26	60.88	59.51	58.02	57.11	57.86	58.21
1909	57.21	57.59	59.39	59.49	59.68	61.25	62.79	61.48	60.19	58.70	57.87	57.60	57.11
1910	58.21	57.99	58.82	59.06	60.12	60.48	61.13	61.26	60.59	59.68	58.71	58.01	57.35
1911	59.80	62.16	63.31	65.17	66.11	66.43	67.06	66.39	65.36	64.63	64.19	61.74	59.94
1912	59.73	60.75	63.65	62.22	63.09	61.57	60.48	60.22	59.74	59.08	58.01	57.38	56.20
1913	59.82	59.40	59.61	59.45	59.73	60.24	60.10	60.58	60.62	60.63	59.96	59.03	58.46
Average	59.18	59.66	60.96	60.52	62.11	62.17	62.23	61.60	61.12	60.55	59.71	59.96	59.01



TABLE E.

DEATHS FROM DIARRHCEA AND ZYMOTIC ENTERITIS classified by Ages during the five months ending 31st October, 1905-12.

Year.	Under 1 Year.				Over 1 Year.			Total for each Year.
	1-3 Months.	3-6 Months.	6-9 Months.	9-12 Months.	1-5 Years.	5-60 Years.	Over 60 Years.	
1905 .. ..	9	16	15	11	6	2	2	61
1906 .. ..	9	17	25	14	9	1	6	81
1907 .. ..	1	9	6	2	4	—	—	22
1908 .. ..	6	9	9	7	6	—	1	38
1909 .. ..	4	2	2	1	1	—	—	10
1910 .. ..	2	3	1	1	1	1	—	9
1911 .. ..	19	27	21	15	18	5	11	116
1912 .. ..	—	2	1	—	—	—	—	3
Total for 1905-12 ..	50	85	80	51	45	9	20	340

NOTE.—In the above figures, "Enteritis" and "Gastro-Enteritis" are excluded up to and including 1910; after 1910 they are included.

DEATHS FROM DIARRHCEA AND ZYMOTIC ENTERITIS under two years of age, for three months, July, August and September.

Year.	1-3 Months.	3-6 Months.	6-9 Months.	9-12 Months.	1-2 Years.	Total.
1913.	9	8	8	3	7	35

TABLE F.  
DIARRHŒA, INFANTILE MORTALITY, AND TEMPERATURE OF SUMMER QUARTER IN  
LONDON AND WOOLWICH.

		Average 1901-4	Average 1905-10	1911			1912	1913
Annual Death Rate from Diarrhœa and Enteritis in summer quarter per 1,000 living.*	LONDON ..	2.27	1.40	3.82	Annual Death Rate from Diarrhœa and Enteritis (under two years) per 1,000 births for whole year	LONDON ..	12.42	27.5
	WOOLWICH	2.30	0.97	2.87†		WOOLWICH	3.65	17.44
Max. weekly average Temperature of 3ft. ground thermometer in 13 weeks of summer quarter	—	62.72	62.61	67.06	Max. weekly average Temperature of 3ft. ground thermometer in 13 weeks of summer quarter	—	63.65	60.63
Average Temperature of 3ft. ground thermometer in summer quarter	—	60.84	60.30	64.01	Average Temperature of 3ft. ground thermometer in summer quarter	—	60.24	59.82

\* In and after 1911 deaths under two years only are included.

† If deaths over two years were included, this figure would be 3.64, and the figure for London would also be increased.



TABLE G.  
 ZYMOTIC ENTERITIS AND METEOROLOGY.  
*Summer Quarter.*

	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Number of cases notified ...	—	—	—	212	366	93	173	123	72	848	115	286
Number of Deaths (Diarrhoea)* at all ages ...	27	29	136	56	81	11	28	8	4	109	2	49
Mean Temperature of Air ...	59.1	59.0	60.08	60.6	62.4	58.87	59.3	58.7	57.2	65.1	58.0	59.1
Mean Temperature 3 ft. below ground ...	59.68	60.18	61.45	61.62	62.08	59.15	60.35	59.25	59.34	64.01	60.24	59.82
Mean Humidity ...	75	77	72	75	70	74.6	77	80	80	65	76	79
Number of days on which rain fell ...	—	46	34	33	26	32	38	46	37	22	39	36
Rainfall in inches ...	5.91	12.32	4.88	5.65	3.78	3.77	8.15	7.43	6.08	2.94	5.64	5.43
Number of hours bright sun- shine ...	485	541	671	529	697	516	532	530	432	824	399	376

\* Enteritis included in and from 1911.

## ERYSIPELAS.

61. There were 70 cases of erysipelas notified, compared with 89, 82, and 87, in the three preceding years. There were no deaths. The case-rate was 0·55, and the death-rate nil, compared with 0·02, 0·07, and 0·02 in the three preceding years. The London case-rate was 0·92.

## EPIDEMIC CEREBRO-SPINAL MENINGITIS.

62. In consequence of the serious epidemic of this disease in certain towns of Ireland and Scotland, cerebro-spinal meningitis was made in 1907 a notifiable disease, under the Public Health (London) Act, by the London County Council. 1 case was notified in the Borough in each of the two years 1907-8, but none in 1909. 1 case was notified in 1910, 1 in 1911, and 1 in 1912. No case was notified last year.

## ANTERIOR POLIO-MYELITIS.

63. This disease, commonly known as infantile paralysis, was made compulsorily notifiable in 1911, by an Order of the London County Council under Section 55, Public Health (London) Act. One case was notified last year which was treated at the London Hospital; very slight paralysis now remains. There were no deaths.

3 cases were notified in 1911 and 3 in 1912.

The disease is believed to be due to the presence of a germ, and to be conveyed from one person to another by the nasal secretion. Treatment is important to prevent the contraction and wasting of the limbs which frequently ensues.



## PUERPERAL FEVER.

64. There were 8 cases of puerperal fever notified, compared with 6, 9, 7, 16, and 2, in the five preceding years. There were 3 deaths. The case-rate per 1,000 births was 2.78, and the death-rate 1.05, compared with 0.73 and 0.36 in 1912. The London case-rate and death-rate per 1,000 births were 3.16 and 1.24 respectively.

In the ten years 1891-1900, the case-rate per 1,000 population was 0.07, and the death-rate 0.03. In 1901-5 the case-rate was 0.06, and the death-rate 0.03, and 1906-10 the case rate was 0.05, and the death rate 0.016. There has been a decided fall in the death-rate from this disease. Although the apparent fall in the case-rate appears to be but slight, it is probably just as great as that of the death-rate. Many cases are now notified which in former years would have been passed over.

## INFLUENZA, BRONCHITIS, PNEUMONIA.

65. Influenza caused 35 deaths, compared with 29, 36, 39, 19, and 25, in the five preceding years. Bronchitis and pneumonia caused 253 deaths, compared with 228, 245, 232, 200, and 208, in the five preceding years. The deaths from these causes under five years were 70, compared with 86, 66, 55, and 70, in the four preceding years. There were more deaths of persons over five from bronchitis than for several years past.

## TUBERCULOSIS.

66. *Deaths.* There were 216 deaths from tuberculous

disease, giving a death-rate of 1.69, compared with 1.80, 1.68, 1.46, 1.65, and 1.34, in the five preceding years.

67. The following table gives the number of deaths from each of the various forms of tuberculosis in the past ten years, and also the deaths from simple meningitis:—

<i>Average.</i>					
	1901-5.	1906-10.	1911.	1912.	1913.
Tuberculous Meningitis	20.0	22.8	20	23	14
Simple Meningitis ...	22.0	15.0	16	13	10
Tuberculosis of Intestines					
and Peritoneum ...	13.0	10.8	5	5	10
Tuberculosis (other forms)	20.8	22.2	29	16	10
Phthisis ... ..	192.0	151.4	146	124	182

68. The deaths from phthisis were 182, giving a death-rate of 1.42, compared with 1.27, 1.22, 1.08, 1.20, and 1.01, in the five preceding years. The rate is higher than it has been since 1905, but is considerably below that of the quinquennia 1891-5, 1896-1900, and 1901-5, as is shown in the following table. The table shows that the increased rate of last year was chiefly in West Plumstead and Eltham, and most of the deaths occurred in the fourth quarter of the year.



	1891-5.		1896-1900.		1901-5.		1906-10.		1911.		1912.		1913.		
	No.	Rate.	Aver. No. per year.	Rate.	Aver. No. per year.	Rate.	Aver. No. per year.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	
Woolwich Parish ...	—	2·80	92	2·23	89	2·15	56	1·46	66	1·80	48	1·30	61	1·58	
Plumstead { West } East }	...	—	1·78	92	1·42	97	1·34	87	1·20	W 41	1·02	31	0·76	66	1·56
										E 33	1·07	37	1·18	40	1·23
Eltham Parish ...	...	—	9	1·28	6	0·63	8	0·64	6	0·45	8	0·57	15	1·02	
The Borough ...	...	—	193	1·74	192	1·56	151	1·22	146	1·20	124	1·01	182	1·42	
LONDON ...	...	—	1·88	—	1·80	—	1·57	—	1·33	—	1·32	—	1·34	—	1·30

69 While there was an increase last year of deaths from phthisis, there was a great decrease of other forms of tuberculosis. The number of cases of both tuberculous and simple meningitis considerably diminished. There was a slight increase of abdominal tuberculosis, but the decrease of deaths from meningitis is very marked.

The death-rate from tuberculous diseases in the past two years was less than in any two preceding consecutive years.

70. The chart on the opposite page shows the course of the phthisis death-rate in Woolwich in the past 23 years, compared with Greenwich, Lewisham, London, and England.

71. 115 of those who died from phthisis were males, and 67 females. The diminution of deaths has been greater among females than among males.

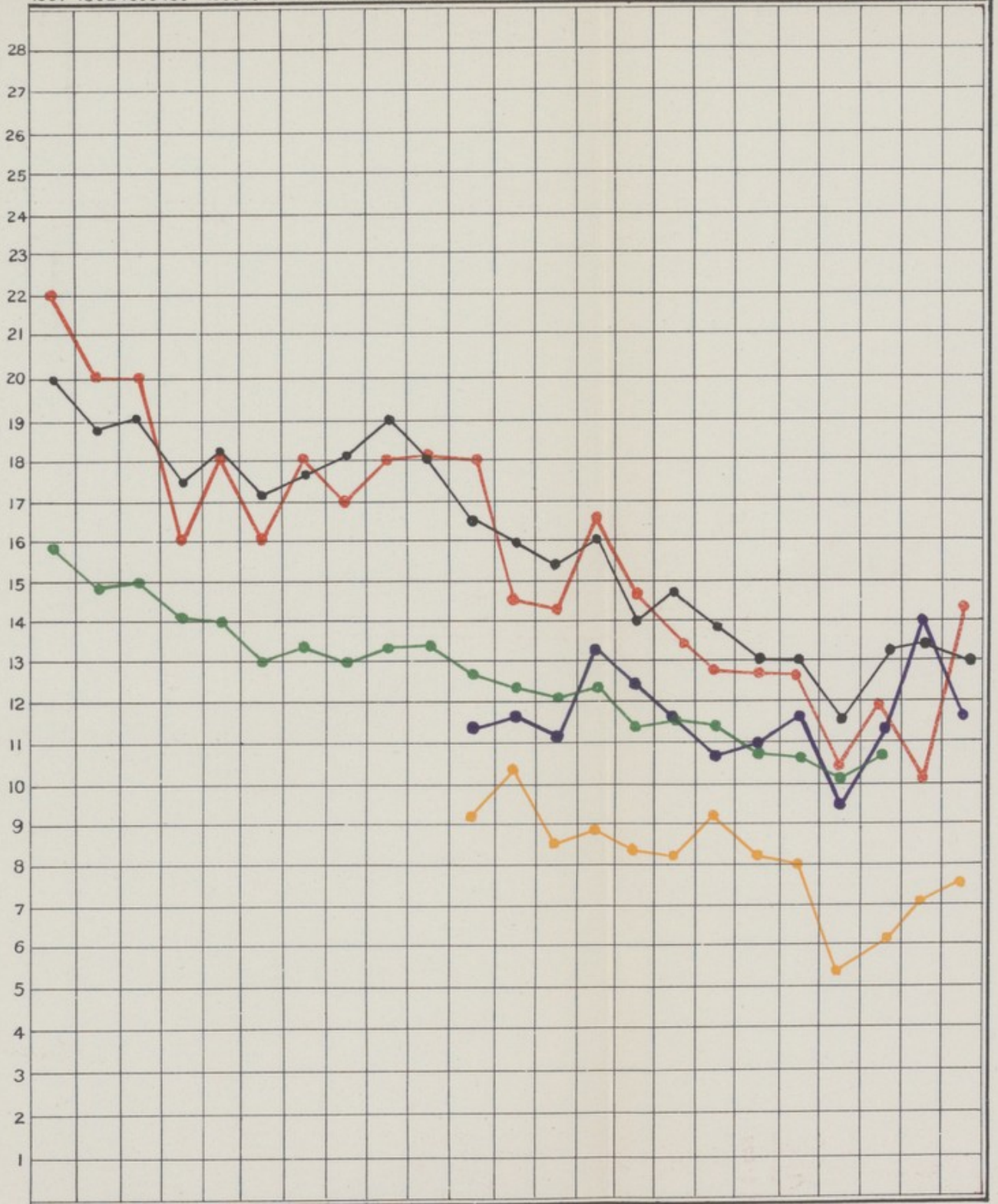
72. *Notification Regulations.* Voluntary notification of phthisis has now been in force in the Borough for nine years. In 1909 notification of cases attended by Poor Law Medical Officers was made compulsory by an Order of the Local Government Board, made under Section 130, Public Health Act, 1875. This Section authorises the Local Government Board to make such regulations as they may see fit with the view of the treatment of persons affected with cholera or any other epidemic, endemic, or infectious disease, and preventing the spread of such diseases. The penalty for neglecting or refusing to obey any regulation made under this Section is £50.



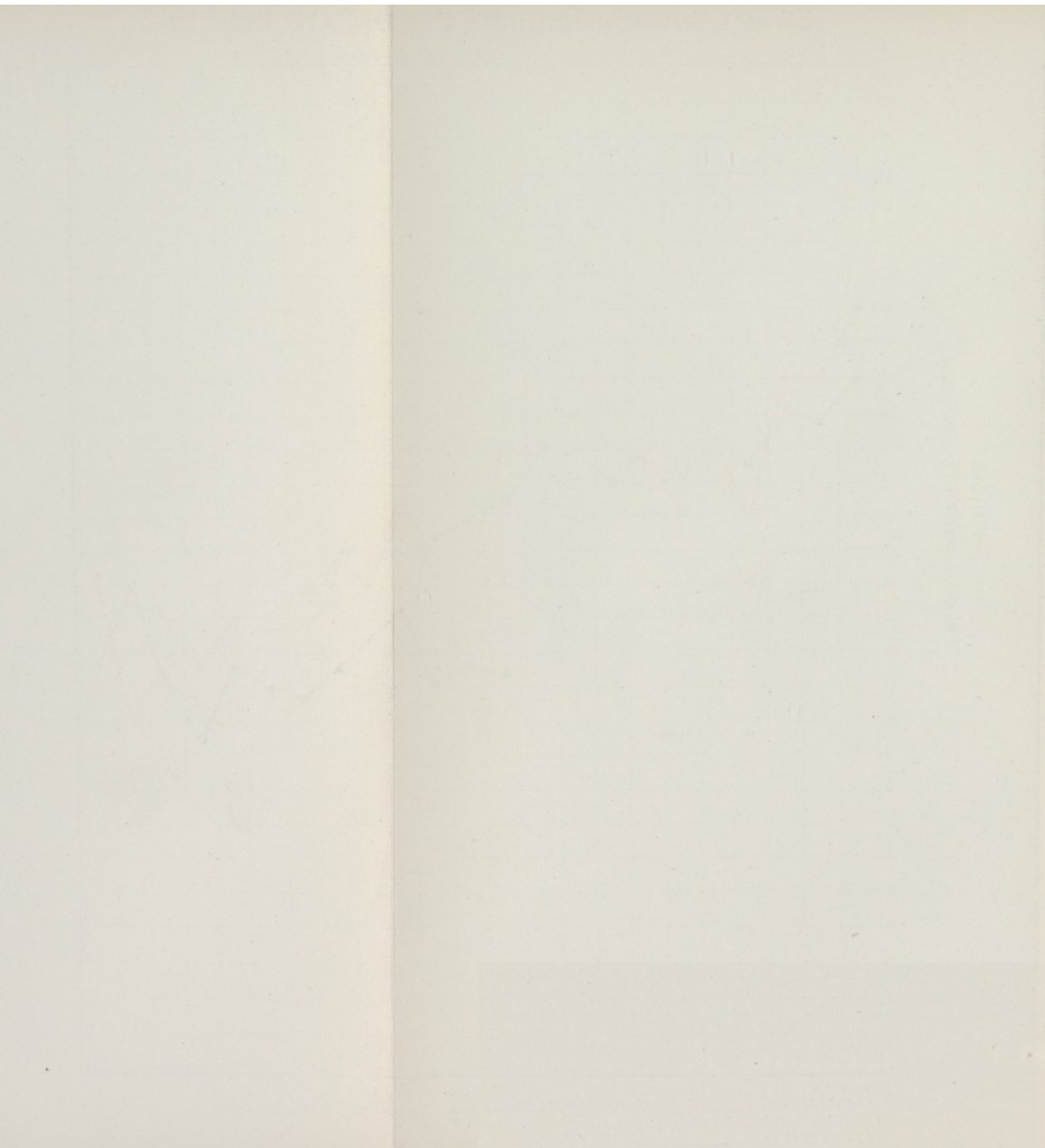
# CHART SHOWING PHTHISIS DEATH RATE 1891/1913.

1891 1892 1893 1894 1895 1896 1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913

PHTHISIS.  
Rate per 10,000 population.



Woolwich —●— London —●— England —●—  
Greenwich —●— Lewisham —●—





Under the same Section, the Board, by Regulations issued in 1912, made it compulsory on the Medical Officers of all Public Hospitals and Public Dispensaries to notify cases of pulmonary tuberculosis attending such institutions, and in November, by further regulations, made the notification of this disease compulsory on all medical practitioners. The regulations also authorise local authorities to supply all such medical and other assistance, and all such facilities and articles, as may reasonably be required for the detection of the disease, and for preventing the spread of infection, and removing conditions favourable to infection, and they may appoint such officers as may be necessary.

Under a further order all forms of tuberculosis were made notifiable in January, 1913.

*Notification Statistics.* 675 cases were notified, viz.:—Tubercle of Lung, 532; tuberculosis meningitis, 3; tuberculosis of the intestines and peritoneum, 8; other forms, 132. It is seen that the deaths from tuberculosis of the meninges and the abdomen exceeded the notifications. When deaths occurred in cases not already notified the medical man certifying was communicated with.

The 532 cases of phthisis compare with 206, 196, 375, and 689, in the four preceding years. 17 of these were in the Woolwich and Eltham Poor Law Infirmaries; 9 others were notified by the District Medical Officers of the Poor Law Union, 21 by the Medical Officers of the Royal Arsenal, Army, &c., 396 from hospitals and dispensaries, including 313 from the Woolwich Tuberculosis Dispensary, 33 by school doctors, and the remainder by private medical practitioners.

£33 7s. 9d. was paid during the year for the notification of tuberculosis.

*Duration.* Of the 675 cases notified during 1913, at least 96 have since died, and of 689 cases notified during 1912, at least 110 have since died (February, 1914).

73. The source of infection of the notified cases was probably as follows:—

Family or Personal—Father, 49; mother, 61; brother, 39; sister, 27; husband, 14; wife, 3; other members of family, 23; friends, lodgers, etc., 4	...	...	...	220
Workshop and Office	...	...	...	22
Public House	...	...	...	11
Navy and Army	...	...	...	2
Milk	...	...	...	4
School	...	...	...	2
Undetermined	...	...	...	414

74. *Age and Sex Distribution.* The following table, required by the Local Government Board, gives the age and sex distribution of pulmonary and non-pulmonary cases, and shows also the sources of notification:—



METROPOLITAN BOROUGH OF WOOLWICH.  
PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.  
Summary of Notifications during the year 1913.

Age periods.	Number of Notifications on Form A. from Private Medical Practitioners.											Number of Notifications on Form B. from School Medical Officers.				Number of Notifications Form C.				
	Primary Notifications.											Total Notifications, i.e., including cases previously notified by other doctors.	Primary Notifications.				Total Notifications, i.e., including cases previously notified by other doctors.	Poor Law Institutions.	Sanatoria.	
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards.		Total.	Under 5	5 to 10	10 to 15				Total.
Pulmonary Males	-	6	27	29	25	31	58	48	31	7	2	264	264	-	3	6	9	9	22	60
„ Females	-	10	40	25	28	35	46	40	19	5	1	249	249	-	4	6	10	10	10	44
Non-Pulmonary Males	4	11	27	15	6	-	4	4	1	-	-	72	72	-	4	4	8	8	-	14
„ Females	-	5	17	16	9	4	1	2	3	-	-	57	57	-	4	2	6	6	1	4
Total ..	4	32	111	85	68	70	109	94	54	12	3	642	642	-	15	18	33	33	33	122

75. *Occupation.* Of the 602 cases from which information was obtained, the occupations were as follows:—

Outdoor—

Official, Soldiers, etc. ... ..	20
Mechanical ... ..	7
Carmen and Costers ... ..	8
Labourers, Porters—Dock and all others ...	28
	— 63

Indoor—

Clerks ... ..	24
Mechanical ... ..	52
Printers ... ..	2
Bakehouses ... ..	2
Laundry ... ..	4
Domestic—Private ... ..	30
Public House ... ..	7
	— 37
Labourers ... ..	30
School Children and Teachers ... ..	219
Housewives ... ..	105
All Others ... ..	64
	— 539
	602

75A. *Visiting.* Cases notified by the Tuberculosis Dispensary are visited by the Dispensary Medical Officers and Nurses, and full particulars provided to the Public Health Department, which follows up any sanitary defects reported. Other cases (except where the social conditions are exceptionally favourable) are visited by the Medical Officer of Health, or one of the Sanitary Inspectors, instructions as to precautions and open-air treatment given, and examination of contacts advised. Printed instructions are sent to every



notified case. Advice and assistance is given as to sanatorium treatment. Revisits of such cases as most need it are made by the Health Visitor. The Health Visitor also visits, as far as time allows, cases returning from Sanatoriums, in order to see that the lessons learnt at the Sanatoriums are practised as much as possible at home, and that the patient is not discouraged by initial difficulties. But it is impossible with the present staff to follow up tuberculous cases as far as desirable. It is not enough, *e.g.*, to simply advise that contacts in the family should go to the Dispensary to be examined. The house should be revisited to see that the advice has been taken. Similarly with regard to the advice given to occupy a separate bed and keep the window freely open; it is often necessary to make repeated visits before this is satisfactorily done.

76. *Bacteriological Diagnosis.* Sputum from 231 cases of suspected phthisis was examined at the Seamen's Hospital and Lister Institute, and tubercle bacilli were found in 57 cases. The number of examinations for the five preceding years was 175, 179, 210, 191, and 151, respectively. In addition the Medical Officers examined 439 specimens of sputum at the Tuberculosis Dispensary, 94 being found positive.

77. In my Annual Report for 1904 some figures were given as to the "Public-house as a source of Infection" and "Chronic Tuberculosis in Children" (see page 50 of the Report).

78. Disinfection was performed by the Public Health Department at 247 premises, compared with 166, 152, and

194, in the three preceding years. Disinfection was performed after the death of the patient, and also after removal to hospital, sanatorium, or other occasion of the house or bedroom being vacated.

79. *Sanatorium Treatment.* Altogether 144 notified persons were admitted to some sanatorium or hospital for the treatment of tuberculosis, most of them being sent by the London Insurance Committee. The following table shows the number sent to the chief institutions:—

CASES ADMITTED AS IN-PATIENTS TO SANATORIA,  
HOSPITALS, ETC., 1913.

	Male.	Female.	Total.
Downs Sanatorium ... ..	24	—	24
Northern Hospital ... ..	5	13	18
Peppard Sanatorium ... ..	7	21	28
Ipswich Sanatorium ... ..	3	—	3
Treloar's Home, Alton ... ..	4	4	8
Mount Vernon Hospital ... ..	5	1	6
Alexandra Hospital ... ..	3	—	3
Brompton Hospital ... ..	4	—	4
Carshalton Children's Hospital ... ..	2	1	3
Sea Bathing Hospital, Margate... ..	2	1	3
All others ... ..	24	20	44
Total ... ..	83	61	144

79A. *Peppard Sanatorium.* Since the year 1904 the Council has had an arrangement with Dr. Carling, the Superintendent and late proprietor of the Maitland Cottage Sanatorium, Peppard, by which the Council maintains beds at the Sanatorium, paying a fixed inclusive charge of 30s.



a week for each bed when occupied by an adult, 25s. for children, and 20s. a week when unoccupied.

For further particulars as to the constitution and regulations see page 842 of the Council's Minutes, 1909.

80. *Numbers Treated.* The Council now maintains 7 beds. At present 5 are occupied by women, 1 by a man, and 1 by a child. Since the provision of sanatorium treatment by the London Insurance Committee there has been less need to provide for insured men, who are now generally referred to the Insurance Committee.

The 7 beds were kept occupied with very little intermission throughout the year. The male applicants numbered 26 (45 in 1912), and the female 52 (31 in 1912). 33 patients were admitted, and 35 discharged. Of the 35 patients discharged, 10 were males over 14, 22 women, and 3 children. 6 stayed for one month, 7 for two months, 17 for three, and 3 for four or five months; 1 died and 1 discharged herself. 31 returned home in improved general health and with a decided increase in weight, and 29 showed very great improvement and were able to resume their ordinary duties.

81. The following table, recommended by the Local Government Board, shows the condition in each subsequent year of the survivors from the cases treated in each year since patients were sent to Peppard. The difference between the sum of the numbers dead and the survivors, and the number discharged, in any year, shows the cases lost sight of.

