

[Report of the Medical Officer of Health for Acton].

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Urban District of Acton.

✻

. Annual Report .

✻ ✻

OF THE

Medical Officer of Health

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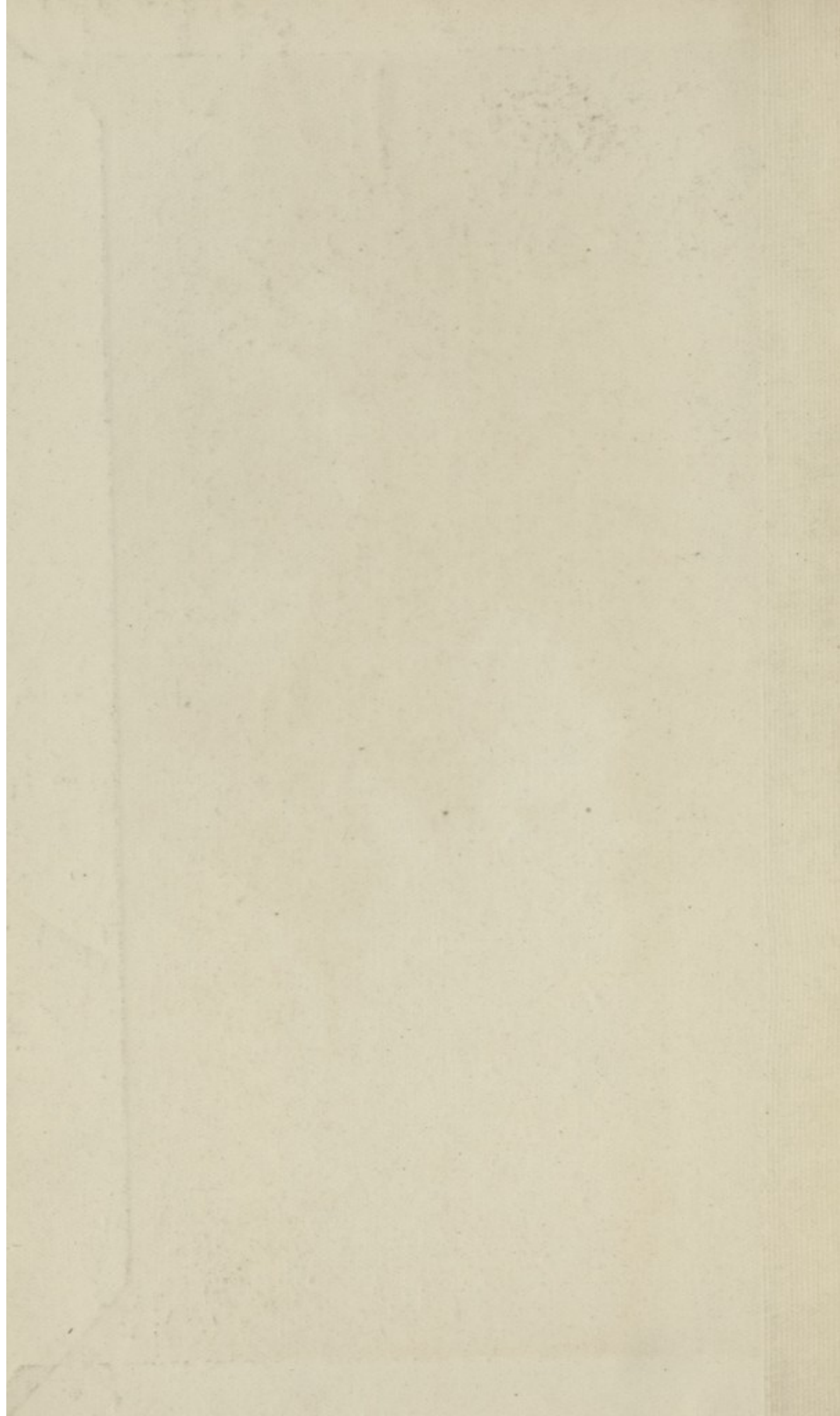
THE REPORT

ON THE

Medical Inspection of Schools,

.. for the Year ..

1913.



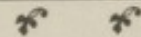


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Urban District of Acton.

. Annual Report .



OF THE

Medical Officer of Health

.. for the Year ..

1913.



INDEX.

	Page.
Anterior Poliomyelitis	32
Baby Show	62
Birth Rate	10
" " District	10
" " Illegitimate	13
" " Ward	11
Cancer	73
Census Statistics	
" " Age incidence of population	17
" " Buildings	7
" " Population	7
" " Street population in South West Ward	8
" " Ward distribution of population	8
Dairies and Cowsheds	75
Day Nursery	55
Death Rate	14
" " Age incidence	15
" " Outside deaths	18
" " Ward distribution	17
Diarrhoeal Diseases	65
Diphtheria	27
Enteric Fever	31
Factories and Workshops	81 & 88
Home Office Table	88
Housing	76
House to House Inspection	79
Infant Consultations	60
Infantile Mortality	45
" " 1907—1910	49 & 57
" " 1911—1913	57
" " Employment of married women in relation to	50
Inquests	73
Inhabited house duty—exemption	76
Isolation Hospital	81
Laboratory—Council	75
Local Government Board Tables	83-88
Measles	36
Mortality between 1 and 5 years of age	69
Mortuary—Public	74
Notification of Births Act, 1907	72
Notification of Infectious Diseases	19
" " " Acton, 1913	19
" " " " 1890—1913	22
" " " County of Middlesex	20
Outworkers	89
Population	6
Sanitary Improvements—Table of	91
Scarlet Fever	29
Sewage Disposal	76
Slaughter Houses	75
Tuberculosis	37
" Deaths	37
" Notification	37
" Occupation of sufferers	37 & 43
Unsound Food	75
Whooping Cough	37
Zymotic death-rate	19

By the Order of the Local Government Board, dated December 13th, 1910, Article 19, section 14, it is prescribed that the Medical Officer of Health shall as soon as practicable after December 31st in each year make an Annual Report to the Council up to the end of December, on the Sanitary circumstances, the Sanitary Administration, and the vital statistics of the District.

In addition to any other matters upon which he may consider it desirable to report, his Annual Report shall contain the information indicated in the following paragraphs, together with such further information as We may from time to time require :—

(a) An account of any influences threatening the health of the District, the prevalence of infectious or epidemic disease therein, and the measures taken for their prevention.

(b) An account of all general and special enquiries made during the year.

(c) An account of the work performed by the Inspector of Nuisances during the year, including the statement supplied in pursuance of Article 20 (16) of this Order.

(d) A statement as to the conditions affecting the wholesomeness of the milk produced or sold in the District.

(e) A statement as to the conditions affecting the wholesomeness of foods for human consumption, other than milk, produced or sold in the District.

(f) A statement as to the sufficiency and quality of the water supply of the District and of its several parts, and in areas where the supply is from waterworks, information as to whether the supply is constant or intermittent.

(g) A statement as to the pollution of rivers or streams in the District.

(h) A statement as to the character and sufficiency of the arrangements for the drainage, and sewage disposal in all parts of the District.

(i) A statement as to the privy, water-closet, and other closet accommodation in the District, including information as to the approximate number of each type of privy and closet.

(j) A statement as to the character and efficiency of the arrangements for the removal of house-refuse, and the cleansing of earth closets, privies, ashpits, and cesspools in the District.

(k) A statement with regard to the housing accommodation of the District as required by Article 5 of the Housing (Inspection of District) Regulations, 1910, and an account of any other action taken by the Council under the Housing, Town Planning, &c., Act, 1909, bearing on the public health.

(l) A statement as to the vital statistics of the District, including a tabular statement, in such form as We may from time to time direct, of the sickness and mortality within the District.

Under section 132 of the Factory and Workshop Act, 1901, the Medical Officer of Health is also required in his Annual Report to report specifically on the administration of the Act in workshops and workplaces, and to send a copy of his Annual Report, or so much of it as deals with this subject, to the Secretary of State.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1913.

COUNCIL OFFICES,
ACTON,

March, 1914.

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

MISS SMEE AND GENTLEMEN,

I beg to submit my Annual Report on the Vital Statistics and Sanitary conditions of the district for the year 1913.

The population at midsummer has been estimated at 60,000. This is lower by over 2,000 than the estimate of the Registrar-General.

The birth-rate still continues to diminish, and last year it was the lowest on record.

The death-rate is slightly higher than that of 1912, but lower than the quinquennial and the decennial average.

The infantile mortality is also higher than that of 1912, but with that exception it is by a considerable margin the lowest on record.

446 compulsory notifications of infectious diseases were received. This number is lower than that of 1912, due to the reduced prevalence of Scarlet Fever, only 80 cases of this disease being notified compared with 315 in 1912.

There was an increase in the number of notifications of Diphtheria, but the number of deaths from the disease remained the same as in the previous year.

There was another reduction in the number of notifications of Enteric Fever, and no death occurred from the disease.

The Public Health Tuberculosis Regulations, 1912, came into force on February 1st, 1913, and, as a result, there was an increase in the number of notifications of Tuberculosis. There is also a higher death-rate from Pulmonary Tuberculosis or Consumption of the Lungs.

The work of the Laboratory has considerably increased, owing largely to the examination of contacts prior to their return to school. 1,528 specimens were examined during the year.

The routine inspection of dwelling houses has proceeded steadily, and 594 house-to-house inspections were made, but some streets have already required reinspection.

A number of houses in Shaftesbury Road, Junction Road, and Stanley Road are let out in one and two-roomed tenements, and it is only by frequent inspections that the premises are kept in a fairly sanitary condition and overcrowding prevented.

The following is a summary of the vital statistics for the year :—

Estimated population	60,000
Birth-rate per 1,000 inhabitants	25.3
Death rate per 1,000 inhabitants	11.55
Phthisis death-rate per 1,000 inhabitants ...	1.
Death-rate from other forms of Tuberculosis per 1,000 inhabitants	.24
Zymotic death-rate per 1,000 inhabitants ...	1.24
Respiratory death-rate per 1,000 inhabitants	2.1
Cancer death-rate per 1,000 inhabitants ...	.9
Infantile mortality per 1,000 births	83.

POPULATION, SOCIAL CONDITIONS, &c.

At the Census of 1911, the population of Acton was 57,497. The preliminary figure was 57,523, but subsequently it was revised.

It had been hoped that the final results of the Census would have been published ere this, and deductions from the report could have been made. Some of the figures have already been published, and it probably will be advisable to include them here. The following table gives the number of the different kinds of buildings, together with the number of occupiers in each class of building :—

	1901		1911										
	Total	Total (Cols. 4-11)	Buildings used as Dwellings							Vessels, Sheds, Vagrants, &c.	Separate Flats (included in col. 5)	Buildings not used as Dwellings	
			Ordinary Dwelling Houses	Blocks of Flats	Shops	Hotels, Inns and Public Houses	Offices, Ware- houses, Workshops and Factories	Institutions	Others			Kind of Building	No.
Cols.—1	2	3	4	5	6	7	8	9	10	11	12	13	14
URBAN DISTRICTS													
Acton U.D.												Places of Worship ...	20
Number Inhabited	6,086	9,445	7,587	1,161	540	38	46	40	33	—	2,447	Government and Municipal Buildings ...	4
Separate Occupiers	8,326	12,965	9,652	2,471	677	38	48	40	34	5	2,471	Shops ...	98
Population ...	37,744	57,497	43,273	10,439	2,825	234	184	333	187	22	10,439	Offices ...	10
Uninhabited	454	490	438	2	35	1	9	1	4	—	98	Warehouses, Workshops, Factories ...	122
Being built	131	77	61	1	13	—	2	—	—	—	10	Theatres and other places of amusement ...	1

The number of persons in each Ward was :— —

North-East.	North-West.	South-East.	South-West.
14,576	11,492	14,599	16,830

The population of the South-West Ward was obtained in greater detail from the Registrar-General, and the following table gives the particulars as to the population and sex distribution in each street :—

Street. South-West Ward.	Population.	
	Males.	Females.
Acton Lane	252	267
Albert Grove	17	18
All Saints' Road	83	98
Antrobus Road	181	193
Avenue Crescent	42	72
Avenue Gardens	68	106
Avenue Road	125	179
Beaumont Road	225	261
Bollo Bridge Road	538	661
Bollo Lane	290	334
Braemar Road	14	14
Bridgman Road	263	249
Brouncker Road	135	163
Church Path	192	220
Cleveland Road	27	31
Colville Road	414	432
Cunnington Street	25	34
Enfield Road	74	81
Fletcher Road	247	256
Hanbury Road	195	199
Heathfield Road	52	117
Holland Terrace	90	97
Junction Road	81	94
Kent Road	180	207
Kingswood Road	220	226
Leythe Road	173	200
Margaret Terrace	95	115

Meon Road	150	139
Newton Avenue	170	155
Osborne Road	479	347
Packington Road	178	199
Palmerston Road	164	175
Park Road East	104	134
Park Road North	331	398
Petersfield Road	347	340
Ramsay Road	160	162
Reynolds Road	26	36
Roslin Road	55	72
Rothschild Road	321	333
Shaftesbury Road	122	153
Strafford Road	204	230
Stanley Road	236	255
Steele Road	53	73
Stirling Road	278	306
Temple Road	141	148
Weston Road	215	219
	8,032	8,798

At midsummer, 1913, the Registrar-General estimated the population to be 62,230. It has been explained in previous reports that this estimate is based on the assumption that the rate of increase which obtained in the last intercensal period is being maintained. There is ground to believe that this increase is not maintained, and that the increase in the intercensal period was not an uniform one. The great increase occurred between 1901 and 1905. Since 1905 the increase has been fairly constant, but the extent is not nearly as great as it was prior to that date. I estimate the population on June 30th, 1913, to be 60,000, and the rates in this Report are based on that estimate. This estimate is based on the number of new houses erected. The Surveyor has kindly supplied me with particulars of buildings erected, and between July 1st, 1912, and July 1st, 1913, 167 dwelling houses, 13 factories, 2 shops, and 40 additions to buildings were completed.

BIRTHS.

Number of Births	...	...	...	...	1,522
Birth-rate per 1,000 inhabitants	...	...	...	...	25.3
Birth-rate per 1,000 inhabitants in England and Wales	...	...	...	...	23.9
Birth-rate per 1,000 inhabitants in the 96 large towns	...	...		...	25.1

1,486 births were registered in the district, 778 males and 708 females. In addition, the Registrar-General transferred 36 births from other districts to Acton—19 males and 17 females. There were no outward transfers.

The birth-rate of 1913 is the lowest on record for Acton, and is .4 per 1,000 lower than that of 1912.

In last year's report the birth-rate was given for Acton since 1878, and it was apparent that the decline was a steady and a continuous one. Until the Census figures are published it is impossible to state what relation this decrease bears to that observed throughout the kingdom. It is probable that the large decrease observed here since 1905 is partly due to an altered age-incidence of the population.

The decreased birth-rate has exercised the minds of many people for years, and during the past year a Private Commission on the Birth-rate was established. France has gone a step further, and appointed a Parliamentary Committee to inquire into the national, social, and fiscal aspects of its declining birth-rate. In France, matters are more serious than in this country; in 1912 there was an excess of deaths over births, and a shortage of 34,000 lives, equal to a good-sized town.

The Private Commission might not expect to do so much as a Royal one would have accomplished; but the former might do some things which a Royal one might miss, for the witnesses would be free to speak in private, and the Commission might thus get a nearer sight and insight into what was really taking place amongst the population.

The inquiry is to be made in various directions. The extent and character of the decline are to be considered under such headings as the present British birth-rate and infantile mortality, general and classified according to income, occupation, province and county, urban and rural.

Statistics showing the proportion of sterile to total marriages, and the extent of the declining birth-rates in foreign countries will be prepared. The alleged causes are to be investigated, and the effects of the decline are to be searched. The question will also be considered in its national and economic aspects.

Although it is known that since 1877 the birth-rate throughout the country has been steadily declining, it is curious how large social movements may take origin, and even gain considerable impetus before the community in general has fairly realised that they exist.

It has been so in large measure with the causes underlying the phenomenon of the falling birth-rate. Nevertheless, there is probably no one who will deny, that one of them, at least, is the practice of voluntarily limiting the number of births which take place in married life.

An examination of the figures for Acton for the last seven years will show that whereas the birth-rate in the North-East, North-West, and South-East Wards has been falling rapidly, in the South-West Ward the rate remains fairly constant. The following table gives the birth-rate per 1,000 inhabitants since 1907, in each of the Wards :—

	North-East.	North-West.	South-East.	South-West.
1913.....	21.7	17.7	23.9	33.
1912.....	22.1	18.9	23.9	33.
1911.....	19.7	17.5	24.7	34.2
1910.....	21.9	19.9	26.3	32.3
1909.....	23.6	19.1	28.0	31.8
1908.....	26.9	19.5	31.2	33.1
1907.....	25.5	20.2	32.0	33.6

It is not self-evident that the fact of a declining birth-rate is an occasion for regret. If the birth-rate had declined uniformly over the whole district it is doubtful if it could be considered an occasion for regret. It is too readily assumed that decrease of the birth-rate in this country is intimately connected with physical degeneracy; but the unaided mother of a family, even when she is fortunate enough to escape being a contributory wage-earner, can rarely do justice to the numerous progeny which she is capable of bearing. In many instances restricted child-bearing is compensated in improved mothering of a fewer offspring. Of the births that occur in the South-West Ward, in more than one-half of the cases, the mother is employed in occupation outside the home.

On the other hand, the fact remains that the human race has now begun an experiment upon its reproduction similar to those which it has in times past made upon its digestion and other bodily functions. No one can tell what effects this quiet concealed and yet widespread and persistent experimenting will have.

The crux of the problem lies in the fact that the larger the family the less adequate the provision which can be made by the parents for their children. It cannot be argued from this, though, that declining fertility necessarily implies superior quality of the offspring. Given a fixed income anywhere near the poverty line, it is obvious that a parent can provide better housing, nourishment, and education for two children than for five. Environmental advantages which thus accrue to the diminished number of the offspring outweigh the disadvantages of a slackening of the intensity of natural selection operating upon a larger number of children, some of whom must be weeded out. Again, are the effects upon the health and morals of a nation of the employment of artificial methods of restricting fertility so prejudicial as to counterbalance the individual advantages? Opinions differ fundamentally with respect to them, and it is very doubtful if some of the measures which are being suggested to arrest the decline will have the slightest effect.

C. R. O. 6.



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One unsatisfactory feature in connection with the birth-rate has been the increase in the proportion of illegitimate births. Prior to 1912 the outside births were not transferred. The illegitimate birth-rate, of course, is considerably affected by this arrangement; but, apart from this, the illegitimate birth-rate is higher than it has been for some years. Of the 36 births that occurred outside the district in 1913, 19 were born out of wedlock. Altogether the infants registered as having been born out of wedlock numbered 76, which number corresponds to a rate of 50 per 1,000 births.

The illegitimate births and the rate per 1,000 births since 1907 are as follows :—

				Number.	Rate.
1913	...	...	...	76	50
1912	...	...	...	71	47
1911	...	...	...	43	29
1910	...	...	...	36	24
1909	...	...	...	29	19.2
1908	...	...	...	42	26.8
1907	...	...	...	37	24

Excluding the outside births which were transferred in 1912 and 1913, the illegitimate birth-rate has been as follows :—

				Number.	Rate per 1,000 births.
1913	...	...	...	56	37.9
1912	...	...	...	53	36
1911	...	...	...	43	29
1910	...	...	...	36	24
1909	...	...	...	29	19.2
1908	...	...	...	42	26.8
1907	...	...	...	37	24

It will be seen that since 1909, a steady and marked increase has occurred in the illegitimate birth-rate.

This increase is partly due to the fact that there are 3 or 4 houses in the district which are being used for lying-in purposes, and for some reason or other the mother gives the place of birth as her usual residence. The majority of these births are illegitimate ones, and do not really belong to the district, but as the mother chooses to utilise the place of birth as her usual place of residence, the births have to be accepted as belonging to Acton.

The births registered in the district had the following Ward distribution :—

North-East.	North-West.	South-East	South-West.
334	231	359	562

DEATHS.

Number 693.

	Crude.	Corrected.
Death-rate per 1,000 inhabitants ...	11.5	12.28
Death rate per 1,000 inhabitants in		
England and Wales	—	13.7
Death-rate per 1,000 inhabitants in 96		
large towns	14.3	—

508 deaths were registered in the district, of these 12 belonged to other districts, and are not included in the returns.

197 deaths of “ residents ” occurred outside the district. The total number of deaths belonging to the district is 693, which corresponds to a death-rate of 11.5 per 1,000 inhabitants.

The rate 11.5 per 1,000 is the “ crude death-rate,” and makes no allowance for the inequalities of age and sex distribution in the district as compared with England and Wales. In former Reports it has been explained that the Registrar-General published a table of factors for all the large towns, and that the “ factor for correction ” for Acton is 1.04640. If the crude death-rate of 11.5 be multiplied by this factor for correction, the result obtained—12.28—is the “ corrected death-rate ” for the district in 1913.

A comparison of the death-rate of Acton with that of the 96 large towns shows that Acton occupies the 16th place in the list; that is, 15 of the large towns had a lower death-rate than Acton, and 80 had a higher one.

The death-rate is .7 higher than that of 1912, and .7 per 1,000 lower than the quinquennial average 1908-1912.

The diseases which caused the most marked increase in the number of deaths were Measles, Phthisis or Pulmonary Tuberculosis, Organic Heart Disease, and Diarrhœa.

The ages at death last year were as follows:—

Under 1 year.	1-2.	2-5.	5-15.	15-25.	25-45.	45-65.	Over 65.
127	56	33	26	26	99	156	170

Compared with 1912 there was a higher rate in the age periods under 1 year, 1-2 years, 25-45 years, 45-65 years, and a lower rate in the other age periods.

It is difficult to calculate exactly the number of persons living at each age period. An examination of the Census figures shows that the increase in the population took place fairly uniformly in all the age periods, and it is natural to assume that the age-distribution of the increased population since the Census remains fairly constant. But the greatly reduced infantile mortality in the last two years would affect the age periods under 1 year and 1-2 years, and raise the numbers in these two age periods out of proportion to the numbers in the other age-periods. The number of children living under two years can be fairly accurately computed, as emigration and immigration do not affect these age-periods to any considerable extent. The number of children under 1 year can be estimated by taking the number of births and subtracting the number of deaths under 1 year. A more accurate method to estimate the number living at midsummer in any year, is to take the number of births in the first half of the year under review and the second half of the preceding year, and subtract the deaths under 1 year which have occurred in the same two half-years. If either of these two methods had been done for the year 1911, the result would almost exactly correspond with the figure at the Census

enumeration. In 1911, 1,486 births and 205 deaths under 1 year occurred; the resultant figure would be 1,281. In 1910, 1,475 births and 151 deaths under 1 year occurred. If the second method, that is, abstracting the deaths in the second half of 1910 and the first half of 1911 from the births in the same period, the resultant figure would be 1,285. The enumerated figure at the Census was 1,283. If we estimate the numbers at the age-periods under 1 year and between 1-2 years by this method, and assume that the increase in the other age-periods has been in the same ratio as in the last intercensal period, the death-rate per 1,000 living at each period last year was as follows :—

Under 1 year.	1-2.	2-5.	5-15.	15-25.	25-45.	45-65.	Over 65.
90	40	8	2.2	2.2	5	17.4	70

Incidentally, it might be mentioned that these figures show the importance of a "factor for correction," before instituting a comparison between the death-rate of one district and that of another. As far as sanitary conditions are concerned, the persons in all the age-periods are affected in a similar manner; but the death-rate at the extremes of life are very much higher than those in the middle periods. A district with an abnormal proportion of its inhabitants living between the ages 5-45 would, therefore, have a lower death-rate than another district which contained a higher proportion of children and old people.

The following table gives the number of deaths at the different age-groups since 1905 :—

	Under 1.	1-5.	5-15.	15-25.	25-65.	Over 65.
1905... ..	172	73	18	24	200	141
1906... ..	201	91	26	19	194	156
1907... ..	200	94	38	28	217	160
1908... ..	188	106	29	23	209	168
1909... ..	158	102	40	30	208	170
1910... ..	151	55	18	20	203	176
1911... ..	205	116	34	28	224	170
1912... ..	107	72	31	30	216	177
1913... ..	127	89	26	26	245	170

With the exception of the two age-periods under 1 year and between 1-5 years, the increase in the numbers in every age-period since 1905 has probably been a fairly uniform one.

The following figures represent the number of persons living at each age period, as enumerated at the Census :—

Under 1.	1-2.	2-5.	5-15.	15-25.	25-45.	45-65.	Over 65.
1,283	1,211	3,929	10,930	10,286	19,010	8,624	2,325

These figures do not extend back for a sufficient period to institute any comparison, and, moreover they are not sufficiently comprehensive for the purpose, but they point to the same result as has been arrived at by an analysis of the figures for the whole kingdom. The improvement in mortality has not taken place at all periods of life, the higher ages participating in it little or at all. The improved conditions of life have, so far, had relatively small effect on the prospects of life after the age of 45, and practically none after the age of 55. In view of the immense improvement in this country in the death-rate during youth and early adult life, and of the more favourable death-rate experienced in some parts of adult life in other countries, there can be no reasonable doubt that much mortality occurring in adult life, which anticipates death in old age, is preventable in character and should be prevented.

WARD DISTRIBUTION—

North-East.	North-West.	South-East.	South-West.
164	119	132	275

The addresses of three could not be traced. The deaths occurred outside the district, and the address given was, simply, Acton.

Based upon the estimated population of each Ward the death-rate per 1,000 was :—

North-East.	North-West.	South-East.	South-West.
10.6	9.5	8.9	16.1

The death-rate is higher in the North-East and South-West Wards, and lower in the two other Wards.

The causes of death and Ward distribution of the different diseases are given on Tables 3 and 5 at the end of the Report.

The addresses outside the district where residents died together with the number of deaths were as follows :—

Union Infirmary	...	...	...	109
West London Hospital	...	...	...	21
Middlesex County Asylum	...	...	...	16
Middlesex Hospital	...	...	...	5
St. Mary's Hospital	...	...	...	4
Children's Hospital	...	...	...	4
St. Luke's House, Kensington	...	...	...	2
St. Bartholomew's Hospital	...	...	...	2
University College Hospital	...	...	...	2
Infants' Hospital	...	...	...	2
Barrogate Road, Chiswick	...	...	...	2
Grand Junction Canal	...	...	...	1
Footway, High Road, Chiswick	...	...	...	1
District Railway, Bollo Lane	...	...	...	1
St. George's Hospital	...	...	...	1
Charing Cross Hospital	...	...	...	1
Belgrave Street, Brighton	...	...	...	1
Berkshire Asylum	...	...	...	1
Llandudno	...	...	...	1
Chelsea Hospital for Women	...	...	...	1
Brecon	...	...	...	1
Bethlem Hospital, Southwark	...	...	...	1
Central Station, Liverpool	...	...	...	1
Queen Mary's Hospital, Carshalton	...	...	...	1
Westminster Hospital	...	...	...	1
Ha Ha Brook, Richmond	...	...	...	1
Cambridge Terrace, Sidmouth	...	...	...	1
Homœopathic Hospital	...	...	...	1
The Meadow, Hanger Lane	...	...	...	1
St. Peter's Hospital, Henrietta Street	...	...	...	1
Buchanan Hospital, Hastings	...	...	...	1
Consumption Hospital, Kensington	...	...	...	1
High Road, Chiswick	...	...	...	1
London County Asylum	...	...	...	1
Guy's Hospital	...	...	...	1

Fulham Infirmary	...	...	...	...	1
Northern Hospital, Winchmore Hill	...	...	...	...	1
Chiswick Hospital	...	...	...	...	1
St. Thomas' Hospital	...	...	...	...	1

ZYMOTIC DISEASES.

Deaths, 76; Death-rate per 1,000, 1.3.

The so-called Zymotic death-rate includes deaths from seven of the principal Zymotic diseases: Small-pox, Measles, Whooping-cough, Scarlet Fever, Diphtheria, Diarrhœa and Enteric Fever.

Most of these diseases are separately dealt with:

NOTIFICATION OF INFECTIOUS DISEASE.

The following notifications of infectious disease were received during the year :—

	N.-East.	N.-West.	S.-East.	S.-West.	Total.
Scarlet Fever	24	10	19	27	80
Diphtheria	34	18	20	45	117
Enteric Fever	2	1	1	—	4
Erysipelas	9	4	12	8	33
Puerperal Fever	3	1	1	—	5
Pulmonary Tuberculosis	38	21	26	74	159
Other forms of Tuberculosis	11	3	12	16	42
Poliomyelitis	1	1	1	3	6
	<u>122</u>	<u>59</u>	<u>92</u>	<u>173</u>	<u>446</u>

Before we make a comparison of infectious disease in the district last year with previous years, a comparison with the rest of the county would be interesting, and the material for such comparison is available. Taking the county as a whole, Scarlet Fever was much more prevalent in 1913 than in either of the two previous years, the attack rate being equal to 3.57 per 1,000 of the population, compared with 2.98 and 2.90 in 1912 and 1911 respectively. The increase was much more noticeable in the urban districts than in the rural, where the attack rate was only slightly higher than in former years.

The attack rate in Acton was 1.28. It will be observed in the tables that there is a slight discrepancy between the figures in the Annual Report and those in the return of the Local Government Board. This is due to two causes. The Annual Report is for the year ending December 31st, 1913, but the return of the Local Government Board is for the 52 weeks ending January 3rd. So that the comparison for the whole county should hold good, I have included the figures in the comparative columns for the county as given in the Local Government return, but in the table giving the figures for former years, the figures for 1913 are the correct ones for the year.

Diphtheria was not appreciably more prevalent than in 1912 and 1911, and all classes of districts were almost equally affected. The attack rate for 1913 was 1.39 per 1,000 inhabitants, as compared with 1.24 in 1912 and 1.32 in 1911. The attack rate in Acton was 1.88.

Typhoid Fever was also less prevalent, and the decline in the disease recorded in 1912 was well maintained in 1913. The attack-rate was .22 per 1,000, as compared with .23 in 1912 and .38 in 1911. In Acton the attack rate was .07 per 1,000 inhabitants.

The following table gives the attack-rates per 1,000 inhabitants in the County :—

Boroughs and Urban Districts.			Scarlet Fever.	Diphtheria.	Enteric Fever.	Puerperal Fever.	Erysipelas.
Acton	...	...	1.28	1.88	.07	.07	.6
Brentford	...	...	2.46	1.92	—	—	.84
Chiswick	...	...	1.35	1.20	.05	.03	.78
Ealing	...	...	5.14	.83	.08	—	.66
Edmonton	...	...	6.82	1.86	.16	.04	.76
Enfield	...	...	2.84	1.31	.03	.09	.57
Feltham	...	...	3.64	.19	.19	—	.96
Finchley	...	...	2.23	1.20	.14	.10	.17
Friern Barnet	...	...	1.89	.46	.07	.07	.52
Greenford	...	...	20.07	1.82	—	—	1.82
Hampton	...	...	3.25	.21	—	.10	.31

Hampton Wick ...	1.25	1.67	—	—	—
Hanwell ...	3.11	1.28	.05	.05	1.04
Harrow ...	5.01	.67	.06	—	.28
Hayes ...	3.35	.67	—	—	.89
Hendon ...	2.24	1.44	.27	.02	.46
Heston & Isleworth	2.40	1.18	.07	.13	.53
Hornsey ...	2.46	1.36	.13	.02	.31
Kingsbury ...	—	—	—	—	—
Ruislip Northwood }	2.89	2.59	.15	—	—
Southall, Norwood }	3.60	1.53	—	.04	.25
Southgate ...	2.66	.58	.11	—	.61
Staines ...	1.92	1.48	—	—	—
Sunbury-on- Thames ...	.43	.43	—	—	—
Teddington ...	1.63	.44	.05	.16	.54
Tottenham ...	4.21	1.92	.08	.04	.58
Twickenham ...	3.84	1.77	—	.13	.23
Uxbridge ...	1.51	2.83	—	—	.57
Wealdstone ...	4.17	1.81	.16	.08	.55
Wembley ...	2.26	2.61	.35	—	.26
Willesden ...	3.24	1.49	.11	.07	.60
Wood Green ...	3.68	1.38	.02	.06	.66
Yiewsley ...	4.93	.67	—	—	.90
<i>Rural Districts—</i>					
Hendon ...	4.10	2.95	.07	—	.07
South Mimms ...	.35	.35	—	—	.71
Staines ...	2.76	.45	.04	.04	.8
Uxbridge ...	.74	1.06	—	—	.21

A return was submitted giving the number of cases of Scarlet Fever, Diphtheria, and Enteric Fever notified since the Infectious Diseases Notification Act came into force, together with the number of deaths from these diseases, and it was resolved by the Health Committee that these figures should be included in the Annual Report.

SCARLET FEVER.

		Total number.		Rate per 1,000 inhabitants.	
		Cases.	Deaths.	Cases.	Deaths.
1890...	...	108	3	4.5	.12
1891...	...	63	4	2.6	.16
1892...	...	74	0	3.0	—
1893...	...	192	10	7.3	.39
1894...	...	86	3	3.1	.11
1895...	...	67	3	2.4	.1
1896...	...	193	1	6.5	.034
1897...	...	93	0	3.0	—
1898...	...	167	3	5.0	.09
1899...	...	111	2	3.2	.06
1900...	..	243	6	6.7	.16
1901...	...	82	2	2.1	.05
1902...	...	109	1	2.6	.025
1903...	...	76	2	1.7	.05
1904...	...	129	1	2.7	.02
1905...	...	137	2	2.7	.04
1906...	...	170	7	3.2	.13
1907...	...	267	6	5.0	.11
1908...	...	484	15	8.8	.272
1909...	...	469	16	8.3	.28
1910...	...	109	2	1.9	.035
1911...	...	234	6	4.0	.1
1912...	...	315	5	5.3	.085
1913...	..	80	2	1.33	.033

Prior to 1905, the deaths and the death-rate may not be strictly accurate. Some of the cases were isolated in outside hospitals, but if any death occurred, it was not included in the returns. It probably affects the Diphtheria and Enteric Fever death-rate to a greater extent than it does the Scarlet Fever rate.

DIPHTHERIA.

