[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

TOGETHER WITH

THE REPORT

ON THE

Medical Inspection of Schools.

FOR THE YEAR

- - 1911. - -

Urban District of Acton.

ANNUAL REPORT

OF THE

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FOR THE YEAR

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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 the 31st December 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 water works, 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, sewerage and sewage disposal in all parts of the District.

(*i*) A statement as to the privy, water-closet and other closet accomodation 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 earthclosets, 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 1911.

March 7th, 1912.

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

GENTLEMEN,

I have the honour to submit to the Council a report on the sanitary conditions of the district; together with the vital and other statistics for the year 1911.

Since the issue of the last annual report, the preliminary figures of the last census have been published; the final figures are not yet obtainable. The population of the district at the Census was 57,523.

The population at the middle of the year would be estimated at 58,048, assuming that the intercensal rate of increase has continued.

The birth-rate is again lower, and the number of births registered in the district is lower than that in any year since 1904.

The death-rate is higher. This increased death-rate is almost entirely accounted for by two causes. In the spring a most extensive epidemic of Measles occurred in the district, and 44 deaths were registered as due to this disease. Last summer was one of the hottest on record, and 98 deaths were caused by diarrhœal diseases,

Of the 142 deaths caused by Measles and Diarrhœa 80 were of children under 12 months of age. As a result, there is also a higher infantile mortality to record.

Whooping-Cough was less prevalent, and there was a decrease in the number of deaths.

Scarlet Fever was more prevalent and outbreaks occurred in the spring and the autumn. The outbreak in the spring was probably caused by a contaminated milk supply, and a full report of the outbreak is given.

The new pavilion at the Isolation Hospital was opened in October, and we were able to accommodate the increased number of Scarlet Fever cases in a satisfactory manner.

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

Estimated Population, 58,048 inhabitants.
Birth Rate, 25·6 per 1000 inhabitants.
Death Rate, 13·3 „ „
Infantile Mortality, 138 per 1,000 births.
Phthisis Death-rate, ·88 per 1,000 inhabitants.
Death-rate from other forms of Tuberculosis—·22 per 1,000 inhabitants.
Respiratory death-rate, excluding Phthisis—1·8 per 1,000 inhabitants.

POPULATION.

Since the last annual report was issued, the preliminary results of the Census enumeration of 1911 have been published. At the Census of 1911, the population of Acton was 57,523. As the population is calculated to the middle of the year, the estimated population at the end of June was 58,048.

Although the rate of increase in Acton in the decennium 1901-1911 was almost equal to that of the decenium 1891-1901, from a knowledge of the local conditions, it may be stated that the increase was not uniform throughout the ten years, If the rate of increase which obtained in the decennium 1891-1901 had been maintained, the population at the census of 1911 would have been 60,222.

If the Registrar General's method of estimating the population is adopted, the estimated population at the end of June in each year would have been as follows:—

1901	...	...	38,144
1902	...	...	39,785
1903	...	...	41,490
1904	...	...	43,333
1905	...	...	45,124
1906	...	...	47,058
1907	...	...	49,076
1908	...	..	51,180
1909	...	...	53,374
1910	...	...	55,662
1911	...	...	58,048

In former annual reports it was pointed out that in Acton this method would give unreliable results. Soon after the

Census of 1901, the mode of transit was revolutionized by the introduction of electric railways and tramways within the district, and in addition factories giving employment to a large number of persons were erected here. As a result, the number of houses erected each year during the period 1901-1905 was considerably in excess of the number errected in any year between 1891 and 1901. Between the end of June 1901 and the end of June 1905, the average number of houses erected yearly was about 440. Since 1905, the rate of increase has appreciably diminished, the number being as follows:—

1906	...	...	300
1907	...	...	245
1908	...	...	210
1909	...	...	187
1910	...	...	147
1911	...	..	106

Having these local conditions in view, I felt justified in discarding the method of estimating the population by the Registrar General and adopting a method based upon the number of houses erected and occupied every year. The latter method proved more accurate and the estimates for 1910 and 1911 were proved by the Census to be almost correct ones. The population at the middle of 1910 was estimated to be 57,000 and at the middle of 1911 to be 58,000.

Our estimated population in the intercensal years is also far more reliable than the estimate of the Registrar General. His estimates will be based on the assumption that increase in the intercensal period 1901-1911 assumed regular and even proportions, and it is clear from the number of houses erected each year, that this method of estimation is not applicable

here. The estimated population to the middle of each year as given in last year's annual report was as follows:—

1901	... ...	38,373
1902	... ...	41,000
1903	... ...	43,802
1904	... ...	46,780
1905	... ...	50,000
1906	... ...	52,000
1907	... ...	53,000
1908	... ...	55,000
1909	... ...	56,000
1910	... ...	57,000

BIRTHS.

Number	1486
Rate per 1,000 inhabitants ...	25·6 per 1,000
Rate per 1,000 in England and Wales	24·4 ,, 1,000
Rate per 1,000 in the 77 great towns	25·6 ,, 1,000
Rate per 1,000 in 136 smaller towns	23·4 ,, 1,000

1458 births were registered in the district, 757 males and 701 females. In addition the Registrar General transferred 28 births from other districts to Acton. These births belonged to Acton, but the births had actually occurred outside the district.

The infants registered as having been born out of wedlock numbered 43, which number corresponds to a rate of 29 per 1,000 births registered in the district. Although the illegitimate birth-rate is lower than that of England and Wales, it is higher than it has been in Acton for a considerable time.

The births registered in the district were distributed amongst the wards as follows:—

North-East.	North-West.	South-East.	South-West.
296	210	371	581

The rates per 1,000 inhabitants were as follows:—

North-East,	North-West.	South-East.	South-West.
19·1	15·5	24·7	40·8

The birth-rate in the South-West Ward is higher than that of 1910, but in the other three wards it is lower.

DEATHS.

Number 777.	Crude.	Corrected.
Death-rate per 1,000 inhabitants... ...	13·3	13·8
Death-rate per 1,000 in England and Wales	14·6	14·4
Death-rate per 1,000 in the 77 large towns	15·5	16·4
Death-rate per 1,000 in 136 smaller towns	13·8	14·4

A comparison of the Local Government Board tables given at the end of this report with those given in last year's report will reveal a considerable difference in the manner in which the tables have been drawn up. More explicit directions have been given as to the deaths belonging to a district.

Formerly all deaths of residents occurring in public institutions, whether within or without the districts, were to be included among the deaths of the district, now by "transferrable deaths" are meant deaths of persons who, having a fixed or usual residence in England and Wales, die in a district other than that in which they resided. The Registrar General supplies the Medical Officer of Health with the particulars of all the transferrable deaths belonging to the district.

The following special cases arise as to transferrable deaths:—

(1) Persons dying in institutions for the sick or infirm, such as hospitals, lunatic asylums, workhouses, and nursing homes (but not almshouses) must be regarded as residents of the district in which they had a fixed or usual residence at the time of admission.

(2) The deaths of infants born and dying within a year of birth in an Institution to which the mother was admitted for her confinement should be referred to the district of fixed or usual residence of the parent.

(3) Deaths from Violence are to be referred (*a*) to the district of residence under the general rule; (*b*) if this district is unknown, or the deceased had no fixed abode, to the district where the accident occurred, if known; (*c*) failing this to the district where death occurred, if known, and (*d*) failing this, to the district where the body was found.

602 deaths were registered in the district; of this number three were transferred to other districts, by the Register General.

178 deaths of "residents" occurred outside the district.

The total number of deaths belonging to the district is 777, which corresponds to a death-rate of 13·3 per 1,000 inhabitants.

It has been explained in previous reports that in order to compare the death-rate of one district with that of another it is necessary to make an allowance for the difference in age and sex distributions of the different districts. After each census, the Registrar General publishes a table of factors for all the large towns, &c., by applying which to the crude-death-rate, it becomes corrected for age and sex distribution. The

table of factors based upon the Census of 1911 has not yet been published. The "factor for correction" for Acton based on the 1901 figures was 1·04240. If the crude death-rate be multiplied by this figure, the corrected death-rate would be 13·8.

The death-rate is 2·4 per 1,000 higher than that of 1910 There was an increase in the number of deaths from Scarlet Fever, Measles, Tubercular diseases and Diarrhœal diseases. All these diseases are discussed in separate paragraphs on a later page of the report.

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.
205	67	49	34	28	81	143	170

Compared with 1910 there was an increase in the number of deaths at all age periods except in persons over 65 years of age.

The increase in infants under one year was mainly due to diarrhœal diseases, the increase in children between one and five years of age was mainly due to diarrhœal diseases and Measles. The deaths of infants under twelve months are dealt with in a subsequent paragraph.

Ward Distribution:—

North-East.	North-West.	South-East.	South-West.
147	150	168	312

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

North-East.	North-West.	South-East.	South-West.
9.5	10·3	11·2	22·2

Compared with 1910 there is a higher death-rate in all Wards, but the most marked increase occurred in the South West Ward.

The diseases which showed an excessive incidence on the South West Ward were:—Measles, 32 deaths out of a total of 44 in the district, Tubercular diseases, 30 out of total of 64, 20 out of 58 deaths, Pneumonia 19 out of 31, Broncho-Pneumonia 13 out of 22, Diarrhœal diseases 50 out of 98.

In former reports it has been shown that as poverty deepens, the death-rate rises at every age group. The diseases which respond most clearly to differences of social position are in childhood those in which the fatality depends most intimately on good nourishment and instructed care, and particularly diseases of the digestive and respiratory systems; in later years it is lung disease which responds clearly and unmistakeably to poverty. It is, however, tubercular diseases which show the sharpest reaction and the widest differences.

On table V it will be seen that in children, Measles, Pneumonia, and Diarrhoea were most fatal in the South West Ward. In later years Consumption is the disease which is abnormally fatal in the Ward. From a purely sanitary point of view, one of the factors which is most constantly associated with poverty is the inheritance of unwholesome dwellings, the common lodging house and collections of unsavoury refuse.

As the result of inspection &c., great improvement has taken place, but there is still much room for advance.

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

Union Infirmary	103
Middlesex Co. Asylum	7
Great Northern Hospital	1
The Infants Hospital	4
St. Mary's Hospital	2
West London Hospital	34
Kensington Infirmary	1
St. George's Hospital	1
Cancer Hospital	1
The Common, Ealing	3
Kingsgate	1
River Thames, Barnes	1
Inns of Court Hotel	1
Hospital of St. John's & Elizabeth	1
Willesden Workhouse	1
Stoke Road, Gasport	1
Royal Free Hospital	1
The River Thames, Chiswick ...	1
Belgrave Hospital	1
3 Westbourne Grove	1
Middlesex Hospitial	2
Clevelands House, Broadstairs ...	1
University College Hospital ...	1
Leamington Road, Southend ...	1
4, 5, 6. Poland Street, Westminster	1
"Brooke Cottage," Maldens & Combe	1
Childrens Hospital	1
Ringman Avenue, Fulham ...	1
St. Andrew's Convalescent Home, Folkestone	1
Victoria Street, Westminster ...	1

Of the 178 deaths which occurred outside the district, 168 were deaths in public institutions. In addition 33 deaths occurred in public institutions within the district; so that a total of 201 deaths or nearly 26 per cent of all the deaths occurred in public institutions. The percentage of deaths in public institutions for the last seven years was as follows:—

1905	...	...	...	...	19
1906	...	...	...	...	I5
1907	...	...	...	...	22
1908	...	...	...	...	23
1909	...	...	...	...	25
1910	...	...	...	...	23
1911	...	...	...	..	26

MEASLES.

The past year has been characterised by an unusual prevalence of Measles, not only in Acton, but also in many other parts of the country, and especially in the administrative county of London. The disease has shown a remarkable capacity to spread; and, judging from the heavy mortality, it appears to have been exceedingly virulent in type. The regular recurrence of Measles in epidemic form has naturally led administrators to consider the question of the control of the disease, but so far no measure has been uniformly successful. In no sanitary district, up to the present, can the disease be said to have been controlled. The occurrence of so serious an epidemic last year in different parts of the country proved that under present social conditions no measures have yet been devised for the effectual control or prevention of measles. The special difficulties in the way of controlling Measles have led some workers to regard the disease as beyond the scope of our present administrative methods and to question the efficacy on

a really extensive scale of any method short of the application of a protective inoculation which shall do for Measles what vaccination has done for small-pox.

The occurrence of an epidemic depends, so far as we know, solely upon a sufficient accumulation of susceptible children under conditions allowing the introduction of infection and free personal communication.

The long incubation period, the insidious approach of the invasion period, the late appearance of the rash are all against the early recognition of the disease, and therefore against the early and successful application of preventive measures.

In the year 1911, Measles was registered as the cause of 44 deaths in Acton, as compared with 19 deaths from Scarlet Fever, Diphtheria, Enteric Fever and Small-Pox together.

Against Meales but little has been effected, while Scarlet Fever, Diphtheria, Enteric Fever and Small-Pox have been the subject of active and fruitful public health administration.

In the Annual Report for 1907 a chart was given showing the death-rate from Measles each year for the period 1882-1906. It was there shown that epidemics of Measles occurred every second year with almost automatic regularity and that the district was visited by a major epidemic at intervals of 4, 3, 4 and 6 years respectively.

The following table gives the annual number of deaths in Acton per 100,000 inhabitants for the 30 years 1882-1911

1882-1886	1887-1891	1892-1896	1897-1901	1902-1906	1907-1911
32.6	66.6	50.2	13.6	29	50

During the past six years the death-rate per 100,000 inhabitants has been as follows

1906	...	...	54
1907	...	...	38
1908	...	...	65
1909	...	...	71
1910	...	...	1.7
1911	...	...	75

Comparing the decennium 1902-1911 with 1882-1891, there is an appearance of a decline in the mortality from Measles. But even this decline is not a true one. The mortality from Measles is confined almost entirely to the first five years of life, and as the birth-rate has continuously declined since 1894, the population of children under five is smaller now than it was twenty years ago. If the mortality from Measles was stated in terms of the population under five years of age, it would be found to be as high, if not slightly higher than it was in the decennium 1881-1891.