Number of patients discharged in each year who were (a) alive but not well enough to work; (b) at work, seeking work, or performing their ordinary duties, in January of each of the undermentioned years:—

Year.	Number Discharged.	Dead, Jan., 1914.	1904.		1905.		1906.		1907.		1908.		1909.		1910.		1911.		1912.		1913.		1914.		
			a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	
1903	1	1	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1904	11	10	—	—	2	6	1	5	1	5	1	5	2	4	1	4	2	2	2	—	1	—	1	—	
1905	17	12	—	—	—	—	1	13	2	9	2	5	—	4	—	4	—	3	—	3	—	2	—	2	
1906	29	14	—	—	—	—	—	—	5	24	2	20	5	15	1	14	—	14	1	12	—	9	—	8	
1907	38	20	—	—	—	—	—	—	—	—	9	24	2	22	7	15	2	13	1	13	2	9	2	10	
1908	31	16	—	—	—	—	—	—	—	—	—	—	6	21	6	17	4	12	2	10	1	10	1	7	
1909	39	15	—	—	—	—	—	—	—	—	—	—	—	—	3	25	2	25	6	18	3	15	1	13	
1910	32	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	25	7	18	4	16	3	9	
1911	39	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	17	4	14	4	12	
1912	46	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	33	6	26
	283	130	1	—	3	6	2	18	8	38	14	54	15	66	18	79	14	94	33	91	19	108	18	87	



The above table accounts for all the patients who left the Sanatorium up to December 31st, 1912. Out of the 283 who have left over one year, 87 are now well and at work, 18 are unwell, 130 have died, and 48 have been lost sight of.

82. Four of those recorded as at work are employed at the Sanatorium in various capacities, receiving board and a small wage. Of the 48 patients not accounted for, a large proportion have emigrated, and are believed to be well and at work in Canada, Australia, South Africa, etc.

Many cases have now been in regular work for five, six, and even seven years, after spending only two or three months at Peppard; several mothers of families have continued for similar periods to look after their families and perform their household duties.

The fact that so many relapse as the years go on indicates that sanatorium treatment is desirable earlier, and that more healthy occupations and conditions of life are required on return home. Suitable work, a guaranteed income, and the provision of a garden shelter, would probably improve the sanatorium results 50 per cent.

83. *The Economy of Sanatorium Treatment.* This subject was fully dealt with in my Annual Report for 1909.

84. *Shelters for Consumptives.* Although open-air treatment for consumption can best be carried out in the first instance at a Sanatorium, there are many cases for which it is desirable such treatment should be tried who cannot be

admitted to any Sanatorium. These are sometimes too advanced for it to be wise to send them away.

Many cases, too, who have had temporary treatment at a Sanatorium find it difficult or impossible to continue the open-air treatment at home as is desirable. For such cases, and to prevent infection in the home, the Public Health Committee decided in 1910 to provide shelters for loan to needy consumptives for use in their garden or back yard. After inspecting shelters used by Dr. Lyster, of Great Baddow, a simple construction was devised by the Chief Sanitary Inspector which is easily transportable, will exclude wind and rain, is durable, and at the same time enables the patient to be always virtually in the open air. These shelters can be closed by canvas or wooden shutters on each side, or can be entirely open above 2 feet 6 inches from the ground all round. Nine shelters of this type have been provided, and two cheaper ones made in Street (Somerset). One Lyster (all canvas) shelter was purchased last year. These have been in almost continual use. Not one is at present (April 24th) disengaged. 7 are occupied by men, 3 by women, and 1 by a boy. The cost of the Woolwich shelter is about £9, and the cost of the Street shelter £4.

These shelters are lent at a small rent varying from 1s. 6d. to 3d. per week, according to means. Only those who have no source of income are now exempted from payment. The weekly call to collect the rent insures that the shelter is being used. Shelters were lent to 22 persons last year, 17 men, 4 women, and 1 boy. 4 of these had the shelter free, 1 paid 3d., 15 paid 6d., and 2, 1s. a week. Two have been occupied by married women for nearly three years. Most of the patients using shelters are now under the supervision of the Tuberculosis Dispensary.



The results have been eminently satisfactory. In many cases the shelters have been of the greatest value in enabling an advanced and infectious case to be isolated from other members of the family; without the shelter the patient would have had to occupy the same bedroom, if not the same bed, as other persons.

Three bedsteads with bedding are also being lent to needy cases too poor to provide such.

84A. *Tuberculosis Dispensary.* A Dispensary for the treatment of tuberculosis was opened in September, 1911. The following is the summary of the work referring to the period 1st October, 1912, to 31st December, 1913:—

New patients examined	...	...	...	1,892
Number found tuberculous or "suspect"	...	...	...	933
Total of attendances at Dispensary	...	...	...	12,335
Home visits by Medical Officers	...	...	...	3,752
do. Nurses	...	...	...	5,414
Sputum examinations in Laboratory	...	...	...	542

SOURCES FROM WHICH DRAWN, AND NUMBERS  
ACCEPTED FOR TREATMENT.

Source.	Total.	Tuberculous.
Private Doctors .. .. .	182	161
Public Health Department .. .. .	62	28
Hospital or Societies .. .. .	57	40
School .. .. .	89	56
Previous Patients .. .. .	418	202
Contacts .. .. .	666	243
Unrecommended .. .. .	414	199
Insurance Committee .. .. .	4	4

The Medical Officer of Health acts generally as Executive

Tuberculosis Officer, and is a member of the Tuberculosis Dispensary Committee.

85. 20 Spitting Flasks were supplied at cost price, 6d., compared with 23, 19, 25, 20, and 21, in the previous five years.

## HISTORY OF WOOLWICH TUBERCULOSIS ADMINISTRATION.

(1894-1913.)

The following table gives the dates of the chief steps taken by the Public Health Department in combating Tuberculosis:—

- 1894. Disinfectants supplied gratis by Plumstead Vestry for use in Consumption.
- 1896. Leaflet of Precautions printed by Plumstead Vestry and circulated through medical men, nurses, clergy, and district visitors.
- 1898. The Medical Officer of Health, Plumstead, recommended Notification of Consumption.
- 1900. Notices printed and distributed at public-houses, workshops, etc., warning people against spitting.
- 1901. Voluntary Notification of Consumption and Disinfection of infected rooms begun.
- 1902. Pocket spittoons supplied cost price (6d.).
- 1903. Borough Council commenced to maintain beds at Peppard Sanatorium.

Letters sent to public-house managers asking them to arrange for wet cleansing of floors, and avoid dry sweeping, which helps to cause the excessive mortality from Phthisis among public-house servants.



1906. Guardians commenced Open-air Treatment of Phthisis at Woolwich Infirmary.
1910. Open-air Shelters for night use of Consumptives in their own gardens, furnished on loan by the Borough Council.
1911. Woolwich Tuberculosis Dispensary started.
1912. Notification of Pulmonary Tuberculosis made compulsory.
1913. Notification of all forms of Tuberculosis made compulsory.

### CANCER.

86. There were 127 deaths from cancer (malignant tumour), giving a death-rate of 0·99, compared with 0·75, 0·93, 0·88, 1·02, and 0·97, in the five preceding years. 55 of the deaths were in males, and 72 in females. 17 only of the deaths were in persons under 45. The highest mortality was in West Plumstead. The London death-rate was 1·11 in 1912. One-third of the deaths occurred in public institutions.

87. The following table shows the sex and region affected in all cases of malignant disease:—

### CARCINOMA.

<i>Seat of Primary Disease:</i>	<i>Male.</i>	<i>Female.</i>
Head and face ... ..	1	1
Mouth, jaw, and tongue ... ..	7	—
Pharynx, œsophagus, larynx, and neck	11	5
Pleura, lung, mediastinum ... ..	—	—
Stomach and pylorus ... ..	6	9
Intestines (excluding rectum) ... ..	4	4

<i>Seat of Primary Disease:</i>	<i>Male.</i>	<i>Female.</i>
Peritoneum and omentum ... ..	—	—
Rectum and anus ... ..	7	5
Liver ... ..	6	12
Kidney and bladder ... ..	2	2
Genital organs ... ..	—	16
Breasts ... ..	—	11
Prostate and external urinary organs	3	—
Pancreas ... ..	1	—
All other ... ..	2	3
	—	—
	50	68
	—	—

## SARCOMA.

	<i>Male.</i>	<i>Female.</i>
Brain ... ..	1	—
Jaw ... ..	1	1
Glands of neck ... ..	1	—
Breast ... ..	—	1
R. Axilla ... ..	—	1
Prostate ... ..	1	—
Testicle ... ..	1	—
Thigh ... ..	—	1
	—	—
	5	4
	—	—

87A. The deaths from carcinoma have been classified under the organs affected, since 1903, and the following table shows the result for males and females respectively:—



## CARCINOMA.

*Males.*

Seat of Primary Disease.	Aver. 1903-5	Aver. 1906-10	1911	1912	1913
Head and face ... ..	1·7	1·2	3	1	1
Mouth, jaw, and tongue ...	4·0	4·8	5	6	7
Pharynx, œsophagus, larynx, and neck ... ..	5·0	8·6	11	13	11
Pleura, lung, mediastinum ...	0·3	0·4	—	1	—
Stomach and pylorus ... ..	5·3	10·4	8	10	6
Intestines excluding rectum	2·7	3·2	5	2	4
Rectum and anus... ..	4·0	4·8	5	10	7
Peritoneum and omentum ...	0·7	—	—	—	—
Liver ... ..	8·0	6·4	8	7	6
Kidney and bladder ... ..	—	1·6	2	1	2
Genital organs ... ..	—	—	—	1	—
Prostate and external urinary	2·7	0·8	2	1	3
Pancreas ... ..	0·3	1·4	4	2	1
Pelvis and groin ... ..	0·3	—	—	—	—
Undefined ... ..	0·3	2·2	6	3	2
	35·3	45·8	59	58	50

*Females.*

Seat of Primary Disease.	Aver. 1903-5	Aver. 1906-10	1911	1912	1913
Head and face ... ..	0·7	1·4	1	1	1
Mouth and tongue ... ..	1·7	0·6	—	1	—
Pharynx, œsophagus, larynx, and neck ... ..	1·7	1·4	2	1	5
Pleura, lung, mediastinum ...	0·7	0·6	1	1	—
Stomach and pylorus ... ..	5·7	7·6	7	5	9
Intestines (excluding rectum)	0·7	4·2	6	5	4
Rectum and anus... ..	3·0	6·8	5	6	5
Liver ... ..	7·3	8·6	6	8	12
Peritoneum and omentum ...	0·3	0·4	1	1	—
Kidney and bladder ... ..	—	1·2	2	1	2
Genital organs ... ..	16·0	13·6	15	11	16
Breasts ... ..	9·7	8·6	9	11	11
Limbs ... ..	—	0·4	—	—	—
Pancreas ... ..	—	0·2	1	1	—
Pelvis and groin ... ..	0·7	—	—	—	—
Undefined ... ..	0·7	1·6	1	3	3
	48·9	57·2	57	56	68

Last year had, with the exception of 1911, the highest recorded cancer death-rate; there was an increase in females, but a decrease in males. There was an increase under carcinoma of the throat, stomach, liver, genital organs, in women, and of the mouth in men.

On the whole since 1903, the most notable increase has been in cancer of the mouth and throat in men, and of the digestive organs in women. The latter increase may be due to improved diagnosis. The greater incidence of cancer on the mouth and throat can hardly be accounted for in this way.

It is seen from these two tables that cancer affects the mouth, tongue, pharynx, œsophagus and larynx of men, much more than similar organs of females, and to a small extent men have more cancer of the stomach than women.

*Causes of Cancer—Special Enquiry.* Owing to the apparent increase of this painful disease, much interest has been aroused in the attempts to discover its cause. So far no great addition to our knowledge on the subject has been made. It has been long known that the disease is frequently a result of local irritation, as in the case of irritated sores producing cancer of the skin, chimney sweeps' cancer, and smokers' cancer of the lip and tongue. Apart from the irritation of a pipe, smoking has been alleged to be the cause of cancer, as also alcoholic liquors, tea, excessive food and meat, and septic teeth, and constipation has been suggested as a cause of cancer of the bowels. I have personally investigated the habits of persons suffering and dying from cancer during the past two years, with a view of seeing what amount of truth is contained in these allegations. The inquiries sought to elicit habits of five to ten years' duration



before death, so as to ensure that they had not been caused or modified by the illness which was the cause of death.

The following table shows the sex and age distribution of the cases specially investigated:—

	Under 50.	50-60.	60-70.	Over 70.	Total.
Males ...	12	22	22	15	71
Females ...	5	19	12	13	49
					120

The following gives the parts affected for males and females:—

#### CARCINOMA.

Cases specially investigated and parts affected.

Seat of Primary Disease.	Male.	Female.	Total.
Face, Mouth, Jaw and Tongue ...	14	5	19
Pharynx, Œsophagus, Larynx and Neck ...	17	3	20
Stomach and Pylorus ...	12	11	23
Intestines (excluding Rectum) ...	4	6	10
Rectum and Anus ...	12	9	21
Peritoneum and Omentum ...	—	1	1
Liver ...	7	3	10
Breasts ...	—	6	6
Uterus ...	—	4	4
Limbs ...	2	—	2
Kidney and Bladder ...	—	1	1
Prostate and External Urinary Organs ...	1	—	1
Pancreas ...	2	—	2
	71	49	120

As regards alcohol and smoke, it was possible in most cases to learn to some extent the amount consumed by the patient, and an arbitrary standard was taken as to the limit of moderation consistent with health, viz.: the daily

consumption of  $1\frac{1}{2}$  pints of beer or its equivalent, an ounce of spirits being considered equivalent to  $\frac{1}{2}$  pint of beer; wine was never but an occasional luxury. The standard for smoke was taken as 2 ozs. of tobacco per week. Persons consuming more than these quantities have been classed as excessive drinkers or smokers.

The correctness of the standard of consumption of alcohol and tobacco taken for the enquiry does not affect its value, since the standard is the same for cancer and non-cancer cases. But it is interesting to find from the recently published statistical abstract for 1912, that as regards tobacco the amount consumed in 1911 per head of population of the United Kingdom was 2.6 lbs., and, allowing one-third of the population to be adult males, we get an average weekly consumption by men of 2.4 ozs. in 1911.

In 1901 the weekly consumption was 1.7 ozs., so that in ten years the amount of tobacco used by each smoker has increased more than 25 per cent., and cancer of the mouth has increased by at least as much.

With regard to tea, food and meat, it was only possible to accept the opinion of the person giving the information as to whether the patient used these articles in excess or otherwise.

As regards the action of the bowels, the cases were divided into those who had a daily action and those whose bowels did not act as often as once in a day.

31 of the patients were stated to be excessive users of alcohol, 10 took the standard quantity, and 74 below the standard. There were thus 27 per cent. of excessive alcohol drinkers.



45 smoked excessively, 5 consumed an average quantity, and 66 below the average, giving 39 per cent. of excessive smokers.

34 were excessive tea drinkers, 48 moderate, and 21 small tea drinkers, giving 32 per cent. of excessive tea drinkers.

51 were large eaters, 43 moderate, and 20 small eaters, giving 45 per cent. large eaters.

33 were large meat eaters, 50 moderate, and 27 small meat eaters, giving 30 per cent. of large meat eaters.

68 had a daily action of the bowels, 4 were doubtful, and 20 suffered from constipation, giving 74 per cent. of persons with a regular action.

These figures may be compared with those obtained for 108 persons under similar circumstances who did not die of cancer. They were persons dying from other causes than cancer at ages over 50, or still alive at advanced ages.

The following table gives their age and sex distribution:—

		Under 60.	60-70.	Over 70.	Total.
Males	...	5	26	45	76
Females	...	—	4	28	32
					—
					108
					—

19 took alcohol excessively, 7 took the standard quantity, and 81 below the standard, giving 18 per cent. of excessive drinkers.

19 smoked excessively, 7 in moderation, and 83 were non-smokers or smoked very little, giving 17 per cent. of excessive smokers.

34 took tea excessively, 49 were moderate tea drinkers, and 23 were small tea drinkers, giving 32 per cent. excessive tea drinkers.

53 were large eaters, 35 moderate, and 18 small eaters, giving 50 per cent. of large eaters.

30 were large meat eaters, 56 moderate, and 18 small meat eaters, giving 29 per cent. large meat eaters.

83 had a regular daily action of the bowels, 4 were doubtful, and 14 suffered from constipation, giving 82 per cent. persons with a regular action.

It will be seen that comparing persons who suffer from cancer with those living at advanced ages or who died at equally advanced ages from other causes, the great differences are as to habits with respect to alcohol, smoke, and the action of the bowels, viz.:—

Cancerous persons had 27 per cent. of excessive alcohol users, 39 per cent. excessive smokers, and 26 per cent. of constipation. Non-cancerous persons living to a greater age had 18 per cent. of excessive alcohol users, 17 per cent. excessive smokers, and 18 per cent. of constipation.

The percentage of large smokers among those dying from cancer is more than twice as high as among other persons. These differences are still more marked with respect to alcohol and smoking if only those who died from cancer of the mouth and throat are considered. Of 33 persons dying from cancer of the lips, tongue, jaws, fauces, larynx, œsophagus, and cervical glands, 14 or 45 per cent. took alcohol excessively, while 25 or 76 per cent. smoked excessively. 15 of these smoked chiefly a clay pipe, 8 a briar or other form of pipe, 2 cigarettes, and 1 cigars. There



were only two cases of cancer of the mouth or tongue who did not smoke; one of these had bad teeth. There were 5 cases of cancer of the larynx and œsophagus who did not smoke, but one chewed. Among the non-cancer cases all the smokers smoked pipes (23 clay and 16 briar), except one who smoked cigarettes. Of cases with cancer of other parts than the mouth and throat, 20 per cent. took alcohol excessively, and 23 per cent. smoked excessively. It would appear then that both alcohol and smoking have some little general effect in promoting cancer, but chiefly exert their injurious influence locally.

20 cases had cancer of the stomach. Of these 4, or 20 per cent., drank excessively, 8, or 40 per cent., were large eaters, and 5, or 25 per cent., were large meat eaters. Comparing these figures with the non-cancer cases, it is seen that, though the percentage of large eaters is no greater in cancer of the stomach, the percentage of small eaters is much smaller, the large number of moderate eaters accounting for this somewhat anomalous result.

As regards cancer of the bowels, out of 25 persons dying from cancer of the intestines (viz., colon, 6; rectum, 17; and undefined, 2), 14 had a regular daily action, 10 had constipation, and 1 was not quite regular. Thus constipation seems to predispose to cancer of the bowels.

#### ALCOHOLISM.

88. There were 4 deaths from alcoholism, 3 from peripheral neuritis, and 11 from cirrhosis of the liver, making a total of 18 deaths probably due to alcohol, compared with 24, 23, 23, 31, and 23, in the five preceding years. In addition to these, there were 429 deaths from diseases of

the brain and nervous system (excluding meningitis), heart, blood vessels, and kidneys, of which a large proportion was certainly caused directly or indirectly by alcohol. The deaths from these causes in the five preceding years were 346, 335, 343, 377, and 395, respectively. The increase last year was chiefly in deaths from cerebral hæmorrhage.

It is satisfactory to find that the deaths due to alcoholism have shown a steady diminution in England and Wales from 113 per million in 1900 to 45 in 1911. Cirrhosis of the liver has diminished from 144 to 91.

89. The death-rate from alcoholism and cirrhosis of the liver was 0·14 in the Borough, and in 1911, 0·14 in England and Wales.

#### SYPHILIS.

90. There were 9 deaths from syphilis, compared with 7, 10, 7, 6, and 3, in the five preceding years. All but one of these occurred in public institutions. Five were infants under two years. There were, in addition, 29 deaths from general paralysis, tabes dorsalis (locomotor-ataxy), and aneurism, diseases which are considered to be usually due to syphilis, compared with 25 and 30 in the two preceding years. These figures are far from representing the total mortality caused by venereal disease. Many of the deaths from epilepsy, congenital debility, and other diseases of the brain, heart, blood vessels, and other organs, are doubtless due to this cause.

The question of instructing patients and the public generally as to the prevention of venereal disease has been under the consideration of the Public Health Committee, and by their



orders a card of instructions has been issued to the local medical men for distribution to their patients. The instructions are similar to those used in the Army, and by Dr. Mott, Pathologist to the London County Council Asylums.

### OPHTHALMIA NEONATORUM

*(Inflammation of the Eyes of the New-Born).*

91. This disease was made compulsorily notifiable by an Order of the London County Council, dated March, 1911. The Order is under Section 55, Public Health (London) Act. No other section of the Act is applied, so there is no requirement to disinfect or penalty for exposure, the main object of notification being to secure effective treatment of the infant affected. The Borough Council Health Visitor inspects in all cases, and reports where proper treatment is being to secure effective treatment of the infant affected. Most cases notified are the infants of women attended in their confinement by midwives who are inspected by the County Council. The Borough Council Health Visitor also inspects in all cases, and reports where proper treatment is being carried out. The Guardians have indicated their willingness to facilitate immediate removal to the Infirmary when satisfactory home treatment was impracticable. 14 cases were notified, of which 2 were removed with the mother to the Infirmary, and 3 were treated as hospital out-patients. The others were all reported to be receiving effectual treatment at home. The district nurses visited 1.

### METEOROLOGY

(See Table 8).

92. The average temperature in the winter quarter of

the year was 42.3; 12 weeks had an average temperature above the normal, and 1 below. The spring quarter had a temperature about the average, but the summer quarter was exceptionally cool, though rather dry; it had 11 weeks below the average, and only 2 above; its average temperature was 59.1° F., which is 1.0° below the average. In the autumn quarter the temperature was above the average in every week.

The lowest temperature, 26.2° F., occurred in the week ending January 18th, and the highest 80° F., occurred in the week ending 23rd August.

The rainfall was 22.37 inches, which is nearly 3 inches below the average; most rain, 6.89 inches, fell in the autumn quarter. The summer quarter had 5.43 inches of rain, most of which fell in July and September.

(See also under Diarrhœa.)



## PART II.

---

### ADMINISTRATION.

---

### WATER SUPPLY.

1. The water supply is constant throughout the Borough. It is derived from deep chalk wells, one of which is situated within the Borough, viz., the Plumstead Well.

*Plumstead Well.* In previous years I have repeatedly called attention to the unsatisfactory condition of the water supplied by this Well.

From the Annual Report of the Water Examiner on the Metropolitan Water Supply for the year ending March 31st, 1913, it appears that 88 samples were taken of the Plumstead Well in the year for chemical analysis. The ammoniacal nitrogen averaged  $\cdot 0000$ , the albumenoid nitrogen  $\cdot 0014$ , the chlorine 5.62, the total hardness 38.03, and the temporary hardness 15.02. In all these particulars the Plumstead Well compared unfavourably with the other Kent wells, the chlorine and hardness far exceeding that of all but one of the other deep wells. The results of last year differ little from those of preceding recent years. The chlorine found in 1913 was slightly lower than the amount reported in 1907, when it was 6.07, but the hardness was higher than ever, and much in excess of all the other Kent wells but one.

For bacteriological examination 127 samples were taken, and an average of 8·8 microbes per cub. centim. were found present. This was slightly below the average for the whole of the Kent wells, and compares favourably with the number of microbes present in 1907, viz., 14·3.

*Houses with Water Supply outside the House.* A report on this subject was contained in the Annual Report for 1912.

2. *Water Supply in Tenement Houses.* An additional tap and sink were supplied on at least one upper floor of 18 tenement houses, under the Public Health (London) Act, Sec. 48, previously to the coming into force of the London County Council (General Powers) Act, 1907, by which a suitable water supply can be required on each separately occupied floor of a tenement house. Under this Act an additional supply was required and provided at 25 houses in 1908, 30 houses in 1909, 3 in 1910, 2 in 1911, 6 in 1912, and 4 in 1913. 29 of these houses were in the Dockyard and St. Mary's Wards, 13 in River Ward, 26 in St. George's Ward, and 2 in Eltham. There were three prosecutions in 1909, which were recorded in full in the Annual Report for that year.

3. Defective and foul storage cisterns were found and remedied at 33 houses, compared with 51, 34, and 55, in the three preceding years. At 24 houses the supply was found insufficient or temporarily cut off, and the necessary steps taken for obtaining a proper supply.

#### FOOD AND DRUGS ACT.

4. 513 samples were submitted to the Public Analyst, and 29, or 5·6 per cent., were found to be adulterated,



compared with 2·5, 3·4, 3·3, 4·6, and 2·7, in the five preceding years, and 8·4 in the Metropolis in 1912. The percentage of adulteration in the past five years averages 3·9. The average of the five previous years was 6·3.

84 of the samples taken were informal. 3 of these were found to be adulterated.

5. Proceedings were taken in 17 cases; convictions were obtained in 11, and 6 were dismissed, 3 on proof of warranty.

6. A total of £15 16s. 0d. was imposed in fines, and £10 15s. 0d. in costs.

7. 303 of the samples were fresh milk. 24 of these, or 7·9 per cent. were adulterated, compared with 1·7, 3·7, 4·8, 7·2, and 3·5, in the five preceding years.

73 samples were bought as butter, and two were found to be adulterated.

14 samples of cream were taken and two were found not to be labelled in accordance with the Milk and Cream Regulations.

Table 18 shows the other 123 articles analysed. Not one of these was found to be adulterated.

During the past six years, 7 samples of coffee out of 78 taken have been found to be adulterated, and one of cocoa out of 69. But no adulteration was discovered in 30 samples of vinegar, 33 of flour, 13 of sugar and sweets, 70 tea, 49 mustard, 46 jams, 17 condensed milk, and 117 drugs, nor in any one of the smaller number of several other articles, other

than milk or butter, taken for analysis. From the Local Government Board Annual Report for 1912 it appears that in that year the adulteration of samples taken in England and Wales was nil for tea, 5 per cent. for coffee, 3 per cent. for cocoa, 2 per cent. for mustard, 2 per cent. for flour, 5 per cent. for confectionery and jams, and 9 per cent. for drugs. As regards all the above articles except coffee, Woolwich shows less adulteration than the rest of London.

#### PUBLIC HEALTH (MILK AND CREAM) REGULATIONS, 1912.

7A. The following tabular statement shows the work done under these regulations which forbid the adding of preservatives to milk and require the amount in cream to be declared on a label.

##### 1. Milk; and Cream not sold as Preserved Cream:—

	(a) Number of samples examined for the presence of a preservative.	(b) Number in which a preservative was reported to be present.
Milk ...	303	0
Cream ...	5	2

Boric acid was present in both samples, viz., 0·32 per cent. and 0·08 per cent. No action taken under Regulations; both samples taken informally. Further samples were taken from the same vendors and found satisfactory.