		Total number.		Rate per 1,000 inhabitants.	
		Cases.	Deaths.	Cases.	Deaths.
1890...	...	14	7	.5	.3
1891...	...	8	2	.3	.08
1892...	...	27	4	1.0	.16
1893...	...	41	2	1.6	.077
1894...	...	22	5	.8	.18
1895...	...	32	5	1.1	.17
1896...	...	23	8	.7	.27
1897...	...	89	28	2.8	.9
1898...	...	35	8	1.07	.24
1899...	...	49	7	1.4	.21
1900...	...	28	4	.7	.11
1901...	...	34	6	.8	.15
1902...	...	33	4	.8	.1
1903...	...	22	2	.5	.05
1904...	...	32	2	.7	.04
1905...	...	49	4	.98	.08
1906...	...	46	2	.88	.03
1907...	...	63	5	1.2	.09
1908...	...	83	7	1.5	.127
1909...	...	104	22	1.8	.39
1910...	...	118	9	2.0	.158
1911...	...	115	9	2.0	.15
1912...	...	100	8	1.7	.133
1913...	...	117	8	1.9	.131

The increase in Diphtheria is more apparent than real. Formerly, only clinical cases of Diphtheria were notified. Now, owing to the extension of bacteriological facilities many cases which exhibit only symptoms of sore throat without membrane, but which prove to have the Klebs Loeffler bacilli present, are notified. A large number of swabs are also taken from school children who suffer from sore throat, and where the Diphtheria bacilli are present, are notified. On the other hand, since 1894 the fatality has been greatly reduced owing to the introduction of Antitoxin.

ENTERIC FEVER.

		Total number.		Rate per 1,000 inhabitants.	
		Cases.	Deaths.	Cases.	Deaths.
1890...	...	13	1	.55	.04
1891...	...	13	0	.5	—
1892...	...	15	3	.6	.12
1893...	...	19	4	.7	.15
1894...	...	15	2	.55	.07
1895...	...	28	2	1.0	.07
1896...	...	14	2	.5	.07
1897...	...	10	2	.33	.06
1898...	...	9	0	.28	—
1899...	...	46	7	1.3	.2
1900...	...	29	4	.8	.11
1901...	...	27	1	.7	.025
1902...	...	14	4	.3	.1
1903...	...	40	5	.9	.11
1904...	...	8	3	.17	.06
1905...	...	12	6	.24	.12
1906...	...	12	3	.23	.05
1907...	...	13	3	.24	.05
1908...	...	14	2	.25	.036
1909...	...	4	1	.07	.018
1910...	...	16	2	.28	.035
1911...	...	17	4	.29	.067
1912...	...	9	1	.15	.017
1913...	...	4	0	.065	—

It will be interesting to give the statistics since 1881, though, of course, the notifications cannot be included, as the Notification of Infectious Diseases Act was not in force before 1890 :—

		Scarlet Fever.		Diphtheria.		Enteric Fever.	
		Rate		Rate		Rate	
		Deaths.	per 1,000.	Deaths.	per 1,000.	Deaths.	per 1,000.
1881 ...	6	.35	11	.62	2	.11	
1882 ...	5	.27	4	.21	6	.32	
1883 ...	6	.31	2	.1	4	.21	

1884 ...	2	.1	8	.4	5	.25
1885 ...	0	—	3	.14	3	.14
1886 ...	0	—	5	.24	6	.28
1887 ...	10	.46	5	.23	4	.18
1888 ...	2	.091	2	.091	0	—
1889 ...	1	.043	8	.35	1	.043

These figures are capable of almost any kind of grouping, and their analysis would serve very little purpose unless some guide might be had in the framing of the estimates for the coming year.

Taking the death-rate from Scarlet Fever as being the simplest and freest of complications, it will be seen that if the 21 years, 1881-1901, be divided into 3-year periods, and the 12 years, 1902-1913, into 4-year periods, the periods of maximum and minimum prevalence exactly alternate, and in the one group of periods the prevalence is, roughly, four times as great as in the other.

Average Annual Death-rate per 1,000 inhabitants.

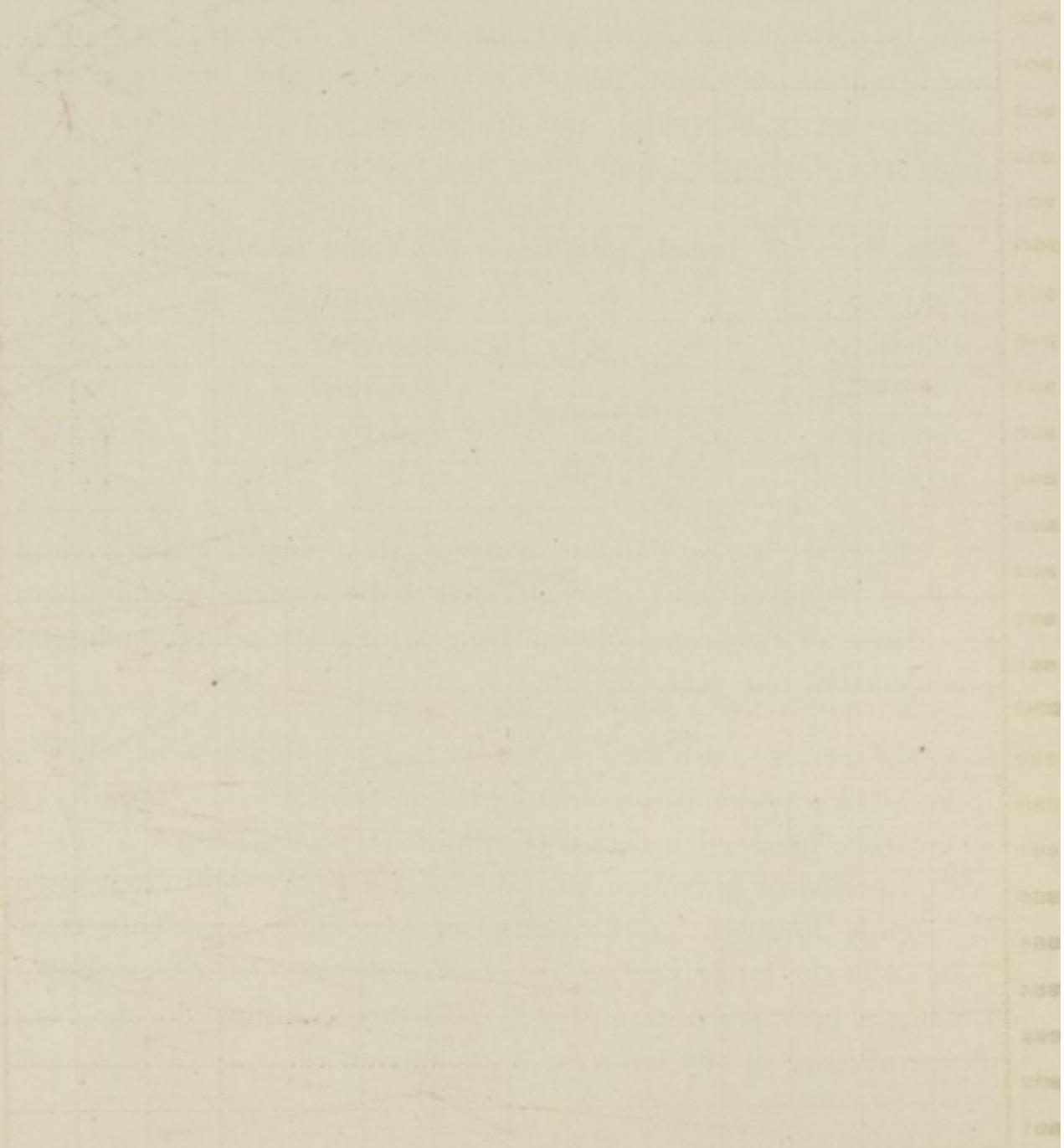
1881-1883 ...	31	1884-1886 ...	033
1887-1889 ...	201	1890-1892 ...	093
1893-1895 ...	2	1896-1898 ...	041
1899-1901 ...	09	1902-1905 ...	023
1906-1909 ...	198	1910-1913 ...	063

The case rate works out in a slightly different manner, and between 1890 and 1891 there seemed to be a period of minimum prevalence of two years alternatively with a period of maximum prevalence of one year.

The period 1901-1906 was a period of minimum prevalence followed by a period of maximum prevalence of 3 years, 1907-1909. Then there followed a period of minimum prevalence of 2 years, with a period of maximum prevalence of 1 year. This alternation is slightly masked, as the period of maximum prevalence commenced in the latter part of 1911. We are now in the period of minimum prevalence, and it will probably continue during 1914 in the absence of any unforeseen circumstances.

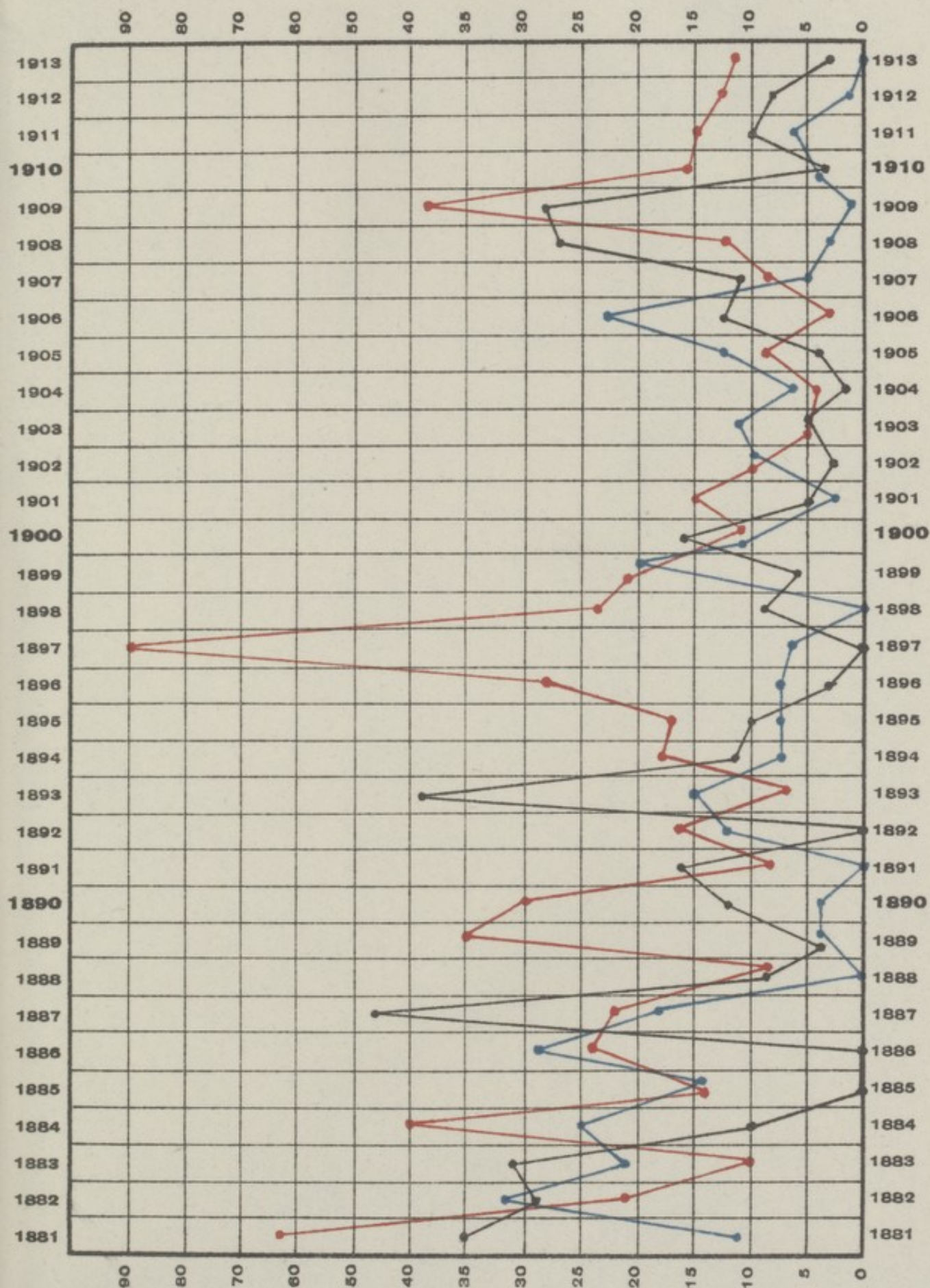
Diphtheria here has behaved in a very similar manner as it has done throughout the kingdom. The periods of maximum and minimum prevalence are longer than those of Scarlet Fever. If we take the death-rate, the 8 years, 1892-1899, was a period of maximum prevalence. The following 8 years, 1900-1907, was a period of minimum prevalence, followed by a period of maximum prevalence, which will probably continue for another 2 years, but with a gradual droop in the curve.

A desire was expressed that these figures should be worked out in the form of graphs, and the two following graphs give the attack-rates and death-rates respectively per 100,000 inhabitants :—

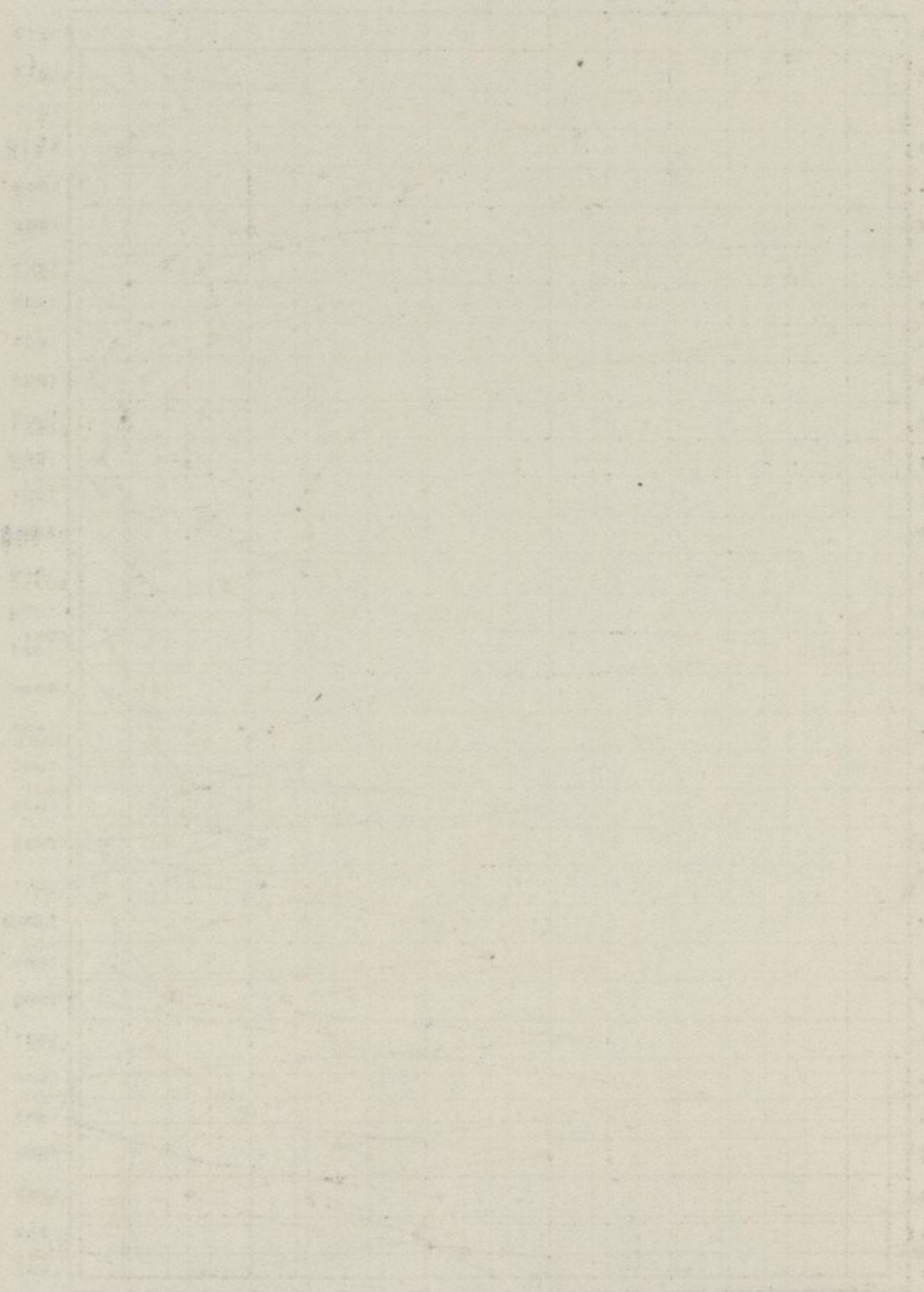


Death-rate per 1,000,000 inhabitants, 1881-1913.

Scarlet Fever —————
 Diphtheria —————
 Enteric Fever —————



1890-1913. (See also 1890-1913.)



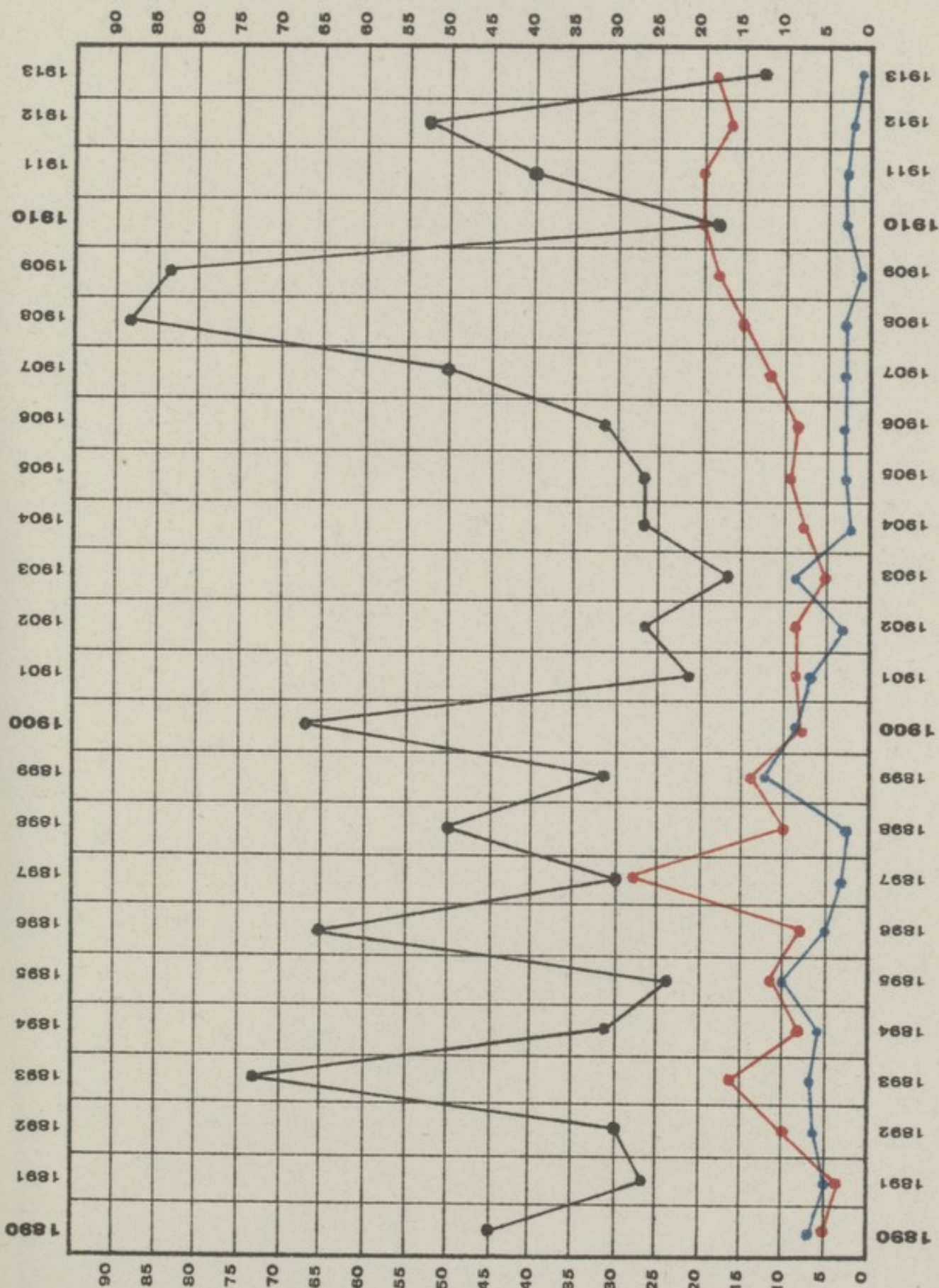
Notifications 1890-1913. Case Rate per 10,000 Inhabitants.

EXPLANATION:—

Scarlet Fever —————

Diphtheria —————

Enteric Fever —————

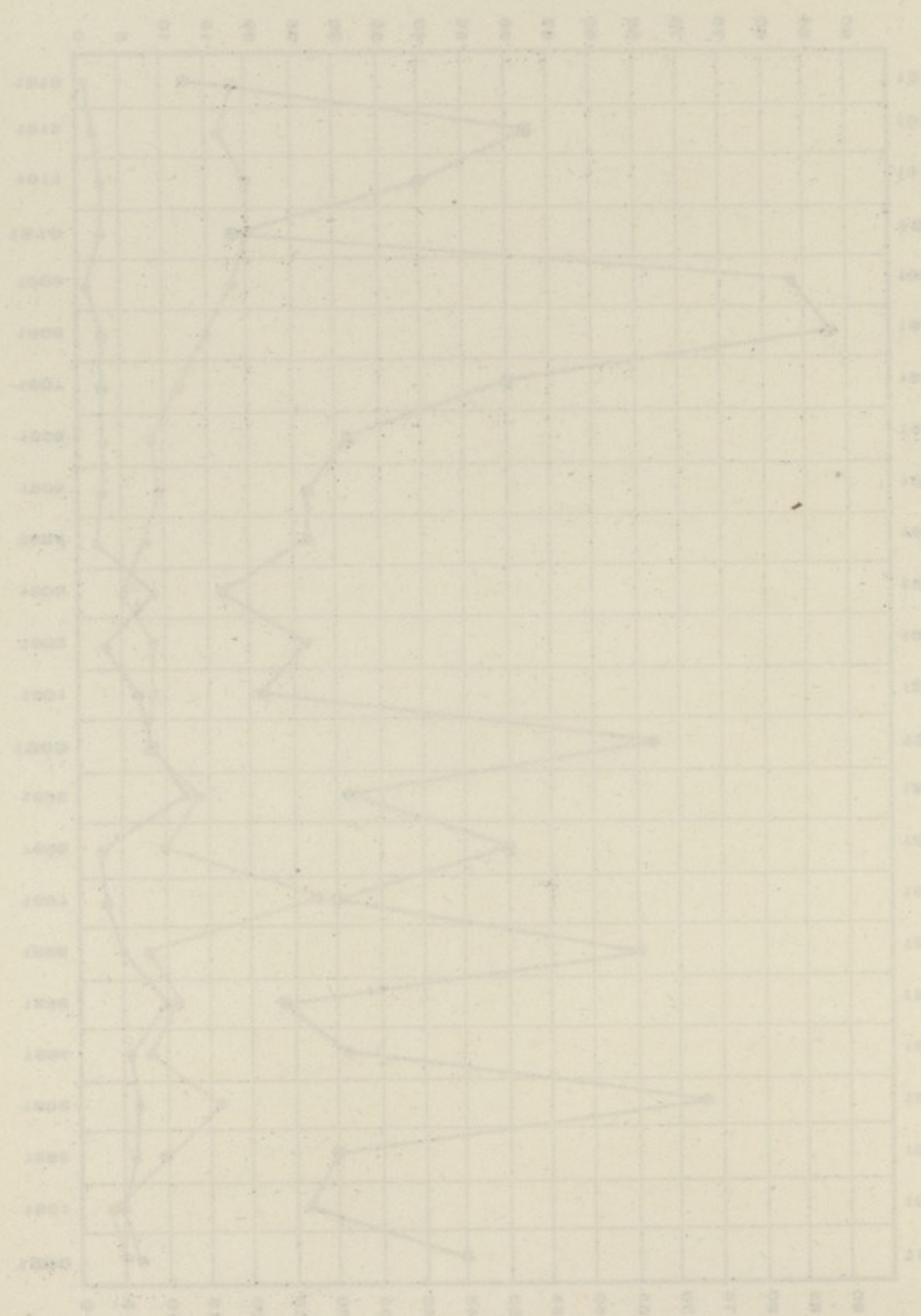


— Extractions —

Scrub fever

Diphtheria

Enteric fever



DIPHTHERIA.

117 cases of Diphtheria were notified, and 8 deaths occurred from the disease. 3 other notifications were received, but subsequently withdrawn; 4 cases were wrongly diagnosed, but the notification was not withdrawn.

Although the number of notifications was higher by 17 than that of the previous year, the number of deaths remained at the same number, with the result that the fatality of the disease was reduced to 6.8 per cent.

There are few phenomena more remarkable than the apparently lessened fatality from Diphtheria which has been noticed during the last 10 years. If we take the last 10 years, 1904-1913, and compare them with the previous 14 years following the introduction of the Infectious Diseases Notification Act, we find that the case-rate in 1904-1913 is nearly 50 per cent. higher than in the earlier period, but the death-rate in the earlier period is 50 per cent. higher. The actual figures are: 1890-1903, average annual case rate, 1 per 1,000; death-rate, .21 per 1,000. In 1904-1913, the figures are: Case-rate, 1.46 per 1,000; death-rate, .13. The death-rate in the earlier period is understated, for, in addition to the fact that outside deaths were not included in the returns, the more accurate means of diagnosis would tend to magnify the death-rate in the later period.

Various reasons have been assigned as the cause of this reduced fatality of the disease, but many of these are based on the assumption that the type of disease is now of a much milder character than formerly. There is a widespread impression that the disease is now milder in character, though the figures which are adduced in favour of this are hopelessly inaccurate, and there is no definite proof of the relative mildness of the disease. To offer explanation of a cause which is not proved to be existent is unprofitable, if not foolish, and the most frequently offered is probably the most fallacious of all. This is the explanation which attributes the mildness to a gradually accumulating inherited immunity, affecting the community as a whole. But why should this immunity only show itself during the last decade or two?

Considering the countless ages which have passed since life has existed, and since Diphtheria has probably made its appearance, what sort of gradually acquired inherited racial immunity would that be which showed no effect for hundreds or thousands of generations, and then sprang up armed in the present one?

It is possible that the lower fatality and decreased mortality are due, not to the mildness of the type, but to the improvement in the methods of treatment and diagnosis. The discovery of Antitoxin and the appreciation of the importance of its early use have revolutionised the treatment of the disease. The treatment, under certain conditions, can be more effectually carried out in a hospital, inasmuch as the liability of secondary infection is lessened, and the nursing is of a more skilled character, but the reduced fatality is not entirely due to hospital isolation.

Another important factor is the improved means of diagnosis. The bacteriological examination not only enables an earlier diagnosis to be made, but many cases are now diagnosed as Diphtheria which formerly passed as "sore throat" or tonsillitis. For instance, last year, 160 children suffering from sore throat were sent from the schools for examination, and in 33 of them the Diphtheria bacillus was found. In the majority of these, the clinical signs in the throat would not have enabled anyone to diagnose Diphtheria, and in many of the other cases notified during the year, the diagnosis was made only after a bacteriological examination.

The facilities for the bacteriological examination of the throat are being more and more appreciated by doctors, and last year 207 swabs were sent by medical practitioners for examination; 72 of these were positive and 135 were negative.

This examination affects the case fatality in two ways; an increased number of cases are notified, and specific treatment is earlier carried out.

The age-incidence and the ward distribution of the disease are given on a subsequent page, and from that it will be observed that the proportion of children of school age is higher than it has been for some years. The percentage of school children to the total notified was 56.4, as compared with 49 in 1912.

Multiple cases occurred in 11 houses. There were 5 notifications from 1 house, 3 from another house, and 2 each from 9 houses.

SCARLET FEVER.

80 cases of Scarlet Fever were notified; of these 4 were wrongly diagnosed, and were not suffering from the disease. 4 others were also notified, but the notifications were withdrawn by the doctor in attendance on the case.

2 deaths were registered as due to the disease. The monthly distribution of the notified cases was as follows :—

January	...	...	12	July	...	...	4
February	...	...	5	August	...	...	3
March	...	...	11	September	...	...	4
April	...	...	8	October	...	...	3
May	...	...	9	November	...	...	7
June	...	...	7	December	...	...	7

At no period of the year was there an undue prevalence of the disease, but the highest number of notifications were received in the first quarter and the lowest in the third quarter.

5 cases occurred in 1 house, 4 cases occurred in another house, and 2 cases each occurred in 5 houses; 4 cases were notified from the Cottage Hospital.

4 cases occurred in houses after the discharge of a child living in the same house from the Fever Hospital, but in all of them doubt exists whether the discharged patient was the infecting agent.

The first case was that of P. S. The case was notified on April 7th. The child was taken ill early on on April 6th; when the parents woke up on April 6th, the child complained of sickness, and had an attack of vomiting. The rash appeared on the same day.

2 families lived in the same house, and V. B., a member of the other family, was removed to the hospital on February 17th and discharged on April 5th. V. B. arrived home from the Fever Hospital about midday on April 5th. P. S. did not come into close contact with him. It is certain that the 2 children did not play

together; the disparity in the ages of the two was too great. If they came in contact with each other, it could only have been a casual meeting in the passage somewhere during the afternoon of April 5th; no evidence of such a meeting could be obtained. If V. B. was the infecting agent the incubation period could only be from 12 to 16 hours.

2 other children from the same house had been removed to the Hospital. A. B. and F. B., brothers of V. B., were removed to Hospital on March 1st and March 6th respectively. These two could not have been the source of infection. A sister, F. B., had also suffered from a sore throat, but had developed no other signs of Scarlet Fever. It is possible that this sister had an abortive attack of Scarlet Fever, and was the infecting agent.

No outside source of infection could be traced. The previous case notified in the district occurred on March 26th, and P. S. had not been in contact with that one.

The second "return" case was that of M. D., who was notified of Scarlet Fever on March 21st, 1913.

R. D., a twin brother, was notified of Scarlet Fever on December 10th, 1912, and discharged from the Hospital on January 29th, 1913. R. D. had no complication of any kind whilst in the Hospital, and was not in contact with any acute cases. He had Chicken Pox on admission, and was kept in the separation ward for nearly a month, and was then transferred to a convalescent ward.

It will be seen that the period which elapsed between the discharge of one case and the occurrence of another exceeds the one month which is sometimes arbitrarily taken, but there are other reasons for believing that R. D. did not infect M. D., and it will be convenient to consider the question in conjunction with the third so-called "return" case.

W. W. was notified of Scarlet Fever on September 16th. A. W., his brother, was admitted to the Hospital on June 18th, and discharged on September 4th. If we trace the Scarlet Fever history of this family we shall find the probable infecting agent of both "return" cases.

In July, 1912, L. W., a sister of W. W. and A. W., was notified of Scarlet Fever. She was admitted to the Hospital and discharged on August 30th, 1912. She had enlarged Tonsils and Adenoids.

Both these families lived next door to each other in East Acton, and it is probable that L. W. remained intermittently infectious until September, 1913. Between September, 1912, and September, 1913, 5 cases of Scarlet Fever occurred in houses in close proximity to L. W.'s home. On the latter date L. W. was taken to Hospital to be operated on for the removal of Tonsils and Adenoids, and subsequent to the operation no further cases occurred in the immediate neighbourhood.

It is now held by many authorities that under certain conditions Scarlet Fever may remain intermittently infectious for prolonged periods, and one of the conditions under which the period of infectivity seems to be prolonged is the presence of enlarged Tonsils and Adenoids. In this instance, the disappearance of Scarlet Fever from the immediate neighbourhood was coincident with the removal of the Tonsils and Adenoids in a possibly infecting case.

The fourth case was that of H. S., who was notified of Scarlet Fever on January 20th, 1913.

A younger brother, W. S., was admitted to Hospital on November 22nd, 1912, and discharged on January 11th, 1913. H. S. worked in Hammersmith, and within a month 3 cases of Scarlet Fever had occurred amongst the employees of the firm. In the room he worked was employed another person who was discharged from a Fever Hospital in December. He had been in the Hospital for 3 months on account of Nephritis following Scarlet Fever.

ENTERIC FEVER.

4 cases of Enteric Fever were notified, and there was no death from the disease.

In one case the patient received all his meals outside the district, and he had eaten some oysters about 3 weeks before the onset of his illness.

In the second case there was a history of a disease resembling Enteric Fever in one of the children about 2 years ago, and this child had suffered from Diarrhœa a few months before the receipt of the present notification. The excreta of this child were sent for bacteriological examination, but no Typhoid bacilli were present.

In the other 2 cases the source of infection was not traced.

ACUTE ANTERIOR POLIOMYELITIS.

During the year 6 cases of Acute Anterior Poliomyelitis have been notified, and a history of these cases is given in the following pages. In 3 of these there was no paralysis at the time they were visited, and all the children were able to use their limbs.

It is admitted that cases of Poliomyelitis occur in which no paralysis supervenes, but usually the diagnosis is made on the initial symptoms, and the association with other paralytic cases. In these 3 cases there was no association with paralytic cases, and the symptoms were in no way similar to those ushering in the graver forms. In one there was a history of an accident, and as the bruise caused by the accident cleared up, the lameness disappeared.

In the second the child was only 4 months old, and the suspected weakness only lasted a short time.

In the third the only symptoms were diarrhœa and vomiting.

Moreover, no precautions were taken to prevent these children mixing with the other patients in the wards or in the out-patients' department.

In the other cases, death occurred in one, and paralysis supervened in the other two.

All the surviving children are kept under observation.

1. A. B., girl, $4\frac{1}{2}$ years old, notified on April 14th, 1913, from the West London Hospital.

History.

The mother goes out to do laundry work, and the child is taken daily to the house of a neighbour, who looks after the child while the mother is at work. About the middle of February the child fell downstairs in the baby-minder's house, and she seemed to have lost the use of the muscles of the right leg. On the following day the mother noticed that the right hip was tender and painful.

There was no weakness prior to the accident, and there was no evidence to show that the fall was the result and not the cause of the illness.

An uncle had been paralysed for 41 years.

Progress.

The child was taken to a local doctor, who advised the mother to obtain Hospital treatment. The child attended as an out-patient of the West London Hospital, and the case was notified as Acute Anterior Poliomyelitis. Massage and electrical treatment were applied. At the present time there is no paralysis of any of the muscles, and the child can flex, extend, adduct, and abduct the hip-joint to its fullest extent.

2. M. C., girl, aged 2 years. Notified on July 29th, 1913.

History.

The child complained of no pain, but the mother noticed, about the middle of July, that one day the child could not lift her right arm when she awoke from her sleep. Child was taken to a local doctor, who advised the mother to take the child to St. Mary's Hospital, where Acute Anterior Poliomyelitis was diagnosed.

There was no history of paralysis in any near relative, and the child, as far as could be ascertained, had not been in contact with the previous case notified in the district.

The other children in the house returned to school after the summer holidays.

Progress.

Some of the muscles around the right shoulder-joint are apparently paralysed, and the child cannot raise the right arm without assistance beyond a right angle.

3. I. J., girl, 3 years of age. Notified on August 9th, 1913.

History.

The child was suddenly taken ill about the middle of July. She was attended by a local doctor, and on August 2nd was admitted into the Great Ormond Street Hospital for Children. The child was an in-patient at Great Ormond Street from August 2nd to August 9th.