The mortality from Measles is not, moreover, a complete index of the mischief wrought by it. Measles is a frequent cause of retarded growth and development and of ill-health; it often lights up latent tuberculosis; and deafness and defects of eyesight are in many instances attributable to it.

Unfortunately, the public are not aware of the serious drain upon life which an outbreak of Measles entails. The opinion generally prevailing is that a child must get Measles, and the sooner he gets it the better.

The truth is, that after a certain period, the older the child, the less susceptible he is to the disease, and even if they contract the disease, children over five years of age rarely

succumb. The age at which relatively the greatest number of children die of Measles is the second year of life; while after the third year has passed there is a rapid decrease in the proportion of children dying of the disease.

The ages at death in Acton last year was as follows:—

Under 1 year.	1-2yrs.	2-3	3-4.	4-5.	5-10yrs.
12	16	6	6	2	2

Between 1881 and 1902 the difference between epidemic and enterepidemic periods was most marked.

The major epidemic years were as follows:—

1885	with	a	death-rate	of	120	per	100,000	inhabitants	
1889	,,	,,	,,	,,	115	,,	,,	,,	
1892	,,	,,	,,	,,	98	,,	,,	,,	
1896	,,	,,	,,	,,	80	,,	,,	,,	
1902	,,	,,	,,	,,	78	,,	,,	,,	
1906	,,	,,	,,	,,	54	,,	,,	,,	
1911	,,	,,	,,	,,	75	,,	,,	,,	

But whereas the peak observed in epidemic years has become flattened the trough in interepidemic years has become raised, so that the actual number of victims to the disease has not diminished.

Following the epidemics of 1892 and 1902, there was no death from the disease in 1893 and 1903, but since 1903, not a single year has passed without a death, although in 1905 there were only four deaths and in 1910 there was only one death.

The following table is taken from Dr. Theodore Thompson's report to the Local Government Board on the control of Measles, and shows that the incidence of attack is different from that of death.

	Under 1yr.	1-2.	2-3.	3-4.	4-5.	5-10	Over 10
Total number of persons living	1155	974	1028	1000	951	4530	25968
Number attacked by Measles	166	233	354	324	324	560	39
Deaths from Measles	16	46	36	16	5	6	0
Measles attack-rate per 1000 living	72	119	172	162	170	62	0.75
Measles death-rate per 1000 living	6.9	23.6	17.5	8	2.6	0.7	0.0
Measles fatality-rate per 1000 attacked	96	197	102	49	15	11	0

The above table refers to a particular Urban District where the number of persons attacked by Measles at each of the several age periods was known, and shows that while the main incidence of death is on the second year, the incidence of attack is chiefly on the third, fourth and fifth years.

1501 cases were investigated in Acton last year, and the ages of these were:—

Under 1 yr.	1-2	2-3.	3-4.	4-5.	5-6.	6-7.	7-8.	8-9.	9-10.	over 10 yrs.
32	23	35	56	180	392	356	207	78	39	103

The ages at death have already been given. The above figures, of course, do not represent the relative number of cases at different ages which occurred last year. The majority of cases which come to the knowledge of the Sanitary Department would be children of school age, and Measles occurring among young children would remain unreported.

The figures though are sufficiently suggestive that Measles is a very fatal disease when occurring among children under three years of age, but comparatively benign when it attacks children over five years old.

This aspect of the question is of importance from two points of view. If the interepidemic period could be lengthened,

not only some children would have reached an age when they would be less susceptible to an attack, but a large number of children will, when the epidemic arrives, have reached ages at which the disease is little fatal. Any and every means should thus be used to delay or arrest a threatened epidemic, but our sphere of action is practically limited to the schools.

The other measures would be directed towards restraining the spread of Measles in invaded households. The isolation of every case of Measles from the first onset to the end of the third week would undoutedly enable an outbreak to be brought abrubptly to a close, as no second crop of cases would occur.

It would also limit the cases very largely to children over school age, as in the majority of instances the disease is introduced into the house by a child attending school.

This ideal of prompt isolation will not for the present be accomplished but the attention paid to invaded households, will, it is hoped, tend to secure more precaution on the part of parents. Unfortunately, it is no uncommon pratice for mothers to allow the other children to mix with the Measles patient, so that all can suffer together and reduce, as they think, the aggregate amount of necessary nursing. There is no greater or more pernicious superstition than that which is so widely held, namely, that a child must have Measles. No condemnation can be too strong for the practice of wilfully exposing other members of the family to this infection. The difficulty experienced in the prevention of the spread of Measles in schools is also experienced in infected households. The disease is most infectious in its earlier stages, and before the rash appears. Circulars are distributed warning parents of the early infectiousness of Measles, and until parents take precautions, during outbreaks of Measles, to isolate all children who may have running from the eyes and nose, it will be impossible to prevent the spread of the disease.

In last year's annual report a history was given of the cases of Measles which had occurred in the district during the last quarter of 1910.

In October and November, 1910, isolated cases occurred in the northern part of the district. When the cases occurred amongst school children during these two months, the symptoms in all instances made their appearance towards the week end, and the children had not attended school subsequently to the appearance of the initial symptoms of Measles.

In December a case occurred in the Priory School. This child attended a class in which most of the members were unprotected, and the child was in attendance after the appearance of the initial symptoms. The school was closed for the Christmas holidays before the "first crop" fell. A list of the children who had been in contact with the first case was obtained, and they were visited during the holidays. It was ascertained that 13 cases had occurred between December 12th and January 9th, the date of the opening of the schools.

No further cases occurred in the Priory Schools until after the Easter holidays.

It was hoped that by the adoption of these methods an epidemic would have been delayed, at any rate, for some months, and the postponement of an epidemic from the winter to the summer would have justified almost any steps, however drastic.

In industrial districts a Measles epidemic is in many ways a less formidable occurrence in the summer than in the winter. Apart from the increased severity of the initial symptoms, the liability to lung complications is much greater in the winter than in the summer.

Death very seldom occurs during the eruptive stage, and only six deaths occurred during the first week of the illness.

The time which elapsed between the appearance of the rash and death was as follows:—

3-7 days.	7-10 days.	10-14 days.	14-21 days.	over 21 days.
6	5	11	12	8

No information could be obtained in two instances.

Although closure was successful as far as the Priory School was concerned, cases occurred in January and February in some of the other schools.

In the Southfield Road Infants Department, one child was excluded from Class II on January 27th. On February 6th, nine cases were reported from Class V. It was decided to close Class V during the week of February 13th—18th, so that the children falling ill of the disease might do so out of school. The children in the class were kept under observation and visited in their homes.

Seven cases of Measles occurred.

In the Central Infants Department several cases were notified on February 13th from Class III. A child had been excluded on January 31st on account of a "cold," which on subsequent inquiry was found to be the commencement of Measles.

In February the Infants Department of the Central and Acton Schools were closed, and in March the Infants Department of the Southfield Road Schools was closed.

Before Easter the outbreak was confined to the northern part of the district, but on the reopening of the schools after the Easter holidays cases occurred in the Rothschild Road,

South Acton, Beaumont Park and Priory Schools. It was in South Acton that the majority of the deaths occurred. It is usually found that Measles increases in virulence as an epidemic progresses, but the greater mortality was probably due to causes other than increased virulence in the type of the disease.

The epedemic lasted until the end of May; it then gradually subsided, but the district was not free of the disease until about the middle of July.

The total number of cases notified from the School was 1496, distributed as follows:—

Turnham Green	11
East Acton	38
Acton	59
Acton Wells	129
Priory	133
Rothschild Raad	184
Southfield Road	187
Central	188
South Acton	266
Beaumont Park	301

The spread of Measles in the district followed closely on that of its spread in the schools, and it is generally agreed that Measles is spread on the largest scale by the attendance at public elementary infant schools of children in the catarrhal stage of the disease. The occurrence of similar spread in the boys and girls departments of the same schools is prevented by the fact that most of the scholars in these departments are already protected by previous attack.

This connection between school attendance and infection brings us to a consideration of the preventive measures against Measles.

The general lines of action in regard to school closure and exclusion recommended by the Medical Officers of the Local Government Board and of the Board of Education are set out in the "Memorandum on closure of and exclusion from school" issued in 1909. In that memorandum it is recommended "that children attacked by Measles should be kept from school for four weeks."

In large districts, and in the smaller districts in which the majority of children over seven years of age who are attending public elementary schools have had Measles, the practice is frequently adopted, when Measles breaks out in a household, of excluding from school attendance only those children of the same household who attend the infant school, and those older children of the same household who have not had Measles. These particular children of the same household should be excluded from school until 21 days from the date of the illness of the last patient with Measles in the house.

The above procedure can be recommended as the result of experience in large districts. It is a compromise which is obviously not a counsel of perfection, and may need future modification. Even under present conditions the procedure may need to be modified in accordance with the special circumstances of a particular district, with special reference to its past history as to Measles. The schedules for the medical inspection of school children, if kept carefully, will, in course of time, place at the disposal of the Medical Officer of Health and of the School Medical Officer the history of each child as to Measles, as well as to other infectious diseases, and they will thus be able to decide, when a case of Measles occurs in a particular class, which scholars in that class should, and which should not, be excluded from attendance at school.

School closure has probably more frequently taken place on account of epidemics of Measles than for any other disease,

but as the closure has been commonly deferred until a large proportion of the children are already absent, it has proved useless, in populous districts at least, for the purpose of preventing the spread of the disease.

If Measles is introduced into a school, the first crop of secondary cases will occur about 12 days after the original case, and in 12 days more there will be a second crop, comprising the majority of the unprotected children. Thus school closure as ordinarily practised after the second crop of cases has occurred fails to prevent an epidemic. In view of this experience, a class closure of short duration after the occurrence of the first case of Measles in the class may be substituted, the class being closed on the ninth day after the sickening of the first child, for a period of five days only. After this period, only those who have sickened need be excluded, along with those in the same households who have not had Measles or who attend the infant school.

Under different conditions, all these procedures were adopted in this district, but their success was only partial. In a majority of instances, in practical working, when it is known by notification that Measles has entered the infants department of a school it is too late to take any effectual precautionary measures; even temporary closure of the department or of a class will probably only temporarily delay further extension of the disease.

The want of success following these measures has led many authorities to advocate the permanent exclusion from school of children under five years of age. In the report of the Consultative Committee of the Board of Education issued in 1908, it was decided not to recommend any change at present in the lower age limit, either of voluntary or compulsory attendance at school.

It is doubtful if mere exclusion from school of children under five can be regarded as a real solution of the problem. It would possibly effect an improvement in the immediate mortality from measles, but in many instances the homes are so unsatisfactory that the children are better off in school, in spite of the risk of infection. As an alternative to the total exclusion of children under five, the establishment of special nursery schools has been suggested for children between the ages of three and five years.

One must be able to penetrate further than the school if a permanent improvement is to result.

A study of the street distribution of the deaths will show what an important part social conditions play in the case-fatality of Measles.

The street distribution of the deaths was as follows :—

Osborne Road	5	deaths.
Bollo Lane	3	,,
Seymour Road	3	,,
Colville Road	3	,,
Stanley Road	3	,,
All Saints Road	2	,,
Berrymead Gardens	2	,,
Park Road North	2	,,
Packington Road	2	,,
Bollo Bridge Road	2	,,
Kingswood Road	2	,,
Holland Terrace	2	,,
Summerlands Avenue	1	death.
Leamington Park Villas ...	1	,,
York Road	1	,,
Grove Road	1	,,
Avenue Road	1	,,
Kent Road	1	,,
Berrymede Road	1	,,

Strafford Road	...	...	1 death.
Alexandra Road	...	...	1 ,,
Enfield Road ...	...	...	1 ,,
Fletcher Road	...	...	1 ,,
Wolsey Road ...	...	...	1 ,,

One authority has advocated the general establishment of institutions for the teaching of mother craft. The teaching of mother craft on a wide scale would no doubt do much to improve home life; but an unsatisfactory home is the product of many conditions, social and economic, other than ignorance of mother craft. Other measures, such as hospital treatment of selected cases, would no doubt be instrumental in saving many lives.

All these measures, which are now being utilised in directly combating Measles, will result in a fall of the death-rate for Measles, but possibly more good will result from indirect measures. Improved housing, a rising standard of cleanliness, both civic and domestic, and the better appreciation of health requirements that health-visiting is now calling forth in the mass of the people—all these are influences from which a substantial result may be expected in the future.

DIPHTHERIA.

One hundred and fifteen cases of diphtheria were notified, and nine deaths occurred from the disease.

The number of deaths is exactly the same as that in 1910.

The percentage of cases occurring amongst school children remains at a fairly constant figure. In 1911, 64 out of a total of 115 occurred amongst school children; in 1910, it was 66 out of 118, and in 1909, 62 out of 104 cases.

The incidence of the disease was highest in the Central School with 9 cases, Beaumont Park 9 cases and Southfield Road with 25.

It will be noticed that it was the same schools that suffered most in 1910. The immediate causes in both years were carrier cases in attendance at school. A detailed account was given in last year's report of the action taken to detect the carrier case, and the same routine was adopted last year.

If a reference be made to the tables furnished in the report on the inspection of school children, it will be found that these three schools furnish the highest percentage of enlarged tonsils and adenoids. It is probable that the association of Diphtheria and enlarged tonsils and adenoids is not an accidental one. Children with enlarged tonsils furnish a fruitful soil for the implantation and growth of the Diphtheria bacillus, and these children are more liable to contract the disease when they come in contact with a "carrier" case.

In two houses three cases occurred in each of them, and in four houses two cases occurred in each. In the other 101 houses one case occurred in each.

ENTERIC FEVER.

Seventeen cases of Enteric Fever were notified and four deaths occurred. In the first half of the year only three cases were notified

Most of the "primary" cases contracted the disease outside the district. One of the cases had stayed at Shanklin from September 8th to September 16th, and whilst there had eaten oysters. She was taken ill on September 25th, and notified on October 9th.

Another case had been staying at Ramsgate in the last week in September and had eaten cockles there. She was taken ill in the second week in October, and notified on October 19th.

It is now generally held that the consumption of shell fish derived from polluted sources plays an important part in the causation of Enteric Fever. In the light of evidence already available there is reason for believing that much Enteric Fever, the source of which is still unrecognised, and in particular Enteric Fever occurring apart from considerable outbreaks, will eventually be traced to the consumption of contaminated shell fish.