##### 2. Cream sold as Preserved Cream:—

(a) Instances in which samples were submitted for analysis to ascertain if the statements on the label as to preservatives were correct:—

(i.) Correct statements made ...	8
(ii.) Statements incorrect ...	1
	9
	—



(b) Determinations made of milk fat in cream sold as preserved cream:—

(i.) Above 35 per cent.	...	9
(ii.) Below 35 per cent.	...	0
		—
		9
		—

(c) Instances where (apart from analysis) the requirements as to labelling or declaration of preserved cream in Article V. (1) and the proviso in Article V. (2) of the Regulations are not observed—Nil.

(d) In one case the Regulations were not complied with. This sample was labelled as "preserved cream," but not exactly in accordance with the Regulations. The sample having been purchased informally the vendor was cautioned.

3. *Thickening substances.* No evidence of their addition to cream or to preserved cream.

4. No other observations.

8. Of the 13 adulterated milk samples for which proceedings were taken the adulteration varied from 2·7 to 12·9 per cent. of added water, and from 8·3 to 64·0 per cent. deficiency in fat.

The fines varied from 2s. to £5.

9. *Sampling.* Of the 303 milk samples, 81 were taken on Sundays or Bank Holidays; 2 of these were found adulterated. In recent years fewer samples taken on Sunday were found to be adulterated than samples taken on week days.

17 samples were taken on arrival at railway stations, one of which was found adulterated.

*Informal Samples.* The reasons for taking informal samples were detailed in my last Annual Report. 84 such samples were taken in 1913, and 3 were found adulterated; one of these was butter which proved to be three-fourths margarine, and the other two were cream containing preservatives not declared on the label. Two formal samples of cream taken subsequently from the same vendors were found to contain no preservatives. A sample of butter taken subsequently formally from the vendor of the three-fourths margarine butter was found to be similarly composed, and he was fined 40s. and 23s. costs.

10. A record is kept of all analyses of milk made by the Public Analyst. The average percentage of fat in unadulterated samples have been found to be the same each year, viz., 3·6, and of non-fatty solids from 8·8 to 8·7 per cent.

10A. *Food Reform.* It is desirable in the interests of health that a sufficient amount of pure food should be consumed and it is also specially important that those with limited incomes should know what articles of food are most nutritious in proportion to their cost. Efforts have been made in recent years to give instruction in this matter, particularly in the value of oatmeal, whole-meal and standard breads, and of the pulses—peas, beans, and lentils, which contain a larger amount of proteid than other vegetable foods. The following particulars, kindly supplied by the Secretary of the largest trading society in the Borough, are interesting in showing



the proportion of the above vegetable foods consumed by the public as compared with the amount of animal food:—

	One week,	Quarterns.
" BREAD.		
Produced March, 1904	White and Brown	44,180
(No separate record of white and brown kept)		
Produced July, 1906	White	... 38,862
	Brown	... 1,167
Produced March, 1914	White	... 74,814
	Brown	... 2,300
	Dr. Allinson's	... 1,570
	Hovis	... 354
	Standard	... 798

The baking of Standard Bread was commenced in February, 1911, when to meet the demand 1,696 quarterns were produced. This produce has fallen to the figure given above for March, 1914. I am unable to give you the separate figures for white and whole-meal bread ten years ago, the records at that time having been made in the aggregate.

Comparisons of the years 1906 and 1913:—

	1906.	1913.
Oatmeals	... 24 tons	37 tons
Peas	... 83 qrs.	120 qrs.
Lentils	... 140 bags	200 bags
Beans	... 275 bags	500 bags

There were also large quantities of oatmeals, peas, etc., sold in packet form during 1913 of which we have no complete record.

#### MEAT SOLD.

1906—Membership, 25,800; Butchery Trade, £54,010.  
1913—Membership, 34,300; Butchery Trade, £80,627."

It appears from the above statement that while the membership has increased over 30 per cent., the sale of meat has increased about 50 per cent., white bread 90 per cent., other bread has quadrupled, and the sale of oatmeal, peas, beans and lentils have increased about 50 per cent. These figures are of course capable of various interpretations. They no doubt indicate increased prosperity of the population, but are not very encouraging to the food reformer.

### FOOD INSPECTION.

11. The inspection of meat and other food received the usual attention. Inspector Tedham made special inspections of the slaughter-houses.

There was one seizure and 87 surrenders. The seizure was of unsound plums, the details being as follows:—

On Saturday, the 30th August, Chief Sanitary Inspector Duck seized 52 crates of plums, the total weight of plums being 8 cwt. 1 qr. 12 lbs. These were exposed for sale and were offered to the Inspector at one shilling per crate. They were laid out on the forecourt of No. 92, Plumstead Road. During the examination and seizure there was considerable obstruction and abuse on the part of the men in charge, and police protection had to be threatened.

At the conclusion of the seizure application was made by Inspector Duck to inspect the interior premises, but this was refused.

The plums were taken before the Magistrate, sitting at the Woolwich Police Court the same afternoon, who made the order for the destruction of the whole of the 52 crates, and at the same time Inspector Duck laid information with



regard to the refusal to enter, and was granted an order to enter if needs be by force. This was executed in the afternoon with assistance and under police protection.

The Chief Sanitary Inspector with Inspector Tedham found large quantities of plums in various parts of the building and in the back yard, but all the heaps had notice boards with a chalked notice "All these plums are condemned and all plums on the premises." There were in all about four tons and, but for these notices being affixed, the Inspector would have seized them, as they were obviously unsound and worse than those seized during the morning.

In order to prevent, if possible, these being carted away and used for human food, (as suggestions had been made that they might be useful for jam making), arrangements were made to keep the premises under observation the whole of Saturday night, Sunday, and Sunday night. On Monday, the 1st September, the whole of the four tons were surrendered and taken to the Council's Destructor.

Information was received on the 3rd September that a further consignment of 16 tons of similar plums had been released for delivery at 92, Plumstead Road. The occupiers on delivery commenced sorting them and the premises were continually inspected during the days that this was in progress, but none of the sorted plums were approved by the Sanitary Inspectors and the owners were threatened with seizure if they attempted to expose any of them for sale. Ultimately the whole of the 16 tons were surrendered and destroyed.

The whole of these plums, including those seized, were found to have come from Germany, but considerable difficulty was experienced in finding who was the actual owner of them.

The freightage account from Germany was paid by a Joseph Blake with a cheque signed Robert Pearce, but on enquiry of Robert Pearce he denied responsibility and put it on to Blake.

Proceedings were therefore taken against Joseph Blake, otherwise known as Thomas Carter, on 2nd October, 1913, before Mr. Hutton at the Woolwich Police Court, the Council being represented by the Town Clerk and the defendant by Mr. Bickmore. The case against Blake was that he was the person to whom the plums did belong at the time they were exposed for sale.

At the hearing Pearce was called for the prosecution when he denied what he had previously said and swore that the plums were his and that Blake was acting as his manager. The Magistrate, after several adjournments, dismissed the case against Blake on the grounds that he was not satisfied on the evidence that Blake was the owner.

Fresh proceedings were then instituted against (1) Joseph Blake, otherwise Thomas Carter, for being in possession of plums that were unsound and unfit for the food of man; (2) Robert Pearce, being the person to whom the said plums did belong at the time; and (3) Richard Carter for having the plums on his premises. Richard Carter, who was said to be Blake's father, had recently entered into an agreement for the premises, 92, Plumstead Road.

The case against these three defendants came before Mr. Simmons, sitting at the Woolwich Police Court, on 28th November and 18th December, 1913. The defendants were all represented by Mr. Bickmore, who made application to



the Magistrate for each defendant to be separately tried. This was conceded and the Magistrate in giving judgment expressed the opinion that Pearce and Richard Carter appeared to be dummies in the hands of Blake.

Blake, against whom there were several previous convictions in connection with unsound food, was sentenced to four months' hard labour; Pearce was fined £40 and 10 guineas costs or one month's hard labour; and Richard Carter was fined £5 or 14 days.

Blake lodged an appeal against his conviction which came before the Chairman of the Clerkenwell Sessions on 9th January, 1914, the Borough Council being represented by Mr. Bodkin and Blake by Mr. Cecil Walsh, K.C., and Mr. Bickmore. The appeal was dismissed with costs.

Blake lodged a further appeal on a point of law as to the true construction of the word "possession."

This further appeal has not yet been heard.

11A. Of the surrenders 8 were tuberculous pigs, 36 livers or other organs affected with parasitic disease, 225 lbs. unsound mutton, 206 unsound kidneys, and 384 tins of unsound condensed milk. A full list is given in Table 19.

#### DAIRIES, COWSHEDS, AND MILKSHOPS.

12. On January 1st, 1913, there were 117 milkshops on the register; 11 were added, and 12 removed, during the year, leaving a total of 116 on the register at the close of 1913. There were 192 inspections made, and 25 notices served. There were no prosecutions.

Owing to the steps taken by the Health Department requiring persons not to sell milk in unsuitable general shops, the number of milkshops has been reduced from 196 to 116 in the nine years 1905-13.

An abstract of regulations was drawn up and printed in the Annual Report for 1910. This is left at every milkshop.

13. Under the London County Council (General Powers) Act, 1908, the Council has power to refuse to register, and to remove from the register, shops which are unsuitable for the sale of milk. During 1913 one application was refused. The requirements of the Health Department for securing the purity of milk were detailed in the 1912 Annual Report.

14. One cowshed was closed and one opened, leaving 16 on the register. There were 32 inspections, and 9 notices were served for dirty conditions, etc.

There has certainly been an advance in the condition of cowsheds and methods of milking in the Borough, but until more up-to-date legislation takes effect, dirty milk will continue to be sold, involving risk of various infectious diseases unless the milk is boiled.

*Tuberculosis in Cows—Order of the Board of Agriculture.* The Board of Agriculture have made an Order under the Diseases of Animals Act requiring the notification of any cow suffering from tuberculosis of the udder, indurated udder, or other chronic disease of the udder, or any bovine animal suffering from tuberculosis with emaciation. The notification has to be made to a constable of the police force or to an inspector of the Local Authority. The constable must



transmit the information to the Local Authority, who, if not themselves the Sanitary Authority, shall inform that authority. I take it the Local Authority in London is the County Council. The Order further requires a similar notification from a Veterinary Surgeon who is employed to examine any cow or bovine animal.

The Local Authority must cause any cow or bovine animal supposed to be giving tuberculous milk, or suffering from disease of the udder, to be examined by a Veterinary Inspector, and the Inspector may, with the consent of the owner, apply the tuberculin test. A Veterinary Inspector for the purposes of the examination may at all reasonable hours enter the premises where animals are kept and require any cow to be milked in his presence and samples of the milk taken. He may also take samples of the fæces or urine of any bovine animal. Where the Local Authority is satisfied that a cow is suffering from tuberculosis of the udder or giving tuberculous milk, or a bovine animal is suffering from tuberculosis with emaciation, they shall with all practicable speed give notice to the owner and cause the animal to be slaughtered. Before the slaughter of the animal the Local Authority must agree with the owner as to the value of the animal. The value is to be ascertained both on the supposition that it is suffering from tuberculosis and also on the supposition that it is not so suffering. If the animal is found after slaughtering to have suffered from tuberculosis not advanced, the Local Authority shall pay compensation of a sum equal to three-quarters of the value of the animal as valued for compensation, after deducting one-half the cost of the valuation. If the animal is found to have suffered from advanced tuberculosis the Local Authority must pay a sum equal to one-quarter of the value or the sum of

30s., whichever is greater. If the animal is found not to have suffered from tuberculosis the Local Authority must pay the full amount at which the animal was valued and a further sum of 20s.

The Order requires that any milk produced by a cow which is suffering from disease of the udder, or tuberculosis with emaciation, shall not be mixed with other milk until the cow has been examined by a veterinary inspector.

The Board, in a covering letter, states that—

“The Order aims at securing the destruction of every cow found to be suffering from tuberculosis of the udder, or to be giving tuberculous milk, as well as of all bovine animals which are suffering from tuberculosis with emaciation, since these are known to disseminate freely the germs of the disease.

In connection with the cost of administering the Order, the Board have obtained from the Lords Commissioners of His Majesty's Treasury authority to refund to Local Authorities from moneys provided by Parliament one-half of the net amount payable by way of compensation for slaughtered animals during a period of five years from the coming into operation of the Order.

The Board believe that public opinion is favourable to the adoption of concerted measures designed to check the spread of tuberculosis throughout the country, and no such action can be satisfactory which fails to make provision for dealing with the disease in the animal, but it should, the Board feel, carry with it a full measure of public sympathy and support. The payment to agriculturists of reasonable compensation for animals slaughtered in the public interest



must, in the opinion of the Board, be an essential feature of any well-devised scheme for gradually reducing the prevalence of tuberculosis in animals. On the other hand the liability of the Treasury and of the Local Authority to provide such compensation on the present basis from public funds is a serious one, and cannot be continued unless events show that a return commensurate with the burden imposed is being obtained. It behoves agriculturists, therefore, to second the efforts of the public authority by the segregation of all bovine animals which respond to the tuberculin test, so as to prevent tuberculosis from being spread within the herd, and the Board will be prepared to advise how this can best be done in particular cases."

#### SLAUGHTER-HOUSES.

15. There are 12 slaughter-houses on the register, as in 1912. 46 inspections were made, and 4 notices served and complied with.

#### NUISANCES (see Table 15A).

16. 441 complaints of sanitary defects were received and investigated, compared with 398, 400, and 361, in the three preceding years.

38 complaints of non-removal of dust were made and attended to, compared with 26, 20, and 29, in the three preceding years. 1 of the dust complaints came from Woolwich parish, 12 from Plumstead, and 25 from Eltham.

The dust in Woolwich is collected by your Council's employees, but that in Plumstead and Eltham by contractors, Messrs. Tuff & Hoar.

Complaints were received against Mr. A. J. Tucker, the Eltham contractor, for breach of contract as regards non-payment of the proper rates of wages and the working of excessive hours of labour. After investigation, notice was served on Mr. Tucker to determine his contract. Tenders were invited, and after considerable delay owing to the discovery that the lowest tenderer had not paid wages in accordance with the terms of his contract for another job, the contract was given to Messrs. Tuff & Hoar, the Plumstead contractors. There have been no complaints from Eltham since the change of contractors.

17. *Drains and Water-Closets.* 7 defective combined drains were investigated and reported upon by the Chief Sanitary Inspector, compared with 7, 27, and 16, in the three preceding years. These drains affected 57 houses.

448 private drains, found choked and defective, were examined, cleared, and relaid, compared with 411, 319, and 399, in the three preceding years. The largest number, 99, was found in River Ward.

785 water-closets and w.c. cisterns were repaired, compared with 963, 734, and 890, in the three preceding years. 209 foul w.c. pans were cleansed by tenants, compared with 312, 279, and 238, in the three preceding years.

18. *Supervision of Drainage.* In the Annual Report for 1908, full particulars were given as to the respective responsibility for supervision of reconstructed drains of the Public Health and Works Departments.

19. *Public House Urinals.* The urinals attached to public



houses, and accessible to the public, have been regularly inspected during the year, 545 inspections being made. Regular cleansing has been required.

20. *House Inspection.* 5,489 houses were inspected, house to house, compared with 6,626, 5,892, and 5,830, in the three preceding years; 6,516 were inspected *re* infectious diseases and complaints, compared with 6,026, 6,546, and 6,678. In addition to these 531 inspections of registered houses were made.

21. Table 16 shows the streets inspected, and the number of houses found defective in each.

At 2,620 houses, interiors were cleansed, or defective roofs repaired, compared with 2,064, 2,137, and 2,206, in the three preceding years. 629 houses with damp walls were remedied, compared with 523, 600, and 571, in the three preceding years. The increase of these figures is probably not unconnected with the diminution of empty houses. When tenants have no choice and must take any house they can get, a certain class of landlords do not decorate and repair until required to do so by the Sanitary Authority.

Improved ventilation was provided in 41 houses, compared with 101, 94, and 62, in the three preceding years.

545 new dust pails were supplied, compared with 585, 516, and 525, in the three preceding years.

22. *Medical Officer's Special Inspections.* These amounted to a total of 623. 12 inspections were made of cowsheds and

milkshops, 37 of bakehouses, 21 of factories and workshops, and 9 of houses registered under the by-laws. 187 inspections were on account of tuberculosis, 119 cancer, 12 diphtheria, 23 scarlet fever, 4 enteric, and 1 small-pox. Many of these visits were made by request of the medical attendants for the purpose of diagnosing doubtful cases of infectious disease. Other visits *re* infectious disease were made at the request of school teachers and others. 114 premises were inspected *re* housing conditions. Special inspections were made of Horn Park sheds, Thomas Cottages, Avenue Cottages, Railway Cottages, High Street Flats, New Street, the Swimming Baths, Dust Destructors, etc.

23. *Overcrowding.* 101 cases of overcrowding were found and remedied, compared with 78, 97, and 91, in the three preceding years. The overcrowding was 1·8 per cent. of house-to-house inspections, compared with 1·6 per cent. in 1912. Overcrowding is increasing with the demand for houses.

24. *Smoke Nuisance.* 42 observations *re* smoke nuisance were made, and 17 nuisances of black smoke observed. The nuisances were abated on service of notices. There was no prosecution. Considerable nuisance occurred from smoke at the Plumstead Baths. The notice of the Baths Committee was called to it.

Two complaints of smoke nuisance were received from the London County Council, and one from the Coal Smoke Abatement Society. These related to the Electric Light Works, Globe Lane, and to Siemens Electrical Works.

25. *Defective Light.* At 73 houses new windows were



supplied or existing ones enlarged, or other work done to improve the lighting by daylight.

26. In my 1909 Report, particulars were given as to "Dark rooms in houses and failure of the Building Act," and the steps taken by the Borough Council and London County Council in the matter referred to.

27. *Verminous Rooms.* 220 verminous rooms were cleansed under the London County Council (General Powers) Act, 1904, or were dealt with as dirty rooms under the Nuisance Section of the Public Health (London) Act, compared with 159, 143, 248, and 214, in the four preceding years.

#### DUST REMOVAL.

28. In Woolwich Parish 6,058 loads of house and in-offensive trade refuse, and 185 loads of offensive trade refuse were removed by direct labour, and destroyed at the Woolwich Destructor. In the three preceding years 6,912, 5,769, and 5,866, loads respectively, were removed.

In Plumstead 14,880 loads, weighing 12,359 tons were removed by the contractors, Messrs. Tuff & Hoar, and destroyed at the Plumstead Destructor. £2,864 10s. 0d. was paid for collection, compared with £2,826 15s. 0d. in 1912.

In Eltham the sum of £894 0s. 0d. (£891 14s. 3d. in 1912) was paid to the contractors for removal of dust.

#### TRADE REFUSE.

29. During the past year there have been 5,271 (6,337 in 1912) receptacles of offensive trade refuse removed. There

are now 45 (47 in 1912) tradesmen on the books from whom offensive trade refuse is removed. Certain soap firms collect offensive trade refuse free of charge, and hence the fall in numbers collected by the Borough Council.

The charge made for inoffensive refuse is 1s. 6d. per load, and 2d. per bushel, and for offensive refuse at the rate of 3d. per receptacle, charged per quarter in advance on the amount collected in the previous quarter.

#### HOUSING OF THE WORKING CLASSES ACTS.

30. More active steps were taken in 1913 under the Housing Acts than in any recent year. 52 houses were represented under Section 17, Housing, Town Planning, &c., Act, as unfit for human habitation, compared with 9 and 18 in the two previous years. 14 Closing Orders were made, compared with 5 and 14 in the two preceding years. 26 houses were remedied to the satisfaction of the Medical Officer of Health without Closing Orders being made, compared with 4 and 4 in 1911 and 1912. In many of the 26 the houses were temporarily closed while the work was done.

The following was the procedure adopted:—

The Public Health and Housing Committee, after considering the Medical Officer's representation, gave notice to all persons interested that the question of making a Closing Order would be considered at the following meeting. When the owner attended the meeting, admitted the existence of the defects, and gave an undertaking to carry out the works required to make the house fit for human habitation, the Committee usually accepted his undertaking. In several cases where the owner disputed the



existence of the defects the Committee visited and inspected the house in question. In such cases, if convinced of the serious condition of the premises, a Closing Order was usually made.

The following were the chief requirements demanded of the owner for putting premises into sanitary condition:—

Remedying dampness, concreting sites, providing damp-proof courses and dry areas.

Providing sub-soil drainage, re-roofing, improving sanitary arrangements, providing adequate water-supplies, remedying dilapidated conditions of structure.

One house was dealt with under Section 15 which requires a house of a certain rental to be kept by the owner in all respects reasonably fit for human habitation.

The following table summarises the action taken:—

Number of houses inspected <i>re</i> Housing and Town Planning Act ... ..	5489
Dwelling houses considered on inspection to be in a state so dangerous or injurious to health as to be unfit for human habitation ... ..	52
Number of representations made to Borough Council under Section 17 (2) with a view to making of closing orders ... ..	52
Number of closing orders made ... ..	14
Number of dwelling houses remedied without making closing order ... ..	26
Number of dwelling houses put into fit state for human habitation after making closing order ... ..	4

The following are the houses referred to in the above table:—

- 1, 2, 3, 4, 5, 6, 7, 8, Cooper's Place, Eltham.  
 2, Thrift Cottages, Henry Street;  
 5 and 6, Limbrey's Buildings;  
 8, St. Thomas Cottages;  
 20, 21, and 22, The Avenue, Sandy Hill Road;  
 35, Timbercroft Lane;  
 83 and 83A, Timbercroft Lane;  
 112, Sandy Hill Road;  
 Nell Gwynn's Cottage, Well Hall Road;  
 83, Church Street;  
 45A, Brewer Street;  
 53 and 54, Charles Street, Woolwich;  
 55, St. Mary Street;  
 2, 3, 4, 6, 7, and 8, Railway Cottages;  
 7 and 8, New Street;  
 1 and 2, Globe Lane;  
 10, Rodney Street;  
 2, Prospect House, Plumstead Common.  
 33 and 35, Barnfield Road;  
 3, 5, 11, 13, 19, 21, 27, 29, 35, 37, 43, 45, Barge House  
 Road;  
 4, Dingley Cottages.

With regard to Nos. 1 to 8, Cooper's Place, 2, Thrift Cottages, 5 and 6, Limbrey's Buildings, 8, St. Thomas Cottages, 35, Timbercroft Lane, 45A, Brewer Street, 53 and 54, Charles Street, 2, 3, 6, and 7, Railway Cottages, 33 and 35, Barnfield Road, and 4, Dingley Cottages, the necessary work was done by the owners to render these houses fit for human habitation without Closing Orders being made, and in the following the work is still in progress:—Nos. 4 and 8, Railway Cottages, and 3, 5, 11, 13, 19, 21, 27, 29, 35, 43, 45, Barge House Road.



Closing Orders were made in the following cases and determined on the satisfactory completion of the work necessary to render the houses fit for human habitation:—Nos. 20, 21, and 22, The Avenue, 83 and 83A, Timbercroft Lane, and 112, Sandy Hill Road.

In the following cases Closing Orders were made, and, nothing having been done to render the houses fit for human habitation, the Council has under consideration the question of making Demolition Orders:—Nos. 7 and 8, New Street, 1 and 2, Globe Lane, 10, Rodney Street, and 2, Prospect House.

A Closing Order was made with respect to No. 55, St. Mary Street, and this house was voluntarily demolished by the owners.

A Closing Order was made for No. 83, Church Street, and the work necessary has been commenced.

In addition to the above one house was dealt with under Section 15, viz., 4, Godfrey Street, and the work put in hand and completed by the owner.

#### NORTH WOOLWICH—VITAL STATISTICS.

A report on the greatly improved health of this district was contained in the Annual Report for 1912. The Vital Statistics of 1911 and 1912 were compared with those for 1902-3.

#### HIGH STREET FLATS AREA.

The following report was presented on this area:—

This area comprises Stanley, Sidney, Albert, and Fore

Houses, in High Street, Woolwich, 1, 2, 3, 4, 5, 6, 7, Globe Lane, 1, 2, 3, 4, 5, 6, 7, 8, New Street, and 8, 9, 10, and 11, Market Hill.

Stanley House contains 9 separate and self-contained flats, and Sidney, Albert, and Fore Houses 10 flats, all of three rooms each.

The other houses contain from three to six rooms.

Altogether there are 58 houses containing 198 rooms. These form a square area which is bounded on the south by High Street, west by Market Hill and "Anchor and Hope" P.H., north by the Electricity Station, and east by Globe Lane.

The population at the Census was 242, but the Sanitary Inspector found, on recent inspection, the population to be 273 persons. I have calculated some vital statistics for the years 1910-11-12, taking an average population of 257·5 persons.

Total births notified (1910-11-12)	...	...	21
Total deaths do. do.	...	...	20
" " under one year (1910-11-12)	...	...	4
" " 1 to 5 years do.	...	...	5
" " infectious diseases do.	...	...	4
" " tuberculosis do.	...	...	3
" " alcoholism and cirrhosis of liver	...	...	3

			Special area.	Borough.
Birth-rate	...	...	27·1	22·8
Death-rate	...	...	25·9	11·9
Infantile death-rate (per 1,000 births)	...	...	190	85
Zymotic death-rate	...	...	5·2	0·89



Tuberculosis	„	...	...	3·9	1·48
Alcoholism	„	...	...	3·9	0·18
Phthisis notifications (1912)		...		3	689
„	„	rate (per			
1,000 population)		...	...	11·7	5·6
Death-rate of Stanley, Sidney, Albert, and Fore Houses (1900- 1902)		...	...	20·8	
do.	Alcoholism	...	...	3·4	

It will be seen that the health of this area compares very badly with that of the Borough.

The birth-rate is but very slightly in excess of the death-rate.

Both the death-rate and the infantile death-rate are more than twice as high as that of the Borough.

The zymotic death-rate is six times as high;

Tuberculosis death-rate more than twice as high;

Death-rate from alcoholism twenty times as high.

Ten years ago I calculated the death-rate of Stanley, Sidney, Albert, and Fore Houses, for 1900-1-2, and found it to be 20·8. There appears, then, to have been rather a deterioration than an improvement in the health of the area.

The area is inhabited by a poor class of persons, and although it does not contain a public house there are two public houses immediately adjoining, and two others within one minute's walk, and it is obvious that too frequent resort to these houses by the women as well as the men is one cause of the unhealthy conditions.

The wage-earners occupying the houses are employed at the neighbouring coal wharves, docks, river, the Arsenal, and other places.

The chief part of the area forms a square which is continuously built round on three sides in Market Hill, High Street, and Globe Lane, but open to some extent in New Street.