She had always been in good health until the middle of July.

A sister of the patient's father is suffering from paralysis, but the history is vague. This aunt, who is now 10 years of age, suffered from Measles when she was 9 months old, and an affection of the eye followed the attack of Measles. The eye was removed, and paralysis of the right side of the body ensued. This aunt stayed with her brother in Acton from the beginning of March to the end of May this year.

Progress.

The extensors of the foot are paralysed, and the child is wearing a splint.

No children from the house attend school.

4. L. L., boy, aged $4\frac{1}{2}$ years. Notified September 17th, 1913.

History.

The child was suddenly taken ill on September 8th, 1913, and a local doctor was called in.

Both legs and the right arm were paralysed, but speech was not affected. A specialist was called in attendance, who diagnosed Acute Poliomyelitis.

Death occurred on September 18th. The child returned from Seaford 9 days before date of sickening. At Seaford he was staying in a boarding-house, where another child was staying. The latter had no signs or symptoms of paralysis.

The child had always been a healthy child except for the presence of enlarged tonsils and adenoids and a certain amount of difficulty in nose breathing. No paralysis in any near relative.

The premises were disinfected on September 25th, 1913.

There were no children of school age in the house.

5. Boy, 4 months. Notified on October 24th, from West London Hospital.

History.

The mother noticed that the child could not lift his left arm on October 9th, and took him to the West London Hospital. He was admitted on October 15th.

He was discharged from the Hospital on November 17th. On his discharge the child was suffering from diarrhœa, and the skin of his hands, feet, arms and legs was peeling, but he could use the left arm and hand. The child was very thin and wasted.

There is no paralysis in any near relative. No children from the house attend school.

6. Girl, aged $1\frac{1}{2}$ years. Notified on October 25th, from West London Hospital.

History.

Has been under a private doctor since she was 6 months old, and stated by him to be suffering from consumption of the bowels. The child was in Bournemouth in the summer for 2 months, and during the whole of that time she suffered from diarrhœa and vomiting. On her return from Bournemouth she was taken to the West London Hospital and treated as an out-patient.

She still attends there fortnightly as an out-patient, and is allowed to mix freely with the others.

Progress.

The child has now the use of all her limbs, and there does not appear to be any paralysis.

She is the only child in the family. There is no history of paralysis in any near relative.

MEASLES.

25 deaths were registered as due to Measles, and 23 of these occurred in the first quarter of the year. The other 2 deaths occurred in the second quarter of the year. All the deaths occurred in the outbreak which commenced in September, 1912. The outbreak started in the south-western part of the district, the first case being reported from the Rothschild Road School. The outbreak spread through most of the district, and the distribution of the deaths was as follows :—

Gloucester Road	...	...	...	...	3
Meon Road	...	...	...	...	3
Junction Road	...	...	...	...	2
Colville Road	...	...	...	...	2
Osborne Road	...	...	...	...	2
Packington Road	...	...	...	...	2
Acton Lane	...	...	...	...	1
Avenue Road	...	...	...	...	1
Bollo Lane	...	...	...	...	1
Clovelly Road	...	...	...	...	1
Holland Terrace	...	...	...	...	1
Mill Hill Terrace	...	...	...	...	1
Park Road North	...	...	...	...	1
Park Road East	...	...	...	...	1
Petersfield Road	...	...	...	...	1
St. Margaret's Terrace	...	...	...	...	1

On Table III. the ages at death are given, and it will be observed that, as usual, the most fatal year is the second one. In the first year of life only 2 deaths occurred, and in the second year 15. In the report on the medical inspection of school children the age-incidence of the notified cases is given, and though these figures are not a criterion of the distribution of the disease, they show that Measles is a comparatively mild disease except in very young children, and exceedingly fatal to children in their second and third year.

WHOOPIING COUGH.

15 deaths occurred from Whooping Cough. The disease was most prevalent during the early part of the year, and the southern part of the district was mostly affected. 4 of the deaths occurred in the North-East Ward, 1 in the North-West, 2 in the South-East, and 8 in the South-West.

All the deaths occurred in children under 5 years of age.

TUBERCULOSIS.

There were 61 deaths from Pulmonary Tuberculosis or Consumption of the Lungs, 8 from Tuberculous Meningitis, and 7 from other Tuberculous diseases.

34 of the deaths from Pulmonary Tuberculosis, 4 of the deaths from Tuberculous Meningitis, and 1 of the deaths from other Tuberculous diseases occurred in public and other institutions outside the district.

Of the deaths from Pulmonary Tuberculosis, 37 were of males and 24 of females.

Prior to their illness the persons who died of Pulmonary Tuberculosis were occupied as follows :—

MALES.				FEMALES.			
Labourer	...	...	7	Laundress	...	...	8
Motor Cab Driver	...	...	5	Domestic Service	...	...	3
Carman	...	...	4	Typist	...	...	1
Laundry	...	...	2	Saleswoman	...	...	1
Clerk	...	...	2	Charwoman	...	...	1
Mechanic	...	...	1	Boxmaker	...	...	1
Librarian	...	...	1	Unknown	...	...	2
Army Reserve	...	...	1	No Occupation	...	...	7
School Cleaner	...	...	1				
Cashier	...	...	1				
Bootmaker	...	...	1				
Builder's Contractor	...	...	1				
Omnibus Conductor	...	...	1				
Brass Finisher	...	...	1				

Bricklayer	...	...	...	1
Gunsmith	...	...	...	1
Stonemason	...	...	...	1
Secretary	...	...	...	1
Handyman	...	...	...	1
Painter	...	...	...	1
No Occupation	...	...	...	2

The persons who died of Pulmonary Tuberculosis had been ill for the following periods :—

Under 3 months	...	...	6	Between 3 & 4 years	...	3
Between 3 & 6 months	...	...	7	„ 4 & 5 „	...	1
„ 6 & 12 „	...	...	13	„ 5 & 6 „	...	1
„ 12 & 18 „	...	...	3	„ 7 & 8 „	...	3
„ 18 & 24 „	...	...	2	„ 10 & 11 „	...	1
„ 2 & 3 years	...	...	8	Duration Unknown	...	13

It has been pointed out that one of the chief obstacles in dealing with Pulmonary Tuberculosis has been the difficulty of obtaining information of the early cases, but during the year the system of notification has been extended, and all cases of Tuberculosis have been placed amongst the compulsory notifiable diseases.

Voluntary notification of cases of Pulmonary Tuberculosis has been in force in this district since June, 1903, the sum of 2s. 6d. being paid for each case notified. The system of voluntary notification was not a success, and the compulsory notification of all cases has gradually been accomplished. The notification of cases occurring in poor-law practice became obligatory on January 1st, 1909. The duty to notify was extended from May 1st, 1911, to cases occurring in Hospital practice. On January 1st, 1912, cases of Pulmonary Tuberculosis in all classes of practice became notifiable. On February 1st, 1913, the Local Government Board Order extending compulsory notification in cases of all forms of Tuberculosis, and consolidating the three previous Orders as to notification of Pulmonary Tuberculosis, came into force. Modifications of the previous regulations were introduced, but some confusion still exists as to the form on which

a case is to be notified. There are four different forms on which the cases may be notified—Forms A, B, C, D—and some confusion exists as to the kind of form on which a particular case is to be notified. In the circular of the Local Government Board which accompanied the Regulations, the directions are plainly given. The confusion arises between Forms A and C.

In the circular it is stated that the notifications to be made by medical practitioners may be divided into two classes, which are described for convenience as “primary” and “supplemental” modifications. Primary notification is required of every case of Tuberculosis unless the practitioner has reasonable grounds for believing that the case has already been previously recognised and notified as such to the Medical Officer of Health of the appropriate district.

A supplemental notification is an additional notification of a case which has been previously notified.

Except in the case of notifications by School Medical Inspectors, all primary notifications are to be made on Form A. School Medical Inspectors notify on Form B.

Supplemental notifications are to be made on Forms C and D by Medical Officers of Poor Law Institutions and Sanatoria only.

A certain number of cases of Tuberculosis will be recognised for the first time after the admission of the patient to an institution, and cases may occur among the staff of the institution. Primary notification of such cases is required to be made by the Medical Officer of the institution under Article V. on Form A. The notification is to be sent to the Medical Officer of Health for the district within which the place of residence of the patient was situated before his admission to the institution. But the majority of the patients at these institutions will have been notified before their admission, and supplemental notification is to be made on Form C, to be completed, after the end of each week, of all cases admitted during the week and believed by the Medical Officer to have been previously notified. Supplemental notification is also required to be made after the end of each week on Form D of all cases discharged from the institution during the week.

The intention of the Local Government Board is obvious, despite any ambiguity in the wording of the Regulations, but many cases which should be notified on Form C have been notified on Form A.

The notifications received were as follows :—

Form A	...	...	...	...	...	219
Form B	..	..	...	...	...	1
Form C	...	...	...	..	...	46
Form D	...	...	...	...	...	41

The modifications of the previous Regulations are summarised in the Report of the Medical Officer of the Local Government Board, and are as follows :—

The practitioner is not required to notify if he has reasonable ground for believing that the Tuberculous patient when first seen by him has already been notified to the Medical Officer of Health of the district in which the patient resides at the time when seen.

The Medical Officers of Poor Law Institutions and of approved Sanatoria are now required to notify all patients admitted to the Medical Officers of Health of the districts from which the patients have been admitted, and all patients discharged to the Medical Officers of Health of the district to which they are discharged.

The diagnosis leading to notification must be based upon evidence other than that derived solely from Tuberculin tests applied to the patient. A positive Tuberculin reaction furnishes no information as to the site of the Tuberculous Focus, nor as to the activity or inactivity of the Tubercular process. It indicates simply that the organism at some time or in some way has been infected with Tubercle bacilli. A positive reaction has been obtained with undiluted Tuberculin in from 90 to 98 per cent. of all adults.

The confidential character of notifications is more strongly emphasised than in the previous Regulations.

The duty of transmitting to the County Medical Officer of Health weekly lists of cases notified is now imposed not merely on the Medical Officers of Health of Metropolitan Boroughs, but also on the Medical Officers of Health of all urban and rural districts.

The notification form has been extended to include the usual place of residence and the occupation of the patient.

Fees for notification are not payable to practitioners notifying in their capacity of Medical Officers of Health, Tuberculosis Officers, School Medical Officers, or Medical Officers of approved Sanatoria.

The National Insurance Act and the Finance Act of 1911 should prove powerful auxiliaries in the campaign against Tuberculosis. It was really the passage of these two Acts which enhanced the value of compulsory notification. A knowledge of the disease would not have been of much value if the means of prevention and treatment were absent. A capital sum of about £1,116,000 is granted from the Exchequer towards the erection of sanatoria and other institutions for the treatment of Tuberculosis in England, and by the National Insurance Act a sum of 1s. 3d. per annum for each insured person is made available for the treatment of insured persons, or, in certain circumstances, of their dependents, in institutions or otherwise.

As some misapprehension exists as to the duties of the different authorities, it may be remarked that "Sanatorium benefit" is not limited to treatment at a Sanatorium, but consists of treatment given at the cost of the National Health Insurance Fund to persons suffering from Tuberculosis (the chief form of which disease is Consumption) or such other diseases as the Local Government Board, with the approval of the Treasury, may appoint. For the time being the benefit is confined to the treatment of Tuberculosis. Treatment for purposes of Sanatorium benefit may be given:—

- (a) In Sanatoria, Hospitals, or other residential institutions.
- (b) At Tuberculosis Dispensaries or other non-residential institutions, or in the patient's home.

In administering the benefit, Insurance Committees are not empowered by the Act themselves to provide institutions. Their duty is to make arrangements with suitable persons or local authorities for this purpose. All such arrangements are required by the Act to be made to the satisfaction of the Commissioners.

In the case of those who require treatment in institutions, the arrangements must be made with persons or local authorities having the management of Sanatoria or other institutions approved by the Local Government Board. Where treatment is required otherwise than in institutions, arrangements must be made for it to be given by persons or local authorities undertaking such treatment in a manner approved by the Local Government Board.

A Departmental Committee was appointed to report upon the consideration of general policy in respect of the problem, which should lead local bodies in their action.

The Committee reported that, having regard to the different classes of institutions which are required, to the variety of the cases to be dealt with, and to the proper organisation of comprehensive, efficient, and economical schemes, they were of opinion that the unit area should generally be that of the County, County Borough, or in some cases a group of Counties and County Boroughs.

Last year the Middlesex County Council prepared a scheme for dealing with Tuberculosis in the County, and for the purpose divided the County into five Dispensary areas. Area No. 4, in which Acton is included, comprises Acton, Ealing, Greenford, Hanwell, Hayes, Southall, and Uxbridge. A head dispensary will be situated at Ealing, and sub-centres at Acton and Uxbridge. Premises have now been secured for the purpose of dispensaries. Tuberculosis Officers were appointed early in 1913, but at the commencement insured cases only were dealt with. The Departmental Committee recognised that the provision for dealing with Tuberculosis when occurring among insured persons could not be satisfactorily considered as a separate problem, and that schemes dealing with the whole population should be drawn up by Councils of Counties and County Boroughs.

In October, 1913, the County Council decided that sufficient progress had been made with the scheme to make a commencement with regard to the treatment of non-insured persons. The Council resolved that where they think it advisable the treatment of non-insured persons suffering from Tuberculosis be undertaken at Hospitals, Sanatoria, and Dispensaries by the County Council upon the basis of a contribution being made, where possible, by the patient towards the cost of maintenance or treatment.

The necessity for a comprehensive scheme to include non-insured persons is made evident from the fact that of the 159 cases of Pulmonary Tuberculosis notified, 62 were insured persons and 97 non-insured.

Of the 62 insured cases, 8 were treated at a Sanatorium, 10 at a Hospital, 9 were removed to the Infirmary, and 14 received domiciliary treatment. 16 insured persons did not apply for Sanatorium benefit, as they were able to follow their employment, though suffering from the disease; 3 have applied for Sanatorium benefit, and the Insurance Committee are considering the applications. 1 refused Sanatorium benefit after making application, and 1 had removed from the district before receiving the benefit.

Of the 97 non-insured cases, 4 were admitted to a Sanatorium, 27 received treatment at a Hospital, 37 were removed to the Infirmary, 4 were admitted as in-patients of Public Institutions, and 1 attended as an out-patient at a Dispensary. The other 24 cases were attended by private doctors.

Of the 159 cases, 93 were males and 66 females. Their occupations were as follows :—

MALES.				FEMALES.			
Labourer	...	...	16	Laundresses	...	...	19
Laundryman	...	...	8	Domestic Servant	...	...	3
Clerk	...	...	6	Shop Assistant	...	...	2
Fitter	...	...	4	Charwoman	...	...	1
Taxi-driver	...	...	3	School Teacher	...	...	1
Bus-driver	...	...	2	Typist	...	...	1
Boot-repairer	...	...	2	Clerk	...	...	1

Painter	...	...	...	2	Brushmaker	...	...	1
Carman	...	...	...	2	Knitter	...	...	1
Bricklayer	...	...	...	2	In School	...	...	8
Gardener	...	...	...	2	No occupation	...	...	29
In School	...	...	...	5				
No Occupation	...	...	...	4				
Unknown	...	...	...	5				
Mason	...	...	...	1				
Harness Maker	...	...	...	1				
Hawker	...	...	...	1				
Cashier	...	...	...	1				
Furniture Remover	...	...	...	1				
Railway Carriage Cleaner	...	...	...	1				
Waiter	...	...	...	1				
Instrument Maker	...	...	...	1				
Accountant	...	...	...	1				
Electrician	...	...	...	1				
Handyman	...	...	...	1				
Sailor	...	...	...	1				
Bus Conductor	...	...	...	1				
Dining Car Attendant	...	...	...	1				
Golf-caddie	...	...	...	1				
Store-keeper	...	...	...	1				
Musician	...	...	...	1				
Photographer	...	...	...	1				
Mechanic	...	...	...	1				
Carpenter	...	...	...	1				
Cinematograph Operator	...	...	...	1				
Naval Pensioner	...	...	...	1				
Greengrocer	...	...	...	1				
Shirtcutter	...	...	...	1				
Showman	...	...	...	1				
Brass Finisher	...	...	...	1				
Postman (Pensioner)	...	...	...	1				
Draper	...	...	...	1				
Secretary	...	...	...	1				

The ages of the persons notified were as follows :—

MALES.

1 to 5 years	5 to 15.	15 to 25.	25 to 45.	45 to 65.	Over 65.
3	5	12	51	21	1

FEMALES.

1 to 15 years.	15 to 25.	25 to 45.	45 to 65.	Over 65.
9	14	33	9	1

In respect of these 159 cases, 259 notifications were received, the notifications being as follows :—

From Private Doctors	...	...	105
„ Union Infirmaries	...	...	65
„ Hospitals	...	...	63
„ Sanatoria	...	...	20
„ Other Institutions	...	...	5
„ School Doctor	...	...	1

42 cases of non-Pulmonary Tuberculosis were received. Of these 25 were of males and 17 of females.

The situation of the disease was as follows :—

	Male.	Female.
Glands of Neck	7	9
Spine	2	4
Peritoneum	3	1
Abdomen	1	1
Mesenteric Glands	1	—
Meninges	2	—
Hip	4	1
Skin of Neck	1	—
Kidney	1	—
Glands of Groin	1	—
Face	1	—
Tendon of Wrist	1	—
Breast	—	1

INFANTILE MORTALITY.

101 deaths under 1 year of age were registered in the district and 26 occurred in public institutions and other places outside the district, making a total of 127 deaths. This number corresponds to an infantile mortality of 83 per 1,000 births.

The infantile mortality in England and Wales in 1913 was 109 per 1,000 births, and in the 96 large towns it was 117 per 1,000 births.

The deaths were distributed as follows :—

North-East Ward	...	...	...	16
North-West Ward	...	...	...	18
South-East Ward	...	...	...	29
South-West Ward	...	...	...	64

The infantile mortality in each ward was :—

North-East	...	...	48 per 1,000 births.
North-West	...	...	78 „ „
South-East	...	...	80 „ „
South-West	...	...	114 „ „

The infantile mortality is lower in the North-East and North-West Wards and higher in the two others.

In the memorandum to Medical Officers of Health on the preparation of their Annual Reports, it is suggested that use should be made of the comparative figures given in the Second Report to the Local Government Board on Infant and Child Mortality. In this Report detailed figures for the years 1907-1910 are given for 241 urban areas. The 241 urban areas were composed of three groups. The first group consisted of the county boroughs, 75 in number, and 26 boroughs and urban districts having a population of over 50,000 at the census of 1911. The second group consisted of 111 boroughs and urban districts, each of which prior to the census of 1911 had a population between 20,000 and 50,000. The third group consisted of the 29 metropolitan boroughs, each of which, with two exceptions, had a population of over 50,000 at the last census.

The 241 areas were classified in order of infant mortality rates into 9 groups of 25, a final group of 16 remaining. The infantile mortality varied from 155.1 per 1,000 births in Group 1 to 74.2 in Group X. Acton is placed in Group V., which group has an average infantile mortality of 116.5. The infantile mortality of Acton for the 4 years 1907-1910 was 115, and the position it holds was number 124 from the top.

The comparison is carried still further, and the variations in infant mortality in neighbouring sanitary areas, and within the area of individual sanitary districts. Within the County of Middlesex during the same period Acton had the highest infantile mortality and Hornsey had the lowest, with 66.8 per 1,000 births. Although the analysis in the Local Government Board Report is not carried farther, as far as this district is concerned, yet it is interesting to note that the variations in the different Wards of the district are almost as great as they are in the towns within the same county or in the different towns throughout the kingdom. In the period 1907-1910, the average infantile mortality in the North-East Ward was 74 per 1,000 births, and in the South-West Ward it was 151.5.

As our comparison for the years 1911-1913 will be limited to the 101 large towns with a population of over 50,000 inhabitants and the 29 Metropolitan Boroughs, it will be interesting to note that the towns with the highest populations do not necessarily have the greatest infantile mortality. For instance, the group of towns with the highest infantile mortality includes 12 with a population under 50,000, 5 of these having a population under 30,000.

The group of 25 towns having the lowest infantile mortality includes only 12 towns with a population under 50,000. Of the 101 large towns with a population of over 50,000, in the years 1907-1910, 44 had a lower infantile mortality and 56 had a higher one than Acton.

One remarkable fact emerges from a comparison of the infantile mortality at different ages, and that is, Acton compares very favourably during the earlier periods, but some influences adverse to life operate more severely from the sixth to the twelfth months. These influences really operate to some extent from the third month, but are more marked after the sixth month.

In the first week after birth the average rate for the 241 urban areas was 24.3 per 1,000; in Acton it was 21.8. In the first month after birth the average rate for the 241 urban areas was 40.2, and in Acton it was 35.8; in the first three months the

figures were 63.5 and 56.8 respectively. With the advance in age the difference becomes less. In the 241 urban areas the average mortality rate at ages 3-6 months was 22.9, and in Acton it was 21.5. When the age of 6 months is reached, Acton ceases to occupy a favourable position. In the 241 urban areas the average mortality rate at ages 6-12 was 34.2, and in Acton it was 36.8.

Of the 101 large towns with a population of over 50,000, 19 only have a lower mortality rate under 1 week after birth, and under 1 month after birth only 17 have a lower rate. Under 3 months after birth Acton occupies 26th place; in the age period 3-6 months it has gone down to the 44th place, and in the age period 6-12 months the position it occupies is the 46th place.

An examination of the varying incidence of deaths from different causes in infancy reveals differences which at present are inexplicable, but as far as Acton is concerned the figures bear out the opinion expressed in many Annual Reports, that under present social conditions the employment of married women in laundries does not produce an excessive mortality from those causes attributable to ante-natal conditions. The majority of the deaths ascribed to premature births and congenital defects are probably attributable to ante-natal conditions; but many also to lack of care at and after birth. The average mortality rate for the 241 urban areas from premature births and congenital defects was 25.8 per 1,000 births; in Acton the mortality from these two causes was 23.1, or 10 per cent. below the average for these towns.

Prematurity, Congenital Defects, Injury at Birth, Want of Breast Milk, and Atrophy, Debility and Marasmus are grouped together under the name of Group of Five. The average rate of mortality from these 5 grouped diseases in the 241 urban areas was 44.6, and in Acton it was 41.6, or 7 per cent. below. But the mortality from want of Breast Milk was higher than Acton in only 5 urban areas. Want of Breast Milk was responsible for a mortality of 3.8 per 1,000 in Acton. The towns with a higher mortality were Birkenhead with 4.0, Stalybridge 4.8, Leeds 5, Shipley 5.7, and Todmorden with 8.7.

Acton compares unfavourably in the mortality from Diarrhœal and Respiratory Diseases.

The average mortality rate from Diarrhœal Diseases in the 241 urban areas was 16.5; in Acton it was 21.5.

From Bronchitis and Pneumonia the figures were 21.4 and 24.3 respectively; that is, Acton was 14 per cent. above the average rate in the 241 urban areas.

From Measles and Whooping Cough the mortality rate was slightly below the average for the 241 urban areas; in Acton the rate was 7.2, compared with 7.8 in the urban areas.

Summarised, it was found that in Acton (1907-1910) the death-rate was :—

	Per cent.
At ages 0-1 month	11 below.
„ „ 0-3 months	11 „
„ „ 3-6 „	6 „
„ „ 6-12 „	8 above.
From Prematurity & Congenital Defects	10 below.
„ the “ Group of Five ”	7 „
„ Measles and Whooping Cough...	8 „
„ Bronchitis and Pneumonia	14 above.
„ Diarrhœal Diseases	30 „
For the entire first year of life	5 below.
At ages 1-5 years	6 „

the average rate for the 241 urban areas.

Limiting our comparison to the 101 County Boroughs or districts with a population of over 50,000, Acton occupies the following relative positions in the mortality rates for the different diseases :—

Convulsions	5th
Measles	18th
Atrophy, Debility, and Marasmus	23rd
Prematurity	33rd
Congenital Defects	35th
Whooping Cough	56th
Tubercular Diseases	65th

Bronchitis and Pneumonia	...	...	...	78th
Diarrhœal Diseases	...	...	...	86th
Injury at Birth	...	...	...	94th
Want of Breast Milk...	...	...	...	99th
Total under 1 year	...	...	...	45th

Before extending our comparisons so as to include the last 3 years, it would be well if we examined the causes of the excessive mortality from the different diseases. We shall then probably be in a better position to gauge the value of the work which has been and is being done in this district.

The conditions associated with and assisting in varying degree in the production of excessive infant mortality are partly social and partly sanitary; and it is easy, according to the point of view adopted, to magnify unduly the importance of one set of factors.

The effects of unsatisfactory domestic and extra-domestic local conditions are fairly obvious, and their consequences fall most heavily on the poorer members of the community. Of the domestic forms of insanitation, overcrowding and lack of cleanliness are probably the most important. For the infant it means exposure to a stuffy atmosphere, and the storage of milk in a contaminated and vitiated atmosphere.

Outside the house, the yards are insufficiently paved and the ground soaked with organic filth.

To what extent and in what manner the industrial employment of married women affects the infantile mortality is still a matter of discussion. Possibly, the case should be stated in a different way, and, under present social conditions, the harmful effects are partly counteracted by the greater comfort and increased nourishment which such employment enables the mother to secure.

The figures for the Census have not yet been published, and the exact number of married women employed in the laundries cannot be given, but the approximate number of births where the pregnant mother was in some employment has been ascertained.

In former Annual Reports, the effect on the child of married female labour was discussed, and the investigations recently made point to the same conclusions as was arrived at on previous occasions. The figures given on a preceding page also point to the same conclusion.

The mortality from Prematurity and Congenital Defects is lower in Acton than the average in the large towns. These two diseases, together with Atrophy, Debility, and Marasmus, are those mostly affected by ante-natal conditions, and from these diseases the mortality in Acton is below the average.

But if the ante-natal effect of married female labour is not obvious, the conditions under which the child is brought up as a result do affect the infantile mortality. In only 2 of the large towns did want of Breast Milk cause a higher mortality, and deaths from Bronchitis and Pneumonia were 14 per cent. above the average, and from Diarrhœal Diseases the mortality was 30 per cent. above the average for the 241 urban areas.

The employment of the women in extra domestic duties tends to produce premature weaning, and it is one of the causes of our heavy mortality from Diarrhœal Diseases. Human milk is not only the best food, but no other milk can be made into a perfect food for infants. It is true that other milks can be modified so as to resemble in chemical composition human milk, but milk is not an inert liquid, depending for its nutritious qualities on the chemical substances it contains; it is a living liquid with important biological qualities. Premature weaning is a pathological process, and always a regrettable event. Fortunately, the human organism is eminently capable of adapting itself to circumstances, and, in spite of these facts, in a majority of instances, healthy children can be brought up on the bottle, and on a succeeding page figures will be given showing to what extent our efforts have been successful in counteracting the baneful effects of married female labour. We are not now discussing the various causes of Diarrhœal Diseases, nor with the factors which underlie the employment of female married labour, but merely with the association of this employment with Diarrhœal Diseases, and we are

convinced that one of the reasons why the incidence of Diarrhoeal Diseases has been excessive has been the extensive prevalence of artificial feeding. The disadvantages of artificial feeding were further accentuated by the absence of the mother from the home, and by carelessness and ignorance and lack of cleanliness in the preparation of the food.

It is impossible, of course, to dissociate the effects of married female labour from those of poverty, and in social questions causes and effects may occupy positions of mutual dependence and transferability. Many of the women are occupied in the laundries, not from choice, but from necessity, and are widows or the wives of men whose earnings are insufficient to maintain the home in comfort.

The excessive mortality from Bronchitis and Pneumonia is also in part one of the effects of married female labour. The mother has to take her baby to be cared for in the morning as she proceeds to work and fetch him again in the evening. Under the best of conditions the child was liable to contract Respiratory Diseases, but in former years the mother had no option but to leave the child in the charge of a "baby minder." The mother did not select the house where the baby was cared for on sanitary grounds, and the standard of cleanliness which usually obtained in the "baby-minder's" house was below that of the average for the neighbourhood. In 1908 the South Acton Day Nursery was opened, and it has been undoubtedly the means of improving the conditions under which the children are cared for.

It is well known that prior to 1901 in very few places had efforts been directed for the specific purpose of reducing the infantile mortality. The passage of the Public Health Act, 1875, marked an epoch in sanitary development, and the work carried out under that Act had for its object the improvement of the sanitary conditions under which the community lived, and to this extent affected infantile mortality. The reason why this general work did not affect the infantile mortality figures is probably accounted for by the fact that the increased urbanisation of the population for a time more than counteracted the good

work done, but this work formed the foundation on which other preventive measures were based. Health visiting, infant consultations, and other allied measures would be almost useless apart from the remedying of sanitary defects which has been and is proceeding in all directions.

Other factors, such as poverty and intemperance, enter into the causation of a high infantile mortality, and their amelioration must react upon the death-rate, but the recent reduction is more than can be accounted for by the general measures which have always been in operation for the removal of these unfavourable conditions. It is more than an accident that the marked reduction here has been coincident with the special measures which have been taken to protect infant life, and a brief review of these measures is more than suggestive that their relation to the reduction is one of cause and effect.

In 1905 two Assistant Sanitary Inspectors were appointed, but owing to the increase in other work, in spite of the additional appointments, very little house-to-house inspection was carried out until 1909, when an additional Inspector was appointed. The duties of the latter officer were primarily connected with house-to-house inspection, more especially in the South-West Ward, where the infantile mortality had been, and is, exceedingly high. The duties of the Inspectors were subsequently rearranged, and house-to-house inspection has since been carried on throughout the district. The details and results of these inspections have been recorded in the Annual Reports, but the following table gives the total number of house-to-house inspections made since 1909 :—

1909	...	...	...	...	...	203
1910	...	...	...	...	...	1,080
1911	...	...	...	...	...	800
1912	...	...	...	...	...	642
1913	...	...	...	...	...	594

But in addition to the house-to-house inspections, at the beginning of every summer, a list is prepared of all the houses where a birth has occurred within the previous twelve months,

and these premises are periodically visited during the warm weather, and the occupiers warned against the accumulation of any refuse or other organic matter in or about the house. Special leaflets are also distributed giving instructions in the prevention of Diarrhoeal Diseases.

In 1904 a Health Visitor was appointed by the Council. Prior to this date leaflets had been distributed, in which instruction in the care of infants was given. These leaflets were probably of some use, but it was felt that personal visits would have a more beneficial effect. A list of the births registered in the district was obtained, and the Health Visitor paid visits to the houses in that part of the district where the infantile mortality was excessive. One fact militated largely against the success of these visits. A birth need not be registered until six weeks have elapsed; so that frequently the baby was about 2 months old before a visit could be paid. In that time occasionally irreparable mischief had been done, and frequently artificial feeding had been resorted to. It is true that the Midwives Act of 1902 has improved the conditions under which the poorer part of the population are treated at their confinement, but some doctors and midwives either did not give advice as to the rearing of the infant or gave improper advice.

The midwife is gradually becoming a more reliable person, and it is likely that ere long the instances will become fewer in which she will be a party to, or actually encourage, the abandonment of breast feeding on the supervention of minor difficulties. Our efforts to visit the births early were greatly facilitated by the passage of the Notification of Births Act, and Acton was one of the first districts to put the Act in force. It came into operation in January, 1908. Over 75 per cent. of the births are now visited, and revisits are paid in many instances.

The increased work which the Notification of Births Act entailed, together with the school work, necessitated the appointment of a second Health Visitor, but when the inspection of

school children was undertaken, the duties were rearranged, and a School Nurse was appointed instead of the second Health Visitor.

At the beginning of 1913 an Infants Consultation was instituted in a room at the Priory School. An account of the year's working will be found on a subsequent page, but its institution was felt to be necessary, as one Health Visitor could not revisit an appreciable number of the homes where a birth had occurred.

Although not a municipal undertaking, the initiation of the movement for the establishment of a Day Nursery in South Acton was due to the efforts of some members of the Council. A clause was proposed in the Acton Improvement Act of 1904, empowering the Council to establish and maintain one or more crèches. The Parliamentary Committee, though professing sympathy, refused the application. Philanthropic Agencies took the matter up, and the Day Nursery was opened in Strafford Road in January, 1908. The first Chairman of the Committee of Management was Mr. E. F. Hunt, who was at the time Chairman of the Health Committee, and some of the members of the Council have continuously kept in close touch with the work of the Day Nursery. Its establishment has undoubtedly been of value in the reduction of infantile mortality. One of the objections raised against crèches is their liability to encourage premature weaning, and in many crèches it must be admitted that this danger is not sufficiently appreciated.

In Acton every safeguard is adopted to obviate this. The crèche is not too large, and is so situated as to be convenient for the mothers to leave their work for the purpose of suckling their children. The crèche has 40 cots, and the mothers work at laundries within easy reach, and every encouragement is given at the crèche to the mothers who wish to suckle their children.

We are now in a position to examine the progress which has been made in the reduction of the infantile mortality and the possible relation which such reduction bears to the measures specified.

As is well known, there was, prior to 1901, no clear indication that the average rate of infantile mortality had declined. The following table gives the chief facts for England and Wales as a whole and for London separately :—

Annual mortality of infants under 1 year of age per 1,000 births :—

	1851-60	1861-70	1871-80	1881-90	1891-1900	1901-10	1911	1912	1913
England & Wales	154	154	149	142	153	127	130	95	109
London	...	155	162	158	152	159	126	129	90

We are not in a position to give exactly the infantile mortality of Acton before 1905. It has been explained that prior to 1905 the outside deaths were not included, and the reductions since 1905 are really greater than appears from the tables.