Three cases were notified from the same honse in Shaftesbury Road in October. The children had been ill since the first week in October. They had all eaten some shell fish which had been given away by a fish hawker in the street. The hawker was in the street on the first and second Sundays in September, and on one of these Sundays he had some winkles which he was unable to sell, and these he had given away.

In last year's report details were given of cases in which the possible source of infection was plaice, and Dr. Hamer's report to the London County Council on the subject was quoted. Dr. Hamer analysed the facts as to certain localised prevalences of Enteric Fever in London in 1910, and arrived at the conclusion that they were best explained on the hypothesis that these groups of cases were due to the eating of contaminated fried fish. It was suggested that the small plaice (commonly imperfectly gutted) brought their infection with them, possibly from the estuaries in which they may have been caught. If this be the explanation, the temperature attained in some portion of the interior of the fish during frying must be much lower than is popularly supposed. The report is important as drawing attention to an additional source of typhoid infection, and as indicating the need for further supervision over the source and the gutting and over the details of preparation of fried fish for food.

Several of the cases had eaten the kind of plaice which is under suspicion. They are sold in shops under the name of dabs.

Six cases occurred in the same house, but five of the cases were probably infected by the primary case, which remained for over three weeks undetected.

SCARLET FEVER.

Two hundred and thirty four cases of Scarlet Fever were notified, and 6 deaths occurred.

There is an increase in the number of notifications of Scarlet Fever received, as compared with 1910, when 109 notifications were received,

The number received each month during the year was as follows :—

January	...	8	July	...	17
February	...	10	August	...	10
March	...	8	September		15
April	...	35	October	...	43
May ...	...	12	November	...	35
June ...	...	3	December	...	38

The increase in the number of cases notified in April was due to an outbreak which occurred in Bedford Park. Up to April 22nd there had been no undue incidence of Scarlet Fever in the district. Between April 1st and April 22nd six cases of Scarlet Fever were notified. On April 22nd eight notifications were received, on April 24th 7 and on April 25th 5.

On investigation of the cases notified on April 22nd it was found that all the cases had the same milk supply. This dairy was situated outside the district, and on inquiry on April 24th

it was found that cases had also occurred in Chiswick amongst customers of the same dairy. I accompanied the Sanitary Inspector of Chiswick to the dairy for the purpose of making inquiries. It was found that, though a case of Scarlet Fever had occurred in the family of one the employees of the dairy, it was improbable, if not impossible, for the infection to have arisen in the dairy.

When the dairy was visited it was found that the milk was being pasteurised, and the manager was advised to continue to pasteurize until further inquiries had been made.

Under Section 15 of the Acton Improvement Act, if the Medical Officer of Health shall have reasonable cause to believe that any person in the district is suffering from infectious disease attributable to milk supplied within the district, he may, by notice in writing, require every person supplying milk to the person so suffering, or to the house of which he is an inmate, to furnish him with a list of all farms, dairies or places from which such person derives his supply of milk, or from which he has derived his supply during the last six weeks.

The list of farms was readily given. All the farms were situated in Berkshire, and I immediately communicated with Dr. Taylor, the Medical Officer of Health for the County.

Before mid-day on April 25th Dr. Taylor had found on one of the farms a person suffering from Scarlet Fever. The patient was sent home, and the dairy refused to receive the milk from that farm pending further inquiries. Only two primary cases were notified amongst customers of this particular dairy after April 25th, and one of these had sickened on April 22nd.

Briefly, these were the circumstances in which the outbreak occurred, and the action that was taken, and in the following report the connection between the cases and the milk supply is set forth.

As stated above, the outbreak was sudden in its onset, and there was no connection between the cases notified on April 22nd and subsequently with those which had previously been notified in the district. The schools could have had no part in the spread of the disease, as they had broken up for the Easter holidays on or before April 12th. Moreover, the distribution was not a school nor a class distribution.

Between April 22nd and April 28th, 25 cases were notified the notifications being as follows:—

April	22nd	... ...	8 cases
„	24th	... ...	7 „
„	25th	... ...	6 „
„	27th	... ...	1 case
„	28th	... ...	4 cases

With two exceptions, all these cases occurred in houses supplied with milk from the same dairy. Subsequently to April 28th, no primary cases occurred amongst the customers of this dairy, but four cases occurred on May 1st and May 2nd in a house from which two previous cases had been removed to the hospital; in another house, where a case was being nursed at home, a second case was notified on May 6th.

There are two other cases which were probably secondary cases. One of these was notified on April 29th, and had sickened on April 27th. She was a maid in the house, and on the previous day another maid had been removed to the hospital. The primary case had been ill since April 22nd.

The other probable secondary case was notified on April 24th, and had sickened on April 23rd. His two brothers had been removed to the hospital on April 22nd, and had sickened on April 21st, and his sister had been notified on April 22nd, and had sickened on April 20th.

This leaves 20 primary cases which had occurred in families supplied with milk by the same dairy, and this report deals with these 20 cases.

Dealing with the question as to the evidence that the cases were Scarlet Fever, there is no doubt on that point. Eleven of the cases were admitted to the hospital, and all the patients presented the characteristic signs and symptoms of Scarlet Fever. The rash was indistinguishable from the ordinary rash of Scarlet Fever, and the appearance of the throat and tongue was typical of Scarlet Fever. Moreover, secondary cases occurred in several houses. In one house six cases occurred.

The type of the disease was mild, but the age distribution of the disease was unusual. The proportion of adults was high, and this circumstance in itself might have affected the type of the disease.

The 20 cases occurred in 18 houses, three of the cases having occurred in one house. The total number of inhabitants in the 18 houses was 95, and of these 54 were stated not to have had a previous attack of Scarlet Fever.

In one instance the information obtained was indefinite. In one instance the patient had not taken unboiled milk. In seven instances the person attacked was the only one in the house who had partaken of unboiled milk. In two instances the maids of the house were attacked. When inquiries were made at the house, the heads of the family declared that no one in the house drank raw milk, but when the maids were questioned they admitted that they had taken uncooked milk.

In one of the houses, the maid was the only person attacked. In the other house, the maid was the primary case, but subsequently five other cases occurred in the house.

In one instance, the person attacked and a sister were the only ones in the house who drank unboiled milk. The sister

subsequently developed Scarlet Fever, but it may have been a secondary case. The first case sickened on April 21st, and the second on April 25th.

In two instances the person attacked and one other member of the family were the only ones who drank raw milk.

In six instances all the members of the household drank unboiled milk, but in these families only one child under 10 years of age escaped.

The age incidence of the persons attacked was as follows:—

Under 5 years.	5 to 10.	10 to 15.	15 to 25.	Over 25 years.
2	7	5	3	3

The dates of notification have already been given, but of more importance is the date of the onset of symptoms. Of the 20 cases we find the date of sickening as follows:—

Five cases sickened on April 20th, eleven cases on April 21st, three on April 22nd, and one on April 26th.

The estimation of an incubation is always a difficult matter. It may be asserted with some confidence that the latent stage of Scarlet Fever is invariably a short one. The vast majority of patients take from two to three days to develop their first symptoms. It has been stated that an incubation of only a few hours is possible.

Murchison had, in his wide medical experience, found only 13 cases that allowed him to draw any certain conclusions as to the true incubation. Among these it was

Less than 24 hours	...	...	2
„ 24-48 „	...	...	3
Between 2-3 days	...	...	1
„ 3-4 „	...	...	2
„ 4-5 „	...	...	3
„ 5-6 „	...	...	2

Cases have been reported in which the disease is supposed to have taken two to four weeks to devolop, but most authorities refuse to accept these long incubation periods as authentic.

We may take it that the incubation period does not exceed seven days, and that it is very seldom longer than four. It is stated that in milk epidemics the incubation period is shortened, but usually the vast majority of patients take from two to three days to develop their symptoms.

I think it may be fairly assumed that all the primary cases could have been infected on the same day, but in that case the date must have been either April 19th or April 20th. On the other hand, if the infection had been a continuous or an intermittent, and not a transient one, the contamination may have occurred on any dates between April 13th and April 26th.

Apart from the dates on which these cases had occurred, an incident had occurred at the dairy which would have made it highly improbable for the milk to have been the means of spreading infection after April 21st.

On April 20th, the child of the foreman at the dairy was notified as suffering from Scarlet Fever. Every possible precaution was taken at the house and at the dairy to prevent the contamination of the milk. The child was immediately removed to the hospital, the premises were disinfected and the father was not allowed to resume work until April 24th. In addition, all the milk was pasteurized on and after April 21st. When the dairy was visited on April 24th the milk was still being pasteurized.

There was no evidence by which the infection of the milk could be traced to the child of the foreman. It may be stated, though, that the Scarlet Fever patient, even [in the beginning

of the attack, is capable of transmitting the infection. Vogl goes much further, and closes the description of his experience in a Munich garrison with the statement that the contagion, as a rule, occurs through direct contact during the period of incubation.

Although the dates of the illness of the foreman's child would not, under the above conditions, render it impossible for the milk to be contaminated from this source, there were circumstances which would render contamination from such a source extremely improbable.

Although cases have been described in which the infection has been conveyed through the medium of a third person, who has carried it in his clothes, very few instances of such indirect transmission will bear critical examination, and there has been no authenticated case where an article of food could be thus affected.

The foreman had hardly been in contact with the child, and there was no evidence that he had personally handled all the milk. He supervised the distribution of the milk amongst the various employees. The cases which were notified on Saturday, April 22nd, occurred on five different rounds.

Inquiries were then made at the farm from which the milk was supplied.

The dairy in question is one of several branches controlled by a large firm. The firm obtains its milk from several farms, but it was possible to trace the source of the milk supply to each of the branches.

The Dairy obtained its milk from three farms in Berkshire. At two of the farms there were no suspicious circumstances, and the districts in which they were situated had been free of Scarlet Fever for a considerable time.

In the neighbourhood of the third farm Scarlet Fever had been prevalent for some time.

This farm (G. M.) comprises an area of about 350 acres of pasture land, and on it, in addition to other stock, are kept 55 milch cows. The whole of the milk was sent under contract to the above-mentioned firm. The milk was detrained at Ealing, and delivered direct to the branch depôt.

Connected with the farm are three cottages, in which most of the milkers reside. One of the milkers (D. F.), though, resides in a village (W. H.), situated about three miles away. A groom (G. R.), who occasionally assists in the milking, resides in the farmhouse, but obtained all his meals with the milkers. At the village (W. H.) Scarlet Fever has been prevalent for some time.

In January, 1909, there were three cases of Scarlet Fever in D. F.'s house at W. H., but D. F. himself did not suffer from Scarlet Fever. Last December Scarlet Fever again made its appearance in W. H., but not in D. F.'s house. On March 25th, 1911, D. F. met with an accident, and was sent away from work until April 15th. On April 16th, 17th, and morning of the 18th he milked the cows. On the latter date he again went off duty with a bad cold, and had not resumed his work on April 25th. On April 25th he was examined by the County Medical Officer of Health, who found him suffering from inflamed tonsils, but there were no symptoms charcteristic of Scarlet Fever. D. F. was also examined by his own doctor, and both doctors are of opinion that D. F. was not suffering from Scarlet Fever.

All the employees were examined on April 25th, and on that date the groom G. R. was and had been for some days suffering from Scarlet Fever. His throat and tongue were typical of Scarlet Fever, and desquamation of the skin was commencing. His family resided at a village some distance away.

He had visited his family since the commencement of his illness, and two further cases of Scarlet Fever subsequently occurred in his home. As far as can be gathered, the history of G, R.'s illness was as follows :—

He was away on Easter Sunday, and returned to work on Easter Monday, April 17th. When he returned on Easter Monday he was suffering from a swollen face, which he attributed to "toothache." He continued at his work, and as one of the milkers (D. F.) had gone away indisposed on the Tuesday, he took D. F.'s smock and milked the cows on Tuesday, Wednesday and Thursday. On Wednesday afternoon G. R. undoubtedly was suffering from Scarlet Fever, the words he used himself being "that his throat was very bad." He continued at his work, though, until Friday, when he told his employer that he could go on no longer. He remained away from the farm until April 25th; on that date he returned to work, but as a result of his medical examination he did not remain at work, but was sent to his parents' home.

It will be observed that G. R. milked the cows on April 18th, 19th and 20th, and on the 19th and 20th, at any rate, he was suffering from Scarlet Fever, From further inquiries, it was found that G. R. only milked the cows in the afternoon, and that he did not assist in the morning milking.

Assuming that G. R. was not in an infectious state until April 19th, the only two days upon which he could infect the milk would be April 19th and 20th. The milk handled by G. R. on April 19th and April 20th would not in the ordinary course of events be delivered to the customers until the early morning of April 20th and 21st respectively. The afternoon milk was forwarded to the Dairy Company on the same day as it was drawn, but it would not reach its destination in time for the evening delivery of that day. It would consequently be delivered to the customers on the following day.

If G. R. was the source of the infection, the milk consumed on April 20th and April 21st would be the ones most liable to be contaminated. The dates correspond very closely to the probable dates upon which the cases that occurred in this district were infected.

There was one other mode by which this milk supply might have been infected. It is possible for the Scarlet Fever germs to be implanted upon the udder and teats of the cows, if there be present an ulceration of the teats or an inflammation of the udder. The cow may thus be the source of Scarlet Fever in man, not because it is constitutionally infective, but because it is acting as a carrier of human infective organisms.

It has been stated that another milker (D. F.) had suffered from sore throat, and that he lived in a village where Scarlet Fever was prevalent. As a rule, even a sore throat that occurs during a Scarlet Fever outbreak is looked upon with suspicion, and some authorities regard these cases of sore throat without a rash as an abortive form of Scarlet Fever. The possibility that D. F. had implanted the infective germs upon the teats of the cows was borne in mind, but all the evidence pointed against this indirect manner of infection.

The cows were examined by a veterinary surgeon, who reported that there was no evidence of recent mastitis or ulceration of the teats. Moreover, the sudden outbreak of short duration pointed to a purely human source of infection.