The High Street flats were built about 1890, but the other houses are all old and to a large extent dilapidated.

The flats are very badly arranged. They have very long back additions causing the back rooms to be exceedingly dark. Except the basement flats, none of them have proper provision of back yards, the back yard provided being about six feet square and so arranged as to make the kitchen and w.c. dark. There is thus no satisfactory provision for drying grounds or playgrounds for these houses.

The houses are provided with dust-shoots which open into receptacles in the basement yards.

All the internal passages of the flats are dark owing to the arrangement of the houses.

The back rooms are all dark for the reasons above given.

In the front the rooms of the two lower flats are dark owing to the narrowness of High Street, but the upper rooms are well lighted.

Owing to the square above described being enclosed on three sides, there is no proper access of air to several of the houses.

Most of the houses have basements, the occupation of



which has been prohibited by the Public Health Department on your instructions. Although this has been an advantage in one way, it has had the disadvantage of making it more difficult to prevent the accumulation of refuse in the back yards in the square referred to. This square is accessible to the public, and hooligans continually gain access and injure the property, pulling down doors, removing pipes and coppers, and doing general destruction; frequently they have caused blockages in the drains. They have also destroyed the dust receptacles and left the house refuse exposed. In addition to this the occupants of the upper flats throw their refuse down on the waste ground, and there is no caretaker or other person to interfere with their doing so.

Nuisances also frequently take place on the public staircases of the flats owing to these being under no control by a caretaker.

The area has been under the continual systematic inspection of the Health Department, so that to a large extent overcrowding and other gross nuisances have been kept under.

A special sub-committee was appointed to consider this matter, consisting of Councillor F. Penny (Chairman), Councillors W. Marlow, R. M. W. Allen, W. H. Dawson, and J. Newman. They held several meetings and made repeated inspections of the area, and also interviewed the owners and endeavoured to get them to take joint action for improving the condition of the block dwellings, but without success. Finally the Medical Officer of Health represented the area as unhealthy under the Housing of the Working Classes Act, Part II., to the London County Council. The London County Council has refused to take action.

NORTH WOOLWICH DOCK EXTENSION—  
DEMOLITION AND DISPLACEMENT.

In the last Annual Report particulars were given of the intended demolition of houses in North Woolwich, the sites of which are required by the Port of London Authority for the extension of the South Albert Dock. 55 houses were scheduled. 12 of these were situated in Drew Road, 17 in Rhea Street, 15 in Winifred Street, and 11 in Auberon Street. They were occupied by 380 persons of the working-class.

Under the Housing of the Working Classes Act, 1903, where, under powers given by any Local Act or Provisional Order, land is acquired by any authority or persons on which are situated working-men's dwellings, such dwellings shall not be entered on until the Local Government Board have either approved of a housing scheme or have decided that such scheme is not necessary. The housing scheme must make provision for the accommodation of such number of persons as is in the opinion of the Local Government Board required, but not exceeding the aggregate number of persons displaced. The Local Government Board may require that the new dwellings shall be completed and fit for occupation before possession is taken of the dwellings it is proposed to demolish.

The Committee decided to ask the Local Government Board to require a re-housing scheme, but did not press for the new houses to be completed before demolition of the old. The Local Government Board, however, insisted that no occupants should be displaced until suitable housing provision had been found for them to the satisfaction of the Medical Officer of Health of the district in which the new



residence was situated. The tenants have experienced great difficulty in finding new provision. The question of the site of the new houses to be built by the Port of London Authority has been a difficulty, as no satisfactory site could be found in the Borough to the north of the river. A site in Wickham Lane is now under consideration.

31. *Council's Houses.* All the Council's 25 houses in North Woolwich were occupied throughout the year with the exception of four; of these four, one was vacant for four weeks, two for two weeks, and one for one week. The loss of rent was due to the necessity of repairs and not to lack of tenants.

All of the Council's 9 houses in Gossage, Park, and Parkdale Roads, which are under the care of the Health Committee, were occupied throughout the year.

On June 5th, 1911, Nos. 15, 17, and 19, Gossage Road, were taken over by the Libraries Committee.

#### HOUSES REGISTERED UNDER THE BY-LAWS.

32. The existing By-laws and the history of proposed new By-laws were commented on in my last Annual Report.

At the commencement of the year, 432 houses were on the register; 10 were newly registered, and 10 taken off the register, leaving 432 on the register at the close of the year, compared with 359, 395, 409, 429, and 432, in each of the five preceding years. These figures seem to indicate that the limit of houses considered by the Committee as likely to be improved by registration has been arrived at.

33. These houses were inspected, some quarterly, others half-yearly, or yearly. 531 inspections were made in all, and 360 notices were served.

The registered houses were under the care of Inspector Shaw. The duties consist largely in educating house wives in keeping their homes clean, and can therefore be best performed by a woman inspector, but unfortunately there is none available.

The houses were situated as follows:—

River Ward, North	...	34
do. South	...	106
St. Mary's	...	37
Dockyard	...	69
St. George's	...	56
Herbert	...	4
Burrage	...	24
St. Margaret's	...	16
Central	...	3
Glyndon	...	18
St. Nicholas	...	65

The following are the particulars of the inspections made:

*Houses Let in Lodgings.*

Total number on register	...	432
Number of houses inspected	...	531
„ found unsatisfactory	...	433
„ found satisfactory	...	98
„ of notices served	...	360
„ of nuisances, defects and offences against the by-laws, dealt with and remedied	...	561
„ of cases of overcrowding remedied by redistribution without notice	...	9
„ of houses measured	...	10



*Notices.*

On Owners for Cleansing (under P.H.L. Act) ...	133
On Tenants for Cleansing (under By-laws) ...	64
On Landlords for Overcrowding ...	10
On Tenants for Overcrowding ...	14
On Landlords and Tenants for other defects ...	134
On Landlords and Tenants for Verminous Rooms ...	34
Verbal Notices on Tenants for Cleansing—carried out	92

## INHABITED HOUSE DUTY.

34. No application was received for a certificate under the Inland Revenue Act.

## COMMON LODGING HOUSES.

35. There are 18 common lodging-houses in the Borough, 16 for men and 2 for women. Total accommodation for 516 persons is available. The following is the list:—

COMMON LODGING-HOUSE.	ACCOMMODATION.		
	Men.	Women.	Total.
60 Beresford Street ...	58	—	58
50 High Street ...	22	—	22
56 do. ...	14	—	14
57 do. ...	18	—	18
76 & 77 do. ...	25	—	25
81 & 82 do. ...	—	19	19
93 do. ...	30	—	30
102 do. ...	22	—	22
1 Ropeyard Rails ...	14	—	14
2 do. ...	17	—	17
4 do. ...	15	—	15
7 do. ...	23	—	23
9 do. ...	27	—	27
10 do. ...	45	—	45
10A & 11 do. ...	62	—	62
21 & 21A do. ...	42	—	42
"Ship House," Rodney Street ...	—	32	32
4 Warren Lane ...	31	—	31
Totals ...	465	51	516

### UNDERGROUND ROOMS.

36. Three underground rooms, separately occupied, were found not in accordance with the Public Health (London) Act. 2 were in St. Mary's and Dockyard Wards, and 1 in Burrage Ward. The service of notices led to cessation of occupation.

### FACTORIES, WORKSHOPS, AND WORKPLACES.

37. There were, at the close of the year, 200 (191 in 1912) workshops and workplaces on the register. 391 inspections were made, and 46 notices served and complied with. 120 inspections of factories were made regarding sanitary accommodation, and 18 notices served and complied with. 364 inspections of homeworkers' premises were made and 18 notices sent and attended to.

Miss Middlebrooke devoted a large amount of her time to the inspection of workshops, factories, and houses where women are employed; 25 new workrooms were measured up and put on the register.

38. A special report on Homework was presented to your Council on October 31st, 1906, and printed in the Annual Report of that year.

### BAKEHOUSES.

39. The number of factory bakehouses is 9, and of workshop bakehouses in use is 40, 14 of the latter being underground. 2 bakehouses were discontinued. They were all inspected twice. I inspected most of them personally, and found them generally satisfactory. 11 certified underground bakehouses are not in use.



## ICE-CREAM SHOPS.

40. 82 ice-cream shops were on the register at the close of the year, compared with 86, 89, and 89, in the three previous years. 7 were added and 14 removed during the year. There were 164 inspections made, and 8 notices served. Regulations, embodying the provisions for premises where food is sold, contained in the London County Council (General Powers) Act, are distributed at every shop on the register. The shops are inspected in April, June, and August, by Inspector Powell.

## DISINFECTION.

41. The mode of disinfection, cost of appliances, staff, etc., were fully described in my Annual Report, 1903, pages 73-76. Rooms at 1,278 houses were disinfected, compared with 964, 1,093, and 1,195, in the three preceding years. The disinfecting apparatus was used 1,278 times for 28,116 articles.

464 books from the Free Libraries and Public Schools were disinfected.

The sum of £5 2s. 6d. was received for disinfection of rooms in special cases, on request of the occupier.

A large quantity of horsehair was disinfected for the Army Ordnance Store Department, for the sum of £28 7s. 5d.

Disinfectants are supplied by the Department for disinfecting infected soiled linen, infected stools, sputa in phthisis, for personal use in infectious disease, and for use by the contractor in dust receptacles. They are dispensed at the Maxey Road Dépôt (306 persons supplied), the Sun Street Mortuary (67 persons supplied), 14, Barge House Road,

North Woolwich (20 persons supplied), and at 144A, High Street, Eltham (78 persons supplied). The cost of disinfectants used by the Department in 1913 was £48 1s. 5d.

The disinfectants used were Corrosive Sublimate; Sulphur and Formalin tablets (for fumigation); Formaldehyde (for praying and disinfecting books, and for use in the Mortuary); Cyllin (for summer diarrhoea, and sputa in phthisis); Permanganate of Potash; Jeyes' Corporation Fluid (for dust-pails); and Chloride of Lime (for offal tins).

41A. The Local Government Board called attention to the importance of issuing disinfectants in poison bottles, and accordingly it was decided to discontinue the practice of using applicants' own bottles, and to purchase dark and ribbed bottles. Applicants are required to leave a deposit on the bottles.

### HEALTH SHELTER.

42. The Health Shelter was not used during the year nor since 1908. It was used twice in 1906, and once in 1908. In view of the small use to which it is put, the upper of the two flats was let in 1908, and has been occupied since on a weekly tenancy.

### THE MORTUARIES.

43. The Sun Street Mortuary was used for 179 bodies, compared with 136, 189, and 143, in the three preceding years. 140 were deposited for inquest, and 36 for custody. 92 post-mortem examinations were made. 3 bodies were deposited in the infectious mortuary, compared with 1, 1, and 4, in the three preceding years.



The Eltham Mortuary was used for 2 bodies, both for custody, compared with 3 in 1910, 3 in 1911, and 5 in 1912.

#### CEMETERIES.

44. The two Borough Cemeteries were well maintained and no complaint was received. 627 bodies were buried in Woolwich Cemetery, compared with 669, 679, and 540, in the three previous years. There were 764 interments in the Plumstead Cemetery, compared with 696, 690, and 602, in the three previous years. 34 burials took place in Plumstead Churchyard, compared with 59, 51, 47, and 60, in the four preceding years.

#### CLEANSING OF VERMINOUS PERSONS.

45. The station for cleansing verminous persons was opened in November, 1906. During 1913 it was used by 651 persons, compared with 262, 408, 590, 509, and 430, in the five preceding years. The users were 132 adults (viz., 5 females and 127 males) and 519 children (viz., 297 females and 222 males).

4,557 articles were disinfected. The adults came mainly from common lodging-houses, and the children from County Council Schools.

An agreement was entered into with the London County Council, dated August 21st, 1911, to allow the London County Council to use the Borough Council Cleansing Station for cleansing school children. The Station is reserved for school children on Tuesday and Friday, between 9 a.m. and 4 p.m., girls being cleansed between 9 and 1, and boys in the afternoon. The Borough Council must properly cleanse the children and their clothes to the reasonable satisfaction of

the London County Council, the children cleansed not to exceed 10 in one day or 20 in one week.

The London County Council pays to the Borough Council 2s. for each child cleansed, such sum to include all attendances made by the child in one month when repeated baths are necessary. The Borough Council for this purpose has engaged a female attendant (Mrs. Lewis) for the two days, Tuesday and Friday, at a payment of 3s. 6d. per day.

£28 2s. 0d. was paid by the London County Council for the school children cleansed last year.

The cleansing of children is supervised by a school nurse.

The Station was found inadequate for its purpose, especially as regards water-closet accommodation. It was extended during 1912 by the provision of another bath, and two closets, according to plans prepared by the Borough Engineer.

A box of stavesacre ointment is supplied to each bather with instructions for its use. The names and addresses of bathers are entered in a book, and the Lady Inspector calls at the homes and arranges for necessary disinfection and cleansing of verminous bedding and rooms.

#### PUBLIC BATHS, LAVATORIES, AND CLEANLINESS.

45A. During the year ended March 31st, 1912, there were 100,005 private baths taken at the Borough Council's Public Establishments in Woolwich and Plumstead.

The Annual Report for 1912 pointed out the desirability of making baths and lavatory accommodation cheaper in order to encourage cleanliness.



*Workmen's Baths.* A letter has been received from the National Women's Labour League with reference to Industrial Dirt, and asking that the Municipality should set an example in relation to its employees of making provision for personal cleanliness. A pamphlet has also been forwarded showing what is done both in England and abroad in this matter. Everyone appreciates the desirability of personal cleanliness and a daily bath is specially important for men engaged in dirty occupations such as scavenging, dust destructors, etc. Public baths have been a great boon to a large number of people but in the case of the great majority of workmen the distance from the home, the cost and the time occupied, prevent their frequent use. At certain industrial works in England, and to a much larger extent in certain continental cities, and the United States, employers of labour have either in their own interests or in that of their employees made very elaborate provision for the workmen to wash themselves before leaving their work. The pamphlet referred to says:—

“In the better towns in the United States and Canada the democratic self-respect of the people makes the use of working overalls, and the provision of full cleansing opportunities at the works, all but universal. Citizens of New York over in this country express amazement at our national toleration of the grimy condition of many of the passengers on our tramcars and trains. Their own dustmen, road sweepers, etc., are provided daily with a clean white suit of overalls, and look their part of servants of the Public Health as attractively as our hospital nurses. By all accounts too, the increased self-respect engendered by the uniform reacts most beneficially upon the standard of the cleansing work performed.”



In 1910 I reported as to the provision for washing at Beckton Gas Works. At these works large lavatory basins are provided supplied with hot and cold water, and also spray baths, and the baths are used very freely in summer, and to an increasing extent every year. I was informed that the Gas Company found it to their interest to make such provision.

The Borough Council has provided baths at the dust destructors for the workmen but these it appears are being little used. At the Plumstead Destructor there are two slipper baths for about 16 men, but I understand that only three men make use of them and that only about once a week. There are two lavatory basins attached to each bath. These are more used. It appears that the men are mostly in the habit of washing themselves over down to the waist every day before leaving work. Ten minutes or a quarter of an hour is allowed out of every daily shift for this purpose. Apparently the men think it necessary to be clean as to the upper half of their bodies, but disregard the lower half. It seems difficult to understand why some of them at any rate should not use the bath every day as it would be easy to take a bath during the quarter of an hour allowed. The provision of spray baths, however, in the place of slipper baths, as at Beckton and many places abroad, is of great advantage. The first cost of spray baths is small compared with that of slipper baths, hence more can be provided, and they can be used much more quickly. With a spray bath a man can wash himself all over in three minutes. There is no doubt than in future when any provision of washing facilities is made for workmen it will be desirable to provide spray baths rather than slipper baths.



### TENTS, VANS, AND SHEDS.

46. During the year, 42 tents, vans, and sheds were inspected (34 in 1912), and three notices served under the by-laws for this class of dwelling.

### NOTICES AND PROSECUTIONS.

47. 3,285 written intimation notices, and 725 statutory notices were served. 79 of the latter, not having been complied with in the time specified, were referred to the Town Clerk, who, before taking proceedings, wrote a warning letter in each case. Finally 5 defaulters were summoned at the Police Court. The results are given in Table XVII.

### BACTERIOLOGICAL EXAMINATION.

48. In the early part of last year the Public Health Committee decided to send its bacteriological work to the Seamen's Hospital. This is situated much nearer than the Lister Institute and there is less delay in obtaining reports. The results have been decidedly satisfactory.

1,168 bacteriological examinations were made for the Public Health Department by the Bacteriological Department of the Seamen's Hospital and the Lister Institute, viz.: 921 for diphtheria, 231 for phthisis, and 16 for enteric fever. The total cost was £183 3s. 2d., compared with £205 19s. 8d. in 1912.

### INFANT CONSULTATION.

49. Since the closure of the Milk Depôt, a Consultation for mothers and infants has been held every Wednesday afternoon in a room at the Town Hall. Mothers bring their

infants for advice and weighing between 2.30 and 4 p.m. Miss FitzGerald and the Medical Officer of Health are in attendance during that time. The Consultation was much better attended last year than ever before, 1,408 infants being seen, compared with 460 and 863 in the two previous years. Further particulars are given in Miss FitzGerald's Report.

#### WOMEN SANITARY INSPECTORS' WORK.

50. There were two Women Sanitary Inspectors, one of whom, Miss FitzGerald, is also a Health Visitor.

Miss Middlebrooke originally inspected houses registered under the by-laws, workshops where women are employed, restaurants, and eating-houses, *re* kitchens, etc., public lavatories, houses where certain infectious diseases (*e.g.*, measles) occurred, and houses reported as being verminous or in a dirty condition. During recent years special efforts have been made by the school authority to deal with verminous children, and for these efforts to be successful it has been necessary to inspect the homes of such children, and arrange for the cleansing of those found to be verminous. This work naturally fell on Miss Middlebrooke, and has grown to such an extent as to take up the greater part of her time. Consequently she has been for some years unable to attend to houses registered under the by-laws nor to measles cases, and it is necessary to leave this work to a male inspector.

The by-laws deal mainly with the habits of tenants, especially the housewife's habits, and can consequently be more effectively enforced by a woman who understands women's work and difficulties.



Miss FitzGerald's duties comprise advising mothers as to the care of infants, and the prevention of infant mortality, visiting houses where phthisis exists, and notified cases of certain infectious diseases, as enteritis and ophthalmia neonatorum. Miss FitzGerald has never been able to do as much of this work as was desirable, and has been obliged especially to neglect the visiting of cases of infectious disease. The visiting of such cases necessarily nursed at home, as phthisis, measles, enteritis, etc., is work which cannot be properly performed by male inspectors. During the year the Committee sanctioned the employment of an unpaid Health Visitor, who, while gaining experience to fit her for a paid post, gives useful assistance in health visiting and the infants' consultation. There is still, however, great and increasing need of an additional woman inspector.

The following is a summary of Miss Middlebrooke's work for the twelve months:—

*Women's Lavatories at Railway Stations, etc.*

Number of Inspections ... ..	91
„ Found dirty and defective ... ..	5

*Restaurants and Eating-Houses.*

Number of Inspections ... ..	120
„ Defects and dirty conditions found and remedied ... ..	31

*Factories and Workshops.*

Number of Inspections of Factories and Workshops ...	253
„ Notices served ... ..	15
„ New workrooms measured ... ..	25

*Homeworkers' Premises.*

Number of Inspections ... ..	364
„ Cases referred to District Inspectors ...	18

*Miscellaneous.*

Total number of houses visited <i>re</i> Phthisis, Measles, Scabies, Whooping-cough, and Zymotic Enteritis ...	63
Visits paid for various causes, complaints, etc. ...	356
„ „ Verminous and dirty houses and bedding	836
Re-visits—estimated ... ..	1000
Cases where bedding was found to be in a dirty and verminous condition, and cleansed ... ..	250
Total number of cases referred to District Inspectors	157
„ Accumulations of refuse removed ... ..	15
„ Early morning inspections ... ..	7
„ Overcrowding—cases found and abated... ..	33
Notices served on tenants <i>re</i> dirty conditions... ..	119
Notices served on landlords and tenants—various ...	154

51. Miss Middlebrooke refers as follows as to her work *re* verminous children:—

“ We hear a great deal nowadays about the welfare of the child as a national asset and its relation to the welfare of the State. This is the day of the child; the air is thick with theories regarding the child's education and health; but how many people outside the Public Health service are aware of the constant and daily warfare being waged at London's Cleansing Stations with dirt and vermin infecting the human body, where children whose parents fail to cleanse their little bodies are taken in hand by public officials, bathed, their hair cut, heads and bodies dressed



where sores are found (sores which are the result of dirt and vermin), and their clothing disinfested, besides being supplied with a box of vermicide ointment.

Poor little victims of incapable parents! their skin disfigured and tortured by thousands of bites. As a matter of fact the parents themselves have verminous bodies in many instances, and constantly re-infest the children after treatment at the Cleansing Station.

There is at present no power to compel adults to cleanse themselves, so that the fathers, mothers, adult brothers and sisters of the children can be as verminous as they like, and, not only can they infest the school children in the same house, but they can jostle shoulders with clean people in the street or in any public conveyance at their own sweet will. The Public Health Department of the London County Council are now considering this question and it is to be hoped we shall soon have power to compel these dirty people to cleanse themselves and so be less of a menace to clean people.

Those who take part in the working of the present law ask themselves very seriously and very often, "What is the good of such a high and expensive system of education for those poor children who have such bad homes and such parents?" Parents who allow them to sleep in flea-ridden beds, huddled together for warmth under some old coats, irritated all night, heavy eyed and unrested in the morning, too utterly tired to use their brains during school hours. The provisions of the Children's Act for punishing parents who neglect their children and home is not enforced effectively; the Sanitary Authority should be responsible for taking proceedings under the Act.

A few remarks made by the children at the Cleansing Station might illustrate the conditions under which they live:

One little mite told the attendant that since she had her last bath at the Station and the bedding had been disinfected she had had a good night's rest, whereas before she could not sleep for the "jumping fleas."

Another looking up pathetically into the attendant's face said "I do wish you were my mother, you are so kind and gentle."

One child protested against her clothes being removed as mother had "stitched her up for the winter," and not even at night did she have them taken off.

A little girl asked if she could come every week and bring her sister.

These few remarks speak volumes as to the value of the work done. It is wonderful to see the homes gradually improving, the standard of cleanliness getting higher and higher, and the intense desire to please the Inspector that a good many of the women visited display. With the cleaner home comes greater self-respect and respect from the husband and family for the wife and mother. One man informed me that since the home had become bright and clean he had not wanted to go out in the evening at all."

52. The following is Miss FitzGerald's report:—

#### SUMMARY OF INSPECTIONS.

Visits to houses after notification of births	...	...	1105
Re-visits	...	...	437
Visits <i>re</i> infant deaths	...	...	47



Zymotic Enteritis cases investigated	...	...	...	348
Re-visits	...	...	...	50
Tuberculous cases	...	...	...	119
Ophthalmia Neonatorum	...	...	...	27
Ophthalmia (reported by Schools)	...	...	...	10
Special visits	...	...	...	88
Infants weighed at Consultation	...	...	...	1408
Health Lectures given	...	...	...	4
Unsuccessful visits (occupiers absent from home)	...	...	...	500

Reported to District Inspectors:—

Structural defects	...	...	...	...	10
Dirty interior walls	...	...	...	...	17
Other defects	...	...	...	...	25
Overcrowding	...	...	...	...	6

“ During 1913 I had the assistance in succession of three fully qualified pupil assistants who did temporary health visiting under my supervision.

Miss Allnutt (April 2nd to June 30th) paid 308 visits.

Miss Lewin (July 2nd to August 29th) paid 242 visits.

Miss Evans (September 26th, 1913, to January 29th, 1914) paid 763 visits.

As the result of the experience gained in practical work they were all successful in obtaining very satisfactory appointments.

The assistance they were able to give me was chiefly

(a) In connection with the work of the infant consultations; assisting in weighing babies and entering up case-papers, also in visiting mothers who were irregular in their attendance;

- (b) In following up my visits and reporting as to whether recommendations were being carried out, or any improvement taking place in condition of delicate infants, results of visits to doctors or hospitals, and so on;
- (c) Assistance with routine clerical work.

I frequently visited after them and found they had all been very tactful in their manner and that their visits were very well received. As the result of their assistance I was able to devote more time to difficult cases. I am convinced that it is the intensive work which we are able to do that counts—the frequent visiting at home and the regular attendance at the consultation. It is gratifying in this connection to note the increasing use that is being made of the infant consultation. The total number of attendances for 1913 was 1,408, as compared with 863 in 1912 and 460 in 1911. In the Second Report on Infant and Child Mortality issued by the Local Government Board in 1913 the following statement occurs:—

“The visitation of infants and young children, and the instruction of mothers as to the details of feeding and of general hygiene form a most important branch of child welfare work. The experience of many countries shows that the maximum of efficiency of such visiting is reached when the children can be referred to an infant consultation.”

On the whole infant welfare work in Woolwich is carried on under relatively favourable conditions compared with some London Boroughs. There is but a small slum area and there are many open spaces. One great advantage is that most of the houses have gardens, and the people are



learning to use them. A baby that sleeps all day in a garden thrives very much better than one which is kept all day in the one or two-roomed tenement used for both living and sleeping by the rest of the family.

The great advance made in the open-air treatment of infants is illustrated in an amusing way by the following reminiscence: Some 15 years ago the wife of a late Mayor of Woolwich received a visit from the Inspector of the Society for Prevention of Cruelty to Children. The Inspector explained that he had received a complaint that Mrs.—— was exposing her child in an injurious manner. She somewhat indignantly pointed out to him that she was only carrying out the instructions of her medical attendant, Dr. S. Davies, who was then in general medical practice, and had advised that the baby should sleep out of doors in the day time. The salutary practice which is now common was then so unusual as to have excited the horror of the neighbours.

There is, however, one hindrance which is constantly met with even in the better class houses and that is the lack of provision for storing food. It is part of a Health Visitor's duty to advise mothers in the feeding of infants and young children and this involves instruction in (i.) the choice, (ii.) the preparation, and (iii.) the storing of food. To some extent (i.) and (ii.) will depend upon what provision there is for (iii.) In 202 routine investigations made in respect of zymotic enteritis in houses of all classes in the Borough, special note was taken of the accommodation provided for food storing. In 111 cases food was stored in unventilated cupboards. These were usually in the kitchen and were unduly warm owing to proximity to the fireplace. In 61 cases

there was no provision at all and food was kept on open shelves. In 20 cases food was kept in a safe provided by the tenant; and in only 10 cases was there any efficient larder accommodation."