Average annual mortality under 1 year per 1,000 births :—

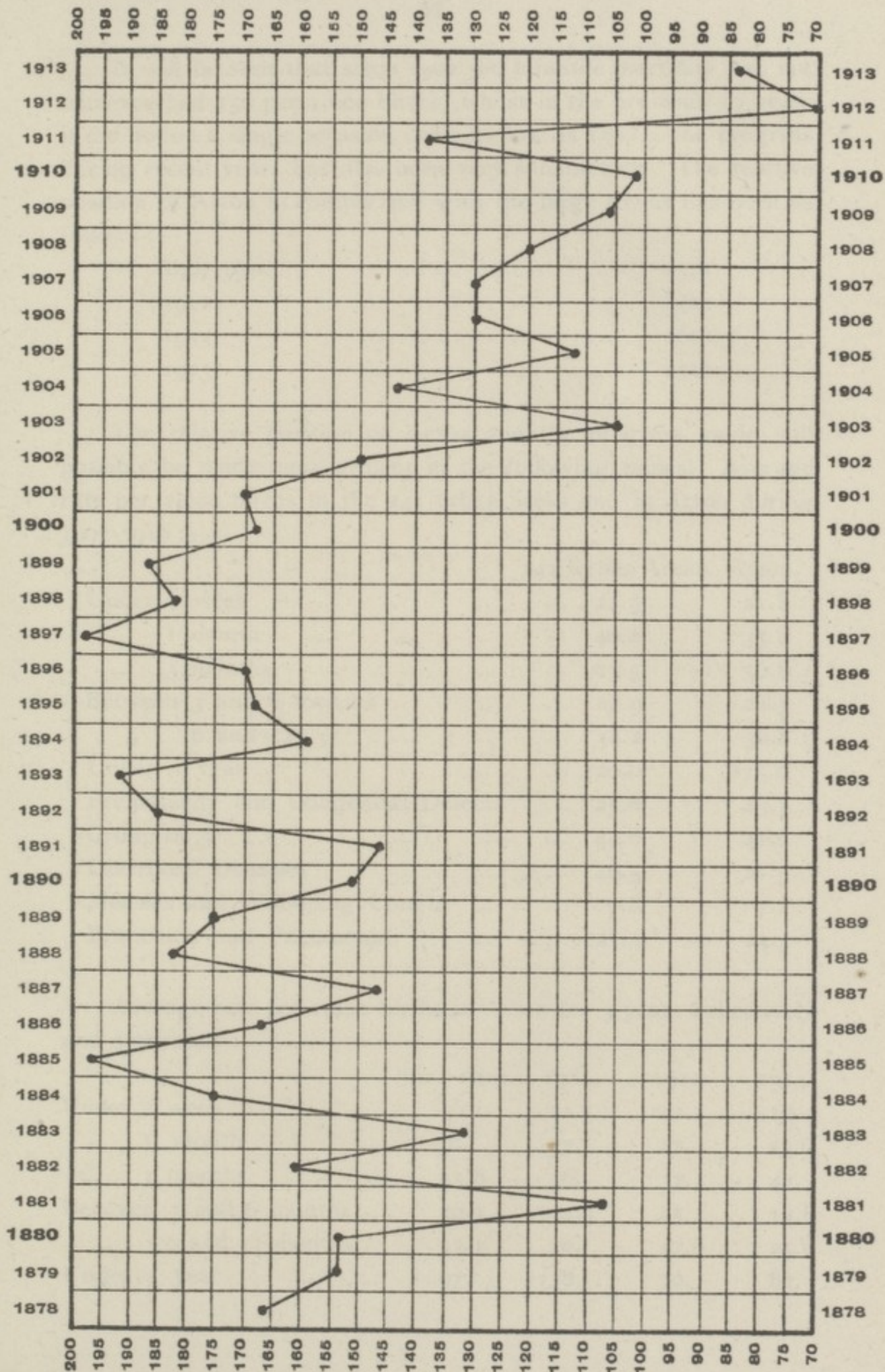
1878-1880.	1881-1890.	1891-1900.	1901-1910.	1911.	1912.	1913.
158.1	159.3	175.5	125.8	138	70	83

Throughout the kingdom the steady improvement from 1901 onwards is one of the most striking features of the vital statistics; and the figures for Acton show a greater improvement than those for the rest of the kingdom.

Prior to the decade 1901-1910 the infantile mortality of Acton was persistently higher than that of the whole of the kingdom and of London, but since 1902 the average rate has been lower. Even the high infantile mortality during 1911, the climatic conditions of which year favoured a high infantile mortality, showed a great improvement on the experience of former years of a similar character.

The course of events since 1878 is more clearly shown in the following diagram :—

Infantile Mortality per 1,000 Births.



It will be seen that since 1902 the infantile mortality has not once reached 150 per 1,000 births, whilst in the previous 10 years it did not on a single occasion come as low as 150. The progress during recent years has also been very satisfactory. The relative position of Acton in comparison with the large towns has been as follows :—

1907-1910	...	...	...	...	45th
1911	...	...	...	...	64th
1912	...	...	...	...	6th
1913	...	...	...	...	25th

The relative position of Acton and the progress made will possibly be made more evident in the following tables. Average rate per 1,000 births in the 241 urban areas and in Acton during 1907-1910 :—

	241 Urban Areas.				Acton.
Under 1 week	...	...	...	24.3	21.8
„ 1 month	...	...	...	40.2	35.8
„ 3 months	...	...	...	63.5	56.8
Between 3 and 6 months	...	...	...	22.9	21.5
„ 6 and 12 „	...	...	...	34.2	36.8
Under 1 year	...	...	...	120.6	115.0
Prematurity and Congenital Defects	...	...	...	25.8	23.1
Group of 5	...	...	...	44.6	41.6
Diarrhœal Diseases	...	...	...	16.5	21.5
Measles and Whooping Cough	...	...	...	7.8	7.2
Bronchitis and Pneumonia	...	...	...	21.4	24.3

Average rate per 1,000 births in Acton for 3 years collectively and separately :—

	1911-1913.		1911.	1912.	1913.
Under 1 week	...	...	16.1	21.5	17.1
„ 1 month	...	...	30.	37.	27.
„ 3 months	...	...	45.8	56.	37.5
Between 3 and 6 months	...	...	20.3	32.3	15.1
„ 6 and 12 months	...	...	33.1	50.	17.8
Under 1 year	...	...	97.	138.	70.

Prematurity and Congenital

Defects	20.3	28.2	16.5	12.4
Group of 5	35.5	45.7	30.9	30.2
Diarrhoeal Diseases ...	22.3	45.7	7.9	13.8
Measles & Whooping Cough	6.63	12.1	3.3	4.6
Bronchitis and Pneumonia	16.1	17.5	13.1	17.7

It will be seen that a great reduction has taken place, even though the unfavourable year of 1911 is included, and the question arises as to the extent which infantile mortality can be further reduced. What is the irreducible minimum? A decade ago, many eminent authorities imagined that if an infantile mortality could be reduced to 100 per 1,000 births, it would be as low a rate as we could hope to attain.

The ideals of yesterday are the accomplished facts of to-day, and our present ideals are on a much higher level than they were 10 years ago. Among the families of army officers in 1911, the infant mortality per 1,000 births was only 44, of naval officers and soldiers 41, of medical practitioners 39, and the rate of infantile mortality of the middle classes generally was only 61 per cent. of the total mortality rate among legitimate infants.

These figures show how little of our present infant mortality is essentially inevitable.

Our ideals must be raised with every new discovery or our system must become fossilized. Our opinions must alter, and our methods of dealing with the problem must change and expand, or our efforts are doomed to failure.

If the table giving the causes of death under 1 year be referred to, it will be seen that a large percentage of the children die from ante-natal causes. There were 19 deaths from Prematurity, 23 from Marasmus, 3 from Congenital Malformation and 2 from Congenital Syphilis. Moreover, under the heading Bronchitis and Pneumonia will be included not only the so-called primary pneumonia, which occurs without any obvious precedent departure from health, but also Pneumonia which occurs in children who have been ailing because of defect existing at birth,

or because of various unfavourable general conditions affecting them after birth, and the Pneumonia which follows as a remote effect of the common infectious diseases and when all characteristic symptoms of the primary illness have disappeared.

If the general causes predisposing to, and the special conditions associated with, pneumonia amongst young children are viewed broadly; it will be found that in the first year of life gross defects of development and ante-natal infection with syphilis have a distinct influence. It will be found also that many of the deaths in the first year are associated with Marasmus, whether that condition is due to prematurity of birth, or be caused by artificial feeding. The broncho-pneumonia, which is the chief cause of the heavy mortality from diseases of the respiratory system in children, is believed to be, in the main, an effect of direct infection of the lung, occurring usually under conditions of general enfeeblement in which the power of resistance of the lung against bacterial invasion from without is lowered.

It may be taken as a conservative estimate that more than one-half of the deaths under 1 year are due to ante-natal causes. But the subject is of still greater importance. It is calculated that the total number of foetal deaths amount to over 11 per cent. of the number of births, and when we are brought face to face with the statement that practically as many infants die during foetal life as during the first year of their independent existence, we are confronted with a problem which clearly requires that means should be concerted with the view of attempting to prevent this waste of human life. There can be little doubt that suitable measures in this direction would be immediately followed by beneficial results, but how the complete solution of the problem is to be reached is not so obvious. Hitherto our efforts have been almost entirely directed to the feeding of infants, and the success attending them has been made sufficiently obvious by the reduction of infantile mortality.

Our efforts to improve some of the ante-natal conditions are at present necessarily of a very limited character, but it is hoped that a small beginning may be made through the agency

of the Infants' Consultation held in the Priory Schools on Monday afternoons. These consultations have proved a bigger success than we had anticipated. The consultations were started primarily because it was physically impossible for one health visitor to re-visit more than a small percentage of the births. They were instituted in November, 1912, in rooms at the Priory Schools hired from the Education Committee, and during 1913, the Health Visitor attended on 48 occasions. During the first three and a-half months the average weekly attendance of mothers with their babies was 9, and the weekly average for the year was 21.

The total number of attendances has been 1,024, the highest number in one afternoon being 57. During the year 18 of the mothers who attended left the district. Altogether 233 children have attended, and of this total 3 died; so that the infantile mortality amongst the infants who attended was 15 per 1,000. Of course, it is unfair to compare this infantile mortality with that of the rest of the district, as most of the mothers do not bring their children until they have reached the age of 1 month, and last year 39 deaths out of a total of 127 occurred in infants under the age of 4 weeks. If a comparison be made, it should be based on the ratio of deaths to the number attending at the different age-groups, but such a comparison would be of little value.

The ages of the infants when they commenced attendance were as follows :—

Under 3 months.	3 to 6 months.	6 to 9 months.	9 to 12 months.
145	29	20	5
1 to 2 years.	2 to 3 years.	3 to 4 years.	4 to 5 years.
10	13	6	5

Although the success of the venture could be stated in figures, its influence is greater and deeper than such figures would suggest. One of the Council's Medical Officers is usually in attendance, and since her appointment Dr. Chubb has attended on almost every Monday afternoon. Most of the mothers bring their infants regularly to be weighed, and although no treatment is carried out, advice is given whenever a child is not making satisfactory progress, and in that case the mother is referred to her own doctor.

Some of the mothers are diffident of making a first visit, but readily come afterwards. The object of the consultation was evidently misunderstood, but after the first visit, they came with alacrity and often at a considerable sacrifice. Where the attendances have been irregular, it is found that the difficulties are almost insurmountable. Some of the mothers are at work—the husbands being out of employment or only irregularly employed—and although the majority of them are employed in laundries and do not commence work in the laundry until Tuesday, on Monday they do their own laundry work at home. In spite of these difficulties a large number manage to find time, so great is their interest in the progress of the baby. They are all keen and anxious to learn, and they undoubtedly do learn a great deal from the simple association with each other, but they ask questions of the Health Visitor and of each other on all matters pertaining to the home and the baby. There is a great need for an educational campaign amongst the mothers, especially as to the nutritive value of the various foods. Want of thrift plays an important part in the poverty of many households; what is meant, of course, by want of thrift here, is an inability to adapt the means at their disposal to the best advantage.

The frequent visits of the mothers enable us to touch on many matters which could not possibly be mentioned in one or two visits to the house. These visits to the Priory School also enable us to give better advice as to the clothing. At the commencement of the winter it was not uncommon for the infants to be brought to the Priory School with their lower limbs blue with cold. For the first couple of months the child is swathed in long clothes and can hardly move a muscle. Then comes the process of "short-coating," when the other extreme is reached, and the legs have hardly any covering at all. When the attention of the mothers was called to the condition, a great improvement was observed, and not the least gratifying result during the past winter has been the intelligent and increased care paid to the clothing of the infant.

Premature weaning has in many cases been prevented by the advice given to the mother as to her own health and diet. This advice has been instrumental in preventing her to give up suckling the baby without sufficient cause. Occasionally the flow of milk would slightly diminish, but timely advice would re-establish the function, and where breast feeding was insufficient, she was enabled to keep up partial suckling and simply supplement this with artificial feeding.

In spite of all endeavours, a large number of children are brought up by hand, and the usefulness of the consultation is then made still more evident. The mother is able to ask and receive advice as to the best food and the proper quantity. She is not left to the mercy of a neighbour who is more ignorant than she is, but whose volubility enhances the dangers of her ignorance. The mother also has visible evidence of the progress or otherwise of the baby; a gradual increase in weight is, after all, one of the best manifestations of a healthy progress.

To stimulate interest, a baby show was held on July 7th, in the Central Hall of the Priory School. The function was really more in the nature of a reception than of a baby show. The Chairman of the Health Committee invited all the mothers to a tea, and if the mothers desired the babies could be entered for competition. 75 mothers accepted the invitation to tea and 62 babies attended the baby show. The 75 mothers brought their babies with them, but for various reasons, some of them did not wish to enter their babies for competition. The chief reason was that some of the babies were delicate. Although the prizes were not awarded for robustness and development alone, the mothers felt that delicate children would be handicapped. In every instance, where care and attention had been paid in the rearing, though the babies were not entered for the baby show, certificates were awarded to the mothers.

The babies were divided into 4 classes—under 3 months, 3-6 months, 6-9 months and 9-12 months. In the youngest class there were 13 babies, in the second 15, in the third 17 and in the oldest class 17.

The babies were drawn from the part of the district which has always had an excessive infantile mortality, and even some of the prize-winners came from streets where efforts are necessary to raise the standard of personal hygiene. It was evident that a large amount of intelligent care and attention had been paid to the upbringing of the children. The condition of the children and the character of their clothing made it obvious that the care had been a continuous one, and not a special preparation for the occasion.

Although the fuuction was carried out with the sanction of the Council, it was a private and voluntary affair as far as management and finance were concerned. Miss Smee, the Chairman of the Health Committee, made herself financially responsible, and though she was supported by the members of the Council, both financially and otherwise, its success was due to her initiative and whole-hearted support.

As previously stated, these consultations were primarily started for the purpose of giving advice to mothers in the rearing of infants, and during the summer months, for instance, Dr. Chubb spoke to the mothers of the special dangers and precautions to be taken to avoid diarrhoeal and other digestive diseases in warm weather. These talks were specially helpful to the mothers and fruitful of good. But it is felt that a large field is open in the direction of remedying some unhealthy ante-natal conditions, and it is hoped by some means to reach some of the expectant mothers. As a sanitary authority, the means at our disposal and our powers are limited, but in some districts, through voluntary agencies, prematernity work has been commenced and a pre-natal campaign has been organised. The inquirer is in a position to fill in the details and to estimate the hopefulness of attempts which have as their first aim the making of the surroundings of the unborn infant healthy and health-giving. The environment of the unborn infant is his mother, and the health reformer looks forward hopefully to the improvement in the health of the infant at birth which must follow upon the making of his ante-natal maternal environment all it ought to be.

The suggestion of a pre-maternity benefit in connection with the Insurance Act is worthy of most serious consideration. The poverty of the expectant mother must have a direct influence on the nutrition of the child, and her mental and physical state would be much improved by the knowledge that there was some provision for such contingencies as might arise.

But one of the most serious causes of intrauterine death and disease is syphilis, and a good deal of the work for the protection of child life will be nullified unless the problem of the prevention of this disease is faced. The favoured germs of this disease are spoken of with bated breath. Large sums of money are spent and endless measures are proposed for the protection of child life and the provision of maternity benefit, and yet these venereal scourges are allowed to go on crippling the mothers, by producing diseases, not only in those who primarily acquire them, but in their wives and children, and their children's children. Our ignorance as to its potency in this direction is paralleled by our lack of knowledge of the general prevalence of this disease in this country. It is to be hoped that the Royal Commission which is at present engaged in the study of venereal diseases in general will not forget the vast importance of this particular branch of the subject, and institute an investigation into this grievous problem of ante-natal mortality. The great advances which have been made in the diagnosis and treatment of the disease in recent years enable us to diagnose it in all its stages, and effectually control its progress. They give us the power to limit the disease to its earliest stages, and eventually to abolish, amongst other curses, congenital syphilis.

The ages at death and the causes of death, together with the ward distribution, are given in the tables at the end of the report.

The deaths from Diarrhœal diseases require a separate paragraph on account of an outbreak which occurred in an institution in the district. These deaths are not included in our returns, as all the children who died were non-residents.

26 deaths were due to Diarrhœal diseases. As might be expected, the number of deaths was lower than in 1911 and higher than in 1912. Whatever views be held as to the causation of summer Diarrhœa no doubt exists of the retarding influence of a wet, cold summer, or of the opposite effect of a hot dry summer. In the matter of temperature and rainfall the summer of 1913 came somewhere between those of 1911 and 1912. The number of deaths of infants from Diarrhœal diseases was as follows: 1911, 68; 1912, 12; 1913, 21. The total deaths from Diarrhœal diseases were: 1911, 98; 1912, 17; and 1913, 26.

There have been many inquiries into the subject of Diarrhœa, some of which, like Dr. Ballard's and Dr. Newsholme's, have dealt with all the aspects of the subject. Others have concerned themselves with special aspects of the subject. There was one aspect of the question which had an especial interest for us last summer. That Diarrhœa is an infectious disease capable of spreading from the sick to the healthy is now assumed by a large section of the medical profession, and if the history of institutions were faithfully recorded, it would probably be found that it not infrequently spreads in these. Dr. Sandilands, in a paper before the Royal Society of Medicine, reviewed the evidence for and against the communication of Diarrhœa from the sick to the healthy, and he came to the conclusion that certain fatal forms of summer Diarrhœa are communicable, but that communicability is by no means a conspicuous feature of epidemic Diarrhœa in every case.

Laboratory experiments have proved that Diarrhœa is capable of spreading from the sick to the healthy, but there are very few instances in which it has been proved that it does so spread in the epidemics which occur annually throughout the country.

The establishment in which the Diarrhœa occurred consists really of two houses, but the children and nurses lived entirely in one, and in the other house the proprietor and his family lived. The outbreak was confined entirely to the house in which the infants and nurses lived. The two houses are entirely detached, although means of communication between the two houses exists in the rear.

The establishment is used as a training place for nurses and an institution where children are put out to live. Practically all the children are illegitimate. The staff consisted of the matron, a trained nurse and 18 probationers or pupils. A doctor attends almost daily, and of course more frequently when an illness occurs. At the end of last August, when the outbreak of Diarrhœa occurred, there were 30 infants there.

The milk is supplied in sealed cans by a well-known and highly respected dairy company. The drains had recently been examined and relaid.

Up to the last week in August the place had been remarkably free of Diarrhœa, but on August 28th, a child aged 5 months was taken violently ill with Diarrhœa and Vomiting and died on September 2nd. On August 29th, the second case occurred. On September 1st, 2 cases occurred; on September 2nd, 2 cases; on September 3rd, 4 cases; on September 4th, 2 cases; September 7th, 1 case, and September 9th, 1 case. Altogether 14 children out of 30 were attacked with severe Diarrhœa, and 8 died.

During the first week in September, 9 out of the 19 nurses suffered from Diarrhœa, but they all recovered.

The propositions formulated by Ballard in 1887 as a working hypothesis that would best accord with the totality of the evidence then, still hold good to a very great extent. He held that the essential cause of Diarrhœa resides ordinarily in the superficial layers of the earth, where it is intimately associated with the life-processes of some micro-organism not yet detected, captured or isolated.

The vital manifestations of such organism are dependent, among other things, perhaps principally, upon conditions of season and on the presence of dead organic matter which is its pabulum.

On occasion such micro-organism is capable of getting abroad from its primary habitat, the earth, and having become air-borne, obtains opportunity for fastening on non-living organic material and of using such organic material both as nidus and as pabulum in undergoing various phases of its life-history.

In food inside of, as well as outside of, the human body, such micro-organism finds, especially at certain seasons, nidus and pabulum convenient for its development, multiplication, or evolution. From food, as also from the contained organic matter of particular soils, such micro-organism can manufacture by the chemical changes wrought therein through certain of its life processes, a substance which is a virulent chemical poison; and that this substance is, in the human body, the material cause of epidemic Diarrhœa.

Although the specific germ of Summer Diarrhœa cannot be said to have been isolated with certainty, the behaviour of the organism most frequently found in infantile Diarrhœa is interesting. When sterilized milk is inoculated with this organism, the germ grows rapidly and is easily recoverable, but when unsterilized milk is inoculated with Morgan's bacillus and incubated at room temperature for 6, 12 and 24 hours, it was impossible to recover the bacillus by the usual methods.

The milk delivered to this institution was always pasteurized, so that the condition under which the germs of Diarrhœa would multiply were present, but whether all the cases were due to the same cause, or resulted from a case-to-case infection is open to argument. It may be stated that the measures which were taken to cope with the disease were based on the assumption of a case-to-case infection and they were successful.

It is most unlikely that the milk was infected before its arrival in the house. It was obtained from a company which pasteurizes all its milk at the farms, and delivered at the house in a sealed can. Moreover, milk from the same churn was supplied to another institution, and no cases of Diarrhœa occurred. It is true that no small children resided in the other institution, but 9 of the nurses were attacked in the affected house. As far as could be ascertained the milk delivered by the dairy company about that period appeared to be free from suspicion, and there is no ground for assuming that the milk was infected before its arrival.

The fact that the cases occurred on consecutive dates points to a case-to-case infection. The first case of Diarrhœa occurred on August 28th, and the other cases occurred at intervals up to September 9th. There was no Diarrhœa amongst the nurses before the end of August and the illness started amongst them during the first week in September. It was impossible to fix the exact date of onset in the nurses, but the exact dates could be fixed in the children, as charts were kept recording the temperatures, state of the bowels, etc., and from the dates given in a preceding page it will be observed that the cases occurred, not at the same time, but at varying intervals following each other. It is no objection to the evidence of communicability that all the members of the household were not attacked. In the early stages, no significance was attached to the occurrence of successive cases, but later the probability of communicability was appreciated and precautions were taken. As soon as these precautions were taken the outbreak ceased, although the conditions favourable to Diarrhœa continued for some time. In London the deaths from Diarrhœa did not appreciably drop until the middle of October, and the temperature was comparatively high for a month later. Last summer up to the week ending August 23rd, the temperature in London was below the average; for the week ending August 30th, it was below 2.3° below the average, and for the weeks ending September 6th and 13th, the temperature was only 0.5° and 0.4° respectively, below the average. For the week ending September 20th, it was 2.2° below the average, but for the week ending September 27th, it was 4.8° above the average.

It is only fair to state that some authorities believe that Diarrhœa is not an infectious disease.

At the Children's Hospital, Vincent Square, no precautions, as in the case of infectious disease, are taken. No attempt at isolation is made. The infants lie side by side in their cots—the case of severe atrophy next to the case of epidemic Diarrhœa—and they are attended by the same nurses, who minister to all their requirements, and yet there is no case-to-case infection.

But the conditions at the Children's Hospital are very different to those in the house in question. In a hospital the nurses are fully trained and appreciate the value of asepsis and antisepsis. Here the majority of the nurses were being trained and had only been a short time in the institution.

But of more importance is the question of floor space allowed to each child. The superficial floor space at hospitals allowed to each child is at least 30 square feet, here it was little more than half of that. Although there was no legal overcrowding, neither the superficial nor the cubic space was comparable to that allowed in a hospital, and there were 30 children and 19 nurses living in the house.

Under the Children's Act, the Guardians have power to fix the number of children allowed in such institutions, and I understand that the responsible officer has fixed the number so as to allow a floor area of 30 square feet for each cot.

MORTALITY BETWEEN 1-5 YEARS OF AGE.

89 deaths occurred in children between the ages of 1 and 5 years, and though this age-period is one of the most important in the life of the child, it is the period when least supervision is exercised. By means of the Notification of Births Act, a child is brought at birth to the cognisance of the Health Department, and a systematic supervision of the first year of life is an established fact. At the age of 5 the child comes under the supervision of the School Medical Service, and remains until he reaches the ages of 13 or 14. Of course, we are only referring to a portion of the industrial part of the community when we say that the children are brought under the supervision of the Health Visitor, but it may be stated that practically no provision has been made in the past for the supervision of any children between the ages of 1 and 5 years. In last year's school report it was pointed out that during the medical inspection of infants who are newly admitted to school it is regrettable to find that certain complaints may already have become chronic at the beginning of school life. This is specially the case in the poorer parts of the district, and refers to such

complaints as blepharitis, chronic ear discharge, deafness, and scars upon the cornea. If we take the case of deafness, the Acton Education Authority have about 10 cases of Hereditary or Congenital deafness under their control. 3 of these are at an institution at a cost of £35 a year each, 4 are at a school at a cost of £12 a year each and will have to be kept later at an institution and 3 are waiting admission to a school.

These children have to be sent to an institution after reaching the age of 14, because at that age they have only reached the development of children of about 10. The deaf child at 7 is unequal in many respects to the hearing child of 2 years. Although the children are known to be deaf, no effort is made to teach them a language until they reach the age of 6 or 7. The loss of the years between 2 and 7 is irretrievable.

The State does not recognise that the child needs anything for these years, and yet these are the years of language and speech formation, and the most plastic in the child's career. If the mother had been taught a few principles of speech or lip reading, in the opinion of Dr. Kerr Love, we might expect the development of the nascent speech instinct at the time when that development is easiest and most natural. The faculty of imitation, so strong in children, would give the young deaf child a small vocabulary, on which the teacher could at once build when the child entered school.

But there is another and a much larger class of deaf people in which the seeds of deafness have been sown in the period under notice. I refer to the acquired deafness which results from chronic ear discharge. Temporary deafness is often cured, discharging ears can be dried up, abscesses of the brain due to ear disease can be evacuated. But old standing deafness cannot usually be cured. Most of this kind of deafness results from a chronic discharge of the ears acquired in an attack of Measles or Scarlet Fever in the age-period 1-5 years, and practically no supervision is exercised and very little warning is given as to the seriousness of the complaint.

Many children when they attend school have become almost or totally blind in one or both eyes, and the blindness often results from causes which could have been removed. Whatever may have been the cause of a squint, it is admitted that a continuous squint involves a weakening or loss of visual function, and that the younger a child the more readily does this occur. A neglected squint which can be cured in the early years of a child's life may lead to blindness in the affected eye in later years. Usually excellent results follow early treatment. Two of the children attending the Infant Consultation at the Priory School had a very bad squint. They were advised treatment and obtained glasses at a hospital. The squint has almost entirely disappeared and the child's sight appears very good. Very frequently, it requires intelligent care and patience on the part of the mother in addition to the wearing of spectacles, but where the mother has been instructed, the results are most gratifying.

The seeds of dental disease suffered from in after-life are sown between the ages of 3 and 5. In the school report stress is laid upon the necessity of care of the temporary teeth. It is generally held that the problem of dental caries is primarily a question of diet, and by far the most important factor in the production of dental caries in children is unsuitability in the character of the food provided from infancy onwards. If an improvement in this direction is to be obtained, it can only come about through education and a change in the dietetic habits of children.

Many other ailments could be mentioned, and it all shows that the question is a far greater one than can be adequately dealt with by the means at our disposal. In this district, the question is a wider one still, on account of the industrial conditions which prevail. Not only is there need for some supervision of children who remain untreated for slight ailments, but there are here many children whose mothers for one reason or another are unable to provide the care and attention required to secure a healthy growth and development.

There are probably about 4,000 women employed in the laundry industry, and possibly one-half of these are married. There are only two organisations in the district which deal with the children between the ages of 1 and 5. The Day Nursery in South Acton receives children up to the age of 5, but the Day Nursery has accommodation for only 40 children, and it is unreasonable to expect the Committee to extend their operations without a hope and promise of a larger subscription list.

Attempts are also made by the Health Visitor to continue the supervision commenced during the first year until the children are of school age, and last year 34 children between the ages of 1 and 5 years regularly attended the Infant Consultation at the Priory School. If this could be extended, some control would be available for a large number of children under school age. It is not suggested that the children should undergo any medical examination, but in most cases advice is required as to feeding, clothing, etc., from time to time.

The alternative suggested to the Infant Consultations has been the Nursery School. The advantage of the former would be in the fact that home visits could be paid to selected cases, and it is also generally admitted that children under 5 should remain at home under the care of their mothers whenever possible. It is possible to combine both and limit the Nursery School to children whose mothers are away from their homes. The organisation of a Nursery School would differ in many ways from that of an ordinary elementary school, and these schools are intended to supplement the care which should be given at home.

NOTIFICATION OF BIRTHS ACT, 1907.

1,456 live births and 44 still births were notified during the year.

44 births were registered that had not been notified within the statutory period.

579 births were notified by doctors, 729 by registered midwives, 150 by parents and 42 by nurses.

In 39 instances the birth was notified by the doctor and the midwife, and in 5 instances by the doctor and the parent.

66.5 per cent. of the births notified were visited by the Health Visitor.

CANCER.

55 deaths occurred from Cancer or Malignant Disease. This number is 1 less than that of 1912.

The Ward distribution of the disease was as follows :—

North-East. North-West. South-East. South-West.

17

9

18

11

19 of the deaths were in males and 36 in females.

36 of the deaths occurred in the district and 19 in public institutions outside the district.

The site of the disease in the two sexes was as follows :—

MALES.

FEMALES.

Stomach	...	...	...	6	Uterus	...	...	...	10
Bowel	...	...	...	2	Breast	...	...	...	8
Aesophagus	...	...	...	2	Bowel	...	...	...	4
Tongue	...	...	...	2	Rectum	...	...	...	2
Mediastinum	...	...	...	2	Stomach	...	...	...	2
Omentum	...	...	...	1	Liver	...	...	...	2
Rectum	...	...	...	1	Ovaries	...	...	...	2
Liver	...	...	...	1	Genital organs	...	...	...	1
Face	...	...	...	1	Mediastinum	...	...	...	1
Glands of Neck	...	...	...	1	Kidney	...	...	...	1
					Ear	...	...	...	1
					Nasopharynx	...	...	...	1
					Axillary Glands	...	...	...	1

INQUESTS.

46 Inquests were held, the certified cause of death being :—

Accidentally killed by a passing train	...	...	...	3
„ crushed between Railway Wagons	...	...	...	1
„ run over by a Motor Car	...	...	...	2
„ „ „ Horse Van	...	...	...	1
„ „ „ Tram Car	...	...	...	1
Accidental Fall	...	...	...	1
Fall from a Scaffold	...	...	...	1
Accidental Burns	...	...	...	1
Accidental Scalds	...	...	...	1
Overlaying	...	...	...	1

Fatty Heart	...	...	...	...	5
Congestion of the Lungs	...	...	...	...	3
Cerebral Hemorrhage	...	...	...	...	3
Aneurysm of Aorta	...	...	...	...	3
Pneumonia	...	...	...	...	2
Enlarged Thymus Gland	...	...	...	...	2
Status Lymphaticus	...	...	...	...	2
Hepatitis	...	...	...	...	1
Convulsions	...	...	...	...	1
Phthisis	...	...	...	...	1
Kidney Disease	...	...	...	...	1
Alcoholic Poisoning	...	...	...	...	1
Strangulated Hernia	...	...	...	...	1
Cirrhosis of Liver	...	...	...	...	1
Pulmonary Thrombosis	...	...	...	...	1

The above refer to all Inquests held in the district, and include both residents and non-residents.

12 Inquests were held on residents who died outside the district, the cause of death in these cases being :—

Suicide	...	...	...	...	...	2
Found Drowned	...	...	...	...	...	2
Accidentally run over by a Motor 'Bus	...	...	...	...	...	1
„ Electrocuted on Railway	...	...	...	...	...	1
Injuries whilst Boarding a Train	...	...	...	...	...	1
Puerperal Fever	...	...	...	...	...	1
Appendicitis	...	...	...	...	...	1
Heat Stroke	...	...	...	...	...	1
Phthisis	...	...	...	...	...	1
Bronchitis	...	...	...	...	...	1

PUBLIC MORTUARY.

49 bodies were removed to the Public Mortuary; on 47 of these Inquests were held. One of the Inquests was on a still-born child, and is not included in the death returns.

2 bodies were removed to the Mortuary for convenience.

32 post-mortem examinations were made.

COUNCIL LABORATORY.

1,258 examinations were made during the year, and the following table gives a statement of the work done :—

Disease.	Specimen.	Result.		
		Positive.	Negative.	Total.
Diphtheria.	Swabs from nose or throat ...	414	830	1,244
Ringworm.	Hair of scalp... 	12	2	14
		426	832	1,258

DAIRIES AND COWSHEDS.

There are 2 cowkeepers and 85 purveyors of milk in the district.

There were 4 changes of occupation and 4 new premises registered.

SLAUGHTER HOUSES.

There are 2 licensed and 1 registered slaughter houses in the district.

All the slaughter houses are regularly visited during the times of slaughter. 175 inspections were made in the year.

The following were surrendered as unfit for human consumption :—

6½	Pigs' Carcases.
29	„ Heads.
16	„ Kidneys.
4	„ Plucks.
2	„ Livers.
3	„ Spleens
1	„ Mesentery.

UNSOUND FOOD.

In addition to the meat surrendered in the slaughter houses, the following articles were surrendered and destroyed as unfit for human consumption :—

- 1 Case of Fresh Herrings.
- 2 Bags of Whelks.
- 1 Box of Dutch Dabs.

SEWAGE DISPOSAL.

The method of Sewage Disposal has been described in detail in former Reports. Under the Acton Sewage Act, all the sewage is emptied into the London sewers, and the flood water, after treatment, is discharged into the Thames.

No complaints have been received during the year, and the filter beds have worked satisfactorily.

With two exceptions, all the houses in the district are connected with the main drainage system, and the sewage is water-borne.

REFUSE COLLECTION AND DISPOSAL.

A weekly collection of House Refuse is carried out, and the Refuse is destroyed in the Council's Refuse Destructor.

The Refuse is collected directly by the Council, and there were no complaints during the year.

Last year 13,485 tons of House Refuse were collected and destroyed.

In addition, 2,682 tons of Clinker were collected and 7,801 loads of Street Sweepings.

The fixed ash-pits are gradually being replaced by movable bins, and at the present time there are about 80 ash-pits in the district; during the year 24 were abolished and replaced by movable bins.

CERTIFICATES OF EXEMPTION FROM INHABITED HOUSE DUTY.

7 applications were received in respect of 19 houses, and certificates of exemption were signed in all cases.

HOUSING, ETC.

During the year 594 house-to-house inspections were made, and in the following table the names of the streets and the conditions found on inspection will be found.

In addition, 840 premises were visited on complaint, 316 without complaint, and 347 after infectious diseases. In these, the inspection was generally made into some specific condition which existed, or alleged to exist, and a full detailed inspection was not in all instances carried out.

In the 594 houses subjected to house-to-house inspection there were 992 tenements; so that a large majority of the houses inspected were let out into two or more tenements. These, of course, do not include the houses let in lodgings registered under the bye-laws. At the end of the year 62 houses let in lodgings were on the register. A large number of the latter are let out in single-room tenements, and this class of house seems to be on the increase. At the present time, single-room tenements are practically limited to Junction Road, the southern portion of Shaftesbury Road, and the western end of Packington Road. There are isolated instances in other parts of the district, but in the latter single-room tenements are the exception, and the rooms are let out unfurnished to widows and occasionally to spinsters. But in the above 3 streets the houses are let out furnished to families, mostly in single rooms, occasionally in 2-roomed tenements. The rent paid varies from 2s. 6d. to 6s. per room per week, the average being about 5s. to 5s. 6d. The furniture is usually of the most meagre and primitive character, and the bed-clothes are frequently in a filthy condition. There is no power to insist upon clean linen, though we can insist upon clean walls and ceilings. The occupiers of these one-roomed tenements have as low a standard of personal cleanliness as can well be imagined, though the condition of the premises depends largely on the landlord, more so than even on the occupier. The occupiers are undoubtedly poor, but in many instances the poverty is not due to a low wage-earning capacity. In many instances the occupiers earn a higher wage than those who live in 3 and 4 room tenements and than some who live in self-contained cottages.