The bulk of the evidence goes to show that G. R. probably infected the milk when acting as milker. Although the specific germ of Scarlet Fever has not with certainty been isolated, there is reason to believe that the germ finds in milk a favourable medium for growth.

From the time the milk was handled by G. R. to its delivery at the customers' houses there would be ample and favourable opportunity for the multiplication of the germs.

Briefly summarized, the reasons we had for assuming that the outbreak was connected with the particular milk supply were as follows:—

1. The outbreak appeared suddenly, and the subsidence was equally prompt.

2, The cases were almost entirely limited to those families who used the milk of a certain dairy.

3. Those members of the family who drank uncooked milk were mostly infected.

4. The houses invaded were quite distant from each other, and not restricted to a particular part of the district.

5. The only condition common to all the houses affected was the milk supply.

6. The proportion of adults among the affected was high.

7. The outbreak was preceded by the occurrence of Scarlet Fever among one of the milkers.

The present outbreak differs from most milk outbreaks in its limited character. This may be explained in many ways. The dairy supplies about 300 families in Acton, but this particular supply is obtained from three farms. The milk from these farms is not mixed, so that only about 100 families would be supplied with the suspected milk. This would tend to limit its extent.

The period during which it could remain infected was also limited.

The milk was pasteurized on April 21st; G. R. had been examined by Dr. Taylor, and the milk had been refused by the firm on April 25th, before G. R. had resumed milking.

These circumstances would tend to limit the extent of the outbreak.

From the administrative side it deserves to be noted how it was possible for early localisation of the source of the mischief to be effected. I have to acknowledge the cordial assistance given by the proprietors and the manager of the dairy.

As soon as the proprietors became aware that any suspicion attached to the milk, every step was taken by them to prevent the distribution of the milk from the suspected farm amongst their customers.

To Dr. Taylor, the County Medical Officer of Health for Berkshire, the district is indebted to an extent that is not easily appreciated. His system of recording the incidence of the Infectious Disease in the County enabled him to localise the mischief immediately. If I record the steps taken, the value of his services can be partly gauged.

On Saturday, April 22nd, eight cases of Scarlet Fever were notified. As a result of inquiries, a milk supply was suspected. Monday, April 24th, the dairy was visited, and late on the same evening the names of the particular farms that supplied the dairy were obtained. By mid-day, April 25th, a case of Scarlet Fever had been detected on one of the farms and the milk supply stopped.

Another increase occurred in the autumn. On the reopening of the schools after the summer holidays a few cases occurred, but it was not until the first week in October that the number of notifications assumed serious proportions. A large number of the children attacked were in attendance in the South Acton School, and, as is usual in these circumstances, some "missed" cases were found.

The age distribution of the cases notified, together with the number removed to hospital, will be found on Table II

INFANTILE MORTALITY.

176 deaths under one year of age were registered in the district, and 29 infants under one year of age died in public institutions beyond the district, making a total of 205. This corresponds to an infantile mortality of 138 per 1,000 births.

The infantile mortality in England and Wales last year was 130; in 77 large towns it amounted to 140, and in the 136 smaller towns it was 133 per 1,000 births.

The deaths were distributed as follows:—

North-East Ward	32
North-West Ward	25
South-East Ward	47
South-West Ward	101

The infantile mortality in each ward was:—

North-East Ward	...	108 per 1,000 births.
North-West Ward	...	119 „ „
South-East Ward	...	126 „ „
South-West Ward	...	173 „ „

The infantile mortality was 36 per 1,000 births higher than in 1910.

Compared with 1910, the infantile mortality was higher in all the wards.

The diseases which showed the greatest increase in the number of deaths were Diarrhœal Diseases and Measles. There was a slight increase also in the number of deaths from Prematurity and Congenital Debility.

There were 37 deaths from Prematurity and 23 from Atrophy, Debility and Marasmus. These are the two groups of cases which are usually supposed to be affected by antenatal causes. A few

years ago it was frequently stated and believed that the industrial employment of married women was one of the most important direct factors in the causation of infantile mortality in large towns Owing to investigations carried out in certain large towns, it is now possible to approach this portion of the subject with greater accuracy than formerly. Although the number of cases investigated are not so large as could be desired, certain results have been obtained which cast some doubt upon the direct influence exerted by the industrial employment of women in producing excessive infantile mortality.

Section 61 of the Factory and Workshop Act, 1901, makes it an offence for the occupier of a factory or workshop knowingly to allow a woman or girl to be employed therein within four weeks after she has given birth to a child.

At the Conference on Infantile Mortality held in London in 1906, a resolution was adopted that this period should be extended from one month to three.

In 1907 the Home Secretary addressed a letter to certain Medical Officers of Health, asking for certain information, as he was considering the question of the further regulation of the industrial employment of women before and after child-birth. Some of the results of these inquiries have now been published, and so far no case has been made out for the further restrictive legislation in the prohibition of employment of married women.

In Blackburn, amongst 314 mothers industrially employed, 13·5 per cent. of the infants died in the first year of life. Amongst 175 mothers not industrially employed, 12·2 per cent. of the infants died in their first year.

In Birmingham it was found that, if the children who have been weighed are divided into two classes, namely, those whose mothers were industrially employed and those whose mothers were not industrially employed, there is scarcely any difference in the average weight in the two classes.

If, however, the same children be divided into those whose fathers earned less than £1 per week and those whose fathers earned £1 per week or more, then a very material difference was apparent. It was seen that in the homes where acute poverty exists there is a marked falling off in the average weight of the baby, whether the mother is industrially employed or not.

If industrial employment has a bad effect on infantile mortality, it is principally because it interferes with breast feeding, and for this reason employment in a factory is more harmful than employment at home. But it was apparent that the influence of industrial employment was small when compared with the influence of acute poverty.

In the South-West Ward, where married female labour mostly prevails, the death rate from these diseases is not markedly higher than in the other wards. 39 per cent. of the births occurred in the South-West Ward; 45 per cent. of the deaths from these diseases occurred in this ward. This is slightly higher than that of the other wards, but nearly 50 per cent. of the deaths of infants under 12 months occurred in this ward.

Until the results of the Census are known it is difficult to estimate what percentage of the married women in the South-West Ward are employed in duties other than domestic work. 26 deaths from Prematurity were inquired into, and 11 of the mothers were employed in some occupation, but in one instance she had not been working for three months and in another for six weeks. The other 15 were not occupied except in domestic work.

Although, compared with the immediately preceding years, there is a higher infantile mortality, if the infantile mortality of last year be compared with that of former years in which the meteorological conditions approximated to those of last year, the results are very gratifying.

It has been explained that the "outside" deaths were not included prior to 1905, but, excluding outside deaths, on two occasions only before 1903 did the infantile mortality fall below 150 per 1,000 births. In 1891 it was 146, and in 1887 it was 147 per 1,000 births. (Last year the deaths of infants registered in the district corresponded to an infantile mortality of 120 per 1,000 births registered in the district.)

For the years 1897, 1898 and 1899 the figures were 198, 182 and 187 per 1,000 births respectively.

Dry, hot, dusty summers and increased atmospheric and earth temperatures will always cause an increase in the deaths from infantile diarrhœa, and the summer of 1911 proved an exceptionally unfavourable one as regards the number of deaths from Diarrhœal diseases. But the experiences of a few years ago, when in dry, hot years about 200 or more children died during the first year of life for every 1,000 children born, will probably not be repeated. The educational measures, together with the improved steps in sanitary administration which have been adopted and carried out, are producing beneficial effects which will overcome the ill effects of adverse climatic conditions.

There is no doubt that educational methods in preventing infantile mortality, such as are associated with the work of health visitors, midwives, &c., are of very great value, and should be continued and encouraged in every possible way. But unless these inquiries are assisted vigorously by efficient sanitary measures, these educational measures will probably be of small avail.

Last year at all ages 98 deaths occurred from Diarrhœa and Enteritis, as compared with 29 from Diarrhœa, Enteritis and Gastritis in 1910. It is rather difficult to institute a comparison between this year's figures and those of earlier years, as considerable alterations have been made in the Tables issued by the Local Government Board. Up to the end of 1910 the

Diarrhœal diseases were included in three separate columns—Epidemic Diarrhœa, Enteritis and Gastritis. Last year, following on the adoption of the International List of Causes of Death, the heading was altered to Diarrhœa and Enteritis. The age periods were also altered last year. Formerly, the tables were divided into the columns under 1 year and 1—5 years; last year the columns were under 1 year, 1—2 years and 2—5 years.

Throughout the kingdom it is necessary to go back to 1899 to find a year with a higher total number of deaths from Diarrhœa and Enteritis, but in Acton 80 deaths of infants under one year occurred in 1906 from Diarrhœal diseases. Last year, out of the total number of deaths from Diarrhœa and Enteritis, 68 were of children under 12 months.

Summer Diarrhœa is now believed by many authorities to be an infectious disease capable of spreading from the sick to the healthy. Undoubtedly, multiple cases do occur in houses and families. Last year in Acton there was no multiple death in any houses, but it was found that the fatal case investigated had been preceded or followed by the occurrence of Diarrhœa in other members of the family. Multiple attacks were known to have occurred in 64 houses.

Whether summer Diarrhœa is produced by one definite micro-organism, or is an illness conditioned by several allied bacilli is doubtful; if the latter theory be true, then all these organisms are capable of exciting acute Diarrhœa in infants and of causing a disease which pursues a very definite cause.

A few years ago it was considered to be due to a micro-organism which resided in the superficial layers of the earth. The micro-organism was supposed to have the power of leaving the soil, to be carried in by the air, gain access to food and to be introduced into the human body.

According to Dr. Ballard's report to the Local Government Board on the subject, "from food, the micro-organism can manufacture a substance which is a virulent chemical poison, and this chemical substance is in the human body the material cause of epidemic summer Diarrhœa."

The development and multiplication of the micro-organism depended on a high temperature, not in the air itself, but in the superficial layers of the soil.

The rise in the Diarrhœa death rate does not begin until the average weekly temperature of the thermometer (suspended in an iron tube 4ft. deep in the earth) has reached 56°F. This takes place about a week later than in the air. Taking this into consideration, and that death occurs usually in a week or a fortnight after the onset of the disease, it will be observed that the relationship of the commencement of summer Diarrhœa with the temperature recorded at a point 4ft. below the surface of the earth, is corroborated by the following table, although the opinion is not now held that this is due to the growth of a micro-organism in the soil as described by Dr. Ballard.

Week ended.	Mean reading of Thermometer.	Rain-fall.	Deaths of infants under 1 year in London.	Deaths from Diarrhœa in Acton.
July 1st	57·5°F. (—4)	·50in.	149	nil
,, 8th	65·6°F. (x3·5°)	nil	144	nil
,, 15th	65·2°F. (2·3°)	nil	159	1
,, 22nd	69·5°F. (x6·2°)	nil	150	1
,, 29th	71°F (x8·4°)	·26in.	173	3
Aug. 5th	68°F. (x5°)	·06in.	304	6
,, 12th	72·5°F. (10·1°)	nil	462	4

Week ended.	Mean reading of Thermometer.	Rain-fall.	Deaths of infants under 1 year in London.	Deaths from Diarrhœa in Acton.
Aug. 19th	69·4°F. (x7·2°)	·58in.	636	14
,, 26th	63.9°F ( )	·29in.	705	14
Sept. 2nd	65·3°F. (x5·2°)	·41in.	712	11
,, 9th	66·9°F. (x7·7°)	·01in.	622	10
,, 16th	60·3°F. (x2·4)	·41in.	555	6
,, 23rd	54·3°F. (—1·9°)	·48in.	442	2

With regard to the mean temperature, it is compared with the week's average in the 65 years ended 1905.

X means above the average; — means below the average.

Although it is generally accepted that summer Diarrhœa is in the large majority of cases due to bacterial infection, there is no certainty as to the sources of infection.

The most important vehicle of infection undoubtedly is milk. Infants artificially fed are much more exposed to infection than breast-fed infants, partly on account of the greater opportunity whereby milk, other than from the breast, can be contaminated. Of the 68 deaths that occurred, 4 were breast fed and 64 were artificially fed.

Professor Delapine adduces evidence showing that milk, as it arrives from a distance in towns, may have much to do with the spread of the disease. This is very doubtful, and the evidence in this district does not suggest the theory. The source of the milk supply in the South West Ward is not very different to that in the other wards, but out of the ·68 deaths from Diarrhœa and Enteritis 33 were in the South-West Ward, 13 in the North-East, 12 in the South-East and 10 in the North-West Ward.

Dr. Newsholme, on the other hand, from the observed facts in connection with breast-fed children, with infants fed on condensed milk, and from a comparison of the fatality experienced by infants fed on milk produced near the town, came to the conclusion that the infection was domestic.

In support of the latter view, it may be pointed out that diarrhœal mortality does not rise in June and early in July, notwithstanding the exposure of outside milks to high temperature.

Of the 64 artificially-fed infants who died in Acton last year, 27 had cows' milk, 23 had condensed milk, 4 had patent foods, and 10 had cows' and condensed milk.

In connection with domestic infection, a good deal of attention has recently been paid to the possibility of conveyance of infection by the common housefly. Many observers maintain that flies are important factors in causing summer Diarrhœa, and in support of their argument state that:—

1. Houseflies are present in great numbers in houses prior to primary attacks of Diarrhœa in infants, although not in all.

2. Houseflies have been shown, by means of bacteriological examination, to convey infection.

23 illegitimate children died under the age of 12 months. This corresponds to an infantile mortality of 535 per 1,000 illegitimate births.

NOTIFICATION OF BIRTHS ACT, 1907.

One thousand four hundred and sixty nine births and 28 still births were notified during the year.

515 were notified by doctors, 782 by midwives and 200 by one of the parents.

In 30 instances a birth was notified by both the doctor and the father, and in 25 instances by the doctor and the midwife.

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

71 per cent. of the births notified were visited.

Of the infants visited, 96 died within twelve months of their birth

TUBERCULAR DISEASES.

There were 51 deaths from Phthisis or Consumption of the Lung, 6 from Tuberculous Meningitis and 7 from other Tuberculous diseases.

44 of the deaths were registered in the district, and the remaining deaths occurred in Public Institutions outside the district.