### PREVENTION OF CARIES AND PRESERVATION OF TEETH.

53. The Inter-Departmental Committee on Physical Deterioration reported in 1904:—

"There is no question that the teeth of the people have become much worse of late years, and in many parts of the country may now be described as very bad.

Professor Cunningham assigned the real cause of dental degeneration to the change that has taken place in the character of the food in common use.

Sir Lauder Brunton laid great stress on the fact that dental caries is due to the cessation of the use of food which requires good mastication, and added that the soft foods are more apt to leave particles behind which cause decay. This view, and the aggravation that lack of cleanliness lends to the conditions of the mouth so produced, were emphasised by a succession of witnesses, lay and professional.

Mr. W. H. Dolamore on behalf of the British Dental Association 'had no doubt that bad teeth were a condition of the feeding that accompanies high civilisation. The cruder and coarser sorts of food at one time in use not only kept the jaw in action during the plastic period of its development, but had the effect of a tooth-brush in keeping the teeth free from the settlement of toxic agents.' "



The Committee found that it was not poverty or the physical deterioration accompanying poverty or town life which in itself caused decay of teeth, and that the poorer children had better teeth than those of the well-to-do working people. Worse teeth were found in better class schools, no doubt because the poorer children ate coarser foods.

An Admiralty and War Office Inter-Departmental Conference on the subject found that:—

“Mal-nutrition plays but a very small part in the production of dental caries, as compared with the more common use of articles of food which readily undergo acid fermentation, and that it is neglect to keep the mouth clean that is chiefly responsible for the decay of the teeth.”

The Committee recommended as remedies for this state of things the teaching of hygiene and the care of the teeth in schools, daily cleansing of the teeth, and systematic examination and treatment of children's teeth by dentists employed by School Authorities.

The Committee also expressed the belief that by instructing mothers, through the medium of Health Visitors, as to the proper food for infants, much might be done towards removing dental caries and the evil results to the general health which it produced.

The recommendations of the Committee as regards teaching cleanliness and examination of teeth have been taken much to heart by the nation. The reports of School Medical Officers every year call attention to the large number of defective teeth found, and some effort has been made to provide treatment for decayed teeth, but the great cost of this seriously

interferes with its being carried out. The upper classes are on the whole able to ensure the preservation of the teeth by frequent resort to the dentist. This, however, is much too expensive for the working classes as a whole, and the fact that there is another simpler, cheaper, and better way, viz., regulation of the diet, has not yet received the attention which it deserves. Dr. Sim Wallace has systematised, in a recent work on the prevention of dental caries, the means of prevention suggested in the evidence given by Professor Cunningham, Sir Lauder Brunton, Mr. Dolamore, and the Admiralty and War Office Conference. These means are based on the relation between diet and decay of teeth, and Dr. Wallace shows the practicability of adopting such a diet as will prevent decay. He has proved, both theoretically and by practical experience, that it is perfectly possible to so arrange the diet as to prevent the teeth decaying. He gives lists of articles of diet such as new white bread, cake, milk puddings, jam, chocolate and sweets, which are found to cause decay, and of others such as fish, meat, fresh vegetables, stale bread with crust, toast, and baked bread, cheese, and fruits, which not only do not cause decay, but when eaten after other foods act as natural cleansers of the teeth, and if therefore taken at the end of a meal leave the mouth clean until the next meal.

In order to teach the public how by diet the teeth may be preserved, by the Committee's direction, I drew up a short leaflet on the subject for distribution, as follows:—

“TEETH AND DIET.—HOW TO AVOID TOOTHACHE,  
AND GET A GOOD SET OF TEETH.

Children will not get strong and regular teeth unless their jaws have plenty of exercise by eating hard, coarse food



which requires chewing. Coarse food, like brown bread and salad, promotes health by increasing the action of the bowels.

Decay of teeth is caused by particles of sweet and starchy foods sticking to the teeth between meals; these particles ferment and form acids which eat away at a tooth until the nerve is exposed.

Sucking sweets (or eating chocolates) is one of the chief causes of decay.

When teeth begin to ache it is often too late to save them.

Decayed teeth not only cause toothache but prevent the food being masticated, and produce indigestion and blood poisoning. Enlarged glands, earache and deafness are often due to this cause.

Clean teeth do not decay.

After eating hard and stringy foods like crusts, lettuce, meat and apples, the mouth is left clean. Such foods are called cleansing foods.

#### *How to avoid Decay.*

1. As soon an infant has got any teeth it should have stale crusty bread or hard crisp toast with butter, in addition to milk. Don't soak the bread in milk. As the child takes more solid food, the milk should be mixed with water which will prevent it from sticking to the teeth.

2. Strong children over two years, and healthy adults, should only take three or four meals a day, and no food of any kind between meals.

- 2A. Children should be taught from infancy to chew their food well before swallowing it.

3. Drinking while eating prevents proper chewing; liquids should be taken before or after a meal.

4. Sweets and chocolates should never be taken between meals or the last thing at night. Acid drops are the least injurious form of sweets. A piece of ripe apple or other fruit, which requires chewing, is much better than sweets.

5. A meal should always be finished with a cleansing food (see over), and jam or marmalade should never be taken to finish up with. A slice of apple or other fruit, or a hard crust with butter, is the best thing at the end of a meal.

6. Mouth breathing in children is injurious to the teeth and the general health; as soon as it is noticed a doctor should be consulted.

7. If the above rules are strictly followed the teeth will always keep clean, but as an additional precaution the teeth and gums should be thoroughly cleansed before going to bed and again after breakfast, and the mouth should be rinsed out with water after each meal.

A little soap, or precipitated chalk (whiting) is a good thing to clean the teeth with.

A match cut to a point and used as a toothpick makes a good toothbrush.

*Decayed Teeth.* As soon as there are any signs of decay, don't wait for the teeth to ache but go to the dentist.

The first permanent teeth are big double ones which come at the back, about the age of six or seven years. It is important to watch and see that they do not decay.

*Examples of Food.* The following foods stick to the teeth



and cause decay unless cleansing foods are taken after them; they should be followed by a cleansing food:—White bread, sweet biscuits, cake, marmalade, jam, honey, most sweets, chocolate, sweet puddings, patent foods, potatoes.

The following are cleansing foods and prevent decay:—Fish, meat, bacon, uncooked vegetables, lettuce, celery, radishes, watercress, cooked greens, and some other cooked vegetables, stale wholemeal bread with crust, crisp toast, twice baked bread, cheese, butter, margarine, fruits (especially apples and nuts).

(N.B.—Some of these, as nuts, celery, and radishes, are not recommended for persons with weak digestion.)

SIDNEY DAVIES, M.D.,

*Medical Officer of Health.*

Town Hall, Woolwich.”

#### PUBLIC AMBULANCE.

54. The Public Ambulance, for accidents and non-infectious illness, was used 150 times, compared with 143, 123, 147, and 127, in the four preceding years. The following were the journeys made:—

To Guy's Hospital	...	...	...	...	30
Cottage Hospitals	...	...	...	...	48
Seamen's and Miller Hospitals	...	...	...	...	13
King's Hospital	...	...	...	...	8
London Hospital	...	...	...	...	10
St. Thomas'	...	...	...	...	4
Union Infirmary	...	...	...	...	4
Other hospitals	...	...	...	...	11
Private houses	...	...	...	...	15
Asylums	...	...	...	...	7

Particulars of this ambulance were given in my Annual Report, 1903, page 78. Sutton Messent, Esq., 234, Burrage Road, is acting as Hon. Secretary for the Ambulance.

An ambulance for non-infectious illness can now be obtained from the ambulance station of the Asylums Board on payment of 5s., but in spite of this there seems little diminution in the use of the Woolwich Ambulance.

#### NATIONAL INSURANCE ACT.

55. Last year was the first during the whole of which the Insurance Act was in force. This Act was intended to be a great measure for promoting the Public Health. It attempted to do this in various ways:—(1) By providing medical treatment for all insured persons, and so promoting their early recovery; (2) By giving a maternity grant which enables mothers to obtain skilled attendance in their confinements; (3) By making special provision for treating tuberculosis; (4) By allowing the cost of excessive sickness to be surcharged on the person or Municipal Authority responsible.

Your Medical Officer of Health was nominated as a member of the District Insurance Committee, and has attended all the meetings of that Committee, and advised the Chairman on many matters affecting the public health. The part of the Act dealing with tuberculosis has very greatly added to the work of the Public Health Department. The Medical Officer of Health is Chairman of the Tuberculosis Dispensary Executive Committee. His assistance is continually sought for obtaining sanatorium benefit. Records of all cases going to and returning from sanatoria are kept in the Department, and cases returning are visited by the Health Visitor with a view to after care.



One complaint was received from a Friendly Society of excessive sickness alleged to be caused by work at the Plumstead Destructor. On examination of the Electrical Engineer's returns I was able to show that there was no excessive sickness, but on the contrary, the average sickness of the employees of the Electricity Works is much below the average. I reported as follows:—

“As regards the general question as to the healthiness of the work at the Dust Destructor, I have received no complaints as to the work being injurious or unhealthy, nor has the Secretary of the Society who calls attention to the excessive sickness. There is no reason to think that such work is directly injurious to health, though it may possibly be so indirectly by exciting a thirst which is not satisfied in a wise manner. The Registrar General gives no statistics in his mortalities of occupations for men employed at destructors or similar work, but it does not appear from the report on occupational mortality that offensive occupations have a high mortality. Thus tallow, soap, glue, and manure workers have a very low mortality, viz., 689, compared with 1,000 for all males. It is, too, generally stated that workers in sewers and at sewer outfalls have a low mortality, though I am not aware of any reliable statistics on the subject.”

#### STAFF.

56. Owing to the great increase in the work of the Department caused by the Insurance Act and the notification of all forms of tuberculosis, the Public Health Committee decided to replace the deficiency in the staff which had existed since the retirement of Mr. Ellis, and Herbert Prescott was appointed Boy Clerk.





TABLE I.

## BOROUGH OF WOOLWICH.

Vital Statistics of the whole District during 1913 and Previous Years.

YEAR.	Population estimated to middle of each year.	Births.		Total Deaths Registered in the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-Residents Registered in Public Institutions in the District.	Deaths of Residents Registered in Public Institutions beyond the District.	Net Deaths at all Ages belonging to the District.	
		Number.	Rate.*	Under 1 Year of Age.		At all Ages.					Number.	Rate.*
				Number.	Rate per 1000 Births Registd.	Number.	Rate.*					
1	2	3	4	5	6	7	8	9	10	11	12	13
1902	122505	3730	29.9	466	124	1678	13.7	278	43	208	1843	14.7
1903	123172	3691	30.0	399	106	1511	12.3	272	41	175	1637	13.3
1904	125791	3531	28.1	479	132	1636	13.0	261	40	169	1765	14.0
1905	125885	3549	28.2	366	103	1463	...	313	50	192	1605	12.7
1906	123644	3524	28.5	396	111	1530	...	293	48	183	1666	13.5
1907	123644	3295	26.5	372	111	1479	...	296	50	184	1613	13.0
1908	123644	3082	24.9	298	95	1374	...	333	60	170	1487	12.0
1909	123644	2937	23.8	240	82	1415	...	323	51	223	1585	12.8
1910	123644	2844	23.0	241	84	1296	...	314	42	156	1410	11.4
1911	121376	2814	23.2	273	98	1402	...	327	53	212	1561	12.8
1912	123311	2747	22.3	201	73	1249	...	297	42	196	1420	11.5
Average for years 1902 to 1912	123660	3249	26.2	339	102	1458	...	301	47	188	1599	12.9
1913	125686	2876	22.5	229	80	1378	...	298	50	252	1580	12.3

\* Rates in Columns 4, 8 and 13 calculated per 1,000 of estimated population.

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 to be 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 sickness or infirmity and dying in Public Institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity and have died in Public Institutions 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.

Area of District in acres (exclusive of area covered by water)	} 8239.7	Total Population at all Ages	...	...	121,376	} At Census of 1911.
		Number of Inhabited Houses	...	...	21,463	
		Average Number of Persons per House...	...	...	5.6	





TABLE IA.

I.	II.
Institutions within the District receiving Sick and Infirm Persons from outside the District.	Institutions outside the District receiving Sick and Infirm Persons from the District.
Woolwich Union Infirmary Royal Arsenal Hospital Auxiliary Hospital Woolwich and Plumstead Cottage Hospital Eltham Cottage Hospital Home for Mothers and Babies	Lewisham Infirmary Herbert Hospital Blackheath Cottage Hospital Seamen's Hospital Brook do. Park do. Southern do. Guy's do. King's College Hospital London do. St. Bartholomew's do. Charing Cross do. Westminster do. St. Thomas's do. East London do. Poplar do. St. Peter's do. St. John's Hospital, Lewisham Children's Hospital West London do. Northern Consumption Hospital Victoria Park Consumption Hospital Downs Sanatorium Maitland and other Sanatoria Ear and Nose Hospital Brompton do. Bethnal Green do. City Road Chest do. Mount Vernon do. Miller do. Cane Hill Asylum Dartford Heath Asylum Colney Hatch do. Claybury do. Tooting Bee do. Darenth do. Caterham do. Stone do. Banstead do. Horton do. Hostel of God do.

TABLE II.  
Cases of Infectious Diseases notified under S. 55, P.H.L.A., during the Year 1913.

Notifiable Diseases.	Total Cases Notified in whole District.							Cases Notified in each Locality.			Cases of Mistaken Diagnosis included in the preceding figures.	Cases removed to Hospital.	
	All Ages.	Age—Periods.						Woolwich.	Plumstead.				Eltham.
		Under 1	1—5	5—15	15—25	25—65	65 and upwards		West	East			
Small-pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever ...	626	4	136	429	36	21	...	206	194	163	63	12	561
Diphtheria ...	321	3	62	216	24	15	1	171	98	33	19	77	370
Membranous Croup ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhoid or Enteric Fever ...	14	...	1	5	3	5	...	7	2	3	2	6	10
Erysipelas ...	70	1	3	6	8	42	10	21	21	21	7	...	1
Puerperal Fever ...	8	...	...	...	3	5	...	2	2	4	...	...	1
Cerebro-Spinal Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ant. Polio Myelitis ...	1	...	1	...	...	...	...	1	...	...	...	...	...
Ophthalmia Neonatorum ...	14	14	...	...	...	...	...	5	6	3	...	...	...
Zymotic Enteritis ...	338	115	138	25	23	33	4	128	86	119	5	...	...
<b>Total ...</b>	<b>1392</b>	<b>137</b>	<b>341</b>	<b>681</b>	<b>97</b>	<b>121</b>	<b>15</b>	<b>541</b>	<b>409</b>	<b>346</b>	<b>96</b>	<b>95</b>	<b>943</b>









TABLE IV.

INFANT MORTALITY.

1913. Nett Deaths from stated Causes at various Ages under One Year of Age.

CAUSE OF DEATH.			Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 4 weeks.	4 weeks and under 3 months.	3 months and under 6 months.	6 months and under 9 months.	9 months and under 12 months.	Total Deaths under 1 year.
All Causes	{ Certified ..	..	No	uncertified	Deaths	..	..	..	..	..	..	..
	{ Uncertified	..										
{ Small-pox	..	..	..	..	..	..	..	..	..	..	..	..
{ Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..
{ Measles	..	..	..	..	..	..	..	..	..	1	1	2
{ Scarlet Fever	..	..	..	..	..	..	..	..	..	1	..	1
{ Whooping-cough	..	..	..	..	..	..	..	2	..	2	1	5
{ Diphtheria and Croup	..	..	..	..	..	..	..	..	..	..	..	..
{ Erysipelas	..	..	..	..	..	..	..	..	..	..	..	..
{ Tuberculous Meningitis	..	..	..	..	..	..	..	..	..	1	..	1
{ Abdominal Tuberculosis	..	..	..	..	..	..	..	..	..	..	2	2
{ Other Tuberculous Diseases	..	..	..	..	..	..	..	..	..	..	..	..
{ Meningitis (not Tuberculous)	..	..	..	..	..	..	..	..	..	..	1	1
{ Convulsions	..	..	2	2	2	..	6	2	2	2	1	13
{ Laryngitis	..	..	..	..	..	..	..	..	..	..	..	..
{ Bronchitis	..	..	..	..	1	..	1	6	3	6	2	18
{ Pneumonia (all Forms)	..	..	..	3	..	..	3	6	6	6	7	28
{ Diarrhoea	..	..	..	..	..	..	..	3	3	..	1	7
{ Enteritis	..	..	..	..	1	..	1	8	7	14	2	32
{ Gastritis	..	..	..	..	1	..	1	1	1	..	..	3
{ Syphilis	..	..	..	..	1	..	1	2	1	..	..	4
{ Rickets	..	..	..	..	..	..	..	..	..	1	..	1
{ Suffocation, overlying	..	..	..	..	..	..	..	1	..	..	..	1
{ Injury at Birth	..	..	2	..	..	..	2	..	..	..	..	2
{ Atelectasis	..	..	8	..	..	..	8	..	..	..	..	8
{ Congenital Malformations	..	..	3	1	..	..	4	2	..	..	3	9
{ Premature Birth	..	..	26	3	1	4	34	6	1	..	..	41
{ Atrophy, Debility, and Marasmus	..	..	9	3	5	4	21	5	3	2	..	31
{ Other causes	..	..	8	..	2	..	10	3	2	1	3	19
			58	12	11	11	92	47	29	37	24	229

Nett Births in the year { Legitimate, 2811.  
 { Illegitimate, 65.

Nett Deaths in the Year of { Legitimate Infants, 215.  
 { Illegitimate Infants, 14.





TABLE VI

LONDON and the METROPOLITAN DISTRICTS.—Cases and Deaths of Persons belonging to London and the Metropolitan Districts, &c., up to and including 31st January, 1913.

TABLE V.

Rates per 1,000 Population, estimated to the middle of the Year.

Year.	Small-pox		Cholera.		Erysipelas.		Diphtheria and Membranous Croup.		Scarlet Fever.		Typhus Fever.		Enteric and Continued Fevers.		Relapsing Fever.		Puerperal Fever.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ave.	0.15	0.01	...	...	0.87	0.05	1.38	0.38	6.05	0.25	0.00	...	0.94	0.17	...	...	0.09	0.03
1891-5	0.01	...	0.01	...	0.89	0.04	2.74	0.48	5.48	1.34	...	...	0.54	0.08	...	...	0.06	0.04
1896-1900	0.43	0.06	...	...	0.62	0.02	1.71	0.16	3.14	0.07	...	...	0.34	0.07	...	...	0.06	0.03
1901-5	...	...	...	...	0.76	0.02	3.13	0.17	4.27	0.04	...	...	0.22	0.06	...	...	0.06	0.02
1906...	...	...	...	...	0.85	0.04	2.22	0.12	8.27	0.11	...	...	0.16	0.03	...	...	0.04	0.01
1907...	...	...	...	...	0.70	0.05	2.93	0.16	4.82	0.07	...	...	0.10	0.02	...	...	0.04	0.02
1908...	...	...	...	...	0.80	0.01	1.94	0.20	8.04	0.15	...	...	0.08	0.02	...	...	0.07	0.01
1909...	...	...	...	...	0.70	0.02	1.19	0.04	4.09	0.10	...	...	0.06	0.01	...	...	0.06	0.02
1910...	...	...	...	...	0.68	0.07	1.68	0.09	4.09	0.02	...	...	0.10	Nil	...	...	0.13	0.02
1911...	0.02	0.01	...	...	0.71	0.02	3.09	0.16	3.80	0.03	...	...	0.15	0.02	...	...	0.02	0.01
1912...	...	...	...	...	0.55	Nil	1.91	0.13	4.80	0.06	...	...	0.06	0.01	...	...	0.06	0.02
1913...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...





TABLE VI.

LONDON and the METROPOLITAN BOROUGHS.—BIRTHS and DEATHS of PERSONS belonging to LONDON and the METROPOLITAN BOROUGHS during the 53 weeks ended 3rd January, 1914.\*

BOROUGH.	Population estimated to the middle of 1913 †	Births.	Deaths from									Deaths under 1 year of Age.
			All Causes.	Enteric Fever.	Small-pox.	Measles.	Scarlet Fever.	Whooping-cough.	Diphtheria.	Diarrhoea and Enteritis (under 2 years).	Pulmonary Tuberculosis.	
COUNTY OF LONDON ..	4,518,191	112,637	65,030	114	—	1570	188	800	431	3098	5981	11,869
<b>West.</b>												
Paddington ..	142,210	3055	1941	6	—	55	7	37	12	71	157	305
Kensington ..	171,284	3357	2377	4	—	84	3	29	6	80	188	375
Hammersmith ..	123,745	3043	1754	—	—	47	7	47	12	64	151	314
Fulham ..	157,117	4302	1992	8	—	50	3	27	14	98	209	414
Chelsea ..	64,592	1257	911	1	—	18	3	5	1	24	81	113
City of Westminster ..	154,810	2227	1992	3	—	22	7	7	8	52	206	213
<b>North.</b>												
St. Marylebone ..	114,532	2221	1633	5	—	33	10	10	6	37	158	202
Hampstead ..	86,346	1326	938	1	—	21	4	11	3	18	50	97
St. Pancras ..	214,330	5512	3321	6	—	41	6	31	16	114	327	508
Islington ..	325,585	8357	5009	5	—	107	17	61	34	221	441	894
Stoke Newington ..	50,518	1144	698	2	—	11	1	6	6	16	48	94
Hackney ..	223,353	5522	3037	4	—	68	11	23	11	141	261	549
<b>Central.</b>												
Holborn ..	46,949	798	698	—	—	10	—	6	4	15	89	83
Finsbury ..	84,679	2547	1576	—	—	30	4	31	9	97	173	352
City of London ..	17,916	167	276	2	—	—	1	2	1	2	27	16
<b>East.</b>												
Shoreditch ..	109,654	3513	2068	1	—	52	3	29	14	207	200	546
Bethnal Green ..	127,824	3998	2006	4	—	62	3	34	10	151	201	470
Stepney ..	275,300	8187	4172	11	—	95	8	26	22	287	471	916
Poplar ..	160,913	5230	2668	5	—	69	12	38	34	159	239	586
<b>South.</b>												
Southwark ..	188,487	5936	3343	6	—	105	11	38	19	182	354	682
Bermondsey ..	124,739	3896	2266	3	—	90	4	47	17	165	204	513
Lambeth ..	297,139	7233	4314	8	—	99	14	47	37	202	389	736
Battersea ..	167,464	4239	2361	6	—	93	7	28	20	125	192	469
Wandsworth ..	330,395	6840	3550	5	—	116	11	23	16	148	288	603
Camberwell ..	261,805	6671	3653	5	—	68	13	54	18	179	306	708
Deptford ..	109,280	3103	1704	2	—	50	3	46	17	93	144	347
Greenwich ..	96,015	2541	1385	2	—	40	2	24	12	52	114	262
Lewisham ..	168,822	3522	1814	8	—	25	5	23	35	50	127	273
Woolwich ..	122,382	2893	1573	1	—	9	8	10	17	48	186	229

\* For the purpose of this table the Births registered in London have been corrected by distributing those which occurred in the principal institutions receiving maternity cases to the boroughs in which the mothers resided. In 1253 cases the residence was outside the County of London, and these cases have been excluded. On the other hand 44 births that occurred outside the County have been included. With regard to the deaths of London residents, all transferable deaths (i.e., those of persons who, having a fixed or usual residence in England and Wales, die in a district other than that in which they resided) occurring in Greater London and in certain Metropolitan Institutions outside Greater London have been distributed to the Metropolitan Borough to which the deceased belonged. Of the deaths registered in London the previous residence was outside the county in 3412 cases, while on the other hand the deaths of 2973 London residents occurred in the Outer Ring or in Metropolitan Institutions outside Greater London.

† Based on the results of the Censuses of 1901 and 1911.

The following table shows the results of the experiments conducted on the various specimens of the material under investigation. The specimens were prepared in accordance with the standard procedure and were tested under the following conditions:

Specimen No.	Material	Temperature (°C)	Strain (%)	Stress (MPa)	Modulus (GPa)	Yield Point (MPa)	Ultimate Tensile Strength (MPa)	Elongation at Break (%)
1	Aluminum	20	0.2	100	70	100	150	10
2	Aluminum	50	0.2	90	65	95	140	12
3	Aluminum	100	0.2	80	60	85	130	15
4	Aluminum	150	0.2	70	55	75	120	18
5	Aluminum	200	0.2	60	50	65	110	20
6	Aluminum	250	0.2	50	45	55	100	25
7	Aluminum	300	0.2	40	40	45	90	30
8	Aluminum	350	0.2	30	35	35	80	35
9	Aluminum	400	0.2	20	30	25	70	40
10	Aluminum	450	0.2	10	25	15	60	45
11	Aluminum	500	0.2	5	20	10	50	50
12	Aluminum	550	0.2	0	15	5	40	55
13	Aluminum	600	0.2	0	10	0	30	60
14	Aluminum	650	0.2	0	5	0	20	65
15	Aluminum	700	0.2	0	0	0	10	70
16	Aluminum	750	0.2	0	0	0	5	75
17	Aluminum	800	0.2	0	0	0	0	80
18	Aluminum	850	0.2	0	0	0	0	85
19	Aluminum	900	0.2	0	0	0	0	90
20	Aluminum	950	0.2	0	0	0	0	95
21	Aluminum	1000	0.2	0	0	0	0	100

The above table shows the results of the experiments conducted on the various specimens of the material under investigation. The specimens were prepared in accordance with the standard procedure and were tested under the following conditions:



TABLE VII.

LONDON and the METROPOLITAN BOROUGHS.—BIRTH-RATES and DEATH-RATES of Persons belonging to London and the Metropolitan Boroughs during the 53 weeks ended 3rd January, of 1914.