It is only by constant inspection that these premises are kept in a sanitary condition. A recent inspection revealed the fact that a large number of the rooms were overcrowded, though the

standard allowed is only 400 cubic feet per adult and 200 cubic feet for children where the rooms are used for sleeping and living purposes, and 300 cubic feet and 150 cubic feet where the rooms are exclusively used for sleeping purposes. As a rule, this standard is lower than the one usually accepted for the estimation of overcrowding. In the Census Returns, any house or tenement which has more than an average of 2 persons per room is considered to be overcrowded. A reference to the table of house-to-house inspections will show that on the Census basis there were 39 cases of overcrowding in the 594 premises inspected, compared with 15 based on the cubic capacity of the room.

Of the 594 houses (including 992 tenements) in which a house-to-house inspection was made, 839 of the tenements had a rental of 10s. a week or under, and in 247 of these the tenancy had commenced before December 3rd, 1909.

* HOUSE TO HOUSE INSPECTIONS, 1913.

(WERE MADE IN THE FOLLOWING STREETS.)

Nature of Sanitary Defect	All Saints Road	Acton Lane	Avenue Road	Antrobus Road	Allison Road	Beaumont Road	Birkbeck Road	Burlington Mews	Burlington Gardens Mews	Burlington Gardens	Berrymead Gardens	Bridgman Road	Bollo Lane
No. of Houses Inspected ...	4	35	60	13	22	7	15	12	3	20	64	52	19
No. of Tenements ...	4	50	72	17	25	20	31	13	2	51	127	101	37
Cases of Overcrowding ...	—	2	—	1	—	—	—	2	—	—	1	2	1
Defects of Drainage System ...	8	43	75	14	37	8	39	7	7	64	39	32	55
Defective or want of Yard Paving...	—	12	20	3	5	1	2	—	—	9	30	25	6
Defects of Water-closets ... (including appliances)	—	20	16	6	11	2	13	5	—	17	19	20	16
Untrapped R. W. Down-pipes ...	—	1	6	1	4	—	10	—	—	8	—	24	—
Dampness ...	1	4	29	12	2	4	8	2	—	3	13	5	3
Dirty Walls and Ceilings of Rooms	2	7	6	19	—	5	3	10	—	—	18	87	51
Defects of Drinking Water Storage	2	10	8	—	6	3	5	2	1	15	33	52	13
Defective Sinks and Waste Pipes ...	1	16	28	4	12	3	20	1	—	54	6	8	1
Miscellaneous Defects (Floors, Roofs, Plas-tering, Gutters, &c.) ...	1	6	39	8	17	6	12	5	1	19	44	30	58
Overcrowding (Census basis) ...	—	3	—	—	—	—	1	1	—	—	5	9	7

HOUSE TO HOUSE INSPECTIONS, 1913—*continued*.

Nature of Sanitary Defect	Clovelly Road	Chaucer Road	Essex Park Mews	Gladstone Road	Gunnersbury Lane	Goldsmith Road	Hanbury Road	Hoopers Mews	Kingswood Road	Kent Road	Larden Road	Osborne Road	TOTALS
No. of Houses Inspected ...	20	26	7	8	2	5	7	6	35	50	7	95	594
No. of Tenements ...	21	48	7	10	2	15	12	6	61	96	14	150	992
Cases of Overcrowding ...	—	1	—	—	—	—	—	1	—	1	—	3	15
Defects of Drainage System ...	11	34	5	9	3	23	14	15	20	33	12	97	704
Defect or want of Yard Paving ...	10	19	2	6	2	3	3	—	19	26	2	11	216
Defects of Water-closets (including appliances) ...	1	2	—	5	1	10	—	3	8	13	4	35	227
Untrapped R. W. Down-pipes ...	2	2	8	1	—	5	2	—	3	2	7	9	95
Dampness ...	—	23	—	—	2	1	3	1	4	6	7	35	168
Dirty Walls and Ceilings of Rooms ...	24	7	7	—	—	2	10	2	40	51	11	93	455
Defects of Drinking Water Storage ...	5	5	5	1	—	9	4	2	18	44	—	9	252
Defective Sinks and Waste Pipes ...	2	27	3	2	2	10	1	—	9	18	2	36	266
Miscellaneous Defects (Floors, Roofs, Plastering, Gutters, &c.) ...	11	26	4	10	—	3	9	4	23	12	4	110	462
Overcrowding (Census basis) ...	2	—	—	—	—	—	1	—	4	3	—	3	39

* All recorded on " Full Record Cards " and the drains of every house tested by means of Smoke-machine.

ISOLATION HOSPITAL.

During the year 162 patients were admitted. On January 1st, 1913, there were 23 patients under treatment, and on January 1st, 1914, 26. 150 patients were discharged during the year, and there were 9 deaths.

There was no infectious disease amongst the staff, but one of the nurses contracted Rheumatic Fever, and resigned as a consequence.

Diphtheria.

92 cases of Diphtheria were admitted. In 5 a mistake in diagnosis had been made.

There were 7 deaths.

There were no "return" cases. Before a patient is discharged from the Hospital, 2 consecutive negative swabs are obtained from the throat. Last year 466 swabs were taken at the Hospital and bacteriologically examined; of these 297 were negative and 169 positive.

Scarlet Fever.

70 cases notified of Scarlet Fever were admitted. In 2 instances a mistake in diagnosis had been made.

There were 2 deaths from Scarlet Fever.

An account of the "return" cases is given on a previous page.

FACTORIES AND WORKSHOPS ACT.

The number of Workshops on the register at the end of 1913 was 349.

645 inspections were made, and 211 notices were served. In No. 2 of the Home Office Tables it will be noticed that other nuisances amount to 233.

This figure is made up as follows:—

Roofs, rain water gutters, plastering repaired	...	...	6
Drains unstopped, repaired, trapped, etc.	...	...	13
New gullies provided	...	...	8
Waste pipes, rain water pipes disconnected, repaired, etc.	...	...	9

New sinks provided	...	...	...	...	...	...	2
New soil pipes or ventilating shafts fixed	...	...	...	...	...	...	2
Existing soil pipes or ventilating shafts fixed repaired	...	...	...	...	...	...	11
Disconnecting traps or chambers inserted	...	...	...	...	...	...	8
Reconstructed	...	...	...	...	...	...	2
W.C. pans cleansed	...	...	...	...	...	...	22
Repaired, supplied with water, or otherwise improved	...	...	...	...	...	...	58
Cisterns cleansed, repaired, covered, etc.	...	...	...	...	...	...	8
New dust bins provided	...	...	...	...	...	...	22
Yards paved and repaired	...	...	...	...	...	...	15
Dampness	...	...	...	...	...	...	7
Accumulations of refuse and manure	...	...	...	...	...	...	8
Floors repaired	...	...	...	...	...	...	14
Smoke nuisances	...	...	...	...	...	...	18
							233

In concluding the report, I have to acknowledge my thanks to the staff of the Health Department for their ungrudging co-operation throughout the year, and for their valuable assistance in the preparation of the tables for the report.

Your obedient servant,

D. J. THOMAS.

TABLE 1.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1913 AND PREVIOUS YEARS.

Year	Popula- tion esti- mated to Middle of each Year	Births			Total Deaths Registered in the District		Transferable Deaths		Nett Deaths belong- ing to the District			
		Uncorrected Number	Nett		Number	Rate	of Non-residents registered in the District	of Residents not registered in the District	Under 1 Year of Age		At all Ages	
			Number	Rate					Number	Rate per 1,000 Nett Births	Number	Rate
1908	55,000	1,568	—	28·5	592	10·7	1	133	188	120	724	13·1
1909	56,000	1,480	—	26·4	575	10·3	1	137	158	106	708	12·6
1910	57,000	1,475	—	25·9	509	8·8	2	116	151	102	623	10·9
1911	58,048	1,458	1,486	25·6	602	10·3	3	178	205	138	777	13·3
1912	59,000	1,477	1,517	25·7	468	7·9	7	179	107	70	640	10·8
1913	60,000	1,486	1,522	25·3	508	8·4	12	197	127	83	693	11·5

Area of District in Acres (land and inland water) 2,304.

Total population at all ages, 57,497.

Number of inhabited houses, 9,445.

Average number of persons per house, 6·1.

TABLE 2.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1913.

Notifiable Disease	Cases Notified in whole District								Total cases notified in each Ward				Total cases removed to Hospital
	At all Ages	At Ages—Years							North-East	North-West	South-East	South-West	
		Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 & up-wards					
Small-pox	—	—	—	—	—	—	—	—	—	—	—	—	—
Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria, including membranous croup	117	—	40	66	5	5	1	—	34	18	20	45	91
Erysipelas	33	1	3	2	2	13	10	2	9	4	12	8	5
Scarlet fever	80	1	21	45	9	4	—	—	24	10	19	27	68
Typhus fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric fever	4	—	—	2	1	1	—	—	2	1	1	—	4
Relapsing fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Continued Fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal fever	5	—	—	—	1	4	—	—	3	1	1	—	—
Poliomyelitis	6	1	5	—	—	—	—	—	1	1	1	3	1
Pulmonary Tuberculosis	159	—	3	13	26	84	30	3	38	21	26	74	75
Other forms of Tuberculosis	42	—	7	15	8	10	2	—	11	3	12	16	18
Totals	446	3	79	143	52	121	43	5	122	59	92	173	262

ISOLATION HOSPITAL { Name and Situation } FRIAR'S PLACE.

Total available beds, 73.

Number of Diseases that can be concurrently treated, 3.

TABLE 3.

CAUSES OF, AND AGES AT, DEATH DURING YEAR, 1913.

Causes of Deaths	Nett Deaths at the subjoined ages of "Residents," whether occurring within or without the District									Total Deaths whether of "Resi- dents" or "Non- Resi- dents" in Institu- tions in the District
	All Ages	Under 1 year	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards	
Enteric Fever	—	—	—	—	—	—	—	—	—	—
Small Pox	—	—	—	—	—	—	—	—	—	—
Measles	25	2	15	6	2	—	—	—	—	—
Scarlet Fever	2	—	—	2	—	—	—	—	—	2
Whooping Cough	15	5	7	3	—	—	—	—	—	—
Diphtheria and Croup	8	—	—	4	4	—	—	—	—	7
Influenza	8	—	—	—	1	—	1	2	4	1
Erysipelas	1	—	—	—	—	—	—	1	—	—
Phthisis (Pulmonary Tubercu- losis)	61	—	—	1	1	13	31	10	5	—
Tuberculous Meningitis... ..	8	2	2	1	—	2	1	—	—	1
Other Tuberculous Diseases	7	2	—	1	—	2	1	1	—	—
Cancer, malignant disease	55	—	—	—	—	—	12	20	23	2
Rheumatic Fever	2	—	—	1	1	—	—	—	—	—
Meningitis	8	5	1	1	—	—	1	—	—	—
Organic Heart Disease	62	—	—	—	1	1	12	24	24	3
Bronchitis	53	11	6	1	—	—	1	11	23	—
Pneumonia (all forms)	68	16	13	4	3	2	9	12	9	5
Other diseases of Respiratory Organs	7	3	—	—	1	—	1	1	1	—
Diarrhœa and Enteritis... ..	26	21	5	—	—	—	—	—	—	1
Appendicitis and Typhlitis	5	—	—	—	1	2	1	1	—	1
Cirrhosis of Liver	3	—	—	—	—	—	1	1	1	—
Alcoholism	4	—	—	—	—	—	1	3	—	—
Nephritis and Bright's Disease	19	—	—	1	3	—	1	11	3	—
Puerperal Fever	1	—	—	—	—	—	1	—	—	—
Other accidents and diseases of Pregnancy and Parturition	3	—	—	—	—	1	1	1	—	—
Congenital Debility and Mal- formation, including Prema- ture Birth	46	45	1	—	—	—	—	—	—	1
Violent Deaths, excluding Suicide	15	1	1	1	5	—	4	3	—	5
Suicide	7	—	—	—	—	—	2	3	2	2
Other Defined Diseases	172	14	5	6	3	3	17	51	73	3
Diseases ill-defined or unknown	2	—	—	—	—	—	—	—	2	—
Totals	693	127	56	33	26	26	99	156	170	34

TABLE 4.

INFANTILE MORTALITY DURING THE YEAR 1913.

Deaths from stated causes in Week and Months under One Year of Age.

Cause of Death	Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 1 month	1-3 months	3-6 months	6-9 months	9-12 months	Total deaths under 1 year
Small-pox	—	—	—	—	—	—	—	—	—	—
Chicken-pox	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	1	1	2
Scarlet fever	—	—	—	—	—	—	—	—	—	—
Whooping Cough	—	—	1	—	1	—	1	1	2	5
Diphtheria and Croup	—	—	—	—	—	—	—	—	—	—
Erysipelas	—	—	—	—	—	—	—	—	—	—
Tuberculous Meningitis	—	—	—	—	—	—	—	—	2	2
Abdominal Tuberculosis	—	—	—	—	—	—	—	1	1	2
Other Tuberculous Diseases	—	—	—	—	—	—	—	—	—	—
Meningitis (<i>not Tuberculous</i>)	—	1	—	—	1	1	1	2	—	5
Convulsions	—	—	—	2	2	—	2	—	1	5
Laryngitis	—	—	—	—	—	—	—	1	1	2
Bronchitis	—	—	1	3	4	1	3	1	2	11
Pneumonia (all forms)	—	—	1	1	2	1	3	6	4	16
Diarrhœa	—	1	1	—	2	6	4	3	2	17
Enteritis	—	1	—	—	1	2	1	—	—	4
Gastritis	—	—	—	—	—	—	—	—	—	—
Syphilis	—	—	—	—	—	2	—	—	—	2
Rickets	—	—	—	—	—	—	—	—	—	—
Suffocation, overlaying	—	—	—	—	—	—	1	—	—	1
Injury at Birth	1	—	—	—	1	—	—	—	—	1
Atelectasis	—	—	—	—	—	—	—	—	—	—
Congenital Malformations	1	—	—	1	2	—	1	—	—	3
Premature birth	9	2	5	1	17	2	—	—	—	19
Atrophy, Debility and Marasmus	2	2	—	—	4	9	4	5	1	23
Other Causes	2	—	—	—	2	4	—	1	—	7
	15	7	9	8	39	28	21	22	17	127

Nett Births in { the year { legitimate, 1,446.
 { illegitimate, 76.

Nett Deaths in { the year { legitimate infants, 121.
 { illegitimate infants, 6.

TABLE 5.

TOTAL DEATHS—WARD DISTRIBUTION.

	Total	North East	North West	South East	South West	Un- traced
Measles	25	3	3	2	17	—
Scarlet Fever	2	—	—	1	1	—
Whooping Cough	15	4	1	2	8	—
Diphtheria and Croup	8	2	1	2	3	—
Influenza	8	3	2	1	2	—
Erysipelas	1	—	1	—	—	—
Phthisis (Pulmonary Tuberculosis)... ..	61	13	8	8	31	1
Tuberculous Meningitis	8	1	1	1	5	—
Other Tuberculous Diseases	7	3	—	—	4	—
Cancer, malignant disease	55	17	9	18	11	—
Rheumatic Fever	2	1	—	—	1	—
Meningitis	8	1	1	2	4	—
Organic Heart Disease	62	11	12	15	24	—
Bronchitis	53	9	6	10	28	—
Pneumonia (all forms)	68	17	7	11	33	—
Other diseases of respiratory Organs	7	3	—	—	4	—
Diarrhoea and Enteritis	26	2	2	8	14	—
Appendicitis and Typhlitis	5	1	1	1	2	—
Cirrhosis of Liver	3	2	1	—	—	—
Alcoholism	4	1	1	1	1	—
Nephritis and Brights Disease	19	4	3	4	8	—
Puerperal Fever	1	—	1	—	—	—
Other accidents and diseases of Pregnancy and Parturition	3	1	1	1	—	—
Congenital Debility and Malformation, in- cluding Premature Birth	46	8	6	6	26	—
Violent Deaths, excluding Suicide	15	5	2	1	7	—
Suicide	7	2	4	—	1	—
Other Defined Diseases	172	49	44	37	40	2
Diseases ill-defined or unknown	2	1	1	—	—	—
Totals	693	164	119	132	275	3

TABLE 6.

INFANTILE MORTALITY.

WARD DISTRIBUTION.

Causes of Deaths.						North East	North West	South East	South West	Total
Measles	...	...	...			—	1	—	1	2
Whooping Cough	...	...	...	...	...	1	1	1	2	5
Tuberculous Meningitis	...	...	...	...	...	—	1	—	1	2
Abdominal Tuberculosis	...	...	...	...	...	1	—	—	1	2
Convulsions	...	...	...	...	...	—	—	3	2	5
Meningitis	...	...	...	...	...	1	1	1	2	5
Laryngitis	...	...	...	...	...	—	—	—	2	2
Bronchitis	...	...	...	...	...	—	1	3	7	11
Pneumonia (all forms)	...	...	...	...	...	3	2	4	7	16
Diarrhoea	...	...	...	...	...	1	1	7	8	17
Enteritis	...	...	...	...	...	—	1	—	3	4
Syphilis ...	...	...	...	...	...	—	—	1	1	2
Suffocation Overlaying	...	...	...	...	...	—	1	—	—	1
Injury at Birth	...	...	...	...	...	—	—	1	—	1
Congenital Malformations	...	...	...	...	...	1	—	1	1	3
Prematurity	...	...	...	...	...	3	4	4	8	19
Atrophy Debility and Marasmus	...	...	...	...	...	4	2	1	16	23
Other Causes	...	...	...	...	...	1	2	2	2	7
Totals ...	...	...	...	...	...	16	18	29	64	127

FACTORIES, WORKSHOPS, WORKPLACES AND HOMEWORK.

1—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES,

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises			Inspec- tions	Written Notices.
Factories (including Factory Laundries) ...	...	...	4	4
Workshops (including Workshop Laundries) ...	...	...	629	204
Workplaces (other than Outworkers' premises included in part 3 of this Report) ...	...	...	12	3
(Prosecutions—Nil).		Total	645	211

2—DEFECTS FOUND.

			Found	Remedied	Referred to H.M. Inspector
<i>Nuisances under the Public Health Acts:—</i>					
Want of Cleanliness	...	...	40	40	—
Want of Ventilation	...	...	—	—	—
Overcrowding	...	...	—	—	—
Want of Drainage of Floors	...	...	14	14	—
Other Nuisances	...	...	233	233	—
Sanitary Accommodation	{ Insufficient	...	4	4	—
	{ Unsuitable or Defective	...	58	58	—
	{ Not separate for Sexes	...	1	1	—

Offences under the Factory and Workshop Acts:—

Illegal occupation of Underground Bakehouse	—	—	—
Breach of Special Sanitary Requirements for Bakehouses	5	5	—
Other Offences (excluding offences relating to outwork which are included in part 3 of this Report)	—	—	—
(Prosecutions—Nil). Total	355	355	—

3—HOME WORK.

Outworkers' Lists, Sections 107, 108, 109 and 110.

NATURE OF WORK	OUTWORKERS' LISTS, SECTION 107.							Notices served on Occupiers as to keeping or sending lists	OUTWORK IN UNWHOLESOME PREMISES, SECTION 108.		OUTWORK IN INFECTED PREMISES, SECTIONS, 109, 110
	Lists received from Employers						In- stances		Notices served	In- stances	
	Sending twice in the year			Sending once in the year							
	Lists	Out- workers		Lists	Out- workers						
		Con- tract's	Work- men		Con- tract's	Work- men					
Wearing Apparel—											
(1) making, &c.	26	2	79	4	—	15	—	2	2	1	
(2) cleaning and washing	18	8	33	12	11	25	49	4	4	—	
Brush making	2	—	12	1	—	2	—	—	—	—	
Stuffed toys	2	—	69	—	—	—	—	4	4	1	
Total	48	10	193	17	11	42	49	10	10	2	

4—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year:

Laundries	205
Dressmaking	32
Millinery	7
Tailoring	8
Bakehouses	27
Others	70

Total number of Workshops on Register ... 349

5—OTHER MATTERS.

Matters notified to H.M. Inspector of Factories :

Failure to affix abstract of the Factory and Workshop Act (s. 133, 1901).	9
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5, 1901)	7
Notified by H.M. Inspector	7
Reports (of action taken) sent to H.M. Inspector ...	7
Other	—
Underground Bakehouses (s. 101) :	
Certificates granted during the year	—
In use at the end of the year	8

Your obedient servant,

D. J. THOMAS.

SANITARY IMPROVEMENTS CARRIED OUT IN DISTRICT IN
PURSUANCE OF INSPECTIONS MADE AND NOTICES
SERVED, &c.

No. of Visits paid to Infected Houses	...	...	...	...	...	902
„ Infected cases removed to Isolation Hospital	...	...	...	...	...	159
„ Library Books dealt with after Infectious Disease	...	...	...	...	...	36
„ Closets disinfected after Enteric	...	...	...	...	...	7
„ Rooms disinfected after Infectious Disease	...	...	...	...	...	237
„ „ „ „ Cancer	...	...	...	...	...	6
„ „ „ „ Phthisis	...	...	...	...	...	82
„ „ „ „ Verminous	...	...	...	...	...	22
„ „ stripped and cleansed after Infectious Disease	...	...	...	...	...	152
„ Articles disinfected or destroyed after Infectious Disease and Phthisis	Large quantities of Bedding & Clothing					
„ Preliminary Notices served	...	...	...	...	...	1,040
„ Notices of Intention to Inspect	...	...	...	...	...	1,069
„ Statutory Notices served	...	...	...	...	...	719
„ Letters received	...	...	...	...	...	1,952
„ „ written	...	...	...	...	...	2,413
„ Notices received from H.M. Inspector of Factories	...	...	...	...	...	7
„ Notifications of Waste of Water sent to Metropolitan Water Board	...	...	...	...	...	37
„ Complaints received (Written)	...	...	...	...	343	840
„ „ „ (Verbal)	...	...	...	...	297	
„ „ „ (Health Visitor)	...	...	...	...	200	
„ Inspection of Premises on Complaint	...	...	...	...	840	2,097
„ „ „ without Complaint	...	...	...	...	316	
„ „ „ after Infectious Disease	...	...	...	...	347	
„ „ „ House to House	...	...	...	...	594	
„ Premises under Periodical Inspection	...	...	...	...	...	569
„ Reinspections of Premises	...	...	...	...	...	9,242
„ Interviews with Owners or Agents	...	...	...	...	...	1,226
„ Houses dealt with under Section 15	...	...	...	...	...	12
„ Houses let in Lodgings Registered under Bye-Laws	...	...	...	...	...	62
„ Contraventions under Bye-Laws	...	...	...	...	...	46
„ Nuisances abated and Insanitary Conditions remedied	...	...	...	...	...	4,858
„ „ „ from Movable Dwellings, Caravans, &c.	...	...	...	...	...	24
„ Movable Dwellings, Caravans, &c., observed in District	...	...	...	...	...	42
„ „ „ „ removed from District	...	...	...	...	...	22
„ Overcrowding Nuisance abated	...	...	...	...	...	23
„ Rooms, &c., cleansed, repaired, &c.	...	...	...	...	...	1,232
„ Roofs, R.W. pipes, gutters, plastering, repaired	...	...	...	...	...	777

Percentage of Houses supplied from Public Water Service	...	...	100%
No. of Cisterns cleansed, repaired, covered, etc.	...	...	386
„ Draw Taps placed on Mains	...	...	121
Percentage of Houses supplied with Water on Constant system	...	...	100%
No. of Drains submitted to Chemical Test	...	...	21
„ „ „ Smoke Test	...	...	1,040
„ „ „ Water Test	...	...	406
„ Re-drainage Plans deposited	...	...	75
„ House drains reconstructed	...	...	120
„ W.C.'s repaired, supplied with water, or otherwise improved	...	...	680
Percentage of Houses provided with W.C.'s	...	...	100%
No. of Drains examined, tested, exposed, &c.	...	...	1,467
„ „ unstopped, repaired, &c.	...	...	690
„ Waste pipes, rain-water pipes disconnected, repaired, &c.	...	...	586
„ New sinks provided	...	...	121
„ New soil pipes or ventilating shafts fixed	...	...	131
„ Existing soil pipes or ventilating shafts repaired	...	...	324
„ Disconnecting traps or Chambers inserted	...	...	133
Percentage of Houses draining into Sewers	...	...	100%
No. of new Dust-bins provided	...	...	423
Dust removed from each house	...	...	Weekly
No. of Complaints of non-removal of dust received	...	...	10
Method of disposal of Dust	...	...	Destructor
No. of Smoke observations taken	...	...	204
„ Smoke Nuisances abated	...	...	37
„ Accumulations of refuse and manure removed	...	...	201
„ Nuisances abated from foul ditches, ponds, &c., and Stagnant Water	...	...	12
„ Nuisances abated from foul pigs and other animals	...	...	26
„ „ „ „ Dampness	...	...	321
„ Yards repaved or repaired	...	...	526
„ Other Nuisances abated	...	...	203
Meat (including organs) seized and surrendered. (Approximate weight in pounds)	...	...	2,179
Fish seized and surrendered. (Approximate weight in pounds)	...	...	165
Method of disposal	...	...	Burnt at Dust Destructor
No. of Samples taken by the Local Authority	...	...	12
„ „ found adulterated	...	...	Nil
„ „ taken by the Local Authority (Rag Flock)	...	...	3
„ „ found to contravene L. G. B. Regulations	...	...	2
„ Inspections of Factories (including Factory Laundries)	...	...	4
„ „ Workshops (including Workshop Laundries)	...	...	
(349 Registered)	...	...	629

„	„	Workplaces (other than Outworkers' premises)	12
„	„	Outworkers' premises	246
„	„	Bakehouses (27 Registered)	253
„	Visits to	Common Lodging Houses (1 Registered)	80
„	„	Houses let in Lodgings	124
„	„	Van Dwellings	47
„	„	Butchers' Shops (27)	225
„	„	Fishmongers' Shops (17)	169
„	„	Greengrocers' Shops (19)	162
„	„	Premises where Food is manufactured or pre- pared (19)	76
„	„	Dairies	55
„	„	Milk Purveyors' Premises } 83 Registered. ...	158
„	„	Cowsheds (2 Registered) (122 Cows in all)	38
„	„	Slaughter Houses (3 Licensed)	175
„	„	Piggeries (2)	23
„	„	Offensive Trades (2 Registered)	14
„	„	Mews and Stables (5)	297
„	„	Public House Urinals, &c. (38)	31
„	„	Schools (11)	6
„	„	Show Grounds (2)	19

MAURICE W. KINCH,

Chief Inspector of Nuisances.





Report
ON THE
Medical Inspection of
Schools
For the Year 1913.



INDEX.

	PAGE
Acton Boys School	4
Average Height and Weight. (Table 5)	25
(Anthropometric Committee)	
Beaumont Park Infants	4
Blind Children	57
Children under five	38
Chicken Pox	76
Cleanliness	40
Convalescent Homes	29
Diphtheria	73
Epileptic Children	57
Eye Disease and Vision	33
Exceptional Children in Area. (Table 8)	56
Examination of Teachers	28
Following-up, Procedure known as	29
Heights and Weights at different ages. (Table 6)	26
Infectious Disease, Control of	68
Inspection Clinic...	28
Measles	72
Mentally Defective and Deaf Children	58
Mothercraft Classes	64
Number of Children inspected in the year. (Table 2)	5
Organized Games	77
Open-air Work	76
Otorrhoea	42
Physical condition of Children inspected, Return showing. (Table 3)	6-10
Physical condition of Children inspected under Schools, Return showing. (Table 4)	12-24
Priory Schools	3
Provision of Meals	54
Prosecutions	41
"Referred Cards," Return of. (Table 7)	31
Ringworm	37
Schools within the District together with Accommodation. (Table 1)	2
Scarlet Fever	68
School Nurse, Work of	51
South Acton Senior Boys	4
Swimming	77
Tuberculosis	63
Tonsils and Adenoids	42
Teeth	43
Truant Schools	28
Turnham Green R.C.	4
Whooping Cough	76



The Urban District Council of Acton.

*To the Chairman and Members
of the Education Committee.*

LADIES AND GENTLEMEN :—

In accordance with paragraph 13 of Circular 576, issued by the Board of Education in November, 1907, we beg to submit the following report on the schools and school children under the control of the Local Education Authority. The report deals with the period ending December 31st, 1913. This period has been adopted so as to secure in future reports an effective basis for comparison of the work done in different parts of the country, and to correspond with the annual period fixed for the closely-related annual report of the Medical Officer of Health.

The scope of the report is defined in Circular 596 of the Board of Education, and this report will follow as closely as possible the lines laid down in that circular. As the report is for the information of the Board of Education, as well as of the Local Education Authority, statements of local circumstances and conditions are included which may seem superfluous to the latter.

As regards the scope of the report, the Board consider it desirable that it should cover as much as possible of the ground indicated under the following heads :—

(a) Hygienic condition of schools.

(b) Description of arrangements for co-ordinating School Medical Service and Public Health Service, including (1) Use of Board's Schedule ; (2) Assistance given by Teachers, Nurses, Attendance Officers, etc. ; (3) Co-operation of parents ; (4) Disturbance of school arrangements.

- (c) Extent and scope of Medical Inspection during the year.
- (d) Review of results of Medical Inspection.
- (e) Relations of home and industrial conditions to health and physical conditions of children.
- (f) Methods employed or available for the treatment of defects, including work of School Nurses.
- (g) Review of action taken to detect and prevent the spread of infectious diseases, including closure of schools or exclusion of children from schools.
- (h) Review of methods adopted for dealing with blind, deaf, mentally or physically defective and epileptic children.
- (i) Review of methods of instruction in personal hygiene and temperance in Public Elementary Schools, including physical and breathing exercises and arrangements for open-air or camp schools.

The Urban District Council of Acton has an area of 2,305 acres, and estimated population at the end of June, 1913, of 60,000 inhabitants.

The average number of children on the books was 9,362, and the average number of children in attendance throughout the year was 8,425.

There are in the district 11 schools and 25 departments.

Table 1.

PUBLIC ELEMENTARY SCHOOLS WITHIN THE
DISTRICT, TOGETHER WITH ACCOMMODATION.

Name of School.					Accom- modation.
1.	Acton	...	...	Boys ...	... 164
				Girls ...	... 129
				Infants...	... 142

2	Beaumont Park	...	Boys	...	530
			Girls	...	530
			Infants...	...	499
3.	Central	..	Senior	...	497
			Junior	...	497
			Infants...	...	410
4.	East Acton	...	Mixed	...	144
5.	Priory	...	Boys	...	610
			Girls	...	542
			Infants...	...	477
6.	Rothschild	...	Mixed	...	545
			Infants...	...	400
7.	South Acton	...	Boys	...	760
			Girls	...	556
			Infants...	...	618
8.	Southfield Road	...	Senior	...	419
			Junior	...	381
			Infants...	...	400
9.	Turnham Green R.C....		Mixed	...	327
10.	Acton Wells	...	Mixed	...	716
			Infants...	...	408
					10,701

Priory School.

During the year an additional classroom has been built over the Cookery Centre. It accommodates 48 girls, but no increase in the accommodation of the School has been recognised by the Board of Education.

Four other rooms have had partitions removed, and fresh ones erected, so that there are now six separate classrooms in place of four. The total accommodation remains the same, but the numbers are grouped more conveniently, and the old system of two classes in one large room has been altered.

In older buildings such as the Priory some of the rooms are too dark, according to modern standards, and the light is in the wrong direction. Walls opposite the windows are white-washed to try to increase the light, and precautions are taken not to overstrain the scholars' eyes on gloomy days.

South Acton Senior Boys.

A new classroom has been built on brick piers over the playground. It accommodates 60 boys, and the recognised accommodation is increased by 40.

Acton Boys' School.

In Acton Boys' School the old and unhygienic long desks have been replaced by 83 dual desks. It is impossible for the Authority to supply new furniture throughout the schools at once, but a certain sum is set aside each year for renewals. The long desks are bad for growing children; there is no proper support for the back, and no possibility of adjustment to different heights, so that the children fall into bad positions, and often develop spinal curvature.

Beaumont Park Infants.

60 dual desks have replaced the long desks.

Roman Catholic School.

70 dual desks have been provided. The school is now completely refurnished.

Number of Children Inspected—1st January, 1913 to 31st December, 1913.

TABLE 2.

Age.	Entrants.											Leavers.					Grand Total
	3	4	5	6	7	8	9	10	11	12	Total	12	13	14	15	Total	
Boys	18	189	327	106	49	6	1				696	1	313	21		335	1,031
Girls	13	184	328	131	64	16	5	1	1	3	746		293	38	1	332	1,078
Totals	31	373	655	237	113	22	6	1	1	3	1,442	1	606	59	1	667	2,109

TABLE 3.

Return Showing the Physical Condition of Children Inspected.