Of the deaths from Pulmonary Tuberculosis, 22 were of males and 29 of females.

46 of the patients who died of Phthisis were over 15 years of age, and prior to their attack of illness were employed as follows:—

Males.		Females.	
General Labourer ...	3	Household	16
Laundryman	3	No occupation ...	3
Carpenter	1	Cookery Teacher ...	1
Furniture Remover ...	1	Dyer's Presser ...	1
Clockmaker	1	Cook	1
Draper's Porter ...	1	Domestic Service ...	1
Quartermaster Merchant Service	1	Confectioner's Assistant	1
Bricklayer	1	Draper's Assistant ...	1
Clerk	1	Laundress	1

Males.	
Commercial Traveller ...	1
Music Engraver ...	1
Cook	1
Electrical Engineer ...	1
Builder	1
Bootmaker	1
Draper	1

It was pointed out in previous reports that one of the chief obstacles in dealing with Pulmonary Tuberculosis is the difficulty of obtaining information of the early cases.

An important step has been taken in this direction by the adoption of compulsory notification of all cases of Pulmonary Tuberculosis.

In 1908 the Local Government Board issued regulations for the notification of cases of Pulmonary Tuberculosis occurring amongst the inmates of Poor Law institutions or amongst persons under the care of district medical officers. In March, 1911, further regulations were made extending the system of notification to cases occurring amongst the in patients or out-patients at hospitals, or other similar institutions for the treatment of the sick, which are supported wholly or partially otherwise than by contributions of the patients and otherwise than from the rates and taxes.

In November, 1911, the Board issued regulations for the general notification of Pulmonary Tuberculosis, and after January 1st, 1912, it will be the duty of every medical practitioner to notify every case of Pulmonary Tuberculosis occurring in the course either of his public or his private practice.

A system of voluntary notification has been in force in the district since 1904, and 8 cases were notified last year by doctors under this system; 35 cases were notified under the Tuberculosis Regulations, 1908, and 41 under the Tuberculosis Regulations of March, 1911.

Seven persons were treated in the Council's beds at Northwood Sanatorium.

COUNCIL LABORATORY.

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

Disease.	Nature of Specimen.	Result. Positive.	Negative.	Total
Diphtheria	Swabs from nose and throat	207	380	587
Tuberculosis	Sputum		2	2
Ringworm	Hair of Scalp	9	9	18
		216	391	607

CANCER.

52 deaths occurred from Cancer or Malignant Disease. This is exactly the same number as occurred in the years 1910 and 1909.

The ward distribution of the disease was as follows:—

North-East Ward	14
North-West Ward	16
South-East Ward	10
South-West Ward	12

INQUESTS.

40 Inquests were held, the causes of death being:—

Heart Disease	7	Distention of the stomach...	1
Cerebral Hæmorrhage ...	4	Overlaying	4
Pneumonia	5	Suicide	3
Convulsions	3	Accidental burns	3
Tuberculosis	1	Wound in throat	1
Spasm of bowel	1	Fractured neck	1
Meningitis	2	Fractured ribs	1
Enteritis	2	Run over by a taxi-cab ...	1

MORTUARY.

42 bodies were removed to the Mortuary; in 40 of these an inquest was held. The other bodies were removed to the Mortuary on account of insufficient accommodation in the house where the death occurred.

31 post-mortem examinations were made.

OFFENSIVE TRADE.

There is only one offensive trade carried on in the district, viz., fat extraction.

SLAUGHTER HOUSES.

There are two licensed and one registered slaughter houses in the district. In the latter, slaughtering is very rarely carried on.

In one of the slaughter houses, only pigs are slaughtered.

In the other, sheep, and occasionally oxen, are slaughtered there.

Complaints were received in respect of one of the slaughter houses, but as the complaints had reference mainly to the position of the slaughter house, the Council renewed the license.

Both the slaughter houses have been regularly visited during the times of slaughter, and the following were surrendered:—

19 pigs' plucks.
14 ,, heads.
2 ,, spleens.

UNSOUND FOOD.

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

1 boar's head
1 case of fresh herrings
1 bushel of pears
1 bag of winkles
10 boxes of kippers
9 bags of walnuts
3 pigs' heads
1 pig's pluck and spleen
1 pork pie

DAIRIES AND COWSHEDS.

There are two cowkeepers and 80 purveyors of milk in the district.

There were 17 changes of occupation and 2 new premises were registered.

All these premises are regularly visited, and every endeavour is made to induce the purveyors of milk to adopt precautions for the prevention of contamination. In some instances it is very difficult to keep the milk clean, especially in those shops where paraffin, wood, &c., are also sold.

ISOLATION HOSPITAL.

During the year 275 patients were admitted. On January 1st, 1911, there were 21 patients under treatment, and on January 1st, 1912, 54.

Two of the nurses contracted Scarlet Fever, and one Diphtheria.

Diphtheria.

86 cases of Diphtheria were admitted, and there were 9 deaths.

SCARLET FEVER.

185 cases of Scarlet Fever were admitted, and there were 5 deaths.

ENTERIC FEVER.

4 cases of Enteric Fever were admitted, and there was no death.

It will at once be seen to what an extent the accommodation at a fever hospital must differ from that of an ordinary hospital, when it is stated that over 57 per cent. of the cases were admitted during the four months September to December, and over 46 per cent. of the cases admitted during the three months October to December.

The average number of beds in occupation throughout the year was 33·6, but it varied from 14 in June to 72 in November. It is usual to find the number of fever cases increasing in the autumn. In September the average number of beds occupied was 30, in October it rose to 47, in November to 72 and in December the average number was 60,

During the earlier three-quarters of the year, in only two months did the average number of beds in occupation rise above 30, viz., in May with 31 and in March 33.

The new pavilion was opened for the reception of patients last October, and there is now accommodation at the Hospital for 73 patients.

The new pavilion has accommodation for 36 patients, and it is divided into two wards of 18 and 16 beds respectively, and two separation wards each with accommodation for one patient. Leading out of each ward in the centre of the building is a bathroom, and at the extreme end of each ward are the annexes containing the water-closets, sinks, &c. Between the two wards and overlooking them and the separation ward is the nurse's kitchen,

The walls of the building are formed with 4in. clinker concrete of slabs rendered outside with cement and washed sand, and the floors are formed with 9in. clinker cement concrete and covered with Newoleum Patent composition Flooring $\frac{3}{8}$in. thick. The walls are ceiled at the level of the wall plates with fibrous plaster set in Keen's cement, and the inside of the wall is rendered in Serapite.

The cost of the building itself was £4,159, or 4·66 pence per cubic foot.

The building is heated with hot water on the low-pressure system, and the steam for heating the water in a calorifier is conveyed from the refuse destructor.

In each ward there are also Shorlands ward-ventilating stoves, but these are only used when it is inconvenient to heat with steam.

The cost of the heating apparatus was £668.

COMMON LODGING HOUSE.

There is only one common lodging house in the district.

REFUSE COLLECTION AND DISPOSAL.

The whole of the refuse of the district is collected by direct labour once a week, including trade refuse up to half a load from each building.

The house refuse is destroyed in the Council's Refuse Destructor.

Last year, 11,600 tons of house refuse and 1,300 loads of laundry clinker were collected and destroyed.

SEWAGE DISPOSAL.

A description of the Sewage Works has been given in previous reports. The whole of the sewage is removed into the London

sewers. The flood water, after proper treatment, is discharged into the Thames.

CERTIFICATE FOR EXEMPTION FROM INHABITED HOUSE DUTY.

Applications were received under the Customs Inland Revenue Acts in respect of 77 houses.

Certificates of exemption were signed for 53 houses and refused for 24.

HOUSING.

Under Section 17 of the Housing, Town Planning, &c., Act, 1909, it is the duty of every Local Authority within the meaning of Part II of the Housing of the Working Classes Act, 1890, to cause to be made from time to time inspection of their district, with a view to ascertain whether any dwelling house is in such a state so dangerous or injurious to health as to be unfit for human habitation, and for that purpose to comply with such regulations and to keep such records as may be prescribed by the Board.

The Local Government Board have issued an Order making Regulations with respect to the manner in which this section shall be carried out, and with respect to the records to be kept of such inspection;

During the year the Sanitary Staff has made a big effort to cope with the Housing Regulations of 1910, and 800 house-to-house inspections were made. These, of course, are in addition to the inspections which were made as a result of complaints, in the investigation of infectious disease, &c. A full list of all the inspections is given on tbe tables prepared for the County Medical Officer of Health.

The following table gives a list of the streets, together with the number of houses inspected, and the principal defects found on inspection :—

HOUSE-TO-HOUSE INSPECTIONS, 1911.

(WERE MADE IN FOLLOWING STREETS.)

Nature of Sanitary Defect.	Antrobus Road	Acton Lane (Basement Houses only)	Burlington Mews	Berrymede Road (Basement Houses only)	Beaconsfield Road	Bollo Bridge Road (East End)	Cheltenham Place (West Side)	Cunnington Street	Clovelly Road (South Side)	Chiswick Road	Friars Place Lane	Gloucester Road	Gladstone Road	Horn Lane	Junction Road	Leythe Road (North)	Meon Road	Nelson Place.
No. of Houses Inspected	6	4	12	6	55	49	9	40	30	30	6	31	48	19	13	23	20	16
No. of Tenements	11	8	12	13	56	54	9	49	32	31	6	44	48	22	73	46	40	24
Cases of Overcrowding	—	—	—	—	—	—	—	1	4	—	—	—	—	—	7	—	—	6
Defects of Drainage System	12	4	3	3	39	28	3	19	13	7	13	8	37	36	1	20	19	12
Defective or want of Yard Paving ...	6	4	—	2	32	12	9	18	14	15	3	14	18	2	4	3	7	16
Defective w.c.'s (including appliances) ...	2	2	6	5	7	6	8	9	1	11	3	7	7	2	2	2	22	6
Untrapped R.W. Pipes	6	1	—	—	—	6	—	—	—	5	2	—	—	4	—	11	—	—
Dampness	—	4	8	3	16	—	9	9	2	1	—	14	7	3	—	2	16	10
Dirty Walls and Ceilings of Rooms ...	3	6	26	11	29	6	7	9	51	13	—	24	15	9	14	8	20	29
Defects of Drinking Water Storage ...	—	2	5	4	—	9	2	4	4	—	2	2	2	13	1	13	6	—
Defective Sinks and Waste Pipes ...	6	2	2	3	21	5	8	29	3	24	8	22	14	30	8	19	8	26
Miscellaneous Defects (Sites, Floors, Roofs, Plastering, R.W. Pipes, Gutter, &c.	5	6	11	14	13	4	13	22	48	14	5	11	16	20	4	13	16	34

HOUSE - TO - HOUSE INSPECTION, 1911—*continued.*

Nature of Sanitary Defect.	Nemoure Road (North Side).	Old Oak Lane	Petersfield Road (East Side)	Priory Road (Basement Houses only)	Park Road North	Richards Cottages	Stanley Gardens	Steyne Road	Saville Road (Basement Houses only)	Silver Crescent (West Side)	South Parade (Sussex Cottages)	Shaftesbury Road (Tenement Houses)	Strafford Road	St. Margaret's Road	Thorneyhedge Road	Wolesley Terrace	Willesden Lane	TOTALS.
No. of Houses Inspected	10	14	46	7	36	25	61	10	5	33	4	6	60	16	27	18	5	800
No. of Tenements	11	14	47	21	46	25	83	18	11	33	4	18	84	48	27	31	5	1104
Cases of Overcrowding	—	—	5	—	—	1	9	2	2	—	1	2	—	—	—	—	—	40
Defects of Drainage System	22	10	43	1	28	1	31	10	—	2	—	3	27	11	4	2	13	485
Defective or want of Yard Paving ...	6	9	27	6	12	5	39	7	—	5	4	—	28	13	4	9	—	353
Defective w.c.'s (including appliances) ...	12	2	23	7	6	12	47	3	—	5	—	4	14	10	1	—	1	255
Untrapped R.W. Pipes	3	—	—	1	6	—	—	—	—	1	2	—	7	—	—	—	1	56
Dampness	7	3	7	3	—	13	30	4	3	—	4	6	9	7	—	—	—	200
Dirty Walls and Ceilings of Rooms ...	3	6	122	48	6	17	102	6	2	—	4	16	34	23	—	6	—	675
Defects of Drinking Water Storage ...	4	1	3	3	9	3	39	1	—	4	4	2	10	12	5	4	—	173
Defective Sinks and Waste Pipes ...	16	9	47	16	5	32	32	8	1	1	4	3	33	13	3	1	7	469
Miscellaneous Defects (Sites, Floors, Roofs, Plastering, R.W. Pipes, Gutter, &c.)	13	17	79	37	4	39	78	21	5	1	25	31	22	9	2	6	9	667

The following houses were represented as unfit for human habitation during the year:—

Nos. 71, 72, 73 and 74, South Parade.

These houses consisted of two rooms and a scullery each. The houses were old and in a generally dilapidated condition.

The houses were closed and demolished by the owner.

Nos. 7, 9, 13, 15 and 17, Priory Road.

The basements of these houses were let in separate tenements. The basements were all in a bad state of repair, the woodwork being defective and the walls damp.

Extensive work was carried out, and the basements were rendered fit for human habitation.

Talbot Cottage, Mill Hill Road.

This house was not originally intended for a dwelling house but a portion of some outhouses had been converted.

The house was closed by the owner.

Nos. 17 and 19, Gunnersbury Lane.

These two houses were old and showed signs of decay. Structural work is being carried out by the owner, so as to render the houses fit for human habitation.

Nos. 7, 8 and 9, Narrow Street, Steyne.

These houses are also old and dilapidated, and the owners are carrying out extensive structural work for the purpose of rendering the houses fit for human habitation.

FACTORIES AND WORKSHOPS.

The Factory and Workshop Acts places upon the local authority the following duties relating to—

A. Factories.

1. Provision of means of escape in case of fire.

2. Enforcing the provision of suitable and sufficient sanitary accommodation.

B. Workshops and Workplaces.

1. Sanitary condition, including (a) cleanliness, (b) air space, (c) ventilation, (d) drainage of floors and (e) sanitary accommodation.