BOROUGHES.	Per 1,000 Persons Living.										Rate per 1000 Births.	
	Births.	Deaths from									Diarrhoea and Enteritis (under 2 years).	Total Deaths under 1 year.
		Crude.	All Causes. * Standardized.	Enteric Fever.	Small-pox.	Measles.	Scarlet Fever.	Whooping-cough.	Diphtheria.	Pulmonary Tuberculosis.		
COUNTY OF LONDON	24.5	14.2	14.2	0.02	..	0.34*	0.04	0.17	0.09	1.30	27.50	105
<b>West.</b>												
Paddington ..	21.1	13.4	13.4	0.04	..	0.38	0.05	0.26	0.08	1.09	23.24	100
Kensington ..	19.3	13.7	13.6	0.02	..	0.48	0.02	0.17	0.03	1.08	23.83	112
Hammersmith ..	24.2	13.9	13.8	..	..	0.37	0.06	0.37	0.10	1.20	21.03	103
Fulham ..	26.9	12.5	12.9	0.05	..	0.31	0.02	0.17	0.09	1.31	22.78	96
Chelsea ..	19.1	13.9	13.2	0.02	..	0.27	0.05	0.08	0.02	1.23	19.09	90
City of Westminster	14.2	12.7	13.3	0.02	..	0.14	0.04	0.04	0.05	1.31	23.35	96
<b>North.</b>												
St. Marylebone ..	19.1	14.0	14.3	0.04	..	0.28	0.09	0.09	0.05	1.36	16.66	91
Hampstead ..	15.1	10.7	11.3	0.01	..	0.24	0.05	0.13	0.03	0.57	13.57	73
St. Pancras ..	25.3	15.2	15.2	0.03	..	0.19	0.03	0.14	0.07	1.50	20.68	92
Islington ..	25.3	15.1	14.8	0.02	..	0.32	0.05	0.18	0.10	1.33	26.44	107
Stoke Newington ..	22.3	13.6	12.9	0.04	..	0.21	0.02	0.12	0.12	0.93	13.99	82
Hackney ..	24.3	13.4	13.5	0.02	..	0.30	0.05	0.10	0.05	1.15	25.53	99
<b>Central.</b>												
Holborn ..	16.7	14.6	14.7	..	..	0.21	..	0.13	0.08	1.87	18.80	104
Finsbury ..	29.6	18.3	18.1	..	..	0.35	0.05	0.36	0.10	2.01	38.08	138
City of London ..	9.2	15.2	15.8	0.11	..	..	0.05	0.11	0.05	1.48	11.98	96
<b>East.</b>												
Shoreditch ..	31.5	18.6	19.2	0.01	..	0.47	0.03	0.26	0.13	1.79	58.92	155
Bethnal Green ..	30.8	15.4	16.1	0.03	..	0.48	0.02	0.26	0.08	1.55	37.77	118
Stepney ..	29.3	14.9	15.6	0.04	..	0.34	0.03	0.09	0.08	1.68	35.06	112
Poplar ..	32.0	16.3	16.1	0.03	..	0.42	0.07	0.23	0.21	1.46	30.40	112
<b>South.</b>												
Southwark ..	31.0	17.4	17.6	0.03	..	0.55	0.06	0.20	0.10	1.85	30.66	115
Bermondsey ..	30.7	17.9	17.8	0.02	..	0.71	0.03	0.37	0.13	1.61	42.35	132
Lambeth ..	23.9	14.3	14.0	0.03	..	0.33	0.05	0.16	0.12	1.23	27.93	102
Battersea ..	24.9	13.9	14.0	0.04	..	0.55	0.04	0.16	0.12	1.13	29.49	111
Wandsworth ..	20.4	10.6	10.6	0.01	..	0.35	0.03	0.07	0.05	0.86	21.64	88
Camberwell ..	25.1	13.7	13.6	0.02	..	0.26	0.05	0.20	0.07	1.15	26.83	106
Deptford ..	27.9	15.3	15.2	0.02	..	0.45	0.03	0.41	0.15	1.30	29.97	112
Greenwich ..	26.0	14.2	14.0	0.02	..	0.41	0.02	0.25	0.12	1.17	20.46	103
Lewisham ..	20.5	10.6	10.4	0.05	..	0.15	0.03	0.13	0.20	0.74	14.20	78
Woolwich	23.3	12.6	13.0	0.01	..	0.07	0.06	0.08	0.14	1.50	16.59	79

\*The Standardized Death-rates represent the Crude Death-rates multiplied by the respective Standardizing Factors in order to make Correction for differences of sex and age constitution of the several populations in 1911 as compared with that of England and Wales in 1901.

1. The purpose of this report is to provide a comprehensive overview of the project's progress and financial status. The data presented here is based on the most recent available information and is subject to change as the project evolves.

Category	Item	Quantity	Unit Price	Total Value	Notes
Materials	Concrete	1000	150	150000	
	Rebar	5000	30	150000	
	Formwork	2000	75	150000	
	Gravel	3000	50	150000	
	Sand	2000	75	150000	
	Bricks	10000	15	150000	
	Paint	500	300	150000	
	Roofing	1000	150	150000	
	Insulation	2000	75	150000	
	Windows	100	1500	150000	
Labor	Construction Workers	10000	15	150000	
	Skilled Laborers	5000	30	150000	
	Project Managers	100	1500	150000	
	Site Supervisors	500	300	150000	
	Equipment Operators	2000	75	150000	
	Transportation	1000	150	150000	
	Permits	100	1500	150000	
	Insurance	1000	150	150000	
	Utilities	1000	150	150000	
	Contingency	1000	150	150000	
Other	Design Fees	1000	150	150000	
	Architectural	500	300	150000	
	Engineering	500	300	150000	
	Legal	100	1500	150000	
	Accounting	100	1500	150000	
	Marketing	100	1500	150000	
	Public Relations	100	1500	150000	
	Research	100	1500	150000	
	Development	100	1500	150000	
	Testing	100	1500	150000	

This report provides a detailed breakdown of the project's costs and resources. It is intended for internal use and should be reviewed regularly to ensure accurate financial reporting and resource allocation.



TABLE VIII.

Meteorology and Registered Deaths from all Causes and from certain Prevalent Diseases for the Year 1913.

Week ending	TEMPERATURE OF THE AIR.			Average temperature 3 feet below ground.	Mean Humidity, complete Saturation = 100	No. of days on which rain fell.	Rainfall in inches.	DEATHS CORRECTED FOR PUBLIC INSTITUTIONS		
	Highest during week.	Lowest during week.	Mean temperature.					Under 2, Diarrhoea and Enteritis.	Bronchitis and Pneumonia.	All causes.
1913.										
January 4	51.2	32.1	44.6+	46.80	86	4	0.15	1	8	38
" 11	51.4	33.1	42.1+	46.18	93	3	0.66	—	6	24
" 18	48.1	26.2	38.5+	44.49	88	5	0.66	1	9	36
" 25	52.1	32.0	42.3+	43.63	89	6	0.70	—	6	29
February 1	56.2	28.1	39.6+	43.63	90	5	0.78	1	8	42
" 8	55.0	33.3	46.7+	43.78	81	3	0.26	—	4	29
" 15	53.5	30.2	40.6+	44.51	92	3	0.19	—	11	38
" 22	46.0	27.8	36.0—	42.87	75	2	0.04	—	12	41
March 1	53.0	24.2	41.3+	41.92	75	2	0.08	—	6	32
" 8	59.0	33.4	46.7+	43.35	78	4	0.24	—	9	43
" 15	56.2	29.0	45.4+	44.33	82	2	0.28	—	11	39
" 22	56.8	28.2	43.0+	44.16	77	6	1.42	—	7	38
" 29	56.7	29.0	43.4+	44.13	85	6	0.49	—	6	37
1st Quarter	59.0	24.2	42.3	44.14	84	51	5.95	3	103	466
April 5	57.0	33.0	45.5—	44.73	81	4	0.33	—	6	24
" 12	55.0	33.2	42.0—	45.19	75	3	0.53	—	5	32
" 19	57.9	29.0	44.4—	44.89	75	5	0.50	—	5	28
" 26	67.2	33.1	50.6+	46.47	75	4	0.32	—	5	43
May 3	64.9	39.6	52.0+	48.57	78	6	0.60	—	6	25
" 10	63.2	36.3	49.9—	49.40	80	7	0.62	—	6	33
" 17	70.6	39.4	53.7+	50.51	73	2	0.05	—	2	19
" 24	74.9	37.1	54.4+	51.70	71	2	0.02	—	5	30
" 31	83.5	45.2	64.9+	55.07	67	2	0.40	—	1	26
June 7	79.1	42.2	58.0—	57.18	74	2	0.12	—	6	26
" 14	70.7	43.1	56.9—	57.08	73	1	0.14	—	2	18
" 21	87.1	43.8	62.3+	58.47	68	1	0.41	—	—	18
" 28	78.3	47.1	59.2—	59.29	69	3	0.06	1	2	23
2nd Quarter	87.1	29.0	53.4	51.43	74	42	4.10	1	51	345
July 5	79.5	49.1	59.9—	59.82	75	4	0.21	—	3	14
" 12	75.8	46.2	57.2—	59.40	78	3	1.33	—	2	25
" 19	73.8	51.2	60.0—	59.61	85	5	0.52	1	3	22
" 26	71.3	48.7	57.5—	59.45	78	1	0.05	1	1	30
August 2	75.0	50.1	59.5—	59.73	81	—	0.00	1	—	13
" 9	75.2	45.4	57.1—	60.24	73	1	0.09	1	3	26
" 16	75.0	49.3	60.7—	60.10	75	4	0.14	1	2	30
" 23	80.0	49.2	60.9—	60.53	74	1	0.36	3	2	25
" 30	79.2	45.0	62.8+	60.62	76	4	0.51	9	2	25
September 6	68.0	53.5	59.1—	60.63	91	4	1.43	7	1	24
" 13	71.6	45.3	58.0—	59.96	79	1	0.06	3	1	27
" 20	70.9	42.1	54.9—	59.03	82	6	0.60	6	1	29
" 27	77.4	46.0	60.2+	58.46	82	2	0.13	2	2	20
3rd Quarter	80.0	42.1	59.1	59.82	79	36	5.43	35	23	310
October 4	70.9	48.1	58.5+	58.75	84	1	0.22	3	3	27
" 11	63.2	42.1	52.9+	57.84	85	4	1.28	1	3	29
" 18	64.2	38.9	52.8+	56.30	85	1	0.12	1	5	40
" 25	61.9	36.1	49.3+	55.31	90	2	0.57	—	6	37
November 1	64.2	43.6	54.1+	54.25	84	6	1.27	—	5	28
" 8	59.2	36.1	48.3+	53.53	81	6	0.40	2	6	33
" 15	59.1	36.0	49.0+	51.92	86	6	1.50	—	4	28
" 22	59.5	31.7	48.9+	51.15	80	3	0.63	—	4	24
" 29	57.0	27.6	46.3+	50.01	89	1	0.03	—	7	31
December 6	54.0	35.0	46.8+	49.93	83	6	0.31	1	3	28
" 13	54.6	36.9	46.2+	48.80	82	1	0.02	—	6	26
" 20	50.5	32.1	42.8+	48.12	81	—	0.01	—	9	34
" 27	51.0	30.2	39.2+	46.24	83	4	0.53	—	5	31
4th Quarter	70.9	27.6	48.8	52.47	84	41	6.89	8	66	396
Year	87.1	24.2	50.9	51.96	80	170	22.37	47	243	1517





TABLE IX.  
WEEKLY AVERAGES.

PERIOD.	Temperature of the Air.			Temperature 3 feet below ground.	Mean Humidity Complete Saturation = 100.	Number of days on which rain fell in each week.	Average Weekly Rainfall in inches.	Deaths corrected for Public Institutions.		
	Average of Weekly Maxima.	Average of Weekly Minima.	Average of Weekly Means.					Diarrhoea and Enteritis (under 2 years).	Bronchitis and Pneumonia.	All Causes.
1st Quarter ...	53.0	29.7	42.3	44.14	84	3.9	0.46	0.23	7	33
2nd Quarter ...	69.9	38.6	53.4	51.43	74	3.2	0.32	0.08	4	27
3rd Quarter ...	74.8	47.8	59.1	59.82	79	2.8	0.42	2.69	2	24
4th Quarter ...	59.2	36.5	48.8	52.47	84	3.2	0.53	0.61	5	30

TABLE X.

Summary of Statistics for the 1st Quarter ending March 29th, 1913, corrected for Public Institutions:—

A. Birth and Death Statistics for the Borough of Woolwich. Rates calculated per 1,000 Population.

Population estimated to middle of 1912	Births.		Deaths under one year.		Deaths at all ages—Gross.	Deaths in Public Institutions.	Deaths of Non-Residents in District.	Deaths of Residents Registered beyond District.	Deaths at all ages corrected for Public Institutions.	
	Number.	Rate.	Number.	Rate per 1,000 Births Registered.	Number.				Number.	Rate.
123,311	714	23·2	68	95	411	84	14	69	466	15·1

B. Birth and Death Rates for each Parish.

WOOLWICH.				PLUMSTEAD.				ELTHAM.			
Population estimated to middle of 1912	Birth Rate.	Death Rate at all ages.	Deaths under 1 year, per 1000 births.	Population estimated to middle of 1912	Birth Rate.	Death Rate at all ages.	Deaths under 1 year, per 1000 Births.	Population estimated to middle of 1912.	Birth Rate.	Death Rate at all ages.	Deaths under 1 year, per 1000 Births.
A	B	C	D	A	B	C	D	A	B	C	D
37,030	27·4	16·7	118	West 40,943 East 31,288	19·8 26·1	17·1 12·7	98 59	14,050	15·1	10·5	113



C. Deaths from Certain Causes in whole Borough.

Cause of Death.	Total.	Average for last 5 years.	Cause of Death.	Total.	Average for last 5 years.
Smallpox .. ..	-	0.2	Rheumatic Fever ..	2	1.8
Measles .. ..	3	9.6	Tubercle of Lung ..	45	55.6
Scarlet Fever ..	2	2.8	Other Tuberculous Dis. ...	10	
Influenza .. ..	17	13.4	Alcoholism and Cirrhosis of Liver	5	5.4
Whooping Cough ..	2	7.6	Cancer and Sarcoma ..	31	25.4
Diphtheria & Mem. Croup ..	3	5.6	Bronchitis .. ..	65	57
Enteric Fever ..	-	0.4	Broncho-Pneumonia ..	14	36.6
Diarrhoea and Enteritis ..	3	2.8	Pneumonia .. ..	24	
Erysipelas .. ..	-	1.2	Violence .. ..	8	8.0
Puerperal Fever ..	1	0.6	Suicide .. ..	5	2.8

TABLE XI.

Summary of Statistics for the Second Quarter, ending June 28th, 1913, corrected for Public Institutions:—

A. Birth and Death Statistics for the Borough of Woolwich. Rates calculated per 1,000 population.

Population estimated to middle of 1913.	Births.		Deaths under 1 year.		Deaths at all ages—Gross.	Deaths in Public Institutions.	Deaths of Non-Residents in District.	Deaths of Residents Registered beyond District.	Deaths at all ages corrected for Public Institutions.	
	Number.	Rate.	Number.	Rate per 1,000 Births Registered.	Number.				Number.	Rate.
125,846	730	23.2	38	52	300	74	14	59	345	11.0

B. Birth and Death Rates for each Parish.

WOOLWICH.				PLUMSTEAD.				ELTHAM.			
Population estimated to middle of 1913.	Birth Rate.	Death Rate at all ages.	Deaths under 1 year p. r 1,000 Births.	Population estimated to middle of 1913.	Birth Rate.	Death Rate at all ages.	Deaths under 1 year per 1,000 Births.	Population estimated to middle of 1913.	Birth Rate.	Death Rate at all ages.	Deaths under 1 year per 1,000 Births.
A	B	C	D	A	B	C	D	A	B	C	D
38,070	24.2	12.2	70	West 41,458 East 31,878	21.0 26.1	11.5 11.0	23 68	14,440	20.5	6.1	41

C. Deaths from certain causes in the whole Borough.

Cause of Death	Total.	Average for last 5 years.	Cause of Death.	Total.	Average for last 5 years.
Smallpox .. ..	—	—	Rheumatic Fever ..	3	1.8
Measles .. ..	5	13.2	Tubercle of Lung ..	35	50.6
Scarlet Fever ..	4	2.8	Other Tuberculous Dis. ..	6	
Influenza .. ..	11	6.2	Alcoholism and Cirrhosis of Liver .. ..	3	
Whooping Cough ..	3	7.8	Cancer .. ..	27	23.2
Diphtheria and Mem. Croup ..	7	3.8	Bronchitis .. ..	26	18.8
Enteric .. ..	—	0.4	Broncho-Pneumonia ..	4	25.0
Diarrhœa and Enteritis ..	1	2.0	Pneumonia .. ..	21	
Erysipelas .. ..	—	0.8	Violence .. ..	10	8.8
Puerperal Fever ..	—	0.6	Suicide .. ..	5	4.0



TABLE XII.

Summary of Statistics for the Third Quarter, ending September 27th, 1913, corrected for Public Institutions:—

A. Birth and Death Statistics for the Borough of Woolwich. Rates calculated per 1,000 Population.

Population estimated to middle of 1913.	Births.		Deaths under one year.		Deaths at all ages—Gross.	Deaths in Public Institutions.	Deaths of Non-Residents in District.	Deaths of Residents Registered beyond District.	Deaths at all ages corrected for Public Institutions.	
	Number.	Rate.	Number.	Rate per 1,000 Births Registered.	Number.				Number.	Rate.
125,846	729	23·2	59	81	274	66	12	48	310	9·9

B. Birth and Death Rates for each Parish.

WOOLWICH.				PLUMSTEAD.				ELTHAM.			
Population estimated to middle of 1913.	Birth Rate.	Death Rate at all ages.	Deaths under 1 year, per 1,000 Births.	Population estimated to middle of 1913.	Birth Rate.	Death Rate at all ages.	Deaths under 1 year, per 1,000 Births.	Population estimated to middle of 1913.	Birth Rate.	Death Rate at all ages.	Deaths under 1 year, per 1,000 Births.
A	B	C	D	A	B	C	D	A	B	C	D
38,070	28·6	11·3	81	West 41,458 East 31,878	21·0 23·3	9·2 9·7	64 113	14,440	14·7	8·3	38

C. Deaths from certain causes in whole Borough.

Cause of Death,	Total.	Average for last 5 years.	Cause of Death.	Total.	Average for last 5 years.
Smallpox .. ..	—	—	Rheumatic Fever ..	1	0·8
Measles .. ..	1	3·4	Tubercle of Lung ..	34	39·8
Scarlet Fever ..	2	2·0	Other Tuberculous Dis. ..	6	
Influenza .. ..	1	1·2	Alcoholism and Cirrhosis of Liver ..	4	
Whooping Cough ..	3	2·8	Cancer and Sarcoma ..	33	32·0
Diphtheria and Mem. Croup	3	1·6	Bronchitis .. ..	10	10·4
Enteric Fever ..	1	0·6	Broncho-Pneumonia ..	8	11·0
Diarrhoea and Enteritis ..	35	30·2	Pneumonia .. ..	5	
Erysipelas .. ..	—	0·8	Violence .. ..	8	8·6
Puerperal Fever ..	—	0·4	Suicide .. ..	3	3·4

TABLE XIII.

Summary of Statistics for the Fourth Quarter, ending January 3rd, 1914 (14 weeks), corrected for Public Institutions:—

A. Birth and Death Statistics for the Borough of Woolwich. Rates calculated per 1,000 population.

Population, Estimated to middle of 1913	Births.		Deaths under 1 year.		Deaths at all ages—Gross.	Deaths in Public Institutions.	Deaths of Non-Residents in District.	Deaths of Residents Registered beyond District	Deaths at all ages corrected for Public Institutions.	
	Number.	Rate.	Number.	Rate per 1,000 Births Registered.	Number.				Number.	Rate.
125,686	703	20·8	58	82	393	73	9	60	444	13·1



B. Birth and Death Rates for each Parish.

WOOLWICH.				PLUMSTEAD.				ELTHAM.			
Population, Estimated to middle of 1913	Birth Rate.	Death Rate	Deaths under 1 year, per 1,000 births.	Population, Estimated to middle of 1913	Birth Rate.	Death Rate	Deaths under 1 year, per 1,000 births.	Population, Estimated to middle of 1913	Birth Rate.	Death Rate	Deaths under 1 year, per 1,000 births.
A	B	C	D	A	B	C	D	A	B	C	D
37,850	26·8	14·8	70	West 41,478 East 31,918	17·2 20·4	12·6 12·6	89 103	14,440	16·2	11·1	63

C. Deaths from Certain Causes in whole Borough.

Cause of Death.	Total.	Average for 4th Quarters of the last 5 years.	Cause of Death.	Total.	Average for 4th Quarters of the last 5 years.
Smallpox .. ..	—	—	Rheumatic Fever ..	2	7·4
Measles .. ..	—	2·8	Tubercle of Lung ..	62	48·8
Scarlet Fever ..	—	1·8	Other Tuberculous Dis. ..	9	
Influenza .. ..	6	8·4	Alcoholism and Cirrhosis of Liver ..	7	7·2
Whooping Cough ..	3	2·8	Cancer and Sarcoma ..	37	30·8
Diphtheria and Mem. Croup	4	4·4	Bronchitis ..	43	39·4
Enteric Fever ..	—	0·4	Broncho-Pneumonia ..	13	
Diarrhoea and Enteritis ..	8	8·6	Pneumonia ..	19	21·6
Erysipelas .. ..	—	1·6	Violence .. ..	6	8·4
Puerperal Fever ..	2	0·2	Suicide .. ..	3	1·2





TABLE XIV.

Weekly Deaths from various causes for the whole Borough, 1913, corrected for Public Institutions.

Week ending	Small-pox.	Measles.	Scarlet Fever.	Epidemic Influenza.	Whooping Cough.	Diphtheria and Mem. Croup.	Enteric Fever.	Diarrhoea (under 2 years).	Enteritis (under 2 years).	Erysipelas.	Puerperal Fever.	Rheumatic Fever.	Tubercle of Lung and acute Tuberculosis.	Other Tuberculous diseases.	Alcoholism and Cirrhosis of Liver, and Per. Neuritis.	Cancer and Sarcoma.	Bronchitis.	Broncho-Pneumonia.	Pneumonia.	Violence.	Suicide.
January 4..	..	..	..	..	..	..	..	..	1	..	..	..	2	1	..	3	7	..	1	1	1
" 11..	..	..	..	1	..	..	..	..	..	..	..	..	1	1	..	3	3	..	..	1	..
" 18..	..	..	..	..	..	..	..	..	1	..	..	..	5	1	1	3	3	3	..	1	..
" 25..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	1	..	6	..	..	..	..
February 1..	..	..	..	2	..	1	..	1	..	..	..	..	5	1	1	1	5	..	3	1	..
" 8..	..	..	..	1	..	..	..	..	..	..	..	..	5	1	..	5	3	1	..	..	..
" 15..	..	..	1	2	..	..	..	..	..	..	..	..	3	..	..	3	8	1	2	1	1
" 22..	..	..	..	3	..	..	..	..	..	..	1	..	1	..	..	3	6	4	2	..	..
March 1..	..	..	..	1	..	..	..	..	..	..	..	1	2	..	..	2	5	..	1	..	1
" 8..	..	2	..	2	..	2	..	..	..	..	..	..	2	3	..	1	7	..	2	1	..
" 15..	..	..	1	..	1	..	..	..	..	..	..	1	4	2	..	2	4	1	6	..	1
" 22..	..	..	..	2	..	..	..	..	..	..	..	..	7	..	..	3	5	..	2	1	1
" 29..	..	1	..	3	1	..	..	..	..	..	..	..	4	..	2	2	3	1	2	1	..
1st Quarter	..	3	2	17	2	3	..	1	2	..	1	2	45	10	5	31	65	14	24	8	5
April 5..	..	..	..	2	..	..	..	..	..	..	..	..	2	..	..	..	4	..	2	1	1
" 12..	..	1	1	1	..	1	..	..	..	..	..	1	5	1	..	1	3	..	2	..	1
" 19..	..	..	..	3	..	..	..	..	..	..	..	1	3	..	1	3	3	1	..	..	..
" 26..	..	1	..	2	..	..	..	..	..	..	..	..	4	2	1	3	4	..	1	..	..
May 3..	..	..	..	1	..	..	..	..	..	..	..	..	4	2	..	1	2	1	3	1	2
" 10..	..	..	..	..	1	..	..	..	..	..	..	..	5	..	..	3	2	..	4	2	..
" 17..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..	2	..	..
" 24..	..	1	1	2	..	1	..	..	..	..	..	..	3	1	..	1	3	..	2	..	..
" 31..	..	1	..	..	1	..	..	..	..	..	..	1	1	..	1	1	..	1	..	1	1
June 7..	..	..	1	..	..	3	..	..	..	..	..	..	1	..	..	4	2	1	3	2	..
" 14..	..	..	1	..	..	1	..	..	..	..	..	..	2	..	..	2	2	..	..	1	..
" 21..	..	1	..	..	..	1	..	..	..	..	..	..	3	..	..	2	..	..	..	1	..
" 28..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	5	1	..	1	1	..
2nd Quarter	..	5	4	11	3	7	..	..	1	..	..	3	35	6	3	27	26	4	21	10	5
July 5..	..	1	..	..	..	1	..	..	..	..	..	..	1	..	..	1	2	1	..	..	..
" 12..	..	..	..	..	..	1	..	..	..	..	..	1	2	1	1	1	1	1	1	2	1
" 19..	..	..	1	..	..	..	..	1	..	..	..	..	2	..	1	1	2	1	..	2	1
" 26..	..	..	..	..	1	..	..	..	1	..	..	..	7	..	..	3	..	..	1	..	..
August 2..	..	..	1	..	..	..	..	1	..	..	..	..	2	..	..	2	..	..	..	..	..
" 9..	..	..	..	..	..	..	..	1	..	..	..	..	3	1	1	3	1	..	2	2	..
" 16..	..	..	..	..	1	..	..	..	1	..	..	..	3	1	..	2	..	1	1	..	..
" 23..	..	..	..	..	..	..	1	..	3	..	..	..	1	1	..	6	1	1	1	1	..
" 30..	..	..	..	1	..	..	3	6	..	..	..	..	2	..	..	2	..	2	..	..	..
September 6..	..	..	..	..	..	1	..	2	5	..	..	..	3	1	..	1	1	..	..	..	..
" 13..	..	..	..	..	..	..	..	1	2	..	..	..	4	1	1	3	..	1	..	..	1
" 20..	..	..	..	..	1	..	..	6	..	..	..	..	3	..	..	4	1	..	..	..	..
" 27..	..	..	..	..	..	..	..	2	..	..	..	..	1	..	..	4	2	..	..	1	..
3rd Quarter	..	1	2	1	3	3	1	7	28	..	..	1	34	6	4	33	10	8	5	8	3
October 4..	..	..	..	1	..	..	..	..	3	..	..	..	2	..	..	1	1	2	..	..	1
" 11..	..	..	..	..	..	..	..	1	..	..	..	..	6	..	1	1	1	..	2	1	1
" 18..	..	..	..	1	..	2	..	..	1	..	..	..	5	1	..	4	3	..	2	1	..
" 25..	..	..	..	..	..	..	..	..	..	..	..	..	7	2	..	5	3	1	2	..	1
November 1..	..	..	..	..	..	..	..	..	..	..	..	..	7	..	..	1	3	1	1	..	..
" 8..	..	..	..	..	..	..	..	2	..	..	..	..	4	1	1	3	1	3	2	..	..
" 15..	..	..	..	..	..	..	..	..	..	..	1	..	4	..	..	3	1	..	3	1	..
" 22..	..	..	..	..	..	1	..	..	..	..	..	..	5	..	1	4	3	..	1	..	..
" 29..	..	..	..	..	1	..	..	..	..	..	..	..	3	1	..	5	5	..	2	1	..
December 6..	..	..	..	..	..	1	..	..	1	..	..	..	3	..	2	4	2	1	..	2	..
" 13..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	1	3	1	2	..	..
" 20..	..	..	..	1	2	..	..	..	..	..	..	1	3	2	..	1	6	2	1	..	..
" 27..	..	..	..	2	..	..	..	..	..	..	..	..	3	2	1	..	3	1	1	..	..
January 3.. 1914	..	..	..	1	..	..	..	..	..	1	..	1	6	..	1	4	8	1	..	..	..
4th Quarter	..	..	..	6	3	4	..	..	8	..	2	2	62	9	7	37	43	13	19	6	3
Whole Year (53 weeks)	..	9	8	35	11	17	1	8	39	..	3	8	176	31	19	128	144	39	69	32	16