CONDITION	Entrants				Leavers				Intermediate Group				TOTAL				Special Cases		
	Boys	Girls	Total	Per Cent	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys	Girls	Total
Total Inspected ...	696	746	1442		335	332	667						1031	1078	2109				
Parents present ...	116	164	280	19		4	4	6					116	168	284	13.5			
CLOTHING AND FOOTGEAR.																			
Satisfactory ...	584	613	1197	83	326	285	611	92					910	898	1808	85.7			
Unsatisfactory ...	112	133	245	17	9	47	56	8					121	180	301	14.3			
CLEANLINESS OF HEAD.																			
Clean (no nits or pediculi)...	659	534	1193	82.7	335	261	596	89					994	795	1789	84.8			
Nits only ...	36	210	246	17.1		67	67	10					36	277	313	14.9			
Pediculi ...	1	2	3	.2		4	4	1					1	6	7	.3			
CLEANLINESS OF BODY.																			
Clean ...	623	628	1251	86.7	330	304	634	95					953	932	1885	89.4			
Dirty ...	73	117	190	13.2	5	26	31	4.6					78	143	221	10.5			
Pediculi present ...		1	1	.1		2	2	.4						3	3	.1			
NUTRITION.																			
Excellent ...	268	320	588	41	72	131	203	30					340	451	791	37.5			
Normal ...	310	317	627	43	242	156	398	60					552	473	1025	48.6			
Below Normal ...	118	109	227	16	21	45	66	10					139	154	293	13.9			
Bad ...																			
NOSE AND THROAT.																			
No defect ...	507	595	1102	76	234	287	521	78.1					741	882	1623	77			
Mouth breathers ...	22	10	32	2		2	2	.3					22	12	34	1.6			

TABLE 3.—*continued.*

CONDITION	Entrants				Leavers				Intermediate Group				TOTAL				Special Cases		
	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys	Girls	Total
NOSE & THROAT— (<i>continued.</i>)																			
Tonsils, slightly enlarged ...	87	78	165	12	49	31	80	12					136	109	245	11.6			
Tonsils, much enlarged ...	30	27	57	4	15	4	19	2.8					45	31	76	3.6			
Adenoids, slight ...	36	31	67	5	26	4	30	4.5					62	35	97	4.6			
Adenoids, marked	14	5	19	1	3	3	6	.9					17	8	25	1.2			
Other diseases ...					8	1	9	1.4					8	1	9	.4			
GLANDS.																			
Submaxillary ...	84	93	177	12	1	27	28	4.2					85	120	205	9.7			
Cervical ...	127	136	263	18	15	15	30	4.5					142	151	293	13.9			
EXTERNAL EYE DISEASE.																			
No disease ...	677	726	1403	97.3	330	326	656	98.4					1007	1052	2059	97.6			
Blepharitis ...	14	15	29	2.	5	5	10	1.5					19	20	39	1.8			
Conjunctivitis ...	1	3	4	.3									1	3	4	.2			
Corneal Opacities	3	2	5	.3		1	1	.1					3	3	6	.3			
Other disease ...	1		1	.1									1		1	.1			
EAR DISEASE.																			
No disease ...	678	733	1411	97.9	321	329	650	97.5					999	1062	2061	97.7			
Obstruction R ...	1	1	2	.1	2		2	.3					3	1	4	.2			
L ...	1		1	.1	4		4	.6					5		5	.2			
Otorrhœa R ...	7	9	16	1.1	4	1	5	.7					11	10	21	1.			
L ...	9	3	12	.8	4	2	6	.9					13	5	18	.9			
Other disease ...																			

TABLE 3. *continued.*

CONDITION	Entrants				Leavers				Intermediate Group				TOTAL				Special Cases		
	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys	Girls	Total
TEETH.																			
Sound	317	372	689	48	189	123	312	46.8					506	495	1001	47.4			
Less than 4 decayed	219	200	419	29	95	158	253	37.9					314	358	672	31.9			
Four or more decayed ...	160	174	334	23	51	51	102	15.3					211	225	436	20.7			
Sepsis																			
HEART.																			
No disease ...	656	724	1380	95	328	308	636	95.4					984	1032	2016	95.6			
Organic disease ...	9	4	13	1	2	7	9	1.3					11	11	22	1.1			
Functional disease	13	12	25	2	4	14	18	2.7					17	26	43	2.			
Anæmia	18	6	24	2	1	3	4	.6					19	9	28	1.3			
Other defect ...																			
LUNGS.																			
No disease ...	663	728	1391	96.4	329	329	658	98.7					992	1057	2049	97.2			
Chronic Bronchitis and Bronchial Catarrh ...	28	16	44	3.1	1	1	2	.3					29	17	46	2.2			
Tuberculosis ...		1	1	.1	1		1	.1					1	1	2	.1			
Tuberculosis suspected ...	4	1	5	.3	3	1	4	.6					7	2	9	.4			
Other disease ...	1		1	.1	1	1	2	.3					2	1	3	.1			
NERVOUS SYSTEM.																			
No disease ...	691	743	1434	99.5	333	332	665	99.7					1024	1075	2099	99.5			
Epilepsy (major or minor) ...	2		2	.1									2		2	.1			
Chorea		2	2	.1										2	2	.1			
Other disease ...	3	1	4	.3	2		2	.3					5	1	6	.3			

TABLE 3 *continued.*

CONDITION	Entrants				Leavers				Intermediate Group				TOTAL				Special Cases		
	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys	Girls	Total
SKIN.																			
No disease ...	681	730	1411	97.9	330	325	655	98.2					1011	1055	2066	98.			
Ringworm (body)...					2	1	3	.4					2	1	3	.1			
Ringworm (head)...	1	1	2	.1									1	1	2	.1			
Impetigo ...	8	4	12	.8		1	1	.2					8	5	13	.6			
Scabies ...																			
Other disease ...	6	11	17	1.2	3	5	8	1.2					9	16	25	1.2			
RICKETS.																			
No disease ...	655	731	1386	96	331	331	662	99.3					986	1062	2048	97.1			
Slight ...	23	10	33	2	3	1	4	.6					26	11	37	1.8			
Marked ...	18	5	23	2	1		1	.1					19	5	24	1.1			
DEFORMITIES.																			
No deformity ...	691	741	1432	99.3	334	324	658	98.7					1025	1065	2090	99.1			
Deformity present	5	5	10	.7	1	8	9	1.3					6	13	19	.9			
TUBERCULOSIS.																			
No disease ...	692	742	1434	99.5	335	332	667	100					1027	1074	2101	99.6			
Glandular ...	3	3	6	.4									3	3	6	.3			
Bones and Joints...	1	1	2	.1									1	1	2	.1			
Other forms ...																			
SPEECH.																			
No defect ...	695	742	1437	99.6	332	330	662	99.3					1027	1072	2099	99.5			
Defective articulation ..		3	3	.2	3	1	4	.6					3	4	7	.3			
Stammering ...		1	1	.1		1	1	.1						2	2	.1			
Dumb ...	1		1	.1									1		1	.1			

TABLE 3. *continued.*

CONDITION	Entrants				Leavers				Intermediate Group				TOTAL				Special Cases		
	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys	Girls	Total
MENTAL CONDITION.																			
Normal ...	532	568	1100	76.2	258	236	494	74.1					790	804	1594	75.6			
Dull or Backward...	161	176	337	23.4	75	96	171	25.6					236	272	508	24.1			
Mentally defective (all grades) ...	3	2	5	.4	2		2	.3					5	2	7	.3			
VISION.																			
$\frac{6}{8}$ each eye ...					254	211	465	69.7					254	211	465	69.7			
$\frac{6}{8}$ R. ...					18	8	26	1.9					18	8	26	1.9			
$\frac{6}{8}$ L. ...					17	2	19	1.4					17	2	19	1.4			
$\frac{6}{9}$ R. ...					20	70	90	6.7					20	70	90	6.7			
$\frac{6}{9}$ L. ...					22	71	93	7.					22	71	93	7.			
$\frac{6}{12}$ R. ...					16	24	40	3.					16	24	40	3.			
$\frac{6}{12}$ L. ...					16	26	42	3.					16	26	42	3.			
$\frac{6}{18}$ R. ...					15	7	22	1.7					15	7	22	1.7			
$\frac{6}{18}$ L. ...					14	9	23	1.7					14	9	23	1.7			
$\frac{6}{24}$ R. ...					5	7	12	.9					5	7	12	.9			
$\frac{6}{24}$ L. ...					8	7	15	1.2					8	7	15	1.2			
$\frac{6}{36}$ R. ...					5		5	.4					5		5	.4			
$\frac{6}{36}$ L. ...					4		4	.3					4		4	.3			
$\frac{6}{60}$ R. ...					1		1	.1					1		1	.1			
$\frac{6}{60}$ L. ...					1		1	.1					1		1	.1			
$\frac{6}{0}$ R. ...						5	5	.4						5	5	.4			
$\frac{6}{0}$ L. ...						6	6	.5						6	6	.5			
Squint ...	5	8	13	.9		1	1	.1					5	9	14	.7			
HEARING.																			
Normal ...	694	742	1436	99.6	331	319	650	97					1025	1061	2086	98.9			
Slightly Deaf (R.)...	1	1	2	.4		6	6	.3					1	7	8	1.1			
(L.)...	1	1	2		1	7	8						2	8	10				
Deaf (R.) ...	1	3	4		1	5	6						2	8	10				
(L.) ...	1	3	4		3	5	8						4	8	12				

It will be observed that the statistics in Table No. 3 are drawn up somewhat differently from former years. In accordance with the request of the Board of Education, we have made use of a table suggested by them, but in order that the Committee may be able to make comparisons with former years, we give a second table, with the scholars grouped under schools as before

TABLE 4.

Return Showing Physical Condition of Children Inspected Under Schools.

SENIOR BOYS				No. Examined	Clothing and Footgear		Cleanliness of Head			Cleanliness of Body			Nutrition			
					Satis- factory	Unsatis- factory	Clean	Nits only	Pediculi	Clean	Dirty	Pediculi Present	Excel- lent	Normal	Below Normal	Bad
Acton	...	16	16		16			16					15	1		
Acton Wells	...	25	25		25			24	1			1	24			
Beaumont Park	...	80	79	1	80			79	1			23	53	4		
Central	...	50	50		50			50				22	24	4		
Priory	...	47	47		47			47				5	39	3		
South Acton	...	62	54	8	62			58	4			6	51	5		
Southfield Road	...	48	48		48			48				9	36	3		
Turnham Green R.C.	...	7	7		7			7				6		1		
Totals ...	335	326	9	335				329	6			72	242	21		
SENIOR GIRLS																
Acton	...	16	15	1	13	2	1	14	2			7	6	3		
Acton Wells	...	10	10		10			10				7	3			
Beaumont Park	...	77	69	8	55	20	2	75	1	1		30	36	11		
Central	...	47	46	1	40	7		47				26	19	2		
Priory	...	57	49	8	44	13		52	5			24	23	10		
South Acton	...	73	50	23	50	22	1	59	13	1		17	42	14		
Southfield Road	...	35	34	1	34	1		35				14	20	1		
Turnham Green R.C.	...	17	12	5	15	2		12	5			6	7	4		
Totals ...	332	285	47	261	67	4		304	26	2		131	156	45		

TABLE 4.—*continued.*

SENIOR BOYS					Nose and Throat							Glands		External Eye Disease					
					No Defect	Mouth Breathers	Tonsils sl. enlarged	Tonsils much enlarged	Adenoids slight	Adenoids marked	Other Diseases	Sub-maxillary	Cervical	No Disease	Blepharitis	Conjunctivitis	Corneal Opacities	Other Disease	
Acton	...	...	...	...	12			1			3			16					
Acton Wells	...	...	...	...	12		7	2	4				5	25					
Beaumont Park	...	...	...	...	60		7	2	6	2	3	1	1	78	2				
Central	...	...	...	...	30		8	5	5	1	1			50					
Priory	...	...	...	...	31		7	4	4		1		5	46	1				
South Acton	...	...	...	...	49		8	1	4				3	60	2				
Southfield Road	...	...	...	...	37		9		2				1	48					
Turnham Green R.C.	...	...	...	...	3		3		1					7					
Totals					...	234		49	15	26	3	8	1	15	330	5			
SENIOR GIRLS																			
Acton	...	...	...	...	13			2	1				4	1	15	1			
Acton Wells	...	...	...	...	10										10				
Beaumont Park	...	...	...	...	65			8	1	2	1		5	2	76	1			
Central	...	...	...	...	43	1		3					4	1	46	1			
Priory	...	...	...	...	53			3		1			3	2	57				
South Acton	...	...	...	...	60			8	2		2	1	6	7	73				
Southfield Road	...	...	...	...	28	1		6					4		34			1	
Turnham Green R.C.	...	...	...	...	15			1		1			1	2	15	2			
Totals					...	287	2	31	4	4	3	1	27	15	326	5		1	

TABLE 4.—continued.

SENIOR BOYS	Ear Disease							Teeth				Heart				
	No Disease	Obstruction Right	Obstruction Left	Otorrhea Right	Otorrhea Left	Other Disease	Sound	Less than 4 decayed	Four or more decayed	Sepsis	No Disease	Organic Disease	Functional Disease	Anamia	Other Defect	
Acton	16						6	8	2		16					
Acton Wells	25						10	10	5		24		1			
Beaumont Park	78	1	1				37	26	17		79	1				
Central	48	1	1				38	6	6		48	1		1		
Priory	44		1		1	1	45	2			47					
South Acton	58				2	2	24	25	13		59		3			
Southfield Road	46		1		1		27	16	5		48					
Turnham Green R. C....	6					1	2	2	3		7					
Totals ...	321	2	4		4	4	189	95	51		328	2	4	1		
SENIOR GIRLS																
Acton	15					1	5	10	1		15		1			
Acton Wells	10						2	5	3		7		3			
Beaumont Park	77						22	41	14		69	4	4			
Central	46					1	24	16	7		46			1		
Priory	57						24	24	9		53	1	2	1		
South Acton	73						25	41	7		71	1	1			
Southfield Road	34				1		12	19	4		30	1	3	1		
Turnham Green R.C. ...	17						9	2	6		17					
Totals ...	329				1	2	123	158	51		308	7	14	3		

TABLE 4.—continued.

SENIOR BOYS				Lungs					Nervous System					Skin				
				No Disease	Chronic Bronchitis and Bronchial Catarrh	Tuberculosis	Tuberculosis Suspected	Other Disease	No Disease	Epilepsy Major or Minor	Chorea	Other Disease	No Disease	Ring-worm Body	Ring-worm Head	Impetigo	Scabies	Other Disease
Acton ...	...	...	16						16				16					
Acton Wells ...	...	...	23				1	1	24			1	25					
Beaumont Park ...	...	...	80						80				80					
Central ...	...	...	49				1		50				50					
Priory ...	...	...	46	1					47				47					
South Acton ...	...	...	60		1		1		62				58	1				3
Southfield Road ...	...	...	48						47			1	48					
Turnham Green R.C. ...	...	...	7						7				6	1				
Totals ...	...	329	1	1	3	1	333		2	330	2							3
SENIOR GIRLS																		
Acton ...	...	...	16						16				15					1
Acton Wells ...	...	...	10						10				10					
Beaumont Park ...	...	...	74	1			1	1	77				73			1		3
Central ...	...	...	47	...					47				47					
Priory ...	...	...	57						57				57					
South Acton ...	...	...	73						73				73					
Southfield Road ...	...	...	35						35				34					1
Turnham Green R.C. ...	...	...	17						17				16	1				
Totals ...	...	329	1		1	1	332						325	1		1		5

TABLE 4.—continued.

SENIOR BOYS				Rickets			Deformities		Tuberculosis			Speech			Mental Condition			
				No Disease	Slight	Marked	No Deformity Present	Deformity Present	No Disease	Glandular	Bones and Joints	No. Defective	Defective Articulation	Stammering	Normal	Dull or Backward	Mentally Defective (all grades)	
Acton	...	...	...	16			16		16			15	1		9	7		
Acton Wells	...	...	...	25			25		25			24	1		7	18		
Beaumont Park	...	...	...	78	2		80		80			79	1		76	4		
Central	...	...	...	50			50		50			50			41	9		
Priory	...	...	...	46	1		47		47			47			41	5	1	
South Acton	...	...	...	61		1	62		62			62			44	18		
Southfield Road	...	...	...	48			47	1	48			48			35	13		
Turnham Green R.C.	...	...	...	7			7		7			7			5	1	1	
Totals				...	331	3	1	334	1	335			332	3		258	75	2
SENIOR GIRLS																		
Acton	...	...	...	16			16		16			16			9	7		
Acton Wells	...	...	...	10			10		10			10			8	2		
Beaumont Park	...	...	...	77			75	2	77			76	1		46	31		
Central	...	...	...	47	1		47		47			47			29	18		
Priory	...	...	...	57			56	1	57			57			51	6		
South Acton	...	...	...	73			71	2	73			72		1	60	13		
Southfield Road	...	...	...	35			34	1	35			35			21	14		
Turnham Green R.C.	...	...	...	17			15	2	17			17			12	5		
Totals				...	332	1		324	8	332			330	1	1	236	96	

TABLE 4.—continued.

SENIOR BOYS				Vision												
				$\frac{6}{8}$ each eye	R $\frac{6}{8}$	L $\frac{6}{8}$	R $\frac{6}{8}$	L $\frac{6}{8}$	R $\frac{6}{12}$	L $\frac{6}{12}$	R $\frac{6}{18}$	L $\frac{6}{18}$	R $\frac{6}{24}$	L $\frac{6}{24}$	R $\frac{6}{36}$	L $\frac{6}{36}$
Acton	...	...	13		1	1	1	1	1				1			
Acton Wells	...	...	20	1		2	3	2	2							
Beaumont Park	...	...	56	5	4	6	7	3	7	4	3	2	2	2		
Central	...	...	42		3	3		1	1	4	4		3			
Priory	...	...	31	1		5	7	5	3	3	2	1	1	1	1	1
South Acton	...	...	50	8	8			1	1	2	2	1	2	2		
Southfield Road	...	...	37	2		3	4	2	1	2	3	1	2	1	1	
Turnham Green R.C.	...	...	5	1	1			1					1			
Totals	...	...	254	18	17	20	22	17	16	15	14	5	8	5	4	1

SENIOR GIRLS																
Acton	...	...	13			1	1	1	2	1						
Acton Wells	...	...	7					3	3							
Beaumont Park	...	...	50	3		14	15	3	3	2	4	3	3			
Central	...	...	36	1		9	9			1	1					
Priory	...	...	35	1	1	7	8	9	10	2	2	1	1			
South Acton	...	...	45	2		19	19	4	4	1	2	2	2			
Southfield Road	...	...	20	1		11	11	3	3							
Turnham Green R.C.	...	...	5		1	9	8	1	1			1	1			
Totals	...	...	211	8	2	70	71	24	26	7	9	7	7			

TABLE 4.—continued.

SENIOR BOYS								Vision—cont.			Hearing				
								R $\frac{6}{8}$	L $\frac{6}{8}$	Squint	Normal	Sl. deaf R	Sl. deaf L	Deaf R	Deaf L
Acton ...	...	...	...	...	...	...	...				16				
Acton Wells ...	...	...	...	...	...	...	...				25				
Beaumont Park...	...	...	...	...	...	...	...				79			1	1
Central ...	...	...	...	...	...	...	...				50				
Priory ...	...	...	...	...	...	...	...				46		1		
South Acton ...	...	...	...	...	...	...	...				60				2
Southfield Road	...	...	...	...	...	...	...				48				
Turnham Green R.C.	...	...	...	...	...	...	...				7				
Totals ...											331		1	1	3
SENIOR GIRLS								R $\frac{6}{8}$	L $\frac{6}{8}$	Squint	Normal	Sl. deaf R	Sl. deaf L	Deaf R	Deaf L
Acton ...	...	...	...	...	...	...	...				16				
Acton Wells ...	...	...	...	...	...	...	...				10				
Beaumont Park...	...	...	...	...	...	...	...	2	2		70	5	5	2	2
Central ...	...	...	...	...	...	...	...		1		47				
Priory ...	...	...	...	...	...	...	...	1	1		55				
South Acton ...	...	...	...	...	...	...	...	1		1	70			3	3
Southfield Road	...	...	...	...	...	...	...		1		35				
Turnham Green R.C.	...	...	...	...	...	...	...	1	1		16		1		
Totals ...								5	6	1	319	6	7	5	5

TABLE 4—continued.

INFANTS				No. Examined	Clothing & Footgear		Cleanliness of Head			Cleanliness of Body			Nutrition			
					Satis- factory	Unsatis- factory	Clean (no Nits or Ped- iculi)	Nits only	Pedi- culi	Clean	Dirty	Pedi- culi present	Excel- lent	Normal	Below Normal	Bad
(BOYS)																
Acton	...	...	...	45	40	5	43	2		40	5		17	21	7	
Acton Wells	...	...	...	21	20	1	21			20	1			19	2	
Beaumont Park	...	...	...	104	81	23	101	2	1	86	18		34	48	22	
Central	...	...	...	60	57	3	58	2		59	1		34	23	3	
East Acton	...	...	...	23	11	12	20	3		21	2		10	11	2	
Priory	...	...	...	88	80	8	82	6		79	9		36	28	24	
Rothschild	...	...	...	100	87	13	91	9		86	14		47	39	14	
South Acton	...	...	...	134	97	37	129	5		117	17		28	70	36	
Southfield Road	...	...	...	99	92	7	93	6		96	3		56	36	7	
Turnham Green R.C.	...	...	...	22	19	3	21	1		19	3		6	15	1	
				696	584	112	659	36	1	623	73		268	310	118	
(GIRLS)																
Acton	...	...	...	33	33		24	9		30	3		26	7		
Acton Wells	...	...	...	18	18		17	1		18			2	15	1	
Beaumont Park	...	...	...	105	88	17	69	34	2	78	27		37	51	17	
Central	...	...	...	57	54	3	54	3		56	1		33	18	6	
East Acton	...	...	...	14	7	7	10	4		13	1		6	5	3	
Priory	...	...	...	83	67	16	50	33		70	13		25	41	15	
Rothschild	...	...	...	111	104	7	86	25		97	14		52	50	9	
South Acton	...	...	...	187	115	72	107	80		136	50	1	45	93	49	
Southfield Road	...	...	...	113	110	3	100	13		113			85	25	3	
Turnham Green R.C.	...	...	...	25	17	8	17	8		17	8		7	12	6	
				746	613	133	534	210	2	628	117	1	320	317	109	

TABLE 4—continued.

INFANTS					Nose and Throat						Glands		External Eye Disease				
					No Defect	Mouth Breathers	Tonsils sl. enlarged	Tonsils much enlarged	Adenoids slight	Adenoids marked	Sub-maxillary	Cervical	No Disease	Blepharitis	Conjunctivitis	Corneal Opacities	Other Disease
(BOYS)																	
Acton ...	...	...	...	...	27	3	7	2	1	5	6	5	44	1			
Acton Wells ...	...	...	...	...	13		3	3	2		2	3	18	1	1	1	
Beaumont Park ...	...	...	...	...	80	1	13	3	7		6	20	99	4		1	
Central ...	...	...	...	...	44	4	6	2	3	1	8	7	60				
East Acton ...	...	...	...	...	15	1	4	1		2		6	23				
Priory ...	...	...	...	...	58	6	14	6	3	1	12	10	87	1			
Rothschild ...	...	...	...	...	72	2	13	6	7		19	19	99	1			
South Acton ...	...	...	...	...	111	2	12	2	3	4	12	30	128	4		1	1
Southfield Road ...	...	...	...	...	70	1	14	4	10		16	20	97	2			
Turnham Green R.C. ...	...	...	...	...	17	2	1	1		1	3	7	22				
					507	22	87	30	36	14	84	127	677	14	1	3	1
(GIRLS)																	
Acton ...	...	...	...	...	25	1	6		1		7	7	32	1			
Acton Wells ...	...	...	...	...	14		2	1	1		5	5	18				
Beaumont Park ...	...	...	...	...	82	3	8	2	6	4	10	32	65				
Central ...	...	...	...	...	47		5	3	2		4	5	57				
East Acton ...	...	...	...	...	9		2	2	1		4	3	12	2			
Priory ...	...	...	...	...	69		6	4	4		9	15	81	1	1		
Rothschild ...	...	...	...	...	85	1	15	2	8		21	16	108	2		1	
South Acton ...	...	...	...	...	154	2	20	6	4	1	14	34	178	7	2		
Southfield Road ...	...	...	...	...	93	2	9	5	4		17	14	111	2			
Turnham Green R.C. ...	...	...	...	...	17	1	5	2			2	5	24			1	
					595	10	78	27	31	5	93	136	726	15	3	2	

TABLE 4—continued.

INFANTS				Ear Disease						Teeth				Heart				
				No Disease	Obstruction Right	Obstruction Left	Otorrhoea Right	Otorrhoea Left	Other Disease	Sound	Less than 4 decayed	Four or more decayed	Sepsis	No Disease	Organic Disease	Functional Disease	Anaemia	Other Defects
(BOYS)																		
Acton	...	...	...	43	1	1				19	13	13		37	2	2	4	
Acton Wells	...	...	...	20				1		17	4			20	1			
Beaumont Park	...	...	...	100			2	2		43	41	20		102		2		
Central	...	...	...	59			1			29	20	11		59		1		
East Acton	...	...	...	23						9	6	8		23				
Priory	...	...	...	86			1	1		38	23	27		83	1	1	3	
Rothschild	...	...	...	99				1		43	25	32		87	3	5	5	
South Acton	...	...	...	128			2	4		67	45	22		130		1	3	
Southfield Road	...	...	...	98			1			45	36	18		94	2	1	2	
Turnham Green R.C.	...	...	...	22						7	6	9		21			1	
				678	1	1	7	9		317	219	160		656	9	13	18	
(GIRLS)																		
Acton	...	...	...	30			3			16	2	15		33				
Acton Wells	...	...	...	18						8	8	2		17			1	
Beaumont Park	...	...	...	104			1			43	31	31		101		4		
Central	...	...	...	57						22	22	13		57				
East Acton	...	...	...	14						10	2	2		14				
Priory	...	...	...	80			2	1		49	18	16		79	1	2	1	
Rothschild	...	...	...	110	1					42	28	41		102	2	4	3	
South Acton	...	...	...	183			2	2		118	42	27		186			1	
Southfield Road	...	...	...	113						53	40	20		112		1		
Turnham Green R.C.	...	...	...	34			1			11	7	7		23	1	1		
				733	1		9	3		372	200	174		724	4	12	6	

TABLE 4—continued.

INFANTS	Lungs					Nervous System				Skin					
	No Disease	Chronic Bronchitis Catarrh	Tuber- culosis	Tubercu- losis sus- pected	Other Disease	No Disease	Epilepsy Major or Minor	Chorea	Other Disease	No Disease	Ring- worm Body	Ring- worm Head	Im- petigo	Scabies	Other Disease
(BOYS)															
Acton	44	1				45				44					1
Acton Wells	20	1				21				20					1
Beaumont Park	97	6			1	104				102			1		1
Central	59	1				60				59		1			
East Acton	22	1				23				23					
Priory	86	2				85	2		1	85			3		
Rothschild	92	7		1		100				100					
South Acton	127	4		3		134				129			4		1
Southfield Road	94	5				97			2	99					
Turnham Green R.C.	22					22				20					
	663	28		4	1	691	2		3	681		1	8		6
(GIRLS)															
Acton	31	2				33				33					
Acton Wells	17	1				17		1		17					1
Beaumont Park	101	4				105				102			1		2
Central	57					57				57					
East Acton	14					14				14					
Priory	82	1				83				82					1
Rothschild	106	3	1	1		110		1		108			3		
South Acton	184	3				186			1	181		1			5
Southfield Road	111	2				113				111					2
Turnham Green R.C.	25					25				25					
	728	16	1	1		743		2	1	730		1	4		11

TABLE 4—continued.

INFANTS	Rickets			Deformities		Tuberculosis				Speech			Mental Condition		
	No Disease	Slight	Marked	No Deformity	Deformities present	No Disease	Glandular	Bones and Joints	Other Forms	No. Defective	Defective Articulation	Stammering	Normal	Backward or Dull	Mentally Defective
(BOYS)															
Acton	44	1		43	2	45				45			38	7	
Acton Wells	20		1	21		21				21			20	1	
Beaumont Park	95	5	4	103	1	104				104			99	5	
Central	59		1	59	1	59	1			60			58	2	
East Acton	23			23		23				23			22	1	
Priory	81	3	4	88		86	1	1		88			74	12	2
Rothschild	90	5	5	99	1	99	1			100			58	41	1
South Acton	127	6	1	134		134				133	1		71	63	
Southfield Road	95	2	2	99		99				99			70	29	
Turnham Green R.C.	21	1		22		22				22			22		
	655	23	18	691	5	692	3	1		695	1		532	161	3
(GIRLS)															
Acton	31		2	33		33				31	2		25	8	
Acton Wells	18			18		18				18			18		
Beaumont Park	104	1		104	1	105				105			103	1	1
Central	56	1		55	2	57				57			50	7	
East Acton	13		1	14		14				14			12	2	
Priory	80	2	1	82	1	82		1		83			70	12	1
Rothschild	110		1	111		111				111			67	44	
South Acton	184	3		187		185	2			186		1	103	84	
Southfield Road	111	2		112	1	112	1			112	1		95	18	
Turnham Green R.C.	24	1		25		25				25			25		
	731	10	5	741	5	742	3	1		742	3	1	568	176	2

TABLE 4—continued.

INFANTS										Vision—cont.			Hearing				
										R $\frac{6}{8}$	L $\frac{6}{8}$	Squint	Normal	R Sl. deaf	L Sl. deaf	R deaf	L deaf
(BOYS)																	
Acton	...	...	...	...	...	...	...	...	...				45				
Acton Wells	...	...	...	...	...	...	...	...	...				21				
Beaumont Park	...	...	...	...	...	...	...	...	...			4	104				
Central	...	...	...	...	...	...	...	...	...				60				
East Acton	...	...	...	...	...	...	...	...	...				23				
Priory	...	...	...	...	...	...	...	...	...			1	88				
Rothschild	...	...	...	...	...	...	...	...	...				100				
South Acton	...	...	...	...	...	...	...	...	...				133			1	1
Southfield Road	...	...	...	...	...	...	...	...	...				98	1	1		
Turnham Green R.C.	...	...	...	...	...	...	...	...	...				22				
												5	694	1	1	1	1
(GIRLS)																	
Acton	...	...	...	...	...	...	...	...	...				33				
Acton Wells	...	...	...	...	...	...	...	...	...				18				
Beaumont Park	...	...	...	...	...	...	...	...	...			3	105				
Central	...	...	...	...	...	...	...	...	...			2	57				
East Acton	...	...	...	...	...	...	...	...	...				14				
Priory	...	...	...	...	...	...	...	...	...			1	83				
Rothschild	...	...	...	...	...	...	...	...	...				110			1	1
South Acton	...	...	...	...	...	...	...	...	...			2	185	1	1	1	1
Southfield Road	...	...	...	...	...	...	...	...	...				113				
Turnham Green R.C.	...	...	...	...	...	...	...	...	...				24			1	1
												8	742	1	1	3	3

Table 5.

AVERAGE HEIGHT, WITHOUT SHOES, AND
AVERAGE WEIGHT, WITHOUT CLOTHES.
ANTHROPOMETRIC COMMITTEE, 1883.

Age last birthday.	MALES.		FEMALES.	
	Height in inches.	Weight in lbs.	Height in inches.	Weight in lbs.
3	35	31.2	35	30
4	38	35	38	34
5	41	41.2	40.5	39.2
6	44	44.4	42.8	41.7
7	46	49.7	45.5	47.5
8	47	54.9	46.6	52.1
9	49.7	60.4	48.7	55.4
10	51.8	67.5	51	62
11	53.5	72	53.1	68
12	55	76.7	55.6	76.4
13	57	82.6	57.7	87.2
14	59.3	92	59.8	96.7
15	62.2	102.7	60.9	106

TABLE 6.

GIVING HEIGHTS & WEIGHTS AT DIFFERENT AGES.

	No. examined	Years of Age									
		12-13		13-14		14-15		15-16			
		Height	Weight	Height	Weight	Height	Weight	Height	Weight		
SENIOR BOYS.											
Acton	16	56	74	57.7	83.2	57	86				
Acton Wells	25			58.9	84.1	60.4	83.5				
Beaumont Park	80			57.	77.8	56.7	74				
Central	50			58.5	88.8	60.5	91.5				
Priory	47			58.2	82.9	57.9	82.9				
South Acton	62			56.5	79.3						
Southfield Road	48			57.9	81.8	59.4	95				
Turnham Green R.C.	7			56.4	78.6						
Total	335										
SENIOR GIRLS.											
Acton	16			59.9	89.6						
Acton Wells	10			64.5	103.9	61.3	89.				
Beaumont Park	77			59.6	85.1	60.2	70.1				
Central	47			60.7	91.3	62.9	102.8				
Priory	57			60.6	75.9	61.7	95.6				
South Acton	73			58.8	86.1	62.8	98.5				
Southfield Road	35			59.9	92.1						
Turnham Green R.C.	17			59.2	88.6						
Total	332										

TABLE 6—continued.

				No. Examined	Years of Age															
					3 to 4		4 to 5		5 to 6		6 to 7		7 to 8		8 to 9		9 to 10		10 to 11	
					H.	W.	H.	W.	H.	W.	H.	W.	H.	W.	H.	W.	H.	W.	H.	W.
INFANTS (BOYS).																				
Acton	...	...	...	45			39·8	37·2	41·8	38·3	44	43·4	45	40·9						
Acton Wells	...	...	...	21	41·9	39·4	40·8	36·9	43·8	39	45·7	44·7	48·3	50·3	52·5	65				
Beaumont Park	...	...	...	104			40·3	38·4	41·7	39·2										
Central	...	...	...	60	37·7	36·9	41·5	38·3	43·5	43·2	46·4	46·6	47·6	49·						
East Acton	...	...	...	23	36·7	36·7	38·8	35·2	41·6	38·2	42·6	42·3	46·5	58·	45	47	49	52		
Priory	...	...	...	88	38·3	32·9	40·9	37·8	41·9	39	43·1	40·9	46·1	46·3						
Rothschild	...	...	...	100			39·9	36·5	41·8	39·2	44·4	42·3	45·3	48·1						
South Acton	...	...	...	134			39·3	36·4	41·1	38·7	41·7	39·6	43·7	43·						
Southfield Road	...	...	...	99					43·1	40·9	45·7	45·2	47·6	47·9	46·9	44·4				
Turnham Green R.C.	...	...	...	22			40·2	40·2	42·2	41·5										
Total	...	...	...	696																
INFANTS (GIRLS).																				
Acton	...	...	...	33			40·5	37·	41·8	39	43·5	37·5	48	51·4						
Acton Wells	...	...	...	18	38·8	35·2	40·	39·1	43·5	40·5	45·5	45·3	46	44·3						
Beaumont Park	...	...	...	105			40·1	38·3	41·6	39·2	43·7	42·4	45·5	46						
Central	...	...	...	57	37·3	33	40·8	37·7	43·5	41·3	45·2	43·5	46·5	46·5						
East Acton	...	...	...	14	36·9	31·2	38·5	34·4	42	44·5			44	48·	48·5	54·5				
Priory	...	...	...	83	38·2	35·9	39·4	35·2	42·4	39·1	43·9	41·2	45·4	43			48·7	55·4		
Rothschild	...	...	...	111			40·9	37·7	41·7	38·8	44·9	43·3	46·9	47·3	48·8	51	47	49·		
South Acton	...	...	...	187			37·7	35·6	41·1	38	43·3	42	45·9	45·1	46·6	46·9	47·8	54	50	55
Southfield Road	...	...	...	113					43·2	40·8	45·1	42·8	46·4	45·8	47·9	48				
Turnham Green R.C.	...	...	...	25			42·5	41	41·8	39·5	45·1	45·2	45·8	49·9	48	46				
Total	...	...	...	746																

The Inspection Clinic.

The Medical Officers see children daily at the Council Offices at a fixed time, and cases can always be referred to them at that hour by teachers, nurses, or attendance officers. The cases that come up are very various, but may be grouped under the following heads :—

1. Convalescents from infectious diseases and contacts, as described in the paragraphs on the control of infectious disease.
2. Cases excluded from school, but under periodical observation.
3. Cases referred for examination and report by the Education Authority.
4. Special cases referred by the teachers for some defect.
5. Cases having treatment by the nurse, under the supervision of the Medical Officers.