2. Provision of means of escape from fire in workshops.

3. Special sanitary regulations of bakehouses.

4. Home work.

The provision of means of escape in case of fire is dealt with by the Surveyor's Department.

The number of workshops on the register at the end of 1911 was 333. This is a reduction of 84 on the number on the register in 1910. This reduction is due to the smaller number of workshop laundries on the register. During the inspections made in the year, inquiries were made as to the provision of any mechanical power, and wherever any mechanical power of any kind was used the premises were deleted from the workshop register.

Since the registration of the premises as workshops a large number of laundries had installed mechanical power.

592 inspections were made during the year, and 352 notices were served.

In conclusion I have to thank the Staff of the Health Department for their co-operation during the year, and for their assistance in the compilation of the different Tables.

As in former years, the County Council Tables have been compiled entirely by Mr. Kinch. The accuracy of the County

Council and Home Offices Tables depends upon the excellent system upon which the records are being kept in the Sanitary Inspector's Office.

I remain,

Your obedient Servant,

D. J. THOMAS.

TABLE 1.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1911 AND PREVIOUS YEARS.

Year.	Population estimated to Middle of each Year.	Births.			Total Deaths Registered in the District.		Transferable Deaths.		Nett Deaths belonging to the District			
		Uncorrected Number.	Nett.						Under 1 Year of Age.		At all Ages	
			Number.	Rate.	Number.	Rate.	of Non-residents registered in the District.	of Residents not registered in the District.	Number.	Rate per 1,000 Nett Births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1906	52,000	1,533	...	29.4	597	11.5	7	97	201	131	687	13.2
1907	53,000	1,535	...	29	605	11.4	8	140	200	130	737	13.9
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

Area of District in Acres (exclusive of area covered by water), 2,304.

Total population at all ages, 57,523.

TABLE 2.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1911.

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 & upwards					
Small-pox	...	...	...	...	...	...	...	...	...	..	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous croup)	115	3	30	67	6	8	1	...	20	25	38	32	85
Erysipelas	37	2	1	3	2	10	13	6	8	6	9	14	...
Scarlet Fever	234	2	61	131	24	15	1	...	38	27	66	103	183
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	17	...	...	10	2	3	2	...	...	3	...	14	12
Relapsing Fever	...	...	...	...	...	...	..	...	...	...	...	...	...
Continued Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	3	...	...	...	...	3	...	...	1	...	...	2	...
Plague	...	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis — Under Tuberculosis Regulations, 1908	35	1	...	3	1	17	13	...	6	3	6	20	20
Phthisis — Under Tuberculosis Regulations, 1911	41	...	...	3	11	23	4	...	7	6	15	13	19
Phthisis — Others	8	...	...	1	2	5	...	...	2	2		4	5
Totals	490	8	92	218	48	84	34	6	82	72	134	202	324

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, 1911.

Causes of Deaths.	Nett Deaths at the subjoined ages of "Residents," whether occurring within or without the District.									Total Deaths whether of "Residents" or "Non-Residents" in Institutions 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	4	—	—	—	1	—	3	—	—	—
Small-pox	—	—	—	—	—	—	—	—	—	—
Measles	44	12	14	16	2	—	—	—	—	—
Scarlet fever	6	—	1	3	2	—	—	—	—	5
Whooping-cough	16	6	5	3	1	1	—	—	—	1
Diphtheria and Croup ...	9	—	—	6	3	—	—	—	—	9
Influenza	5	—	—	—	1	—	1	2	1	—
Erysipelas	2	—	—	—	—	—	—	1	1	—
Cerebro-Spinal Fever ...	—	—	—	—	—	—	—	—	—	—
Phthisis (Pulmonary Tuberculosis)	51	2	—	1	2	12	21	12	1	—
Tuberculous Meningitis ...	6	1	2	2	1	—	—	—	—	1
Other Tuberculous diseases	7	4	1	—	2	—	—	—	—	—
Rheumatic Fever	5	—	—	—	1	1	2	1	—	—
Cancer, maglignant disease	52	—	—	1	—	—	3	22	26	3
Bronchitis	58	12	—	—	—	—	3	17	26	—
Broncho-Pneumonia ...	22	8	5	3	1	1	2	1	1	1
Pneumonia (all other forms)	31	6	4	2	3	—	3	10	3	1
Other diseases of Respiratory Organs	6	—	2	1	—	—	2	1	—	—
Diarrhœa and Enteritis ...	98	68	21	4	—	—	—	1	4	—
Appendicitis and Typhlitis	5	1	—	—	2	1	1	—	—	—
Alcoholism	—	—	—	—	—	—	—	—	—	—
Cirrhosis of Liver	8	—	—	—	—	—	1	7	—	—
Nephritis and Bright's Disease	15	—	—	1	1	1	2	5	5	1
Puerperal Fever	—	—	—	—	—	—	—	—	—	—
Other accidents and Diseases of Pregnancy and Parturition	3	—	—	—	—	—	3	—	—	—
Congenital Debility and Malformation, including Premature birth	62	60	2	—	—	—	—	—	—	—
Violent Deaths, excluding Suicide	22	5	1	4	3	2	3	2	2	4
Suicides	3	—	—	—	—	—	2	1	—	—
Other defined diseases ...	236	19	9	2	8	9	29	60	100	7
Diseases, ill-defined or unknown	1	1	—	—	—	—	—	—	—	—
All causes	777	205	67	49	34	28	81	143	170	33

TABLE 4.

INFANTILE MORTALITY DURING THE YEAR, 1911.

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 One Year.
Small-pox	...	...	...	...	...	...	...	..	...	...
Chicken-pox	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	2	10	12
Scarlet Fever	..	...	...	...	...	...	...	...	...	...
Diphtheria and Croup ...	...	...	...	...	...	...	...	...	...	...
Whooping Cough ...	...	...	...	...	...	...	3	1	2	6
Diarrhœa	...	...	...	1	1	7	20	17	10	55
Enteritis	...	...	...	2	2	2	5	3	1	13
Tuberculous Meningits ...	...	...	..	...	...	...	...	1	...	1
Abdominal Tuberculosis...	...	...	...	..	..	1	1	...	...	2
Other Tuberculous Diseases	...	...	...	...	...	1	1	1	1	4
Congenital Malformations	2	1	...	..	3	1	1	...	...	5
Premature Birth	22	3	5	3	33	4	...	...	..	37
Atrophy, Debility and Marasmus ...	4	2	..	2	8	7	5	1	2	23
Atelectasis	...	...	...	...	...	...	...	...	...	...
Injury at birth	3	...	...	...	3	...	...	...	...	3
Erysipelas	...	...	...	...	...	...	.	...	...	...
Syphilis	...	...	...	...	...	...	...	...	...	...
Rickets	...	...	...	...	...	...	...	...	...	...
Meningitis (*not Tuberculous*)	...	...	...	...	...	...	1	1	...	2
Convulsions	...	1	...	...	1	...	1	1	...	3
Gastritis	...	...	...	...	...	...	...	...	...	...
Laryngitis	...	...	...	...	...	...	...	...	...	...
Bronchitis	...	1	...	...	1	1	5	3	2	12
Pneumonia (all forms) ...	...	...	...	1	1	2	1	4	6	14
Suffocation, overlying ..	1	...	...	...	1	1	1	1	...	4
Other causes	...	...	...	1	1	1	3	3	1	9
	32	8	5	10	55	28	48	39	35	205

Nett Births in the year { legitimate, 1486 ; illegitimate, 43

Nett Deaths in the year of { legitimate infants, 777 ; illegitimate infants, 23

TABLE 5.

CAUSES OF DEATH.	WARD DISTRIBUTION.				
	North East	North West	South East	South West	Total
Enteric Fever	...	...	...	4	4
Measles	2	4	6	32	44
Scarlet Fever	..	1	2	3	6
Whooping Cough	1	1	8	6	16
Diptheria and Croup	5	...	2	2	9
Influenza	2	2	...	1	5
Erysipelas	...	1	...	1	2
Phthisis	11	11	7	22	51
Tuberculous Meningitis	1	1	...	4	6
Other Tuberculous Diseases	1	...	2	4	7
Rheumatic Fever	2	1	2	...	5
Cancer...	14	16	10	12	52
Bronchitis	13	14	11	20	58
Broncho-Pneumonia	2	2	5	13	22
Other Diseases of Respiratory Organs ...	1	1	1	3	6
Diarrhœa and Enteritis	15	12	21	50	98
Appendicitis and Typhilitis	...	2	3	...	5
Alcoholism	...	...	...	...	...
Cirrhosis of Liver	1	3	1	3	8
Nephritis and Bright's Disease	3	1	4	7	15
Puerperal Fever	...	...	...	...	...
Other Accidents and Diseases of Pregnancy and Parturition	...	...	1	2	3
Congenital Debility and Malformation, including Premature Births	10	7	17	28	62
Violent Deaths, excluding Suicides ...	6	3	10	3	22
Suicides	...	2	...	1	3
Other Defined Diseases	52	62	51	71	236
Diseases Ill-defined or Uuknown	...	...	...	1	1
Pneumonia	5	3	4	19	31
Totals	147	150	168	312	777

TABLE 6.

INFANTILE MORTALITY. WARD DISTRIBUTION.

	North East	North West	South East	South West	Total
Measles	1	1	1	9	12
Whooping Cough	...	1	3	2	6
Diarrhœa	9	6	10	30	55
Enteritis	4	4	2	3	13
Tuberculous Meningitis	...	...	...	1	1
Abd. Meningitis	...	...	...	2	2
Other Tuberculous Diseases	...	...	2	2	4
Congenital Malformations	1	2	...	2	5
Prematurity	5	5	10	17	37
Atrophy, Debility, and Marasmus... ...	3	2	8	10	23
Atelectasis	...	...	...	...	...
Injury at Birth	...	...	1	2	3
Meningitis	1	...	...	1	2
Convulsions	1	1	...	1	3
Gastritis	...	...	...	...	...
Bronchitis	2	...	2	8	12
Pneumonia	2	2	1	9	14
Overlying	1	...	3	...	4
Other Causes	2	1	4	2	9
Totals	32	25	47	101	205

PHTHISIS: SANITORIUM AND HOSPITAL ACCOMMODATION.

Classes for which accommodation is Provided.	Do the Sanitar Authority use— (1) their Isolation Hospital, or (2) their Small-pox Hospital, for cases of Phthisis ?	Do the Sanitary Authority reserve Beds in any Phthisis Sanitorium : If so, how many, and in what Sanatorium ?	Do the Sanitary Authority provide portable open-air Shelters or Tents ?
Early cases	No	The Council mantains two beds at the Northwood Sanatorium	No

Have the Council or any Private Body, provided a Dispensary : If so, give particulars	No

FACTORIES, WORKSHOPS, WORKPLACES AND HOMEWORK.

1.—Inspection of Factories, Workshops and Workplaces.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Inspections.	Written Notices
Factories (including Factory Laundries)	48	28
Workshops (including Workshop Laundries)	525	321
Workplaces (Other than outworkers premises included in Part 3 of this Report)	19	3
(Prosecutions—Nil). Total	592	352

2.—Defects Found.

	Found.	Remedied.	Referred to H.M. Inspector.
Nuisances under the Public Health Acts :—			
Want of cleanliness	47	47	—
Want of ventilation	—	—	—
Overcrowding	2	2	—
Want of drainage of floors	13	13	—
Other nuisances	147	147	—
Sanitary accommodations—insufficient	3	3	—
Sanitary accommodations—unsuitable or defective ...	29	29	—
Sanitary accommodations—not separate for sexes ...	1	1	—
(Prosecutions—Nil) Total	242	242	—

3.—Home Work.

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

Nature of Work.	Section 107. Twice Yearly: Lists	Twice Yearly: Outworkers, Contractors	Twice Yearly: Outworkers, Workmen	Once Yearly: Lists	Once Yearly: Outworkers, Contractors	Once Yearly: Outworkers' Workmen	Outworkers received from other Councils	Outw'k'rs forwarded to other Councils	Notices served on occupiers as to keeping or sending lists	Inspections of Outworkers' premises	Sec. 108: Unwholesome Premises, instances	Sec. 108: Unwholesome Premises, Notices served	Sec. 109: Infected Premises Instances
Wearing Apparel—													
(1) making, &c. ...	20	...	73	5	...	6	78	...	...	73	3	3	...
(2) cleaning and washing ...	32	18	27	20	15	28	...	...	39	55	8	8	8
Lace, lace curtains and nets ...	2	...	2	...	...	...	2	...	...	2	..	...	...
Brush making ...	2	...	5	1	...	1	...	...	...	6	...	...	...
Stuffed toys ...	2	...	94	...	...	...	...	22	...	83	...	...	5
Total	58	18	201	26	15	35	80	22	39	219	11	11	13

4.—Registered Workshops.

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

Laundries	210
Dressmaking	25
Millinery	8
Tailoring	7
Bakehouses	29
Others	54
Total number of workshops on Register	333

5.—Other Matters.