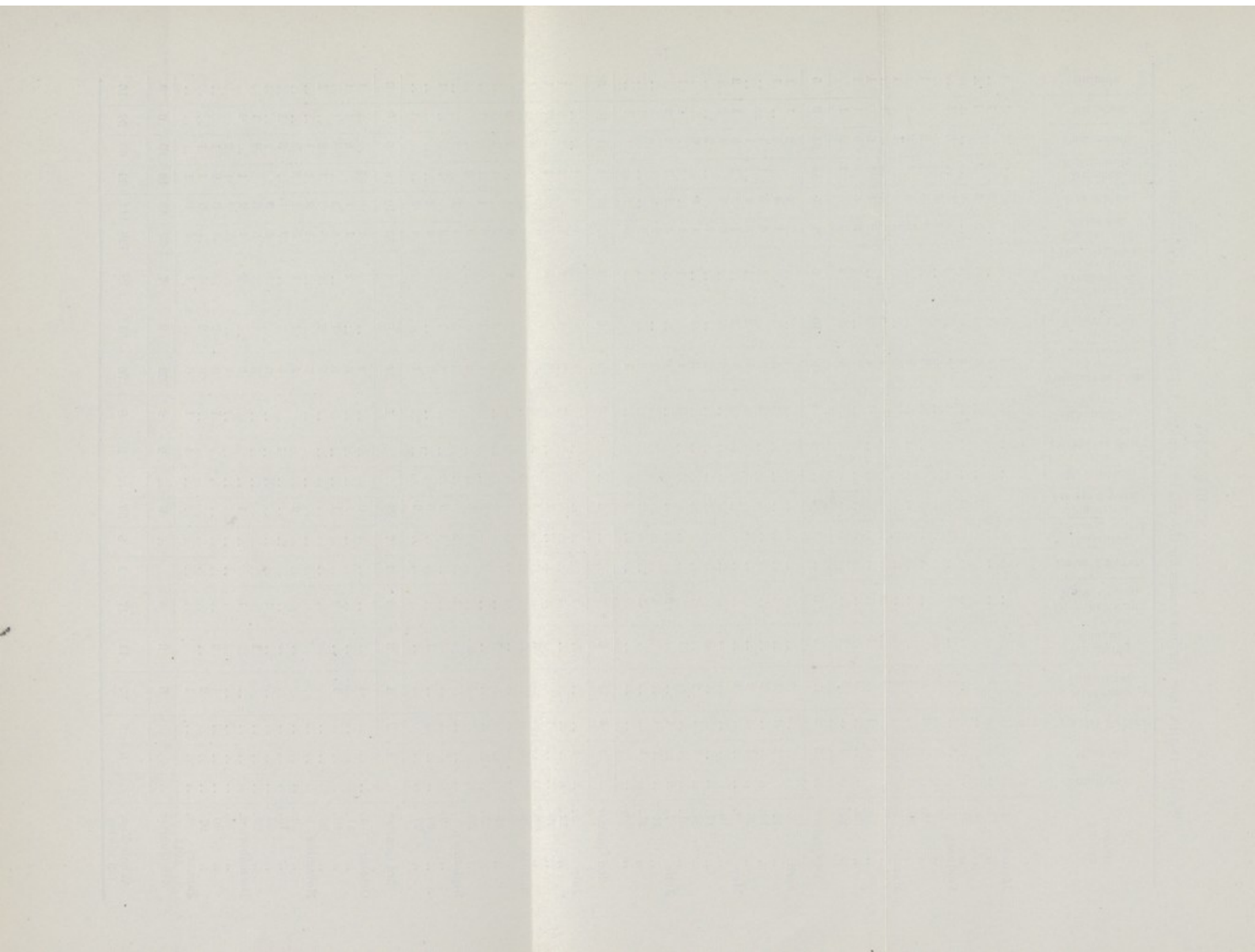




TABLE XVa.

Summary of Nuisances Abated, Notices served, and General Work of Public Health Department, 1913.

	St. Mary's and Dockyard.	River.	Burrage and Herbert.	Central and St Margaret's.	St Nicholas.	Glyndon.	Eltham.	St. George's.	Total.
PREMISES INSPECTED.									
No. of Houses inspected, house to house .. ..	630	1157	655	1013	894	626	256	258	5489
„ Re-inspections after service of Notice (estimated) ..	1560	1680	1737	1870	1830	1120	1150	490	11437
„ Houses and premises specially inspected, including infectious diseases and complaints ..	1039	628	1182	1086	939	496	901	245	6516
„ Houses where drains have been tested by smoke test .. ..	30	28	32	49	15	12	8	4	178
„ Houses where drains have been tested by water test .. ..	10	15	22	5	10	16	17	2	97
„ New Houses inspected for Water Certificates .. ..	..	..	..	12	97	..	66	..	175
NUISANCES ABATED—DRAINS.									
Waste-pipe from baths, lavatories, and wash-house sinks, repaired or disconnected .. ..	60	26	40	12	49	7	16	22	232
Choked and defective drains .. ..	72	99	84	28	89	24	24	28	448
Defective traps .. ..	19	7	12	6	1	9	5	4	63
Defective and unventilated soil pipes .. ..	1	1	9	4	..	..	3	1	19
W.C.'s.									
W.C.'s repaired, new traps or pans provided .. ..	35	33	61	14	46	76	36	33	334
Water supply apparatus repaired or renewed .. ..	110	63	36	63	90	50	17	22	451
Foul pans cleansed .. ..	42	27	22	52	18	17	17	14	209
Additional w.c.'s provided to Factories & Workshops, &c. ..	..	..	..	..	..	2	..	..	2
Do. do. dwelling houses .. ..	4	..	..	..	..	..	..	..	4
PREMISES.									
Underground rooms not in accordance with Act .. ..	2	..	1	..	..	..	..	..	3
Interiors cleansed and defective roofs repaired .. ..	697	643	324	143	258	240	161	154	2620
Damp walls remedied .. ..	158	154	91	33	116	30	21	26	629
Paving in yards and wash-houses repaired .. ..	82	59	89	17	93	26	25	40	431
Improved ventilation provided .. ..	2	8	16	..	..	10	4	1	41
Wash-houses without sink and outlets for waste water .. ..	..	..	17	..	..	..	..	..	17
Defective guttering and rain-water pipes .. ..	86	35	36	43	64	81	36	35	416
Dustbins supplied .. ..	130	94	64	47	105	27	40	38	545
Dung pits provided .. ..	1	..	8	..	..	..	1	1	11
Cases of overcrowding remedied .. ..	19	16	14	12	26	1	8	7	101
Deficient light—windows supplied, or enlarged, or other works .. ..	16	..	19	..	13	11	8	6	73
Dampness in premises from defective water pipes .. ..	36	10	9	17	15	..	5	6	98
ANIMALS.									
Animals (including pigs) kept in such a state as to be a nuisance .. ..	8	..	8	..	5	1	3	2	27
Accumulations of manure removed .. ..	13	14	10	10	17	2	21	10	97
WATER.									
Defective and foul cisterns used for dietary purposes .. ..	..	..	..	2	26	..	5	..	33
Defective and foul rain-water tanks remedied .. ..	3	..	4	1	..	..	..	..	8
Insufficient supply, and water cut off by Water Board .. ..	..	5	2	..	5	..	7	5	24
Additional water supply for two or more families .. ..	2	..	..	..	..	..	..	2	4
MISCELLANEOUS.									
No. of observations made of chimneys in connection with smoke nuisances .. ..	16	7	2	1	13	..	3	..	42
No. of smoke nuisances observed .. ..	..	4	..	..	13	..	..	..	17
Tents, Vans, &c., inspected .. ..	..	..	..	4	1	..	37	..	42
Notices served with respect to tents and vans .. ..	..	..	..	1	..	..	5	..	6
Inspection of Urinals accessible to the public .. ..	90	32	62	83	35	75	45	23	545
Vermineous rooms cleansed .. ..	54	82	14	5	20	28	8	9	220
Intimation notices served .. ..	840	552	437	217	557	317	206	159	3285
Statutory .. ..	187	49	155	37	153	65	43	36	725

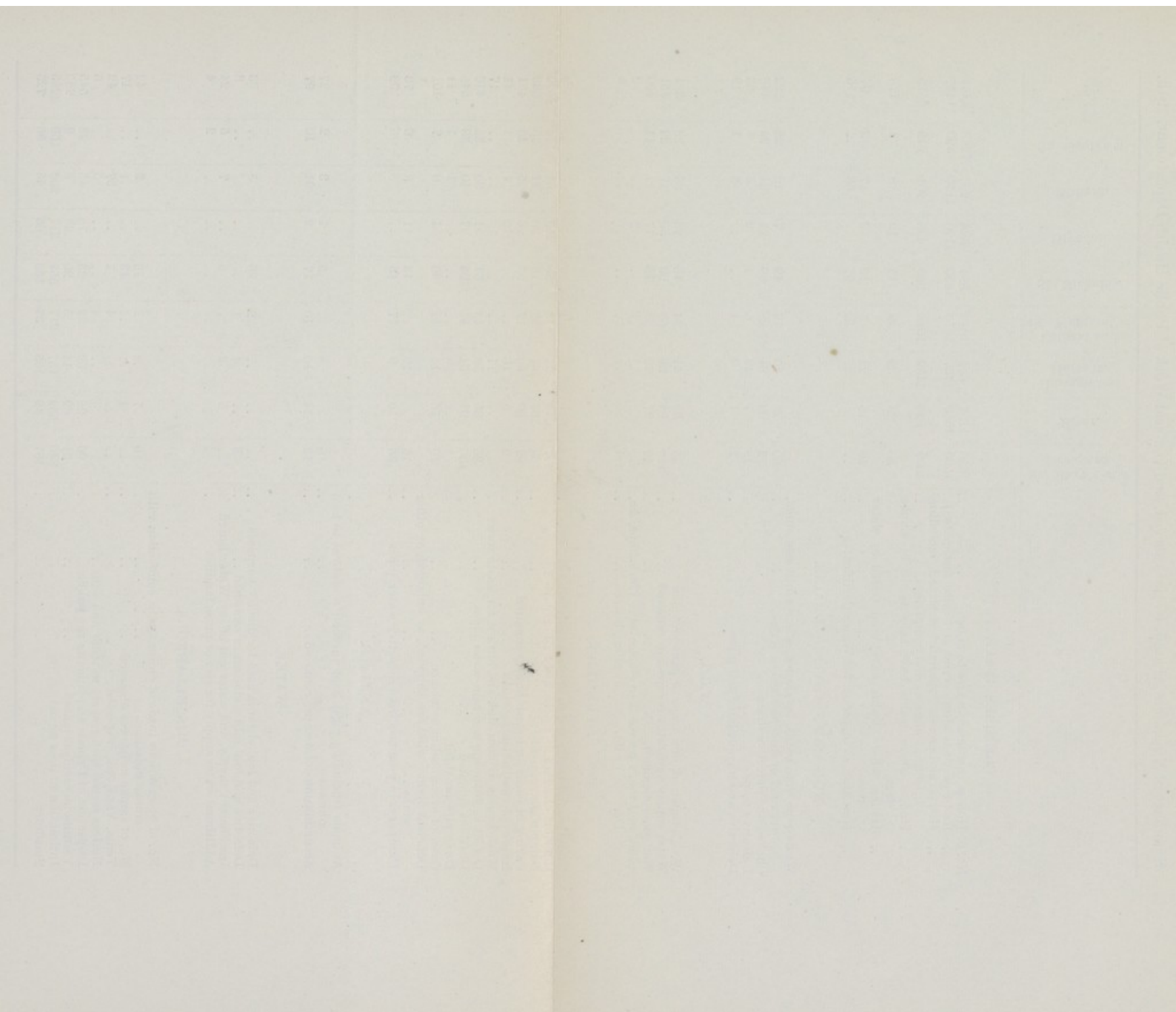




TABLE XV<sub>B</sub>.

## SUMMARY OF WORK OF CHIEF INSPECTOR.

Premises Inspected .. .. .	1240
New Buildings Inspected .. .. .	27
Defective Combined Drains Investigated and Reported on ..	7
Number of Houses referred to in such Combined Drains ..	57
Cow-houses and Slaughter-houses Inspections .. .. .	29
Complaints Investigated .. .. .	143
Attendances at Police Courts .. .. .	27

MISCELLANEOUS, INCLUDING WORK OF CHIEF INSPECTOR,  
DISTRICT INSPECTORS, AND CLERKS.

Number of Cases of Inattention to Notices reported to Town	
Clerk for proceedings .. .. .	79
Summons at Police Courts .. .. .	5
Bake-houses Inspected and Cleansed twice during the year ..	40
Number of Houses Disinfected after Infectious Disease ..	1278
Letters written .. .. .	4062
Notifications received .. .. .	3008
Certificates issued after Disinfection .. .. .	1268
of Infectious Disease forwarded to Schools .. .. .	1831
Complaints of Sanitary Defects .. .. .	441
of Non-removal of Dust, viz :—	
Woolwich .. .. .	1
Plumstead .. .. .	12
Eltham .. .. .	25

TABLE XVc.

Factories, Workshops, Laundries, Workplaces, and Homeworkers' Premises.

1.—*Inspection.*

Including Inspections made by Sanitary Inspectors.

Premises.	Number of	
	Inspections.	Written Notices
Factories .. .. . (Including Factory Laundries)	120	18
Workshops .. .. . (Including Workshop Laundries)	271	15
Workplaces .. .. .	120	31
Homeworkers' Premises ..	364	18
Total .. .. .	875	82

2.—*Defects found.*

Description.	Number of Defects.	
	Found.	Remedied.
<i>Nuisances under Public Health Act :</i>		
Want of Cleanliness .. .. .	36	21
Want of Ventilation .. .. .	11	11
Overcrowding .. .. .	1	1
Want of Drainage of floors ..	—	—
Other nuisances .. .. .	12	12
Sanitary Accommodation { insufficient— unsuitable or defective } ..	12	11
{ not separate for sexes } ..	2	2
Total .. .. .	74	58



TABLE XVc.—*continued.*3.—*Other Matters.*

Class.	Number.	
<b>Matters notified to H.M. Inspector of Factories:—</b>		
Failure to affix Abstract of the Factory and Workshop Act. (S. 133) .. .. .	4	
Action taken in matters remediable under the Public Health Acts, but not under the Factory Act (S. 5).	2	
Notified by H.M. Inspector ..	2	
Reports (of action taken) sent to H.M. Inspectors	0	
<b>Underground Bakehouses (S. 101) :—</b>		
In use during 1903 .. .. .	24	
Certificates granted {	in 1903 .. .. .	24
	in 1904-1905 .. .. .	0
	in 1906 .. .. .	1
	in 1907-1908-1909 .. .. .	0
	in 1910 .. .. .	1
	in 1911-1913 .. .. .	0
In use during 1913 .. .. .	14	
<b>Workshops on the Register (S. 131) at end of 1913 :—</b>		
Workshop Laundries .. .. .	12	
„ Bakehouses .. .. .	40	
Other Workshops .. .. .	148	
Total number of Workshops on Register ..	200	

TABLE XVc.—*continued*

4.—*Home Work.*

Nature of Work.	Out Workers' Lists, Section 107.								Number of Inspections of Outworkers' premises.	Outwork in Unwholesome Premises, Section 108.			Outwork in Infected Premises, Sections 109, 110.		
	Lists received from Employers.				Number of Addresses of Outworkers received from Other Councils.	Number of Addresses of Outworkers forwarded to Other Councils.	Prosecutions.			Instances.	Notices served.	Prosecutions.	Instances.	Orders made (Sec. 109).	Prosecutions (Secs. 109, 110).
	Twice in the year.		Once in the year.				Failing to keep or permit in, section of Lists.	Failing to send lists.							
	Lists.	Outworkers.	Lists.	Outworkers.											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Wearing Apparel	42	158	4	12	68	16	..	..	129	12	12	..	..	..	..
Lace .. ..	..	..	..	..	4	..	..	..	..	..	..	..	..	..	..
Artificial Flowers	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Tennis Balls, etc.	6	586	..	..	18	103	..	..	232	6	6	..	..	..	..
Furriers .. ..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..
Brushes .. ..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Upholstery ..	2	3	..	..	..	..	..	..	2	..	..	..	..	..	..
	50	747	4	12	94	119	..	..	363	18	18	..	..	..	..



TABLE XVd.

## Proceedings during 1913.

PREMISES.	NUMBER OF PLACES.				Number of Inspections.	Number of Notices.	Number of Prosecutions.
	On Register at end of 1912.	Added in 1913.	Removed in 1913.	On Register at end of 1913.			
Milk Premises ..	117	11	12	116	192	25	0
Cowsheds ..	16	1	1	16	32	9	0
Slaughter-houses ..	12	0	0	12	46	4	0
Ice Cream Premises ..	89	7	14	82	164	8	0
Registered houses let in Lodgings )	432	10	10	432	531	360	0

*Overcrowding—*

Number of Dwelling Rooms overcrowded ..	101
Number remedied ..	101

*Underground Rooms—*

Illegal occupation dealt with during year ..	3
Number of rooms closed ..	0

*Insanitary Houses—*

Number closed under the Housing Town Planning, &c. Act..	13
--	----

*Number of Prosecutions under By-laws under Public Health Act, 1891—*

With respect to water closets, earth closets, etc.	0
With respect to insufficiency of water supply to water closets	0
With respect to drainage, etc. (Metropolis Management Act, sec. 202) ..	0

*Mortuaries—*

Total number of Bodies removed ..	179
Total number of Infectious Bodies removed ..	3

*Inspections of premises where food is prepared for sale ..* 130

*Number of Public Sanitary Conveniences removed or altered ..* 0

*Number of fixed ashpits removed ..* 0

TABLE XVI.

Details of House to House Inspections.

Name of Street.	Number of Houses Inspected.	Number where Defects were found.
RIVER WARD.		
Beresford Street .. ..	66	34
Bellwater Gate .. ..	6	3
Creton Street .. ..	23	8
Myrtle Street .. ..	8	2
Anglesea Road .. ..	23	4
The Flats, High Street .. ..	22	9
Sandy Hill Road .. ..	17	11
Brookhill Road .. ..	24	10
Nelson Street .. ..	11	4
Mulgrave Place .. ..	23	7
Red Lion Street .. ..	20	5
Brewer Street .. ..	28	6
Meeting House Lane .. ..	9	6
Collingwood Street .. ..	11	8
Rodney Street .. ..	10	4
Clara Place .. ..	12	9
Monk Street .. ..	12	5
Upper Market Street .. ..	11	6
Rope Yard Rails .. ..	13	2
Wellington Street .. ..	77	20
Rectory Place .. ..	11	2
Kingsman Street .. ..	19	6
New Street .. ..	7	2
Globe Lane .. ..	12	10
Charles Street .. ..	58	16
St. Mary's Street .. ..	8	3
Gough Street .. ..	25	14
Parsons Hill .. ..	6	2
Eleanor Road .. ..	42	12
Warren Lane .. ..	19	7
Union Street .. ..	13	—
Powis Street .. ..	28	8
Taylor's Buildings .. ..	5	3
Kates Place .. ..	13	9
Elizabeth Street .. ..	85	18
Glass Yard .. ..	6	—
Nile Street .. ..	7	4
Albert Road .. ..	129	62
Winifred Street .. ..	66	29



TABLE XVI.—continued.  
Details of House to House Inspections.

Name of Street.	Number of Houses Inspected.	Number where Defects were found.
RIVER WARD—cont.		
Rhea Street .. ..	62	17
Auberon Street .. ..	34	16
Davey's Square .. ..	10	3
Dock Street .. ..	27	11
Barge House Road .. ..	39	28
	1157	445
38.0 % Defects.		
DOCKYARD AND ST. MARY'S WARDS.		
Thrift Cottages .. ..	6	5
Warwick Street .. ..	60	30
Glenalvon Street .. ..	11	5
Joseph Street .. ..	27	16
Limbreys Buildings .. ..	11	11
Lower Wood Street .. ..	42	30
Sun Street .. ..	29	23
Frances Street .. ..	26	11
Hill Street .. ..	56	19
Rectory Grove .. ..	58	18
Trinity Street .. ..	8	6
Station Road .. ..	35	8
Waverley Cottages .. ..	7	1
Ogilby Street .. ..	48	37
Back Lane .. ..	9	6
Rideout Street .. ..	36	22
Eustace Place .. ..	14	7
Sims Buildings .. ..	10	7
Railway Cottages .. ..	8	8
Martyrs Passage .. ..	8	7
Godfrey Street .. ..	31	15
Lower Pellipar Road .. ..	20	10
Pellipar Place .. ..	4	2
Pellipar Road .. ..	28	13
Woodville Street .. ..	9	1
Mary Place .. ..	10	9
Sarah Place .. ..	6	5
North Kent Grove .. ..	22	10
North Kent Place .. ..	5	--

TABLE XVI.—continued.  
Details of House to House Inspections.

Name of Street.	Number of Houses Inspected.	Number where Defects were found.
DOCKYARD AND ST. MARY'S WARDS—cont.		
Morris Street .. ..	5	3
	<u>649</u>	<u>345</u>
St. GEORGE'S WARD.		53·0% Defects.
Belmont Place .. ..	5	3
Dacey Street .. ..	42	30
Eglinton Road, part of ..	16	10
Gildersome Street .. ..	61	25
James Street .. ..	41	23
Keemor Street .. ..	28	13
Montague Cottages .. ..	4	2
Nightingale Vale .. ..	30	14
Ritter Street .. ..	31	20
	<u>258</u>	<u>140</u>
ELTHAM WARD.		54·2% Defects
Back Lane .. ..	4	1
Bowness Terrace, Blanmerle Rd.	8	4
Kendal House .. ..	8	7
Deansfield Road .. ..	40	4
Elizabeth Terrace, High Street..	24	12
Elm Terrace .. ..	23	12
Grangehill Road .. ..	31	10
High Street .. ..	18	7
Messeter Place .. ..	7	4
Osborne Terrace, Lee Green ..	8	3
Pound Place .. ..	24	15
Reventlow Road .. ..	34	19
Roper Street .. ..	20	5
Theobalds Cotts., Southwood Rd.	7	3
	<u>256</u>	<u>106</u>
		41·2% Defects.



TABLE XVI.—continued.  
Details of House to House Inspections.

Name of Street.	Number of Houses Inspected.	Number where Defects were found.
BURRAGE AND HERBERT WARDS.		
Plumstead Common Road ..	24	13
Conduit Road .. ..	33	13
Hanover Road .. ..	59	19
Maxey Road .. ..	107	48
Red Lion Lane .. ..	58	41
East Street .. ..	28	14
Edge Hill .. ..	22	6
Eglinton Road .. ..	92	50
Plum Lane .. ..	39	7
Westdale Road .. ..	53	41
Herbert Road .. ..	53	17
Brent Road .. ..	5	2
Frederick Place .. ..	44	29
Eton Street .. ..	36	17
Barnfield Road .. ..	2	2
	655	319
		48·7 % D facts.
GLYNDON WARD.		
Richmond Place .. ..	42	18
Oliver Street .. ..	25	11
Earl Street .. ..	103	35
Elm Street .. ..	106	40
Park Road .. ..	51	18
Plumstead Road .. ..	97	30
Down Street .. ..	17	9
„ Place .. ..	7	4
Dawson Street .. ..	26	11
Swetenham Place .. ..	22	7
Sandbach Place .. ..	15	6
Ann Street .. ..	71	36
	582	225
		38·7 % Defects.

TABLE XVI.—continued.  
Details of House to House Inspections.

Name of Street.	Number of Houses Inspected.	Number where Defects were found.
ST. MARGARET'S AND CENTRAL WARDS.		
Orchard Road .. ..	107	28
Albatross Street .. ..	46	20
Timbercroft Road .. ..	81	30
Francis Street .. ..	86	20
Maxey Road .. ..	44	13
High Street .. ..	58	14
Vicarage Road .. ..	24	3
Coxwell Road .. ..	59	13
Ingledew Road .. ..	57	13
Liffler Road .. ..	59	15
Miriam Road .. ..	55	13
Orissa Road .. ..	22	6
Conway Road .. ..	118	19
Sladedale Road .. ..	74	26
Lee Street .. ..	38	5
Roydene Road .. ..	85	24
	1013	262
		25·8 % defects.
ST. NICHOLAS WARD.		
Kashgar Road .. ..	18	5
Bannockburn Road .. ..	89	48
Bastion Road .. ..	25	18
Bostall Hill .. ..	40	12
Swingate Lane (east side) .. ..	23	7
Scotch Flats, Bassant Road .. ..	11	4
King's Highway .. ..	35	17
Cemetery Cottages .. ..	7	5
Southland Road .. ..	9	2
Bleak Hill .. ..	11	5
Riyerdale Road .. ..	111	54
Viewland Road .. ..	35	14
Hull Place .. ..	10	5
Heath Villas .. ..	5	0
Bostall Lane .. ..	6	6
Grove Road .. ..	19	13
Abbey Grove .. ..	101	49



TABLE XVI.—continued.  
Details of House to House Inspections.