Last year 1,230 children were seen in this way.

There is also a good deal of work done which cannot be expressed in statistics. Parents come up to see the Medical Officers about the health of their children, and the necessity of treatment. These personal interviews are of great value, and it is cheering to notice that some parents will bring up a child as soon as they notice anything wrong, and ask if treatment should be obtained. In such cases, if treatment is necessary, they are referred to their private doctor, or to a hospital, or, in cases of eye trouble, arrangements are made for them to see the School Oculist. The Medical Officers are anxious that parents should regard the school doctor as one who is interested in helping them to keep their children healthy, and not as a new variety of inquisitor.

Examination of Teachers.

19 candidates have been medically examined during 1913.

Truant Schools.

14 children were examined for Truant Schools.

Convalescent Homes.

54 children were examined, of whom 11 were to be sent away.

The Procedure known as Following Up.

The discovery of defects and of conditions requiring treatment, though necessary and important, is only a beginning. It is very essential to know whether treatment was obtained, if it was successful, and what was its final effect. Again, many cases do not require treatment at the moment, but need to be kept under medical supervision, so that the conditions of school life may not increase the defect.

The following paragraphs give a description of the methods adopted for keeping such cases under review.

When a child is found—either at the routine medical inspections, or as a special case referred for medical advice—to require further observation, the particulars are transferred to special “defect cards,” of which a specimen is shown here.

Action Education Committee.

DEFECT CARD.

Name Age Address
 School Dept. Referred by
 Date of Inspec..... Notice sent Treatment obtd.
 Treatment given by Result Countersigned by.....

Slightly different cards are used for ringworm and eye cases. They have spaces for particulars about X rays and provision of spectacles. On these cards are entered full medical details of the children. An index is kept of the cards under the heading of schools, and for chronic conditions a cross index is kept under the heading of the diseases. In this way it is possible to estimate the amount of chronic disease among the children in the schools.

After each routine inspection at the school, all the children on these “defect cards” come up for review, including all the eye cases. This re-examination is limited as a rule to the point

requiring observation or treatment, but when necessary a complete re-examination is made. If treatment has been advised but not obtained, a second notice is sent, and an attempt is made to get a personal interview with the parents. The nurse calls at the house, if she has not already been, or the teacher invites the parents to interview the Medical Officers at the offices. It is unfortunate that so small a proportion of parents attend at medical inspection, because a little explanation then is more effectual and less likely to cause annoyance than the receipt of an official notice advising treatment. Moreover, it is often possible to give hints on health and minor points which do not call for an official notice. The percentage of parents present during the inspection of infants is 19, during the inspection of seniors .6. The Priory School shows the highest percentage among the infant departments. If treatment is still not obtained, and the child is being injured by failure to provide it, the next step is for the secretary to send a letter, pointing out the parents' liabilities under the Children's Act, and if this is neglected, the final step is prosecution. This is very rarely needed. Particulars of such cases are given later.

Sources of cases referred to Defect Cards :—

Total.	Medical Inspection.	Outside dis- tricts.	Public Health Dept.	Attend- ance Officer.	Secre- tary.	Head Teachers.
489	316	24	16	17	6	110

The heading "outside districts" requires explanation. When a child enters the Acton Schools from another district, a card is sent asking for its medical inspection schedule. If any condition requiring treatment is noted on it, the particulars are transferred at once to a defect card, so that the child comes automatically under review at the Medical Officer's next visit to the school. In most cases the parents have been glad to avail themselves of the treatment offered, but in some instances the working of the system has caused dismay. One family crossed the border into Acton, thinking to escape the necessity of obtaining treatment, and expecting a long time of peace before the next routine inspection again revealed the defect. When within the first term a notice arrived from the Acton Authorities, their disappointment was deep. In the same way, when another district notifies us that one of

our scholars has entered their schools, we supply them with copies of the medical schedules and following up cards.

During the year there were 237 inquiries from outside districts, and we sent out 722, to which 219 answers were received. Of these 24 had defects which needed following up.

It will be noted that the Head Teachers refer a large proportion of the cases. Their co-operation is most valuable, and helps to bridge the gaps between the routine inspections.

Table 7 gives an analysis of the cases under observation, with statistics as to the numbers who have obtained treatment. The figures are a little more favourable than they appear, as some of the defects were only notified late in 1913, and will doubtless be treated. Most, if not all, of the eye cases will come under this heading.

Table 7.

Referred Cards Table.

	No. of Cases.	Observation only.	Already under Treatment.	Treatment obtained	Treatment not obtained	Left or removed.
HEART—						
Anæmia ...	4	—	—	1	3	—
Congenital ...	4	3	1	—	—	—
Other organic..	27	12	8	4	1	2
Functional ...	14	13	—	—	—	1
LUNGS—						
Bronchitis ...	14	14	—	—	—	—
Suspected phthisis ...	26	18	5	—	—	3
Phthisis ...	12	2	9	—	—	1
Other disease..	4	2	2	—	—	—
TUBERCLE (other than lungs) ...	3	—	3	—	—	—
DEFORMITIES—						
Rickets ...	4	4	—	—	—	—

Table 7.—*continued.*

	No. of Cases.	Observations only.	Already under Treatment.	Treatment obtained.	Treatment not obtained.	Left or removed.
Lateral curvature ...	10	—	—	10	—	—
Congenital dislocation of hip ...	3	—	3	—	—	—
Other deformities ...	5	3	1	1	—	—
NOSE, THROAT, & EAR—						
Tonsils ...	122	—	—	17	99	6
Adenoids ...	79	—	—	22	49	8
Otorrhœa ...	26	—	2	12	11	1
Deafness ...	11	4	3	1	3	—
Nasal obstruction ...	5	—	—	3	2	—
NERVOUS DISEASE—						
Epilepsy ...	6	1	4	1	—	—
Chorea ...	3	—	1	1	1	—
Infantile paralysis ...	2	1	—	1	—	—
Other disease..	2	2	—	—	—	—
MENTALLY DEFICIENT ...						
DEAF & DUMB	2	1	—	1	—	—
DEFECTIVE SPEECH ...						
MALNUTRITION..	11	8	1	2	—	—
RINGWORM ...	77	—	—	77	—	—
DEFECTIVE EYESIGHT ...						
Unclassified disease...	4	—	—	1	2	1
				Oculist		
				17		
				Elsewhere		

Eye Disease and Vision.

During the year under review an attempt was made to follow up all children who had been referred to the School Oculist, Dr. Grace Banham, for eye disease or vision, since her appointment in September, 1910. It was found that 36 had removed to other areas and 149 had left school, making 185 who could not be traced.

371 cases were still in the Acton Schools, grouped as follows :—

Cases under treatment or awaiting treatment	...	65
Cases other than those requiring glasses		80
Cases for which glasses were prescribed		226
Total		371

Of the cases which should have been wearing glasses :

168 were wearing them;

17 were not, but obtained them on request;

41 were not wearing them;

that is, 18 per cent. failed to wear the glasses needed.

This failure to wear glasses prescribed is due to several reasons. Often the glasses are broken, and it is not thought worth while to mend them. At other times the child is not at first accustomed to wearing them, and will not persevere till the slight initial discomfort has worn off. Sometimes the eyes have changed, or the frames have become too small, and the glasses need re-adjusting. To prevent this as far as possible, all children who have been noted as having defective vision or eye disease are seen after each routine inspection at the school with the other referred cases, as described in the section "following up." If necessary, they are referred again to the School Oculist, and fresh glasses are prescribed where needed.

In addition to this, a special register was compiled of cases which require special observation at frequent intervals, that is, cases of myopia and strabismus.

The following is an analysis of such cases at present in the Acton Schools :—

Myopia.

A.	Excluded as unfit for an ordinary school (—20D) ...	1
B.	High myopia (over —4.50 D)—In school with special instructions as regards near work, etc. ...	10
C.	Low myopia—No special instructions... ..	21
		—
		32

Group B are seen at frequent and regular intervals. At present in 8 cases the myopia is stationary, and in two increasing slightly.

The Strabismus cases are as follows :—

Internal strabismus		46
External „		3
Alternating concomitant		14
		—
		63

The revisits of the strabismus cases show very clearly the immense importance of early treatment and the provision of correcting glasses. In children of 7 and 8 the results of treatment are disappointing. The squint may sometimes disappear, but the sight does not return, and the child for all practical purposes has only one eye. Even at 5, the earliest age at which the Medical Officer can observe the defect, the sight is often much affected, though with perseverance in treatment an excellent result can still be obtained. Unfortunately, parents are very slow to believe that a squint is any drawback, and often do not understand that it is only a symptom of defective vision. Often they are convinced that at the mystic age of 7 the child “will grow out of it,” and so the opportunity to preserve the sight is lost.

On the other hand, the School Medical Officer now sees some children under school age at the Mothers' Welcome, and here some squints have been noticed, and the mothers persuaded to get treatment for children under 5 with excellent results.

As a typical example of the good effect of early treatment, the

case of E. W. might be quoted. At 5 E. W. had vision only one-seventh of normal in the squinting eye, with the prospect of losing even that. She was provided with glasses. At her next visit she had no squint, and the sight had improved to three-sevenths of normal. The glasses were altered to suit. At her third visit she had normal vision with glasses. There is some irony in the fact that when two months later the parents' attention was drawn to the fact that the child's glasses were broken, and that it was important they should be mended, the father replied that "the glasses were rubbish, and had never done any good." Fortunately, the facts were too strong for him; he was convinced, and had the glasses mended.

The revisits of special cases, while exceedingly necessary for efficient work, naturally absorb a large part of the time of the School Oculist, while the number of new cases continues as before. Therefore, in accordance with the resolution of the Education Committee, the School Oculist now attends once a week during the school year, instead of, as before, only 25 times.

The cases to be seen by the School Oculist are selected by the School Medical Officer. They are either :—

- (1) Cases from routine medical inspection.
- (2) Special cases referred chiefly by head teachers.
- (3) Transfers from outside districts.

The head teachers are exceedingly vigilant in detecting signs of eye-strain, and a large proportion of the cases are sent up by them. All cases with vision 6/18, or any with better vision, if they show symptoms of any kind, are seen by the School Medical Officer and referred to the School Oculist, if the parents are unable to provide treatment. If examination under atropine is required, the parents' consent is given in writing, and the ointment is applied in school by the nurse.

After the School Oculist's prescription for glasses has been given, the glasses are carefully tested again by the School Medical

Officer, and are then sent down to the school, accompanied by a note to the head teacher, asking him or her to see that they are worn regularly. At the same time, any special directions are given about the case. The parents pay from 3s. to 4s. 6d., according to the cost of the glasses which are provided. In necessitous cases they are given free. As already mentioned, these children then come up for review at each routine visit of the School Medical Officer. If the children move into another neighbourhood, the defect card is copied and sent with the Medical Inspection card to the new education authority.

For the past year the statistics are as follows :—

Number of children examined (including observation cases)	...	...	...	...	270
Number of visits paid	...	...	...	...	556
Prescriptions granted	...	...	...	...	126
Glasses obtained	...	...	...	...	125

DETAILED ACCOUNT OF CASES :—

Refractions performed	...	...	...	...	118
Hypermetropic astigmatism	...	...	...	...	72
Hypermetropia	...	...	...	...	3
Alternating concomitant strabismus	...	...	...	...	7
Right internal strabismus	...	...	...	...	10
Left internal strabismus	...	...	...	...	21
Myopia	...	...	...	...	5
Myopic astigmatism	...	...	...	...	23
Nystagmus	...	...	...	...	1
Phlyctenular conjunctivitis	...	...	...	...	3
Corneal ulcers	...	...	...	...	6
Anterior polar cataract	...	...	...	...	1
Blepharitis	...	...	...	...	5
Conjunctivitis	...	...	...	...	3

Ringworm.

The statistics for the year are as follows :—

Old cases	...	...	...	...	4
New cases during year	...	...	...	...	73
					—
Total	...	...	...	...	77
					—
Returned to school cured	...	...	...	...	50
Still under treatment	...	...	...	...	27
Treated by X Rays through Education Authority	...	...	...	...	34
Treated by X Rays elsewhere	...	...	...	...	6
					—
Total	...	...	...	...	40

That is, 80 per cent. of the cases returned to school had X Ray treatment. Unfortunately, in many cases the parents only agree to X Ray treatment after a long period of exclusion from school. If X Rays were applied early the length of absence would be much less, and the loss of grant much reduced.

In 25 cases treated in the last year, the total absence was 1,218 days, average per child 49 days.

Absence from date of X Ray application 661, or 26 days per child. This difference would be still more striking if cases which have dragged on from former years were included. For example :—

Case 1. Excluded $2\frac{1}{2}$ years under constant treatment and observation. X Rays on July 9th, 1913. Returned to school September 1st, 1913.

Case 2. Excluded $1\frac{1}{3}$ years. X Rays September 9th, 1913. Returned November 3rd, 1913

There has been one case in which the hair is still thin over part of the area treated. The condition is somewhat peculiar and unlike the usual type of X Ray baldness. It is probably due in part to a co-existing skin affection of the scalp.

It will be noticed that there is an increase in the number of cases occurring during the year. The control of ringworm in the schools is complicated by two factors :—

1. The shifting nature of the school population. This is very marked in some schools, and as a result children suffering from ringworm come in from other districts, and may infect others before the condition is discovered.
2. Infection in children under school age. The Education Authority have no power to provide treatment for these cases, even if they are aware of them. In the meanwhile the children may act as centres of infection to children of school age, and some cases of re-infection after cure have been traced to such an untreated child at home.

All cases sent to Dr. Arthur are selected by the School Medical Officer. The parents are interviewed, the nature of the treatment explained, and the slight risk of difficulty with the growth of the hair afterwards explained. If they agree their consent is obtained in writing, and an appointment made with the radiographer. Before returning to school each case is seen again by the School Medical Officer. It is the custom in Acton to let the child return to school as soon as the infected hair has fallen out. The child wears a cap or bonnet till the new hair has grown.

Cases which do not receive X Ray treatment are visited regularly by the nurse, to see that treatment is being obtained.

Microscopic examinations are made of all doubtful cases. 14 such examinations were made, and spores were found in 12. Cases of ringworm of the body are treated by a nurse under the supervision of the School Medical Officer, if they are not attending a doctor.

Children Under Five.

A reference to the table of defects found at the medical inspection of entrants shows that before they come under the notice of the Education Authority they have already developed many diseases and defects.

3 per cent. have chronic diseases of the external eye, 3 per cent. have ear disease, 52 per cent. have decayed teeth, 16 per cent. enlarged tonsils, 6 per cent. adenoids, 4 per cent. rickets, and so on. Most of these defects, especially ear and eye trouble, are easy to remedy at their beginning, but if neglected they are exceedingly difficult to treat efficiently, and result in a large amount of unnecessary suffering and disability. By the time these children reach school age, these conditions are already chronic, and the Education Authority is at considerable trouble and expense to remedy them.

In the report of the Medical Officer of Health, an account will be found of the work done among children under one year. An attempt is now being made to bridge the gulf between one and five, and if possible prevent some of this unnecessary and wasteful suffering. This has been done in two ways. In the first place, the Committee of the Crèche kindly considered a suggestion from the Medical Officers, and raised the age limit from four to five. It is now possible for a child to remain under trained supervision at the crèche till he enters school, whereas before there was a year in which he was obliged to go to a "baby minder," or be left in charge of an older child.

Secondly, the mothers who attend the Babies' Welcome are urged to continue attendance at regular intervals till the child reaches school age, and they are invited to bring any other children they have, not yet attending school. These children are weighed regularly, and one of the Medical Officers present at the Welcome is able to give advice on health matters.

This Babies' Welcome has only been working a year, and the last development a little under three months, but already 34 children between 1 and 5 are under supervision. Of course, only the mothers who are careful and anxious about their children will take the trouble to bring their little ones to the Welcome, but on the other hand, these are the very mothers who will carry out medical advice, and so prevent the development of chronic conditions. Already several mothers have obtained needed treatment in consequence of the advice given, e.g., early squints have been taken to hospital and had glasses fitted, slight cases of rickets have had special diet, and so on.

Cleanliness.

A list of children found to have vermin or nits is handed to the nurse after each medical inspection, and the figures appear on her report. She visits these cases until she is satisfied with their condition. Now that a second nurse has been appointed, a routine inspection of heads is made in each school once a fortnight, and the cases are followed up at home. Here, again, many cases relapse as soon as the nurse's visits cease. Severe cases are excluded, and if they are not clean within a reasonable time, the case is taken into court.

There has been a steady rise in the level of personal cleanliness since medical inspection was started, and—apart from statistics—this is shown in an unexpected way. The original cards which were printed for sending to the parents of verminous cases are found to be far too drastic for most of the cases occurring now, and as a result a second card has been printed, to be given to children who need some attention which does not involve exclusion from school.

The condition of the children's heads depends to a large extent on the state of public opinion among the parents, and their attitude towards the subject of personal cleanliness. In some schools nits are not considered any disgrace, and the fact that "they are all dead" is considered a sufficient excuse for their presence. Some parents show very clearly that they consider the Medical Officers are demanding the impossible, and are altogether over-particular in commenting at all if nothing worse than nits is to be found.

In other schools the most mildly worded notice is regarded as a deep disgrace, and messages of apology for the unfortunate discovery are sent at once. It is not fair that careful mothers should have their children in contact with verminous or unclean companions, and a steady effort is maintained to raise the level of personal cleanliness throughout the schools. Sending notices which are not followed up is useless, and tends to make the parent think that they may be neglected with impunity. At first only the bad cases could be dealt with, but the improvement has continued, and now it is possible to follow up any case in which nits are present.

In one infant department an attempt was made to get complete freedom from nits, and a notice was sent out for every child affected—about 20 out of 400. Within three days all the heads were clean.

This standard should be reached in every school, and it is necessary to educate the parents to believe that it is attainable, and that anything short of it is a disgrace. The success of the teachers in enforcing cleanliness depends on the attitude of the parents at home.

Prosecutions.

(a) Under the Attendance Bye-laws.

In four cases prosecutions were instituted against parents who had, after repeated warnings, failed to present their children in a sufficiently clean condition to attend school. In each case directions as to the treatment had been given, and repeated visits were paid by the school nurse before proceedings were taken.

Convictions were obtained in all four cases, two cases being fined 5s., and two 10s. each.

(b) Under section 12 (1) of the Children's Act, 1908.

One case was dealt with under this Act. The particulars were as follows :—

L. P., aged 7, was found in May, 1911, to be suffering from an alternating concomitant strabismus and mixed astigmatism, and a notice was sent to the parent that the child's eyes required treatment. He refused to allow the oculist to proceed with the case. In November, 1911, a second notice was sent. The child was in four different schools under the Acton Authority, and in each one she was promptly referred to the Medical Officer by the Headmistress, because she complained of "seeing double." Frequent attempts were made to see the father to explain the necessity of his obtaining treatment, or of allowing treatment to be given by the School Oculist, but in vain. In June, 1912, the

Secretary wrote a letter pointing out the parent's liability under the Children's Act, 1908. In March, 1913, a final registered letter was sent, announcing that proceedings would be taken, and in May, 1913, the case was taken into Court. The father was fined 10s., and finally glasses were obtained for the child from Moorfields Hospital.

The value of a personal interview, to which reference has been made before, was shown very clearly by the sequel to this case. Not long after a notice was served for a second child, who suffered from high myopia. The father came down to the offices to sign a consent for treatment, saying he could not afford another fine or journey to Moorfields Hospital. For the first time it was possible to explain the necessity for treatment, what the treatment really was, and what the effect on the child's future would be, if the condition was neglected. As soon as this had been done he signed readily, explaining that he thought the Medical Officer meant "to take the eyes out, tamper with them, and put them back," and that if he had understood at first he would not have raised any objections.

Otorrhœa.

Treatment in these cases has been unsatisfactory. 55 per cent. had treatment, but treatment in these chronic cases is not synonymous with cure, and frequently when the stimulus of the nurses' visits is withdrawn, there is a speedy relapse. This is a difficulty which we find with other chronic and disfiguring but neglected diseases, such as blepharitis and skin disease. Now that a second nurse has been appointed, it will be possible to arrange for children with ear discharge to come up daily for syringing. Apart from the unpleasantness of a neglected discharging ear, it may at any time lead to an acute and dangerous condition, which needs instant operation.

Tonsils and Adenoids.

This heading shows a large percentage of untreated cases. This is partly due to difficulty in obtaining treatment, but also

largely to a reluctance to have "cutting operations." Parents are not ready to believe that deafness, a vacant look, and general backwardness are due to enlarged tonsils and adenoids, and expect the child to "grow out of it."

At the end of last year the Committee appointed a Surgeon and Anæsthetist to operate in cases selected by the School Medical Officers. The operating rooms will shortly be ready for use, and it is to be hoped that when we can offer treatment the percentage of neglected cases will diminish. There is no argument for treatment so impressive as a successful case, and parents who can make their own arrangements are likely to be convinced of the value of early operation when they see the improvement in their neighbours' children.

Teeth.

There is no reference in the Table to the treatment of teeth. The enormous amount of decay present can be seen in the Table of Defects found at medical inspection, but, speaking generally, there has been no treatment up to the present. What little there was, was confined to the extraction of septic teeth, and there was no attempt at conservative treatment.

The Table of Defects found at the medical inspection of school children shows the extent of dental caries in the district, though such records refer only to obvious dental disease, and take little or no account of the earlier indications of decay which reveal themselves only to the dental probe and mirror. It is usually found that the percentage of dental caries appears highest in those districts where a dentist conducts the examination.

As a result of the medical inspection of over 10,000 children, it was found that 86 per cent. of the children had obvious dental caries. In Cambridge, where the teeth were examined by a dentist, 96 per cent. had dental caries.

Speaking generally, not more than a few children out of every hundred will be found who fail to bear evidence of present or past dental disease. Among the infants examined in the Acton School in 1912, there were none without some caries, and 37 per cent. had four or more decayed teeth.

Moreover, the prevalence of dental caries is as great among the children of parents more favoured as regards their social position in life as among the children of the poor.

Of even greater moment is the fact that probably the majority of school children suffer more or less serious disability in some form or other, sooner or later, from dental decay. Although the facts are now known, the effects of dental disease are but imperfectly recognised, because the effects on the health of the child and the adult are mostly of indirect character. It is probably true to say that there is no single ailment of school children which is responsible, directly or indirectly, for a larger proportion of the delicacy and disease which is found at every turn to handicap efficiency, both physical and mental. It is only of recent years that the influence of the teeth upon the general health has been realised. Decayed teeth entail diminished mastication, and diminished mastication brings about indigestion and impaired nutrition. But the decreased biting power reacts upon the jaws and face bones, which, owing to the fact that they only work half-time, fail to develop to their full size. The nasal air passages share in the mal-development of the jaws, and contract. The lining membrane of the nose and nasal cavities becomes unhealthy, from time to time inflamed and blocked up, mouth breathing becomes habitual, reacting upon the nasal condition, so that the congestion or state of inflammation passes on to the formation of adenoid tissue.

It is also held that a connection exists between diseased teeth and consumption. Some authorities claim that consumption can be, and is, contracted through diseased teeth.

Apart from any unproved effects, it is undoubtedly true that the mouth is responsible for a multitude of sins so far as disease

is concerned. Dyspepsia, anæmia, headache, neuralgia, enlarged tonsils, and adenoids are due in a measure—perhaps a considerable measure—to the diseased condition of the teeth. These effects are not operative only in children. It was stated that over 3,000 soldiers were invalided home from South Africa during the war on account of the disabling effects of decaying teeth alone.

It may seem surprising in face of the extent of the evil and far-reaching effects which follow, that more attempts should not have been made to grapple with the problem. One reason why the question was not faced by many authorities has been its magnitude. It was felt to be impossible to deal with the whole question, and it was difficult to decide how much should be done and in what way it should be approached. The local education authorities that did pioneer work on the question have had to modify their plan of procedure, and the Board of Education warn authorities now giving consideration to this question to put on one side any idea of undertaking to grapple with the entire problem of dental disease. The most, and indeed the best, that can be done by such authorities is to make a beginning.

Fortunately at the present time, we have the experience of many authorities, and some of the centres where dental treatment is carried out have been visited. These centres were chosen as representative of widely varying conditions and administration, but while they differed among each other in detail, the most marked feature was the consensus of opinion as to the main method of attacking the problem. This uniformity had only been reached after experiments on differing lines, a fact which increases the importance of the final result.

Before dealing with what is done by different authorities, it may be as well if we give, shortly, what are accepted as the causes of dental caries. The total mass of dental disease can be differentiated, so to speak, into its constituent parts, and the reason why the problem is approached in a certain way, may appear evident.

Causation of Dental Caries.

The causation of dental caries is understood more thoroughly than that of the causation of any other disease in the body, and it is necessary to keep three facts relative to the disease in due proportion. Only so will it become clear to the Committee precisely in what direction, and to what extent, they are able to undertake effective measures to combat the disease.

Firstly, by far the most important factor in the production of dental caries in children is *unsuitability in the character of the diet provided* from infancy onwards. The immediate cause of the disease is the accumulation about and between the teeth of fermentable carbohydrate material. These collections are due to (a) shape of the jaw and teeth, (b) presence of an unsatisfactory form of carbohydrate, (c) absence of some cleansing form of food, such as fresh fruit partaken of at the same time as the meal or subsequently or both.

In the white races of Europe the jaws are undergoing a slow process of shortening. This change in the jaws reduces the jaws in size, crowds them together, and thus makes them more liable to disease. The change is undoubtedly due to the altered character of the food, and one of the factors in the etiology of caries is the pappy nature of the food which very young children are compelled to subsist upon. This kind of food does not compel the child to exercise the muscles of his face, and the shape of his teeth and mouth becomes irregular. In addition, another unsatisfactory form of food in the shape of sweets lodges in the irregularly shaped teeth. It is difficult to prevent children after they reach school age from wasting their money on sweets if they have been brought up on pap, for pap-feeding causes a pathological craving for sweets. It is said that children who have been properly brought up do not naturally like sweet things; rather have they a liking for fish, flesh, fruit, and fat.

Although hereditary conditions may in some instances predispose, in the main, hereditary influences are not the causes of dental disease, and if we get rid of harmful habits, it is claimed that we can get the teeth back to as good a condition as 100 years ago.

Secondly, the next line of defence is the *maintenance* of cleanliness of the teeth and mouth, obtained by training in the use of the tooth brush. What is called tooth-brush drill has been instituted in many schools, and it is claimed that in such schools dental caries is less prevalent. Unless care is exercised, the use of the tooth brush by children may do almost as much harm as good. There can be no doubt that much depends upon the manner in which the teeth are brushed. The fact is frequently overlooked that dental caries, in the large majority of instances, commences in the crown of the tooth, in the part, that is to say, not infrequently left untouched by the brush. The molars at the back of the mouth which undergo decay, in the first instance, remain untouched.

Apart from its effect upon the cleanliness of the mouth, the institution of a tooth-brush drill in the school would facilitate the work of the dentist. There is a necessity for a preliminary and persistent working up of the districts in which a clinic is placed, and there will always be a residuum of recalcitrant parents who decline to allow their children's teeth to be treated.

Thirdly, every effort should be made to *arrest dental disease at the very outset*, and this aspect of the question is the one which more particularly bears upon the action of the Committee.

The treatment by conservative methods of all existing disease in children, both younger and older, may rightly be regarded an impossible task, and, at present, at least, outside the range of practical politics; but treatment of dental decay at its earliest manifestations in the newly erupted teeth of the permanent set, *i.e.*, between 6 and 8 years of age, has been shown to be quite feasible, and to be productive of results fully commensurate with the expenditure incurred. In no disease is it more imperative to view the actual treatment from the point of view of *prevention*. We doubt if the Board of Education will sanction any scheme in which the treatment is not based on preventive lines. Treatment must begin from the first moment disease shows itself, and, indeed,

before it shows itself. The recognition of this fact is of the utmost importance to the Committee when it comes to consider what practical measures of a direct kind it should adopt in order to remedy the state of affairs revealed by medical inspection. It suggests at once certain lines of action which are both practical and practicable.

Inspection and Treatment.

1. The inspection as well as the treatment should be done by a dentist. It is important that the earliest signs of disease should be detected. Inasmuch as a very large number of children will have to be dealt with, it must be realised at the outset that the principle to be carried out is the greatest good to the greatest number, by which it is meant that an undue time must not be spent upon individual cases, as, for example, in carrying out elaborate root treatment extending over several visits. The early signs can only be detected by a dentist with the aid of the probe and mirror. It is quite possible to fill a tooth directly it becomes carious without causing the slightest pain to the child. The success which will attend any effort towards improving the teeth depends directly upon how near one can get to this painless treatment.

2. Inspection should not be delayed later than during the sixth year, and attention should be concentrated, in particular, upon the permanent set of teeth immediately upon their eruption.

Whilst under an ideal system every school child should have its teeth regularly attended to, it is evident in large centres of population that the treatment must at first be limited to a comparatively small number, and for this reason some age limit must be imposed. The key to the situation is the preservation of the first permanent or so-called six-year molars. It is a most natural thing to say that the six-year molar appears at six years of age and probably becomes carious by the seventh year, therefore all that has to be done is to treat the seven-year children to save

these teeth. So great is the variation that it is not unusual with seven-year children to examine one with two molars so carious as to be beyond any means of conservative treatment, whilst the next may only have the points of one or two of these teeth just appearing through the gums.

The experience of most authorities who have established dental clinics points to the ages 6-8 years as the *most suitable PERIOD* for examination and treatment.

3. Each child found defective and in whom the defect has been remedied should be *periodically supervised*, and further treatment given if required in order to obviate the possibility of the disease becoming at any time extensive in character. The reinspection should take place at intervals of not less than a year. Although in time all children over 6 years of age would have to be treated, the amount of dental disease becomes appreciably less in after years if treatment has been carried out and continued in children over 6 years of age. For instance, the following figures represent the experience obtained in Cambridge. After filling every permanent tooth which shows the earliest trace of caries for children aged 6 years, the average number of carious teeth per child a year later is 1.5; 83 per cent. of the children develop fresh caries in their permanent teeth between the ages of 6 and 7 years, and 74 per cent. between 7 and 8 years. This great increase appears only in the period of the eruption of the first permanent molars, with a sufficient margin to allow all the four teeth to reach their final position in the jaw, one in contact with the other. Immediately afterwards the percentage of children with fresh caries drops to 45 per cent. for the year, and one would not expect any percentage above 40 in after years, except perhaps from 11 to 13, about which time the second molars appear.

Applying these general principles to the problem before the Committee, we find that in January, 1913, the number of children in the schools between the ages of 6 and 8 was :—

Boys	...	...	*...	...	1,118
Girls	...	...	...	...	988
Total					2,106

so that this figure represents the school population to be dealt with.

It is obvious that so large a number of children cannot be treated at once, and the experience of other authorities has led us to make a small start, and allow the work to develop gradually and naturally. This avoids any possibility of money being spent without a proportionate return, and is elastic enough to permit any necessary modification as the scheme develops.

It was considered advisable to limit the treatment at first to three selected schools, for it is important to remember that at first parents may show some hostility to the treatment. They do not realise its importance, and this is more marked in the poorer districts. To a certain extent this can be overcome by special talks to parents about teeth by the Medical Officer or Dentist, and by demonstration of the difference between children with healthy mouths who have been treated and those who have not, but the most convincing argument is the smooth working of the dental centre, the fact that it is generally accepted as a matter of course, and that treatment is not necessarily painful.

These considerations led us to recommend that to begin with the schools selected should be those where the parents have shown themselves ready to co-operate with the school medical service, as much depends on the attitude the parents adopt at the beginning of the scheme.

In 1914 the scheme of treatment will, therefore, be extended to include teeth, and a Dentist has been appointed to attend at first one half-day a week. Arrangements have been made for him to inspect the teeth of children between 6 and 8 in three schools, the Priory, Central, and Southfield Road, and select those requiring treatment. He has already begun on this inspection.

The treatment will be carried out in three rooms in the Council Offices. One of these is being fitted up as a treatment room for teeth, tonsils, and adenoids, one as a recovery room, and one as a waiting room.

When we consider the effect of decaying teeth on health and nutrition, we realise the importance of such a step in improving the condition of the scholars, and the advisability of gradually extending the system to include all the schools.

Work of the School Nurse.

With the development of the new scheme for dealing with teeth and tonsils and adenoids, it was evident that the work was beyond the powers of one Nurse.

The second Nurse appointed by the Committee took up her duties in January, 1914.

In all their work the School Nurses are under the supervision of the Medical Officers. They carry out treatment in minor cases occurring in the schools for which they are responsible.

In all cases of absence from school due to illness, they are notified by the Head Teacher on special cards. They visit at the homes, and report on the cases to the Medical Officers and the Education Department.

They conduct systematic inspections of the schools, and follow up all cases of uncleanness requiring attention. They follow up cases referred from medical inspection, either to urge the importance of medical treatment, or to endeavour to obtain a higher standard of personal cleanliness, or to give advice on the treatment of chronic, but neglected eye or ear disease. Unfortunately many of these latter cases relapse when the nurses' visits cease.

They also visit the schools to apply atropine ointment before refractions are done.

The visiting in connection with the dental work and tonsils and adenoids is also done by them, and this often means several visits to one case before consent is obtained.

The following is a Table of the work done in 1913, before the appointment of the second Nurse :—

Eye Treatment Cases.

463 visits were paid, and 79 children were treated. The distribution of these cases and the diseases treated were as follows :—

				No. of children treated.	Defective sight.
Acton Girls	...	...	...	1	1
Acton Infants	...	...	...	3	3
Beaumont Park Boys	...	...	...	2	2
Beaumont Park Girls	...	...	...	9	9
Beaumont Park Infants	...	...	...	3	3
Central Senior	...	...	...	1	1
Central Junior	...	...	...	5	5
East Acton ...	...	...	...	1	1
Priory Boys	...	...	...	1	1
Priory Girls	...	...	...	11	11
Priory Infants	...	...	...	3	3
Rothschild Infants	...	...	...	3	3
Southfield Road Infants	...	...	...	1	1
South Acton Senior Boys	...	...	...	2	2
South Acton Junior Boys	...	...	...	2	2
South Acton Girls	...	...	...	16	16
South Acton Infants	...	...	...	7	7
Acton Wells Mixed	...	...	...	2	2
Turnham Green R.C.	...	...	...	6	6
				79	79

Visits Paid by School Nurse.