Matters notified to H.M. Inspector of Factories—

Failure to affix Abstract of the Factory and Workshop Act (s. 133) ...		5
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)	Notified by H.M. Inspector ...	12
	Reports (of action taken) sent to H.M. Inspector... ...	12

Underground Bakehouses (s. 101)—

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	606
,,	Infected cases removed to Isolation Hospital	275
,,	Library Books dealt with after Infectious Disease	107
,,	Closets disinfected after Enteric	12
,,	Rooms disinfected after Infectious Disease	432
,,	,, ,, ,, Cancer	5
,,	,, ,, ,, Phthisis	37
,,	,, stripped and cleansed after Infectious Disease ...	162
,,	Articles disinfected or destroyed after Infectious Disease and Phthisis	Large quantities of Bedding and Clothing.
,,	Preliminary Notices served	628
,,	Notices of Intention to Inspect	889
,,	Statutory Notices served	2258
,,	Letters received	1958
,,	,, written	2561
,,	Notices received from H.M. Inspector of Factories	12
,,	Notifications of Waste of Water sent to Metropolitan Water Board	29
,,	Summonses served...	2
,,	Convictions obtained	2
,,	Complaints received	802
,,	Inspection of Premises on Complaint	1826
,,	,, ,, after Infectious Disease	490
,,	Re-inspection of Premises	11517
,,	Interviews with Owners or Agents	1401
* ,,	House to House Inspections	800
,,	Premises under Periodical Inspection	670
,	Nuisances abated	5641
,	Inspections of Common Lodging Houses (1 Registered) ...	123
	,, ,, Van Dwellings...	70
,	Nuisances from Movable Dwellings, Caravans, &c	14
,,	Overcrowding Nuisances abated	47
,,	Rooms, &c., cleansed, repaired, &c.	1119
,,	Roofs, R. W. pipes, gutters, plastering repaired	734
,,	Houses dealt with under Section 15	1
,,	,, found to be in a state Dangerous or Injurious to Health (Sect. 17)	15
,	Representations made by M. O. H. (Sect. 17)	15
,,	Houses made Habitable without Closing Orders	5
,,	Closing Orders made by L. A. (Sect. 17)	4

No. Houses Closed Voluntarily	—
,, Closing Orders determined after repairs (Sec. 17)	3
,, Houses demolished (*a*) by order of L.A. (Sec. 17) (*b*) Voluntarily	—
,, Illegal Underground Rooms Vacated	—
,, Houses Let in Lodgings Registered under Bye-Laws ...	56
,, Contraventions under Bye-Laws	33
,, Articles of unsound food seized	1
,, ,, ,, ,, ,, condemned by Magistrates ...	1
,, ,, ,, ,, ,, surrendered	8
No. of Samples taken by the Local Authority	4
,, ,, found adulturated	—
,, Inspections of Butchers' Shops (27)	253
,, ,, Fishmongers' Shops (17)	197
,, ,, Greengrocers' Shops (19)	229
,, ,, Premises where food is manufactured or prepared (19)	78
,, ,, Dairies ... } (80 Registered) ...	94
,, ,, Milk Purveyors' Premises }	70
,, ,, Cowsheds (2 Registered) (98 Cows in all) ...	34
,, ,, Bakehouse (29 Registered)	347
,, ,, Laundries	156
,, ,, Other Workshops (126)	70
,, ,, Slaughter Houses (3 Licensed)	139
,, ,, Piggeries (2)	24
,, ,, Offensive Trades (2 Registered)	1
,, ,, Mews and Stables (5)	342
,, ,, Public House Urinals, &c. (38)	72
,, ,, Schools (11)	2
,, ,, Show Grounds (2)	32
Percentage of Houses supplied from Public Water service ...	100 %
No. of Cisters cleansed, repaired, covered, &c.	305
,, Draw taps placed on Mains	112
Percentage of Houses supplied with Water on constant system ...	100 %
No. of Drains submitted to Chemical test	85
,, ,, ,, ,, Smoke Test	380
,, ,, ,, ,, Water Test	353
,, Re-drainage plans deposited	70
,, House drains reconstructed	111
,, W.C.'s repaired, supplied with water or otherwise improved ...	758
Percentage of Houses provided with W.C.'s	100%
No. of Drains examined, tested, exposed, &c.	818
,, ,, unstopped, repaired, trapped, &c.	363
,, Waste pipes, rain water pipes disconnected, repaired, &c. ...	783
,, New sinks provided	222

No. of New soil pipes or ventilating shafts fixed	317
,, Existing soil pipes or ventilating shafts repaired	140
,, Disconnecting traps or Chambers inserted	334
Percentage of Houses Draining into Sewers	100%
No. of New Dust Bins provided	343
Dust removed from each house	Weekly
No. of Complaints of non-removal of dust received	6
Method of Disposal of Dust	Destructor
No. of Smoke Observations taken	245
,, Smoke Nuisances abated	5
,, Accumulations of refuse removed	90
,, Nuisances abated from foul ditches, ponds, &c., and Stagnant Water	18
,, Nuisances abated from foul pigs and other animals ...	24
,, ,, ,, ,, Dampness	211
,, Yards repaved or repaired	512
,, Other Nuisances abated	414

Yours obediently,

MAURICE W. KINCH.

* It should be noted that the somewhat decreased number of initial inspections made during the last year is mainly in consequence of the more detailed record which the Orders of the L.G.B. demand, and which is now kept Moreover, the drains of every house are now submitted to the smoke test.

Report

ON THE

Medical Inspection of Schools

FOR THE YEAR 1911.

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, 1911. 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, &c. (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 2,304 acres, and estimated population at the end of June, 1911, of 58,048 inhabitants.

The average number of children on the books was 8,941, and the average number of children in attendance throughout the year was 7,933.

There are in the district 11 schools and 24 departments.

In former reports, a description has been given of all the Council's Schools; during 1911 the following improvements have been carried out.

Central Infants' School.

Draught screens have been fitted to 29 window sashes in this department.

South Acton Boys' School.

In the Senior and Junior Departments, roller-screens have been supplied on account of the draught on the platforms in the Hall.

Beaumont Park Girls' School.

During the past year, three rooms at the Acton Green Mission Church, Steele Road, have been hired from the Trustees to provide additional temporary accommodation at the above school. It was found that the ventilation of the rooms was unsatisfactory, but alterations have now been carried out to four windows, and considerable improvement has resulted.

Rothschild Road School.

The urinal accommodation is not satisfactory, and arrangements have been made that the walls on three sides of the urinal shall be cemented three feet high.

Acton Boys' School.

The playground of this school was in bad condition, and clinker has been put down at the lower end of it.

Acton Wells School.

Some of the seats of the offices were in need of alteration, but these have been repaired by the makers.

Turnham Green (R. C.) School.

Considerable alterations have been made in this school. The lighting, heating and ventilation of the old class-rooms have been improved, and two additional infants' class-rooms have been erected on the western side of the old building.

Along the northern side of the building a corridor now runs along the entire length of the building, and from this corridor entrance is gained to all the class-rooms. The old slow-combustion stoves have been taken out, and open fireplaces have been substituted. The old class-rooms have been arranged so that the

light comes mainly from the left of the scholars. In one of the new class-rooms the light also comes from the left; in the other the light comes mainly from the right.

Inlet and outlet openings have been provided for the ventilation of each class-room. Five new closets have been erected, and all the drainage arrangements overhauled. New cloak-rooms have been erected, and are in all instances separated from the class-room by a corridor. There is no Teachers' room, and inspection of the children has to be carried out in one of the class-rooms.

TABLE 1.

PUBLIC ELEMENTARY SCHOOLS WITHIN THE DISTRICT, TOGETHER WITH ACCOMMODATION.

	Name of School.		Accommodation.
1.	Acton	Boys	164
		Girls	129
		Infants	142
2.	Beaumont Park	Boys	635
		Girls	675
		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 Road ...	Infants	295
7.	South Acton	Boys	720
		Girls	574
		Infants	618
8.	Southfield Road	Senior	419
		Junior	381
		Infants'	400
9	Turnham Green (R.C.) ...	Mixed	327
14.	Acton Wells	Mixed	1124
		Total	10279

TABLE 2.

Showing the number of children examined classified according to age and sex.

	No. examined.	years 12-13	years 13-14	years 14-15	years 15-16	years 16-17
SENIOR BOYS—						
Acton	23	...	20	3	...	...
Acton Wells	13	...	11	2	...	...
Beaumont Park ...	97	...	78	19	...	...
Central	44	...	21	23	...	...
Priory	62	1	55	6	...	...
South Acton	59	...	51	7	...	1
Southfield Road ...	49	...	37	12	...	...
Turnham Green (R. C.) ...	11	...	8	3	..	...
	358	1	281	75	...	1
SENIOR GIRLS— ...						
Acton	15	...	14	1	...	...
Acton Wells ...	1	...	1	...	...	...
Beaumont Park ...	41	...	27	14	...	...
Central	43	...	20	22	...	1
Priory	31	...	31	...	...	...
South Acton	38	...	30	8	...	..
Southfield Road ...	50	1	34	13	1	1
Turnham Green (R. C.) ...	10	..	8	2	...	...
	229	1	165	60	1	2

	No. examined.	Years of age.. years 7-8	years 8-9	years 9-10
JUNIOR SCHOOLS—				
Central Male... ...	35	3	24	8
Central Female ...	42	2	36	4
Southfield Road Male ...	33	...	30	3
Southfield Road Female...	38	...	28	10
South Acton Male ...	78	2	71	5
South Acton Female ...	85	...	79	6
	311	7	268	36

TABLE 2—*continued.*

	No. examined	Years of age.								
		3	4	5	6	7	8	9	10	11-12
INFANTS (MALE)—										
Acton	30	...	14	12	4	...	...	...	...	...
Acton Wells	34	4	13	12	5	...	...	...	...	...
Beaumont Park ...	70	...	9	42	13	6	...	...	...	...
Central	99	8	29	27	24	9	1	1	...	...
East Acton	12	...	6	1	1	...	3	...	...	1
Priory	89	3	29	37	14	6	...	...	...	...
Rothschild Road ...	48	...	1	31	6	6	4	...	...	...
South Acton	120	9	56	37	16	2	...	...	...	...
Southfield Road ...	91	...	...	58	20	11	2	...	...	...
Turnham Green (R. C. ...	24	1	4	11	4	4	...	...	...	...
	617	25	161	268	107	44	10	1	...	1
INFANTS (FEMALE)—										
Acton	32	...	7	17	5	3	...	...	...	...
Acton Wells	39	6	17	11	5	...	...	...	...	...
Beaumont Park ...	61	...	10	39	7	5	...	...	...	..
Central	94	8	25	26	26	5	4	...	...	...
East Acton	14	1	3	3	3	...	...	2	2	...
Priory	88	4	26	33	15	10	...	...	...	...
Rothschild Road ...	46	...	...	28	10	4	4	...	...	...
South Acton	141	14	52	32	19	24	...	...	...	...
Southfield Road ...	104	...	...	65	24	13	2	...	...	...
Turnham Green (R. C.) ...	14	...	1	7	3	3	...	...	...	...
	633	33	141	261	117	67	10	2	2	...

TABLE 3. Giving the number of children examined in each school, together with the conditions found on examination.

SENIOR BOYS	No. Examined	Nutrition			Clothing		Cleanliness			Verminous		Teeth			Enlarged Tonsils	Adenoids	Enlarged Glands	
		A	B	C	Average	Below Average	A	B	C	Head	Body	In faulty Position.	Carious.	Perfect.			Sub-maxillary	Cervical
Acton	23	18	5	...	23	...	22	1	...	...	..	...	3	6	3	1	...	3
Acton Wells	13	12	1	...	11	2	13	...	...	...	...	...	3	5	...	...	...	...
Beaumont Park	97	80	6	11	80	17	96	...	1	...	1	...	4	45	13	2	...	8
Central	44	35	9	...	44	...	44	..	...	...	...	..	4	24	8	..	...	1
Priory	62	54	4	4	52	10	58	3	1	...	...	...	6	17	13	2	...	8
South Acton	59	40	14	5	43	16	55	3	1	1	...	...	8	12	12	1	...	9
Southfield Road	49	40	9	...	45	4	46	...	3	...	...	...	10	14	12	5	...	10
Turnham Green R.C. ..	11	10	1	...	11	...	11	...	...	...	...	...	3	3	1	...	...	1
Totals	358	288	49	20	308	49	344	7	6	1	1	...	41	126	62	11	..	40
SENIOR GIRLS.																		
Acton	15	14	1	...	15	...	14	1	...	...	...	...	2	...	2	...	...	1
Acton Wells	1	1	...	...	1	...	1	..	..	...	...	...	...	...	...	...	...	...
Beaumont Park	41	36	4	1	36	5	34	7	...	4	...	...	3	1	8	1	...	1
Central	43	40	2	1	43	...	43	...	...	2	...	1	2	3	2	...	...	...
Priory	31	17	12	2	22	9	22	7	2	6	...	...	3	3	4	1	...	1
South Acton	38	16	17	5	32	6	20	14	4	5	...	2	5	3	9	2	...	2
Southfield Road	50	46	4	...	50	...	45	5	...	1	...	2	4	11	5	1	1	1
Turnham Green R.C. ..	10	4	6	..	6	4	6	3	1	2	...	..	...	1	...	...	...	2
Totals	229	174	46	9	205	24	185	37	7	20	...	5	19	22	30	5	1	8
JUNIOR SCHOOLS (8 yrs.)																		
South Acton Girls ..	85	34	45	6	76	9	31	35	19	19	...	...	5	1	14	2	1	6
South Acton Boys ..	78	25	44	9	62	16	41	31	6	1	...	..	10	9	12	7	3	4
Central Junior Girls ...	42	37	5	...	42	...	42	...	...	...	...	3	8	1	8	2	...	1
Central Junior Boys ...	35	31	4	...	35	...	35	...	...	...	...	..	3	4	3	5	...	1
Southfield Road Girls ...	38	34	3	1	37	1	33	3	2	1	...	1	4	4	3	3	...	2
Southfield Road Boys ...	33	29	3	1	33	...	30	2	1	...	...	1	2	3	6	2	..	...
Totals ...	311	190	104	17	285	26	212	71	28	21	...	5	32	22	46	21	4	14