Name of Street.	Number of Houses Inspected.	Number where Defects were found.
St. NICHOLAS WARD—cont.		
Abbey Wood Road .. ..	81	23
Bassant Road .. ..	29	17
Heathfield Terrace .. ..	20	8
Tewson Road .. ..	118	65
Dingley Cottages, A.W. .. ..	4	4
Lakedale Road (east side) .. ..	33	15
Cordite Street .. ..	54	22
	<u>894</u>	<u>418</u>
		47.2 % Defects.

TABLE XVII.

Prosecutions under the Public Health and London County Council (General Powers) Acts.

No.	Date of Hearing.	Offence.	Situation.	Result.
1	1913 April 2	Failure to keep rooms in a cleanly and wholesome condition (By-laws, Houses let in Lodgings).	23 Balgowan Street ...	Summons withdrawn, conditions improved.
2	June 25	Dirty condition ... ..	43 Elm Street ... ..	Costs, 3/-. Work done date of hearing.
3	„ 25	No dust bin ... ..	43 Elm Street ... ..	Costs, 2/-. Supplied date of hearing.
4	July 24	Damp walls of house ... ..	9 Radnor Terrace ... ..	Costs, 3/-. Work done date of hearing.
5	Nov. 27	Dampness and dilapidations ... ..	38 Albion Road... ..	Costs 23/-. Order to abate in 14 days.
6	„ 3	Joseph Blake did expose for sale (as owner) 8 cwt. 1 qr. 12 lbs. of plums that were unsound and unfit for the food of man	92 Plumstead Road ... ..	Dismissed.
7	Dec. 18	Joseph Blake had in his possession 8 cwt. 1 qr. 12 lbs. of plums that were unsound and unfit for the food of man	92 Plumstead Road ... ..	Four months hard labour
8	„ 18	Robert Pearce owner of above ... ..	92 Plumstead Road ... ..	Fine £40 & £10 10s. 0d. costs, or 1 month.
9	„ 18	Richard Carter had above on his premises	92 Plumstead Road ... ..	Fine £5, or 14 days.



TABLE XVIII.

Summary of Articles Analysed, under the Sale of Food and Drugs Act, during the year ended 31st December, 1913.

Article.	Number Analysed.	Number Adulterated.
Milk .. .. .	303	24
Separated Milk .. .. .	10	..
Butter .. .. .	73	2
Vinegar .. .. .	4	..
Coffee .. .. .	9	..
Jams .. .. .	10	..
Potted Fish .. .. .	9	..
Iron Pills .. .. .	1	..
Mustard .. .. .	5	..
Drugs .. .. .	21	..
Whisky .. .. .	6	..
Rice .. .. .	4	..
Cocoa .. .. .	8	..
Potted Meat .. .. .	6	..
Cheese .. .. .	1	..
Flour .. .. .	8	..
Lard .. .. .	5	..
Pepper .. .. .	4	..
Sausages .. .. .	12	..
Cream .. .. .	14	3
	513	29

TABLE XVII  
 Prosecutions under the Public Health and London County Council (General Powers) Acts.

TABLE XVIII A.

Prosecutions under Food & Drugs Act during year 1913.

No.	Article.	Nature of Offence.	Name and Address of Vendor.	Result of Proceedings.
1	Milk ..	12.94 % added water ..	J. R. Grove, 1 The Broadway, Abbey Wood	Fined 2/- and 12/6 costs
2	Milk ..	7.65 % ,, ..	G. H. Holdway, 45 Bostall Hill ..	Fined 2/- and 12/6 costs
3	Milk ..	11.7 % ,, ..	E. Hiscock, 14 Blenheim Terrace, Wickham Lane	Dismissed on proof of Warranty
4	Milk ..	2.71 % ,, ..	W. M. Forward, Huntingford Farm, Mere, Wilts	Dismissed
5	Milk ..	9.66 % ,, ..	W. C. Bunn, 13 Hinstock Road ..	Fined 2/- and 5/- costs
6	Milk ..	36.6 % deficient in fat	A. P. Godden, 229 High Street, Plumstead	Dismissed on proof of Warranty
7	Milk ..	15.6 % ,, ..	J. Couzens, 10 Chapel Street ..	Dismissed on proof of Warranty
8	Milk ..	18.0 % ,, ..	R. Pollock, Jersey Farm Dairy, High Road, Mottingham	Costs 12/6
9	Milk ..	16.6 % ,, ..	E. A. & L. King, 4 Spray Street ..	Fined 40/- and 28/- costs



TABLE XVIII A.—*continued.*

No.	Article.	Nature of Offence.	Name and Address of Vendor.	Result of Proceedings.
10	Milk ..	15.3 % deficient in fat..	H. N. Perrett, 2 The Parade, New Eltham	Fined £5 and 23/- costs
11	Milk ..	8.33 % .. ..	Attenborough Bros., 60 Sand Street ..	Fined 20/- and 22/- costs
12	Milk ..	64.0 % .. ..	W. Joy, 90 High Street, Woolwich ..	Fined 60/- and 23/- costs
13	Milk ..	12.66 % .. ..	T. Clark, 33 Butterfield Road, Lee ..	Dismissed
14	Butter ..	Upwards of 75 % Foreign fat	E. Gray, 36 High Street, Eltham ..	Fined 40/- and 23/- costs
15	Milk ..	15.3 % deficient in fat.	W. H. Jones, 39 Beresford Street ..	Fined 40/- and 23/- costs
16	Milk ..	6.0 % .. ..	J. W. Hearn, 61 Bannockburn Road ..	Fined 10/- and 12/6 costs
17	Milk ..	8.5 % added water ..	W. J. Gittings, Grosmount Road ..	Dismissed, 23/- costs

TABLE XIX.

Food Seized, or Surrendered by Owners, as unfit for Consumption.

Articles.	Quantity.	Date.	Remarks.	Reason.
Pork .. .. .	2 pieces ..	Jan. 1	Surrendered	Abscesses
Ox Liver .. .. .	1 .. .. .	" 9	"	Flukey
Pig's Liver .. .. .	1 .. .. .	" 23	"	Cirrhosis
Ox Livers .. .. .	2 .. .. .	" 31	"	Flukey
Ox Lungs .. .. .	1 .. .. .	" 31	"	Tuberculous
Sheep's Pluck .. .. .	1 .. .. .	Feb. 4	"	Strongyli
Beef .. .. .	2 pieces ..	" 18	"	Tuberculous
Pig, carcase and offal .. .. .	128 lbs. ..	" 19	"	Tuberculous
Beef .. .. .	108 lbs. ..	" 22	"	Unsound
Beef .. .. .	129 lbs. ..	" 24	"	Unsound
Ox Liver .. .. .	1 .. .. .	" 28	"	Echinococci
Beef .. .. .	128 lbs. ..	" 27	"	Unsound
Ox Lungs .. .. .	1 .. .. .	Mar. 7	"	Tuberculous
Ox Liver .. .. .	1 .. .. .	" 11	"	Abscesses
Beef .. .. .	26 lbs. ..	" 11	"	Unsound
Beef .. .. .	132 lbs. ..	" 13	"	Unsound
Pig and offal .. .. .	112 lbs. ..	" 13	"	Tuberculous
Pork .. .. .	28 lbs. ..	" 18	"	Wounds and abscesses
Apples .. .. .	1 box .. ..	" 22	"	Unsound
Ox Lungs .. .. .	1 .. .. .	" 25	"	Tuberculous
Ox Livers .. .. .	2 .. .. .	April 4	"	Flukey
Dabs .. .. .	1 box .. ..	" 4	"	Unsound
Condensed Milk .. .. .	384 tins ..	" 14	"	Unsound
Ox Liver .. .. .	1 .. .. .	" 18	"	Abscesses
Sheep's Liver .. .. .	1 .. .. .	" 21	"	Cavernous angioma
Apples .. .. .	1 box .. ..	" 23	"	Unsound
Ox Liver .. .. .	1 .. .. .	" 23	"	Echinococci
Ox Liver .. .. .	1 .. .. .	" 29	"	Abscesses
Herrings .. .. .	4 boxes ..	May 1	"	Unsound
Herrings .. .. .	4 boxes ..	" 6	"	Do.
Beef .. .. .	40 lbs. ..	" 15	"	Do.
Herrings .. .. .	1 box .. ..	" 27	"	Do.
Ox Livers .. .. .	2 .. .. .	June 18	"	Flukey
Ox Liver and Lungs .. .. .	1 .. .. .	" 23	"	Tuberculous
Ox Livers .. .. .	2 .. .. .	July 22	"	Echinococci
Ox Lungs .. .. .	1 .. .. .	" 22	"	Echinococci
Plums .. .. .	15 baskets ..	" 29	"	Unsound
Potatoes .. .. .	25 bags ..	Aug. 1	"	Do.
Mackerel .. .. .	5 barrels ..	" 1	"	Do.
Ox Liver .. .. .	1 .. .. .	" 20	"	Flukey
Pollock .. .. .	1 box .. ..	" 23	"	Unsound
Ox Livers .. .. .	3 .. .. .	" 25	"	Flukey
Plums .. .. .	936 lbs. ..	" 30	Seized	Unsound



TABLE XIX.—*continued.*

Articles.	Quantity.	Date.	Remarks.	Reason.
Plums	8960 lbs.	Sept. 1	Surrendered	Unsound
Plums	6720 lbs.	" 5	"	Do.
Plums	6720 lbs.	" 6	"	Do.
Plums	11200 lbs.	" 8	"	Do.
Plums	6720 lbs.	" 9	"	Do.
Plums	4480 lbs.	" 11	"	Do.
Haddocks	1 trunk	" 3	"	Flukey
Skate	1 box	" 5	"	Unsound
Coalie	1 box	" 10	"	Do.
Beef	294 lbs.	" 15	"	Do.
Beef	1 piece	" 17	"	Do.
Ox Liver	1	" 18	"	Flukey
Ox Livers	2	" 18	"	Echinococci
Haddocks	1 trunk	" 17	"	Unsound
Winkles	1 bag	" 22	"	Unsound
Ox Tongues	2	" 23	"	Actinomycosis
Whiting	1 trunk	" 29	"	Unsound
Ox Liver	1	Oct. 1	"	Flukey
Haddocks	1 trunk	" 2	"	Unsound
Bloaters	3 boxes	" 2	"	Unsound
Ox Livers	3	" 13	"	Flukey
Mackerel	2 boxes	" 15	"	Unsound
Kidneys	206	" 22	"	Do.
Herrings	1 barrel	" 23	"	Do.
Haddocks	1 box	" 24	"	Do.
Pig's Liver	1	" 30	"	Cirrhosis
Dabs	1 box	Nov. 5	"	Unsound
Dabs	1 box	" 5	"	Do.
Skate	32 lbs.	" 7	"	Do.
Pig's Plucks	2	" 10	"	Strongyli
Ox Livers	2	" 11	"	Flukey
Ox Livers	2	" 20	"	Flukey
Sheeps' Pluck	2	" 24	"	Strongyli
Pig and offal	1	" 25	"	Tuberculous
Dog Fish	1 trunk	Dec. 3	"	Unsound
Ox Tongue	1	" 8	"	Antinomycosis
Mutton	99 lbs.	Nov. 24	"	Unsound
Mutton	18 lbs.	Dec. 13	"	Do.
Mutton	138 lbs.	" 15	"	Do.
Beef	29 lbs.	" 16	"	Do.
Ox Livers	2	" 17	"	Flukey
Pork	80 lbs.	" 21	"	Badly bled and discoloured
Apples	4 boxes	" 22	"	Unsound
Beef	132 lbs.	" 23	"	Unsound

TABLE XIX.—continued.

Articles.	Quantity.	Reason.
<b>SUMMARY—</b>		
Pigs, carcasses of	.. 3 ..	Tuberculous
Pork ..	.. 4 lots ..	Abscesses and unsound
Pig's Liver ..	.. 2 ..	Cirrhosis
Pig's Pluck ..	.. 2 ..	Strongyli
Mutton ..	.. 255 lbs. ..	Unsound
Sheep's Pluck	.. 3 ..	Strongyli
Sheep's Liver	.. 1 ..	Cavernous angioma
Ox Tongues..	.. 3 ..	Antinomycosis
Ox Livers ..	.. 31 ..	Abscesses, Flukey, Tuberculous, and Echinococcus
Ox Lungs ..	.. 5 ..	Tuberculous and Echinococcus
Beef ..	.. 11 lots ..	Unsound and Tuberculous
Kidneys ..	.. 206 ..	Unsound
Condensed Milk	.. 384 tins ..	Unsound
Fish ..	.. 34 boxes ..	Unsound
Apples ..	.. 6 boxes ..	Unsound
Potatoes ..	.. 25 bags ..	Unsound
Plums ..	.. 46006 lbs. ..	Unsound



## TABLE XX.

## LIST OF LEVEL BAKEHOUSES.

Name.	Address.
Chadwell Bros.	60 Plumstead Common Road
C. Pullen	105 do.
C. Cheesman	126 High Street, Plumstead
J. E. Porter	1 Riverdale Road, do.
F. Bohmer	307 High Street do.
A. E. Paine	14 Gunning Street. do.
A. Jewiss	68 Glyndon Road, do.
C. Letchford	109 Plumstead Road, do.
J. Clark	152 do. do.
P. H. Mack	111 High Street, Woolwich
A. Bradshaw	3 Green's End, do.
E. Erdman	184 Elizabeth Street, North Woolwich
C. Haas	122 Albert Road, do.
H. Meyer	33 Samuel Street, Woolwich
Mrs. Dennis	90 Brookhill Road, do.
W. Jones	36 Chapel Street, do.
J. B. Fyson	94 High Street, Eltham
W. Redler	114 do. do.
F. Cook	142 do. do.
F. J. Cook	5 The Parade, New Eltham
G. A. Finch	13 do. do.
W. Millar	6 Well Hall Parade, Eltham
R. Moakes	53 Cordite Street, Plumstead
C. Tucker	53 Lakedale Road, do.
E. Dalton and F. Mendham	4 Plumstead Road
R. Tsinn	100 High Street, Woolwich

TABLE XXA.

## LIST OF CERTIFIED UNDERGROUND BAKEHOUSES.

NAME.		ADDRESS.	
—	(unoccupied) ..	33, Eglinton Road,	Plumstead
Alderton, Ltd.	..	50, Herbert Road,	do.
—	(unoccupied) ..	14, Westdale Road,	do.
A. B. Adams	..	223, High Street,	do.
J. Werner	..	1, Park Road,	do.
—	(unoccupied) ..	58, Pattison Road,	do.
F. Cox	..	46, Hudson Road,	do.
—	(unoccupied) ..	14, Conway Road,	do.
—	(unoccupied) ..	30, Burrage Road,	do.
G. Scott	..	16, Armstrong Place,	do.
Virgoe & Sons	..	13, Eton Road,	do.
J. Colver..	..	57, Plumstead Road,	do.
R. C. Davis	..	2, Crescent Road,	do.
A. E. Sims	..	24, St. James's Place,	do.
—	(unoccupied) ..	165, Sandy Hill Road,	do.
—	(unoccupied) ..	57 Burrage Road,	do.
—	(unoccupied) ..	16, Woolwich Common,	Woolwich
H. Adams	..	31, Beresford Street,	do.
F. Wilkening	..	72, Henry Street,	do.
W. C. Clothier	..	51, Albion Road,	do.
—	(unoccupied) ..	23, George Street,	do.
—	(unoccupied) ..	21, Albion Road,	do.
—	(unoccupied) ..	32, Church Street,	do.
Mrs. Attenborough	..	60, Sand Street,	do.
—	(unoccupied) ..	81 & 82, Brookhill Road,	do.
—	(unoccupied) ..	8, Hill Street,	do.
J. Fletcher	..	15, New Road	do.



TABLE XXB.

## LIST OF FACTORY BAKEHOUSES.

Name.	Address.
J. Fletcher .. ..	57, Burrage Road, Plumstead
T. Newman .. ..	94, Wellington Street, Woolwich
Royal Arsenal Co-operative Society	127 to 153, Powis Street, Woolwich
Alderton, Ltd. .. ..	Malton Street, Plumstead
Mackintosh Bros. ..	Warwick Terrace, Plumstead Common
J. Werner .. ..	1, Park Road, Plumstead
A. Chapman .. ..	2, High Street, Plumstead
Virgoe & Sons .. ..	13, Eton Road, Plumstead
Alderton, Ltd. .. ..	81, Park Road, Plumstead

TABLE XXI.

## LIST OF SLAUGHTERHOUSES.

No.	Name of Owner.	Situation.
1	Frederick Hedges .. ..	168. High Street, Eltham
2	William Francis Bartlett ..	78, Frederick Place, Plumstead
3	H. Reed & Co., Ltd. ..	25, Parry Place, Plumstead
4	Do. .. ..	6, High Street, Plumstead
5	Hedley Vicars .. ..	41, Church Street, Woolwich
6	William Francis Bartlett ..	14, Church Street, Woolwich
7	H. Reed & Co., Ltd. ..	Love Lane (rear of Wellington Street), Woolwich
8	James & George Mitchell ..	25, Hare Street, Woolwich
9	Hedley Vicars .. ..	30, Hare Street, Woolwich
10	H. Reed & Co., Ltd. ..	38, Plumstead Common Road, Plumstead
11	Henry Fretter .. ..	33, Herbert Road, Plumstead
12	Royal Arsenal Co-operative Society	Bostal Farm, Plumstead



TABLE XXII.

## LIST OF COWHOUSES.

No.	Name of Owner.	Situation.
1	John B. Stocker .. .. .	Cold Harbour Farm, Chislehurst
2	Alfred Low .. .. .	Park Farm, Eltham
3	W. F. Corp .. .. .	Lyme Farm, Eltham
4	Charles Umfreville Fisher and William F. Fisher, Crescent Farm, Sidcup	Belmont Park Farm, Eltham
5	John Grace .. .. .	Pippinhall Farm, Eltham
6	William Ridewood .. .. .	Chapel Farm, Eltham
7	George Keen .. .. .	Clay Farm, New Eltham
8	Maurice Bayley .. .. .	Middle Park Farm, Eltham
9	Harry Furber .. .. .	Southend Farm, Eltham
10	Charles William Killick .. .. .	52, St. James' Place, Plumstead
11	Charles William Killick .. .. .	13, Princes Road, Plumstead
12	Henry Woolsey .. .. .	50, Francis Street, Plumstead
13	William Ridewood .. .. .	3, Ripon Road, Plumstead
14	F. G. Cock .. .. .	13, Raglan Road, Plumstead
15	Jas. Buckingham .. .. .	Rear of 14, 15 & 16, Pellipar Road, Woolwich
16	Albert George Look.. .. .	Keightley House, Southwood Road

## TABLE XXIII.

## LIST OF MILK SELLERS.

No.	Name.	Address.
1	Perrett, H. N. .. ..	2 The Parade, New Eltham
2	Webb, F. W. .. ..	58 Brewery Road
3	Carr, E. .. ..	46 Kingsman Street
4	Finnimore, J. A. .. ..	83 Park Road
5	Squirrell, J. .. ..	57 Church Street
6	Jeal, W. H. .. ..	139 Plumstead Road
7	Cock, G. .. ..	13 Raglan Road
8	Royal Arsenal Co-op. Society. ..	Lakedale Road
9	Do. .. ..	15 Brewery Road
10	Do. .. ..	143 Powis Street
11	Do. .. ..	Herbert Road
12	Do. .. ..	147 & 151 Powis Street
13	Woolsey, H. .. ..	50 Francis Street
14	Howe, J. R. .. ..	82 High Street, Eltham
15	Hawkins, Ellen M. .. ..	2 St. Nicholas Road
16	Furber, Harry .. ..	Southend Farm, Eltham
17	Large, Daniel J. .. ..	6 Herbert Road
18	Hiscock, E. .. ..	14 Blenheim Terrace
19	Dalton, R. G. .. ..	55 Eglinton Road
20	Butter Bros. .. ..	49 Woolwich Common
21	Do. .. ..	10 Jackson Street
22	Ward, S. .. ..	1 Nightingale Vale
23	Webb, Y. .. ..	10 Beresford Square
24	Dennis, Ellen .. ..	90 Brookhill Road
25	Bayley, M. .. ..	Middle Park Farm Eltham
26	Godden, A. A. .. ..	229. High Street, Plumstead
27	Corp, W. F. .. ..	Lyme Farm, Eltham
28	Pearce, R. A. .. ..	175 Plumstead Common Road
29	Christmas, Hannah .. ..	18 Well Hall Parade, Eltham
30	Dodson, W. .. ..	138 Plumstead Common Road
31	Dolphin, T. G. .. ..	89 Maxey Road
32	Corp, C. .. ..	142 High Street, Woolwich
33	Clements, E. J. .. ..	2 Cross Street
34	Bohmer, H. .. ..	307 High Street, Plumstead
35	Couzens, Jessie .. ..	10 Chapel Street
36	Stevens, F. .. ..	100 Roydene Road
37	Ridewood, F. .. ..	116 High Street, Eltham
38	Rose, J. .. ..	64 Hargor Road
39	Stevens, H. .. ..	27 Church Street
40	Needham, Elizabeth.. ..	94 High Street, Woolwich
41	Webb, F. W. & Co. .. ..	16 Lakedale Road
42	Finch, G. A. .. ..	13 The Parade, New Eltham
43	Davis, D. H. .. ..	170 Albert Road
44	Smith, Elizabeth .. ..	12 The Broadway, Eltham
45	Bennett, Rose .. ..	22 Glyndon Road



TABLE XXIII.—*continued.*

No.	Name.	Address.
46	Williams, Ellen .. ..	12 Thomas Street, Woolwich
47	Bartrum, A. .. ..	167 Kingsman Street
48	Jones, D. .. ..	65 Maxey Road
49	Jaques, H. .. ..	56 Anglesea Road
50	Killick, C. W. .. ..	52 St. James's Place
51	Parkes, J... ..	Fountain Stores, The Slade
52	Lamb, Annie .. ..	29 Admaston Road
53	Jones, E. C. .. ..	6 Samuel Street
54	Harrington, J. .. ..	26 Prospect Row
55	Cole, E. J. .. ..	18 Camrose Street
56	Finnimore, W. J. .. ..	21 Walpole Place
57	Lyons, J. & Co., Ltd. .. ..	99 Powis Street
58	McGee, Jane .. ..	42 Mulgrave Place
59	Attenborough, Caroline .. ..	18 Prospect Place
60	Marsh, C... ..	Ashurst, Shrewsbury Lane
61	Mumford, Kate F. .. ..	22 Cross Street
62	Holmes, Blanche .. ..	43 Bostall Hill
63	Gill, Emily A. .. ..	398 High Street, Plumstead
64	Brinkworth, W. J. .. ..	82 Purrett Road
65	Palmer, P. .. ..	82 Purrett Road
66	Espline, G. .. ..	48 High Street, Woolwich
67	R.A. Co-operative Society .. ..	The Links, Plumstead Common Road
68	Jones, W. H. .. ..	39 Beresford Street
69	Holdway, Georgina H. .. ..	45 Bostall Hill
70	Buck, E. V. .. ..	52 Raglan Road
71	Challis, P. W. .. ..	4 High Street, Woolwich
72	Gee, A. J... ..	147 Plumstead Road
73	Joy, W. G. .. ..	36 Thomas Street
74	Crayfourd, J. E. .. ..	40 Orchard Road
75	Leaver, E. A. .. ..	25 Garland Street
76	Buckingham, J. .. ..	16 Pellipar Road
77	Corp, W. F. .. ..	3 Wellington Street
78	Flint, Emma .. ..	124 Maxey Road
79	Gittings, W. J. .. ..	"Cold Blow," Plumstead Common
80	Curtis, Stephen .. ..	181 Abbey Wood Road
81	Grace, James .. ..	18 The Broadway, Eltham
82	Cornwall, J. .. ..	14 Frances Street
83	Sheldon, W. .. ..	101 Sand Street
84	Adams, H. .. ..	31 Beresford Street
85	Muir, W. C. .. ..	28 Conway Road
86	Handsley, Ltd. .. ..	68½ Bloomfield Road
87	Townsend, Rose E. .. ..	104 Brookhill Road
88	Voice, C. .. ..	102 Ann Street, Plumstead
89	Trodd, W. J. .. ..	19 Green's End, Woolwich

TABLE XXIII.—*continued.*

No.	Name.	Address.
90	Bunn, W. C.	13 Hinstock Road, Plumstead
91	Collins, G.	2B New Road, Woolwich
92	Williamsons, Ltd.	66 Powis Street, Woolwich
93	Willis, Jessie	2 Ritter Street, Woolwich
94	Fairbrother & Co.	94 Wellington Street, Woolwich
95	Slater, E. T.	30 High Street, Eltham
96	Hilder, E.	102 Ann Street, Plumstead
97	Couzens, J.	46 Church Street, Woolwich
98	Phillips, Sophia	141 Albert Road, North Woolwich
99	Warhaft, Violet	107 Pattison Road, Plumstead
100	Virgoe & Sons	13 Eton Road, Plumstead
101	Adams, E. J.	1 Shooters Hill Gardens, Eltham
102	Adams, H.	56 Artillery Place, Woolwich
103	Charles, Herbert	35 Sand Street, Woolwich
104	Look, Albert G.	Southwood Road, New Eltham
105	Cook, Margaret	25 Plum Lane, Plumstead
106	Brown, T. N.	18 Oliver Street, Plumstead
107	Wilkinson, A. J.	52 Whitworth Road, Plumstead



TABLE XXIV.

LIST OF APPLICANTS REGISTERED AS PURVEYORS OF MILK  
DURING 1913.

No.	Name.	Address.
108	Hoar, J. (Junr.) .. ..	40 Saunders Road
109	Grove, J. R. .. ..	1 The Broadway, Abbey Wood
110	Wilkening, A. E. G. .. ..	63 Grffin Road
111	Hearn, J. W. .. ..	61 Bannockburn Road
112	Naylor, L. .. ..	82 Plumstead Road
113	Grayson, J. .. ..	41 Hylton Street
114	Balster, W. H. .. ..	147 Burrage Road
115	Cheesman, C. .. ..	126 High Street, Plumstead
116	Campbell, W. W. .. ..	22 George Street