Schools				N.-East.	N.-West.	S.-East.	S.-West.	Total.
Acton	...	...	...	15	41	3	37	96
Acton Wells	...	...	...	130	4	—	—	134
Beaumont Park	...	...	...	—	1	54	47	102
Central	...	...	...	54	55	2	19	130
East Acton	...	...	...	25	—	—	—	25
Priory	...	...	...	97	80	42	140	359
Rothschild	...	...	...	—	—	60	101	161
South Acton	...	...	...	—	—	4	484	488
Southfield Road	...	...	...	51	1	97	—	149
Turnham Green R.C....	...	...	...	—	3	11	16	30
Lower Place (Willes-	...	...	...	—	1	—	—	1
den	...	...	...	—	—	—	1	1
No School	...	...	...	—	—	—	1	1
				372	186	273	845	1,676
Diseases.				N.-East.	N.-West.	S.-East.	S.-West.	Total.
Abscess	...	...	...	1	—	—	1	2
Blepharitis	...	...	...	1	—	—	5	6
Chicken Pox	...	...	...	19	12	5	12	48
Colds	...	...	...	13	8	5	10	36
Conjunctivitis and de-	...	...	...	9	13	14	78	114
fective sight	...	...	...	—	—	—	1	1
Dermatitis	...	...	...	—	—	—	2	2
Diphtheria	...	...	...	—	—	2	2	4
Diphtheria carrier	...	...	...	—	—	—	2	2
Eczema	...	...	...	3	2	—	4	9
Herpes	...	...	...	—	—	1	—	1
Impetigo	...	...	...	21	15	15	68	119
Measles	...	...	...	104	29	74	109	316
Measles contact	...	...	...	11	11	11	31	64
Mumps	...	...	...	86	42	50	276	454
Otorrhœa	...	...	...	1	—	3	2	6
Psoriasis	...	...	...	—	—	1	4	5
Ringworm	...	...	...	27	13	30	51	121
Scabies	...	...	...	5	—	7	15	27
Seborrhœa	...	...	...	—	—	—	1	1
Tonsilitis	...	...	...	26	10	10	22	68
Urticaria	...	...	...	2	—	2	1	5
Verminous heads	...	...	...	12	10	20	41	83
Whooping cough	...	...	...	12	6	12	59	89
Miscellaneous	...	...	...	19	15	11	50	95
				372	186	273	845	1,676

Provision of Meals.

The Provision of Meals Act, 1906, is put in force in this district for those children who are under-nourished, and meals are provided through the holidays as well.

Some dinners are provided at the Cookery Centres, but most are given at a Restaurant in Osborne Road, South Acton, at a cost of 2½d.

The figures are as follows :—

Number of Meals at Restaurant	9,957
Number of Meals at Cookery Centres ...	1,327
	11,284
Cost of Meals at Restaurant	£103 14 4½
Cost of Meals at Cookery Centres ...	13 16 5½
	£117 10 10

One of the great difficulties in providing satisfactory arrangements is the fluctuating number to be catered for. On some occasions the number dropped as low as 4, and others—as, for instance, during a strike—the number rose to 94. The Restaurant is not able to deal satisfactorily with such a number. The children have to go in in relays, the first-comers hurrying through their meal, while the later ones are obliged to wait outside till seats are vacant. If the weather is bad they are often wet and chilled before they can obtain a meal, and the conditions lead to noise and disorder.

The food itself is generally of good quality, but it is, of course, impossible in a public Restaurant to exercise any efficient control over the children, or to use the meal as a lesson in good manners and cleanliness. Many of the children rarely sit down to a properly laid meal, as the mothers who are at work have no time to prepare one in the middle of the day or to supervise the children. They come into the Restaurant with very dirty hands, hurry through their food in an unsuitable manner, and rush

out again. The Restaurant-keeper has complained several times of the difficulty of keeping order, and when the number of children is large an Attendance Officer is usually present, but this does not remedy the other drawbacks, and the service of the meal does not approach the standard of the Board of Education, which lays stress on the importance of the way in which the meal is served.

Another difficulty is that many children are suffering from unsuitable food more than lack of food. These children are often referred by the School Medical Officer for investigation, but inquiries show that they are not suffering from actual poverty, though their food is inadequate to nourish them. In some cases this is due to ignorance, but often it is because the mother has no time to prepare a midday dinner, and gives the child money to buy food. As a result, the midday meal may consist of pickles, biscuits, fried fish, or some equally unsuitable food, while this method of buying is disproportionately expensive. If it were possible for children to buy a cheap dinner from a feeding centre it would meet the difficulty of these under-nourished children, and at the same time reduce the great fluctuation in numbers which makes catering so difficult. Moreover, with such a system it would not be known which children were paying and which were receiving free dinners.

At present the names of the children to receive meals are obtained from various sources :—

1. The School Medical Officers refer all cases coming under their notice at routine or special inspections.
2. The Teachers send up the names of children whom they consider to be in need of meals.
3. The parents apply for assistance.
4. The Attendance Officers report cases of poverty.
5. Various other sources—Charitable Organisations, Church Workers, etc., send in names.

An investigation is made at once into the circumstances of the family, such as the total income, the outgoings for rent, and the number in the family, and on these facts the decision is made.

As a rule, when one or both parents are in regular work, meals are not granted, but no attempt is made to insist on a hard-and-fast rule, which may result in great hardship in individual cases. Each case is judged on its merits, and if there is a reasonable doubt, the child gets the benefit of it.

Books of tickets are granted, available for a month at a time, and these are distributed daily by the Head Teachers, and given up at the Restaurant by the children.

Table 8.

Numerical Return of all Exceptional Children in the Area.

	Boys.	Girls.	Total.
BLIND (including partially Blind)—			
Attending Public Elementary Schools ...	—	—	—
Attending Certified Schools for the Blind	2	1	3
Not at School	—	—	—
DEAF & DUMB (including partially Deaf)—			
Attending Public Elementary Schools...	8	10	18
Attending Certified Schools for the Deaf	3	4	7
Not at School	1	1	2
MENTALLY DEFICIENT—			
Feeble Minded—			
Attending Public Elementary Schools	16	6	22
Attending Certified Schools for Mentally Defective Children...	—	1	1
Not at School	1	1	2
Imbeciles—			
At School	—	—	—
Not at School	—	—	—
Idiots	1	—	1
EPILEPTICS—			
Attending Public Elementary Schools...	5	—	5
Attending Certified Schools for Epilep- tics	—	—	—
Not at School	—	1	1

Table 8—*continued.*

	Boys	Girls	Total
PHYSICALLY DEFECTIVE—			
Pulmonary Tuberculosis—			
Attending Public Elementary Schools	2	1	3
Attending Certified Schools for Physically Defective Children	—	—	—
Not at School	3	6	9
Other forms of Tuberculosis—			
Attending Public Elementary Schools	1	2	3
Attending Certified Schools for Physically Defective Children	—	—	—
Not at School	—	—	—
Cripples other than Tubercular—			
Attending Public Elementary Schools	3	5	8
Attending Certified Schools for Physically Defective Children	—	—	—
Not at School	1	—	1

Blind Children.

Three children are provided for in the Hants and Isle of Wight Home for the Blind, Southsea, and at present there are no others in the Acton area.

Epileptic Children.

if in school are kept under close and frequent supervision, and only those who do not have fits in the daytime are allowed to attend.

The one excluded case is now just over school age.

Mentally Defective and Deaf Children.

During the last year the London County Council have notified the Acton Education Committee that they are not prepared to admit any more outside children to their Special Schools for deaf or backward children. The consequence is that at present there are children in our schools who are quite incapable of benefiting by the ordinary class teaching, and the question of providing for them becomes a pressing one.

The presence of an abnormal child in ordinary classes is bad in several ways.

In a large class it is impossible to give him constant individual attention, the ordinary methods fail to arouse his interest, while the work is entirely beyond his capacity. As a result, he is entirely isolated, and either falls into an apathetic condition, or diverts his energies to mischief. In the latter case he acts as a storm centre to the class, displaying a perverted ingenuity in naughtiness. If, on the other hand, the teacher devotes her attention largely to him, the whole class are retarded to his slow rate of advance, and become in their turn uninterested and restless. In either case, as he grows older and stronger, his strength is disproportionate to that of the other members of the class, and this often results in undesirable bullying of the smaller children. The presence of such a child in the class always means that the teacher's work is much heavier than usual and very disheartening.

Besides the definitely mentally defective child, who needs a special syllabus, there is also the child who is backward. It is often not possible to say at first whether this backwardness is due to temporary causes, such as former ill-health, or to the very slow development of an otherwise normal mind, or whether the child is really mentally defective. Such a child needs much individual attention, and a modified syllabus. If left in a large class with a syllabus fitted to the needs of normal children his time is wasted, and any advantage from the education provided

is practically non-existent. Any scheme for abnormal children should provide for the accommodation of these children. They should be kept under observation, re-examined at frequent intervals, and gradually drafted out either to the ordinary schools when the special training has produced its effect on their slow, but normal, minds, or else to the class of definitely defective children.

In this connection it is to be noted that the *name* of any special school is of considerable importance. Parents often raise the most vehement objections to their children attending a school to which they consider a stigma is attached, such as a "School for Mentally Defectives." It is always wise to refer to it as an "Observation School," or a "Special School," or some other non-committal term, and it is also a help in a small area, if other cases such as deaf or physically defective children are housed in the same building.

Classes for very backward or mentally defective children should be kept small, so that the Teacher can give more individual attention, and the syllabus should contain provision for a great deal of handwork. A specially trained Teacher is essential.

Mentally Defective and Backward Children.

	Boys.	Girls.	Total.
Excluded and unsuitable for education...	3	—	3
Mentally defective	16	6	22
Extremely backward, requiring special arrangements	35	31	66
	54	37	91

One other child attends a Certified School for Mentally Defectives.

Provision needed for... 88 children.

Roll No. 9,449 = .9 % of defective and backward children.
 .26 % mentally defective only.

According to the estimate of the Royal Commission, .79 per cent. of the children in the Public Elementary Schools were feeble-minded or imbecile.

Deaf Children.

The deaf child is in an entirely different category. He is often normally intelligent, but as one of his channels of communication with the outer world is cut off, he is much handicapped, and needs a special training to enable him to overcome his handicap.

For practical purposes there are three grades of deafness :—

- A. The totally deaf, including deaf and dumb.
- B. The "hard of hearing," who can hear a little, but not sufficiently to follow in an ordinary class.
- C. The slightly deaf, who can hear sufficiently to be in an ordinary class if they can be near to the front.

Classes A and B need special provision.

The Committee has at present three children at the Royal School for Deaf and Dumb at Margate.

The modern idea is that it is better for deaf children to attend a Day School, because the conditions are more like those they will be obliged to meet later in life. They live with hearing people, and are obliged to use oral speech, while in institutions they tend to prefer the finger language. Moreover, if deaf children are brought up together, they tend to intermarry. As a large proportion of deafness is hereditary, and the chance of transmitting it is much increased when the tendency is on both sides, this is a somewhat serious consideration. The whole question of the marriage of deaf people needs investigation, and the gradual education of public opinion, but, in the meanwhile, to encourage intermarriages is not advisable. Of course, these remarks apply entirely to hereditary deafness, not to acquired or congenital forms.

On the other hand, the children in institutions are taught trades, and enabled to support themselves, so that, on the whole, it would seem better not to withdraw the children already sent to Margate, but any scheme of Day School for Deaf Children should certainly in future include the teaching of a trade, which means keeping the children beyond the present school age.

In Ackmar Road L.C.C. School the Committee have 4 children who could be withdrawn if this was thought desirable.

Table of Deaf Children.

	Boys.	Girls.	Total.
Deaf and Dumb School, Margate ...	1	2	3
Ackmar Road, L.C.C.	2	2	4
Out of School	1	1	2
In ordinary Schools, totally Deaf ...	2	2	4
Hard of Hearing	6	8	14
	12	15	27
Total not provided for 20			

Lastly, there is a small group of cripples or otherwise physically defective children. Three of these should really be in a cripple school. The other three have special spinal chairs, or other modified arrangement in school.

There are, therefore needing special provision :—

Mentally Defective or Backward	88
Deaf or Hard of Hearing	20
Cripples or Physically Defective	6
	114

In considering the question of meeting the need, it would probably reduce expenses per scholar and facilitate grouping into classes of more or less similar attainments, if the Committee invited the neighbouring areas to co-operate. They are also faced with the same problem, and if Acton provided a Special School, it might be possible to arrange to accommodate scholars from other areas.

TABLE 9.

Appended is a table giving an analysis of the cases in the Acton schools :—

School	Mentally Defective			Very Backward			Deaf			Hard of Hearing			Cripples or Special Physically Defective		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Acton Boys				3		3				3		3			
Acton Girls					1	1					1	1			
Acton Wells Infants and Mixed...	1		1		1	1					1	1			
Acton Wells Infants and Mixed...					3	3									
Beaumont Park Boys and Girls...				5		5									
Beaumont Park Infants	1		1	1	2	3	1	1	2						
Central Junior											1	1			
East Acton				1	1	2							1	1	2
Priory Boys	2		2	8		8	1		1						
Priory Girls		1	1		4	4					1	1			
Rothschild Infants				2		2									
Rothschild Junior	3		3	9	14	23					2	2			
South Acton Junior Boys	6		6	4		4				1		1			
South Acton Infants		2	2		3	3		1	1				1		1
South Acton Senior Boys										1		1			
Southfield Road Infants	2		2										1	2	3
Southfield Road Junior	1	1	2												
Turnham Green Roman Catholic		2	2	2	2	4				1	2	3			
TOTALS	16	6	22	35	31	66	2	2	4	6	8	14	3	3	6

Tuberculosis.

A register is kept of all cases of school age definitely known to have had phthisis, and if they are in school they are kept under close supervision. Cases in school are those in which the disease is arrested, and in which there is no risk of infection for other children. They are weighed fortnightly, and seen at each routine inspection. Any loss of weight or other unfavourable symptom is at once noted, and, if necessary, treatment is advised.

Cases out of school are kept under observation, but at less frequent intervals. They are all under treatment, and in many cases are away in the country. The Central Aid Society has given most valuable help in sending these children away to Convalescent Homes for long periods, as the usual short term is useless in such cases.

Unfortunately, the children often relapse on returning to town life. It would be an advantage if they could attend an open-air class.

In addition to actual cases, a large number of children are under supervision for "suspected phthisis." They are children—often of bad family history—who are below the usual weight, anæmic, and with chronic bronchitis, *i.e.*, children who are of low resisting power and tuberculous tendency. They are weighed regularly, given free meals if necessary, and, where possible, recommended to the Central Aid Society for country holidays. These children would also benefit by an open-air school.

Lately arrangements have been made to examine all children in the schools who are "phthisis contacts," and so are exposed to special risks of the disease. In this way it is hoped that early cases may be found while still in the curable stage, and that some cases may be prevented from occurring. Phthisis in children in early stages has a very good prognosis.

When the Public Health Department receives a notification of Tuberculosis, the Health Visitor visits the home to give advice and obtain particulars. If there are any children of school age

she invites the mother to bring them up to the offices for examination. The Medical Officers are anxious that this should be regarded as an offer of advice and help to the family, and not in any sense as a persecution. So far the mothers who have attended have been grateful for the opportunity, and it has been possible to give them a little advice on the best way to prevent the infection of the children and to keep them healthy. If the mothers are unable to come to the offices, the children are noted down for medical examination at the next routine visit to the school they attend.

The name of any child who should be kept under observation is transferred to a "Defect Card," and if treatment is required the parent is advised to obtain medical advice in the usual way. Throughout the confidential character of the notification of Tuberculosis is strictly observed.

Lastly, cases of Bone and Joint and Gland Tuberculosis in the schools are also under medical supervision.

The following are the figures at present available under the different headings :—

	In School.	Treated at home.	In Hospital, country, or Convalescent Home.	Total.
Notified as Phthisis ...	3	6	3	12
Suspected Phthisis ...	26	—	—	26
Phthisis contacts ...	—	—	—	21
Other Tuberculosis ...	—	—	—	8
				67

Mothercraft Classes.

In the last report an account was given of the local conditions which render such classes particularly useful in Acton, and it was stated that an experimental class had been formed. This was such a success that it was put on a permanent footing, and three schools sent down scholars for a course of lessons. At first these classes were confined to the schools in the poorer districts, but

it was evident that the instruction given would be valuable to every girl in the schools, and that an extension of the classes was urgently to be recommended. In October, in accordance with the resolution of the Committee, the number of classes was raised to four a week. As a result, it has been possible to arrange for every department containing senior girls to send down parties of girls for a course of lessons at the crèche, and we may fairly claim to have developed a permanent scheme, which is of the greatest practical value. In the smaller schools all the senior girls are able to attend the crèche, but in the larger ones only some of the girls can do so at present, though all receive the preliminary teaching in the class-room.

The girls themselves are exceedingly anxious to attend these classes, and before all the schools shared the opportunity for special instruction, we received a pathetic message from one senior department, asking if arrangements could not be made for them "to learn to wash real babies" !

This department is in charge of a Headmistress, who gives an excellent course of lessons on infant care and management; the girls most of them had young babies at home whom they helped to mind, and they were very anxious to have a chance of carrying out on real babies and then reproducing at home the hygienic methods they had been taught on dolls.

The scheme has aroused much interest, and has brought to the crèche many people interested in educational and public health problems, so that it may be well briefly to recapitulate the arrangements as they are at present carried out.

The instruction begins in the school, where the senior girls are given a course of simple, practical lessons on hygiene, including such subjects as the clothes suitable for babies and small children, the simple laws of health, food, fresh air, cleanliness, etc. There is no hard-and-fast syllabus for these classes, and their value depends on the Teacher's power to make them apply to the conditions of the children's lives. The Teachers who give

these lessons are asked to accompany their girls to one course of lessons at the crèche to insure uniformity of instruction. Slight differences in method often confuse children, and it is advisable that the teaching be the same throughout. For the lessons on bathing and dressing a baby, a specially made life-size jointed doll, which sinks in water, is used in most of the schools. The Teachers who have worked with it find it quite useful for the preliminary drill. The girls can make clothes for it, and learn the correct way of putting them on, and can be taught the details of washing without risk of chilling the baby while they are still slow in handling it.

In some schools this class is given in a room with a fire—not a class-room—nursery fittings are borrowed for the occasion, and the conditions the girls will have to work under at home copied as far as possible.

The next step is the course at the crèche. This consists of 6 lessons of an hour each, and each class is limited to 6 girls, so that each may take a share in the work. The lessons are given by the Matron of the crèche, Miss Lucas. She knows the local conditions, and is able to lay emphasis on those points which experience has shown are most neglected in Acton.

The lessons begin with a short lecture. The girls are supposed to have the main facts from the instruction in the school; then under the Matron's supervision they carry out the practical work. The lessons are :—

1. Clothing and dressing baby.
2. Bathing baby.
3. Baby's bed, sleep, and outing.
4. Washing baby's flannels.
5. Washing and making baby's bottle.
6. Signs of health and ill-health, and what to do till the doctor comes.

Permission is obtained from the mother before any baby takes part in a demonstration, but visitors are much impressed by the placid contentment which the baby shows and the skilful handling of the class.

The girls write permanent notes of these lessons as compositions, and are urged to keep them for reference after they leave school.

The classes are under the close supervision of the School Medical Officers, one of whom is often present at the demonstration, and visits are also paid to the preliminary classes in the schools. It is easy to find out by a little judicious questioning whether the children have grasped principles, or are repeating vaguely-understood formulæ, and so far this latter error seems to have been avoided.

It might be supposed that the mothers would regard the classes unfavourably, but experience proved the opposite. It is quite common to hear a child ask the Matron for the patterns of baby clothes used at the crèche "because mother wants to copy them," and, in general, the mothers are glad to have their children taught by trained experts in this as much as in any other subject.

During the hot weather of last summer, one mother whose baby was very ill borrowed her neighbour's little girl "because she had been to the nursery and knew the best ways." The child went in daily to make albumen water and sterilise the bottles and the milk, according to the doctor's instructions. It is satisfactory to be able to say that the baby recovered!

The value of work of this kind cannot be expressed in statistics, but in time it should show in an increased knowledge of the rearing of children, and in an improved level of health in childhood. One side result, though important in its way, is that the attitude of the girls to such subjects as infant care and home management is altering. Perhaps it was natural that when they were carefully taught so many other branches of skilled work they should assume that woman's work in the home was unskilled

and not attractive. Now they find it, too, demands, and should receive, trained and skilled intelligence, and they develop a legitimate pride in their own capacity for doing it well.

The scheme works without any friction, thanks to the fact that the Teachers in the schools and the Matron at the crèche have worked whole-heartedly for its success. Without such co-operation it could not have been carried through.

The Committee pay 6s. a lesson for six girls; that is, 36s. a course of 6 lessons.

The Committee of the crèche receive also £15 for the Matron, who is recognised as a teacher on this subject. One member of the Education Committee is appointed to the Committee of the crèche, and one of the Medical Officers is an Hon. Medical Officer and a member of the House Committee of the crèche.

Control of Infectious Disease.

The School Medical Officers are respectively Medical Officer of Health and Assistant Medical Officer of Health, so that the work of the two Departments is closely correlated. During the year under review new arrangements were made, by which all children from Scarlet Fever or Diphtheria, and all contacts are examined by the Medical Officers before their return to school. A form, signed by one of the Medical Officers, is sent to the Head Teacher authorising him, or her, to re-admit the child.

Swabs are taken of all suspicious sore throats, as well as of actual Diphtheria cases and their contacts. The details are given in the following paragraphs.

Scarlet Fever.

The district was comparatively free of Scarlet Fever, and, although neighbouring districts suffered severely from the disease, in no school was the incidence of the disease heavy.

The distribution of the notifications amongst school children was as follows :—

Southfield Road	...	...	...	...	8
Priory	...	...	...	...	8
Rothschild Road	...	...	...	...	5
Central	...	...	...	...	5
South Acton	...	...	...	...	5
Beaumont Park	...	...	...	...	2
East Acton	...	...	...	...	2
Acton	...	...	...	...	2
					—
					37

Four cases occurred amongst pupils attending Private Schools in the district, and one child was in attendance at a school outside the district.

Details as to the proportion of cases isolated in the Fever Hospital and in their own houses are given on a preceding page in the report of the Medical Officer of Health, and the usual precautions are adopted for the quarantine of the infected persons and those who come in contact with them. Where the case is nursed at home all the children of the house are excluded from school until a period of 8 days has elapsed from the time the patient is free from infection and the premises have been disinfected. The patient is excluded from school for 3 weeks after he is certified free of infection and the premises have been disinfected.

Where the case is removed to Hospital the contacts are excluded from school for 8 days after the removal, and the patient for 3 weeks after the discharge from the Hospital.

But every case of Scarlet Fever and every contact is examined before they are allowed to return to school. Last year, in addition to the actual sufferers from the disease, 107 school contacts were examined on the expiration of their quarantine and before they resumed school attendance.

Some of the channels along which Scarlet Fever is spread remain obscure, but the opinion is becoming more universally held that the chief infecting material resides in persons, and not in things. Our methods may have to be changed, as our knowledge of the etiology and epidermiology of Scarlet Fever increases. Our procedure at the present time is based on the assumption that the spread of the disease in schools takes place under three conditions.

Firstly, a certain number of those who have suffered from Scarlet Fever remain intermittently infectious for prolonged periods. These are the "infecting" cases which give rise to "return" cases, and they also probably give rise to a certain proportion of the school cases where the source of infection remains untraced. What the precise conditions are under which they continue in an infectious condition remain a subject of doubt and debate; but in a large proportion of the "return" cases in houses there is an abnormal condition of the mucous membrane of the nose and throat of the alleged "infecting" case. In some instances the patient develops a discharge from the nose or ear immediately on his return home from the Hospital. In other cases an enlargement of the tonsils and adenoids is present. In the report of the Medical Officer of Health an instance is given of the cessation of notifications from a certain area coincident with the removal of tonsils and adenoids in such a case. Basing our action on this experience, every convalescent case is examined before resumption of school attendance, and if any abnormal conditions of the nose and throat exist, an endeavour is made to have this abnormality remedied before the child attends school. If there is a sore present inside the nose, or an unhealthy discharge persists from the nose, the child is kept out of school and instructions given for its treatment. If there is an ear discharge present or the tonsils and adenoids are enlarged, an operation is advised.

These children are noted and kept under observation, and are borne in mind as a possible focus of infection.

Secondly, there is reason to believe that persons coming in

contact with Scarlet Fever may suffer from the disease in a mild form, without exhibiting all the symptoms. In Diphtheria the "carrier" case is well known; that is, a person may carry in his throat the germs of Diphtheria without exhibiting any of the symptoms of the disease. Moreover, the "carrier" case may transmit the disease in a virulent form to those with whom it comes in contact. It is possible that a phenomenon somewhat similar in its character may occur in Scarlet Fever. In houses where Scarlet Fever has appeared, some of the children suffer from a sore throat, but do not exhibit any other symptom of Scarlet Fever. These instances of sore throat are possibly abortive attacks of Scarlet Fever. The sufferers enjoy a certain amount of natural immunity, but can in this state, and subsequently, act as infecting agents to those with whom they come in contact and thus transmit the disease. It is difficult otherwise to explain those instances where Scarlet Fever recurs in a house after an interval of some weeks has elapsed since a case has been removed to the Hospital. No undoubted proof of an incubation period of more than seven days has been adduced in the case of Scarlet Fever, and yet cases occur after an interval of some weeks has elapsed since any contact could have taken place with a previous case of the disease. The interval is probably bridged over by an abortive attack of the disease, the sufferer only exhibiting the symptoms of a sore throat. A possible instance of this kind is mentioned on a preceding page. Another instance might be cited. Four cases of Scarlet Fever occurred in the Cottage Hospital during the early part of the year. The date of the notifications were February 7th, February 12th, March 3rd, and March 7th. It will be seen that the interval which elapsed between the occurrence of the second and third case is considerably more than can be bridged over by the incubation period, and no explanation could be given apart from the occurrence of a possible abortive case exhibiting only the symptoms of a slight sore throat.

Acting on this assumption, every school child from a house where a case of Scarlet Fever has occurred is examined at the end of 8 days after the removal of the patient to Hospital or after the disinfection of the premises, and if any history of recent sore

throat is obtained, the child is further excluded from school and kept under observation.

Thirdly, in spite of every care and attention, mild cases sometimes escape detection and attend school in an infectious state. In some outbreaks these "missed" cases are the chief means by which the disease is spread. When inquiries are made into the history of a case of Scarlet Fever, the school and class to which the child belongs are noted, and if multiple cases occur within a short period in a class, all the children are examined.

Measles.

In last year's report there was an account of a Measles outbreak, which commenced in September, 1912. That outbreak continued into the first quarter of 1913. The first case was reported from Rothschild School in September, 1912, and about the same time other cases occurred in Beaumont Park School. Before the end of November the Central Schools had been invaded, and in 1912 these were the schools which suffered most.

In December, 1912, the disease had made its appearance in the South Acton Infants' Department, and the school was closed for the Christmas holidays on December 13th, a week earlier than the other schools in the district.

The Infants' Departments at Acton Wells and Southfield Road Schools were affected in the early part of January, 1913, and were not re-opened after the Christmas holidays until February 3rd.

The Priory School was invaded in February and March.

During the latter part of the year the district was entirely free of the disease.

The number of cases reported from the different schools was as follows :—

Acton	...	...	...	...	...	16
Acton Wells	...	...	...	...	...	29
Beaumont Park	...	...	...	...	...	4
Central	...	...	...	...	...	2
Priory	...	...	...	...	...	56
Rothschild	...	...	...	...	...	6
South Acton	...	...	...	...	...	87
Southfield Road	...	...	...	...	...	81

It will be seen that before the beginning of 1913, the outbreak had spent itself in the Rothschild, Beaumont Park, and Central Schools. In 1913, only 4 per cent. of the cases notified occurred in these schools, whilst in 1912, the number was 72 per cent. of the total.

The age distribution of the notified cases in the different schools was as follows :—

	3-4 yrs.	4-5.	5-6.	6-7.	7-8.	8-9.	9-10.	10-11.	11-12.	12-13.
Acton	—	—	8	6	—	1	1	—	—	—
Acton Wells ...	1	3	20	3	2	—	—	—	—	—
Beaumont Park ...	—	—	1	1	1	—	—	—	—	1
Central	1	—	—	—	—	1	—	—	—	—
Priory	3	15	26	8	6	2	—	1	—	1
Rothschild	—	—	2	2	1	1	—	—	—	—
South Acton ...	—	15	48	18	3	2	—	—	—	1
Southfield Road ...	—	5	16	36	12	10	1	1	—	—

In addition to the cases which occurred amongst school children, the School Nurse visited the homes of 125 cases where Measles had occurred amongst children under school age. The ages of these children were as follows :—

Under 1 year.	1-2 years.	2-3 years.	3-4 years.
16	36	34	39

The usual regulations were adopted for the exclusion of school children from these houses.

Diphtheria.

66 cases of Diphtheria occurred amongst school children, 58 of these being amongst scholars in the Public Elementary Schools of the district. The distribution was as follows :—

Priory	17
Central	11
Rothschild	8
Acton Wells	6
South Acton	6
Southfield Road	4
Beaumont Park	3
East Acton	2
Acton County School	2
Private Schools	5
Outside School	1
Acton	1

The percentage of cases occurring among school children is higher than that in any year since 1909. Last year the percentage was 56.3, compared with 49 in 1912, 55 in 1911, 56 in 1910, and 60 in 1909.

It was only necessary in one instance to make an examination of all the children in a suspected class. A few virulent cases had occurred in Acton Wells School, and all the children with suspicious sore throats in the affected classes were examined; as a result, 2 children were found who were harbouring the Diphtheria bacillus. These children were excluded from school, and the notifications ceased.

At the beginning of 1913, though, a systematic examination of all school children from houses where a case of Diphtheria had occurred was carried out. The usual period of quarantine was observed. The other children in the house were excluded from school for 8 days after a case was removed to the Hospital; or where the case was nursed at home, for 8 days subsequently to the disinfection of the premises at the end of the illness. At the end of the quarantine period all children from infected houses come to the offices, and a swab is taken from each throat. Last year 187 contacts were examined in this manner, and of these 30 were found to harbour the Klebs-Loeffler bacilli. The figures are, of course, too small to draw any conclusions, but it will be readily appreciated how easily the disease is kept alive in a community, and how difficult it is to stamp out the disease in a school once it gets firmly established there. The behaviour of the contacts made it appear highly probable that the disease is kept alive in the community and fresh outbreaks lighted up chiefly by infected individuals who mingle with their fellows. The percentage of positive contacts varied at different times of the year, but a high percentage was shortly followed by an increase in the notifications in the district.

Whenever a "contact" is found to be positive, he or she is excluded from school, and a further examination made at the end of another week. Altogether 220 swabs were examined from the throats of contacts; of these 172 were negative and 48 were

positive. Some contacts were found to be positive for a considerable time, but in the majority of instances the swab was negative on the second examination.

Although it was not found necessary to examine systematically the throats of children in more than one school, the search for mild sore throats amongst scholars has been more stringent, and the Teachers exercise very great care to prevent any children with sore throats from attending school. How necessary this precaution was, is made evident from the result of the bacteriological examination of the swabs taken from children sent to the offices by the Teachers and the School Nurse. 160 children were examined, who had been sent by the Teachers on account of sore throats. Of these, in 33 instances the Klebs-Loeffler bacillus was present, and in 127 instances it was absent.

It is impossible to give an estimate of the percentage of virulent cases amongst these positive contacts and sore throats, as the final test of virulence must, of course, depend upon the result of infection of guinea pigs, but out of the 63 there must have been a considerable number who were in a highly infective condition. Some of them were in the early stages of a typical attack of Clinical Diphtheria, and were isolated in the Fever Hospital.

The point we wish to emphasise is, that the most hopeful ground for the control of Diphtheria generally lies in the school, and it is highly probable that this disease would be almost entirely stamped out if a systematic examination were made of all contacts, not "house-contacts" as at present carried out, but also "class-contacts." The percentage of "class-contacts" who would be found positive on examination is probably a higher one than we are led to believe. The mild and the carrier cases are those which it is of the greatest importance to identify, especially in schools, for, if not recognised, the children may go about and prove a source of infection to all around.

Chicken Pox.

Only 30 cases of Chicken-pox occurred amongst the Elementary School children last year, distributed as follows :—

Southfield Road	...	...	...	...	10
Acton	...	...	...	...	6
Central	...	...	...	...	4
Priory	...	...	...	...	4
East Acton	...	...	...	...	3
Acton Wells	...	...	...	...	2
South Acton	...	...	...	...	1
—					30

Whooping Cough.

Whooping Cough was prevalent in the Southern part of the district, especially during the earlier part of the year. It is characteristic of Whooping Cough, though, that its incidence is very light in children of school age. Whooping Cough is not a compulsorily notifiable disease, and we are dependent for our information on the death returns and the school notifications. The cases notified from the schools were distributed as follows :—

South Acton	...	...	...	...	40
Rothschild	...	...	...	...	19
Southfield Road	...	...	...	...	13
Beaumont Park	...	...	...	...	11
Priory	...	...	...	...	5
East Acton	...	...	...	...	4
Acton	...	...	...	...	2
Acton Wells	...	...	...	...	2
Turnham Green	...	...	...	...	1
—					97

Open-Air Work.

There is no special open-air school, but each Head Teacher makes as much use as possible of the playground sheds during

the summer. In some schools the babies carry their small chairs out under the trees for work in the summer, and the newer schools have gardening plots for the children to work in.

Organised Games.

were fully described in the last report. They consist of football, cricket, running, paper-chasing, jumping, and swimming for boys, and netball, cricket, skipping, running, and swimming for girls.

Some schools have four complete football and netball teams, including "practice teams," so that out of a department of 300 children, 130 play sufficiently well to be included in a team, beside numbers of beginners.

The Teachers refer any child to the Medical Officers for examination, if since the last routine medical examination any question of fitness for sports or games has arisen.

After each routine inspection all cases requiring modified drill or exclusion from games are notified to the Teachers.

Swimming.

During the season of 1913, 43 Swimming Classes were held weekly. 116 boys and 87 girls have earned the swimming certificate awarded by the Committee to children who have this year learned to swim, 40 yards in the case of boys and 20 yards in the case of girls.

School.	No. of per week. classes	No. of ances. attend-	No. of scholars in depart- ment who can swim.	No. who have learned to swim this season.
Acton Boys	2	966	30	22
Acton Girls	1	264	4	4
Acton Wells Mixed ...	3	1,450	54	46
Beaumont Park Boys ...	6	2,945	70	37
Beaumont Park Girls ...	2	1,237	35	32
Central Senior	5	2,556	106	47
Central Junior	2	1,082	35	29
Priory Boys	4	1,562	51	33
Priory Girls	2	1,157	27	22
South Acton Senior Boys	5	2,248	89	59
South Acton Girls	3	1,595	33	17
Southfield Road Senior ...	6	2,615	115	62
Turnham Green R.C. ...	2	725	10	10
	43	20,402	659	420

No. of lessons given by Mr. Briant and his staff ... 7,078

It will be obvious that much of the work described in the Report could only have been carried out with the co-operation of the staff of the Education Department and the Teachers. We beg to thank them for their assistance in the work of medical inspection and in the compiling of this Report.

We remain,

Your obedient servants,

D. J. THOMAS.

ELSIE M. CHUBB.