TABLE 3—*continued.*

	External Eye Disease	Defective Vision	Squint	Defective Hearing	Ear Disease	Defective Speech	Mental Condition	Heart Disease	Lung Disease	Tuberculosis	Rickets	Skin Disease	Anaemia	Polypus of Nose	Deformities, Spinal Disease, etc.	Other Diseases, and defects	Infectious or Contagious Diseases
SENIOR BOYS (*continued*).																	
Acton	...	4	...	1	...	1	...	2	1		2	..	...	..	...	1	...
Acton Wells	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Beaumont Park	...	11	2	7	1	1	...	4	10	2	1	...	...	...	...	3	...
Central	...	3	...	...	1	1	...	2	1	...	...	...	...	...	...	1	...
Priory	4	13	...	2	1	1	..	1	2	2	...	...	...	...	...	1	1
South Acton	.	8	...	4	2	...	...	3	4	2	2	...	...	...	1	...	...
Southfield Road	...	4	...	3	1	...	...	...	...	..	2	...	..	1	2	1	...
Turnham Green R.C.	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...
Totals	5	44	2	18	6	4		12	19	6	7	...	...	1	3	8	1
SENIOR GIRLS (*continued*).																	
Acton	1	1	...	1	1	...	...	2	...	...	...	...	...	...	...	2	...
Acton Wells	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Beaumont Park	1	7	...	1	...	...	...	2	1	...	..	...	...	...	...	2	...
Central	..	4	...	3	...	...	...	2	...	...	...	...	...	...	...	1	...
Priory	1	7	...	3	1	...	...	2	1	...	..	2	...	1	1	...	...
South Acton	2	6	...	3	...	...	1	1	...	1	...	1	...	...	...	...	...
Southfield Road	...	2	...	4	...	...	...	2	...	...	..	2	2	...	...	2	...
Turnham Green R.C.	...	2	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...
Totals	5	29	...	15	2	...	1	13	2	1	...	5	2	1	1	7	...
JUNIOR SCHOOLS (8 yrs.) (*continued*).																	
South Acton Girls	...	4	2	3	...	1	..	2	...	...	...	1	1	...	..	...	1
South Acton Boys	2	6	...	3	2	...	...	1	2	...	7	3	...	...	1	1	...
Central Junior Girls	2	1	...	...	...	...	...	1	...	1	...	...	1	...	1	3	...
Central Junior Boys	3	1	...	...	...	...		...	...	...	...	...	1	...	...	1	...
Southfield Road Girls	1	4	..	...	1	...	...	2	1	...	...	...	2	...	1	...	...
Southfield Road Boys	...	2	1	...	...	...	...	2	...	...	...	...	...	...	...	3	...
Totals	8	18	3	6	3	1	..	8	3	1	7	4	5	...	3	8	1

TABLE 3—*continued.*

INFANTS.	No. examined	Nutrition			Clothing			Cleanliness			Verminous		Carious Teeth	Perfect Teeth	Teeth in faulty position	Enlarged Tonsils	Adenoids	Enlarged Glands.	
		A	B	C	Over-Clothing	Average	Below Average	A	B	C	Head	Body						Sub-maxillary	Cervical
Acton (Boys)...	30	23	5	2	...	28	2	26	3	1	...	...	...	2	...	6	5	1	3
,, (Girls)	32	26	5	1	1	31	...	25	6	1	5	...	2	...	1	3	3	...	2
Acton Wells (Boys) ..	34	27	7	1	...	29	5	30	4	...	...	...	...	...	...	...	...	...	...
,, (Girls) ..	39	33	5	1	...	37	2	34	5	...	3	...	...	...	...	...	...	...	...
Beaumont Park (Boys) ..	70	50	15	5	...	62	8	55	10	5	...	1	6	...	...	7	6	...	7
,, (Girls) ..	61	45	12	4	2	52	7	48	6	7	8	2	5	...	...	2	1	1	2
Central (Boys) ..	99	90	9	...	2	93	4	94	5	...	1	...	12	2	1	10	8	...	9
,, (Girls) ..	94	88	6	...	...	92	2	85	8	1	6	...	8	...	...	6	...	...	4
East Acton (Boys) ..	12	5	7	...	...	11	1	6	5	1	1	...	2	...	...	3	1	...	1
,, (Girls) ..	14	9	4	1	...	13	1	13	...	1	1	...	...	1	...	4	...	...	...
Priory (Boys) ..	89	53	34	2	1	77	11	61	24	4	2	...	4	...	...	11	6	4	11
,, (Girls) ..	88	63	24	1	3	82	3	65	18	5	8	1	6	...	...	10	2	4	3
Rothschild Road (Boys) ..	48	42	6	...	...	46	2	44	2	2	...	...	1	...	2	4	7	...	4
,, (Girls)	46	41	5	...	...	45	1	40	4	2	6	3	1	2	2	4	1	...	1
South Acton (Boys) ..	120	80	33	7	2	98	20	84	24	12	5	1	5	5	...	5	...	4	13
,, (Girls) ..	141	98	39	4	3	111	27	100	21	20	24	4	7	1	1	5	4	1	2
Southfield Road (Boys) ..	91	81	9	1	1	86	4	84	5	2	1	...	13	2	2	10	7	...	5
,, (Girls) ..	104	93	9	2	1	102	1	95	8	1	2	...	8	1	3	5	2	...	7
Turnham Green R C (Boys)	24	12	10	2	...	18	6	15	5	4	2	1	2	...	...	1	1	3	2
,, (Girls)	14	7	7	...	...	12	2	9	3	2	2	1	1	...	1	...	...	3	...
Totals	1250	965	251	34	16	112	109	1013	166	71	77	14	83	16	13	96	54	21	76

TABLE 3—*continued.*

INFANTS *(continued).*	External Eye Disease	Defective Vision	Ear Disease	Defective Hearing	Defective Speech	Mental Condition	Heart Disease	Lung Disease	Tuberculosis	Rickets	Anæmia.	Skin Disease.	Deformities, Spinal Disease, &c.	Infectious or Contagious Disease	Other Diseases and Defects
Acton (Boys)	...	...	...	1	1	...	...	4	1	...	1	2	...	...	...
,, (Girls)... ...	1	1	..	1	...	2	1	5	...	1	2	2	...	...	1
Acton Wells (Boys) ...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...
,, (Girls) ...	...	...		...	...	...	...	...	...	...	...	...	...	...	...
Beaumont Park (Boys) ...	1	...	1	...	1	...	2	7	...	6	3	2	...	...	3
,, (Girls) ...	3	2	...	2	...	...	1	4	1	2	3	1	...	2	4
Central (Boys) ...	3	...	...	...	...	..	1	1	...	4	6	1	1	...	6
,, (Girls) ...	2	2	...	1	2	...	2	2	...	1	...	1	...	...	...
East Acton (Boys) ..	...	..	...	...	...	...	...	...	...	2	1	1	1	1	...
,, (Girls) ..	2	...	...	...	...	...	...	...	1	...	2	...	...	...	...
Priory (Boys)... ...	2	...	2	2	1	2	2	2	1	11	4	1	2	...	2
,, (Girls)... ...	2	...	1	...	...	...	1	3	...	...	1	1	1	1	1
Rothschild Road (Boys) ...	1	1	..	1	...	...	...	3	...	2	2	3	1	1	1
,, (Girls) ...	2	..	2	...	...	...	...	...	...	...	...	1	1	1	1
South Acton (Boys) ...	6	1	3	...	...	1	2	7	2	7	5	4	...	1	3
,, (Girls) ..	10	3	2	1	...	1	1	9	2	7	3	4	2	2	3
Southfield Road (Boys) ...	2	3	1	...	...	...	3	2	1	4	4	2	...	2	1
,, (Girls) ...	1	2	...	...	1	...	2	3	...	1	1	2	1	...	6
Turnham Green R.C. (Boys)	...	1	...	...	...	...	..	2	..	2	...	2	...	...	...
,, (Girls)	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Totals	38	16	12	9	6	6	18	54	9	50	39	30	10	11	32

Special Examination.

In addition to the foregoing numbers, 1,316 children have been examined who were kept apart by the teachers, and 22 were examined for special schools.

Eye Disease and Vision.

During 1911 refraction work has been carried out by the School Oculist, Mrs. Marshall Banham, M.B. The examination is carried out at the Priory Offices, in a room specially fitted for this purpose; and the arrangements for this branch of medical inspection are most satisfactory.

All cases are first examined by the S.M.O., and selected ones are sent to the School Oculist, who reports on the treatment required. Various cases of external eye disease are treated by the School Nurse, under the supervision of the S.M.O., and much improvement results in neglected cases, though sometimes the gain is not lasting, as parents take little interest in a complaint of long standing which needs constant attention to effect a cure.

In last year's report, the scheme for examination of eyesight was explained, but it may be pointed out that in practice there are many obstacles to be overcome before suitable glasses are provided and worn by the children.

The objection to spectacles is most marked in the poorer parts of the district. Parents do not realise, when a child is young, that a neglected squint will probably lead to blindness in that eye later in life, and a warning that spectacles are required is often met with a refusal "to have the eye tampered with."

Again, notices are served calling attention to the fact that the atropine ointment necessary in refraction cases will appear to temporarily affect the sight, and asking for the parents' consent to the treatment before its commencement. The ointment is applied in school by the School Nurse for four days before the child sees the Oculist. It is quite common for no objection to be raised for two or three days, and then the parents send a note

saying that, as the child's eyes are no better, they refuse to have ointment further applied. Thus, a whole week's work may be wasted, as visits to the house paid by the S.M.O. or Nurse may fail to find the parents at home, so still further explanation is impossible. If the parents are seen, an unwilling consent is obtained, coupled with the information that one or both parents are "much against the wearing of spectacles." On one occasion the parents changed their minds twice during a day as to permission to continue interrupted treatment. In another case, where the child had been treated the full number of times and failed to appear before the Oculist, it was found that the father (who was a coster) had taken the child with him that afternoon for a ride on his barrow. It is possible that this was not intentional, but at any rate it shows a lamentable ignorance of the value of the Oculist's work.

Among better-class parents there is a tendency to prefer gold-rimmed spectacles, obtained from an optician, to the plainer variety, with accurate lenses, supplied after examination by an Oculist. Perhaps the risk run is not fully understood, but opticians are not legally entitled to use mydriatics, and many cases of astigmatism can only be properly tested where the eye muscles of accommodation have been thrown out of action by atropine.

The following case illustrates the difficulties of administration.

In 1909, a child, D. S. (in a Junior Department), was found suffering from defective sight and advised to procure glasses. A hospital letter was given for treatment at a special eye hospital, and the mother promised to take the child, but always failed to keep her word. Seventeen visits were paid by the School Nurse, much pressure was brought to bear by the Head Teacher, but the mother would neither return the hospital letter nor avail herself of its benefits, though always promising to do so. In May, 1911, D. S. obtained glasses, and it was reasonable to suppose that these had come from the eye hospital. In December, 1911, when the S.M.O. was visiting a school, D. S. (now in the Senior

Department) was brought forward as a case of defective eyesight. She was then wearing no spectacles, and stated that the glasses obtained did not suit her. On enquiry, it was found these glasses had been obtained from an optician, and not through the hospital letter provided. Finally, D. S. was brought up to the S.M.O., with a message from the optician, who had been again visited, to say that "the girl's sight was very bad, and the school doctor had better see to it."

D. S. is now in the hands of the School Oculist.

The payment of spectacles in necessitous cases is provided for by a grant of £50 made by the Urban District Council for this purpose. An attempt is always made to obtain some contribution from the parents, as it is found that more care is taken of the glasses under these circumstances. After a prescription is received from the Oculist, the glasses are supplied, and the School Attendance Officers collect payment in small instalments. This is often a tedious business; for instance, in two cases visits were paid for over three months in order to collect the sum of 3s. in each case.

During the past year 198 children were examined by the Oculist. They paid 345 visits, 93 prescriptions for spectacles were given, and spectacles were obtained in 90 cases.

A detailed account of the cases seen is shown in the following table:—

	Cases.
Refractions performed	106
Hypermetropic astigmatism	80
Strabismus	38
Hypermetropia	15
Corneal nebulæ	12
Myopic astigmatism	12
Phlyctenular conjunctivitis	9
Mixed astigmatism	8
Blepharitis	8
Conjunctivitis	6

	Cases.
Myopia	5
Progressive myopia	2
Habit spasm	2
Cataract	2
Malingering	2
Trachoma	1
Nystagmus	1
Purulent conjunctivitis	1
Ptosis	1
Directions given	31

Besides this number, many other cases of eye disease are seen during the year by the S.M.O. of those children who are not in a position to necessitate their being seen by the School Oculist. These are referred to their own doctor for treatment, or simple directions are given according to the needs of each case.

Teeth.

As mentioned in former reports, an arbitrary standard has to be observed, and in the school tables only those children who have four or more carious teeth are included under the heading of defective teeth. Again, the examination by the S.M.O. is necessarily a superficial one, and only obvious dental caries is recorded. It is probable that a qualified dentist, on thorough examination, would find in apparently sound teeth, commencing caries which has been undetected by the school doctor.

At present no definite scheme for the removal or stopping of carious teeth is in force in the district. Children with badly-decayed teeth are given dental letters to a hospital, if the parents show willingness to co-operate in the treatment and there seems good reason to believe that their promises will be fulfilled.

The necessity for the use of a toothbrush, especially at night, is pointed out by the S.M.O. to those mothers who attend the inspection of their children, and many parents promise to see

that the treatment is carried out; also the importance of dental hygiene is emphasized by the teachers or by the S.M.O. in many of the schools.

It is noticeable that the best and the worst sets of teeth are found in the poorer schools of the district. This is probably due to the coarser food given during early life, which acts as a mechanical cleanser and develops the use of the jaw, whereas well-cooked food requires less mastication and soft, starchy foods tend to collect round the bases of the teeth and cause decay.

On the other hand, if Nature's supply has proved faulty in the poorer schools, no attempt has been made to check commencing caries, and this leads to enlarged cervical glands from septic absorption, malnutrition and impaired general health.

In a certain number of cases the second set of teeth are found to be in faulty position owing to the late shedding of the primary set and failure to secure early dental treatment.

In some parts of the country, toothbrush drill is a feature of the school work, or "toothbrush clubs" have been established where children are supplied with brushes and powder at very cheap rates. In Bedfordshire, a private philanthropist instituted an ingenious scheme of competition in the care of the teeth.

Prizes were given for the most perfect teeth: the children were classified in four age-groups, with three prizes for each age-groups. The entrance fee for the competition was 1½d., in return for which each competitor received a toothbrush and box of tooth powder, the two costing 5d. bought wholesale.

All these methods of inducing care of the teeth are a great attraction, while they have the merit of novelty, and probably some children continue the good habits formed at school into later life.

Ringworm.

In the Annual Report for 1911, it was mentioned that a scheme was in progress for treating certain cases of Ringworm with the X-rays.

Dr. Arthur, of Ealing, formerly Radiographer to the West London Hospital, agreed to treat selected cases sent from Acton for the sum of £10 per annum, as this was the amount sanctioned by the Council.

It happened that during 1911 there was a considerable increase in the amount of ringworm existing in the district. This is partly due to the etiology of the disease, as it is known to become almost epidemic at intervals; and another source of infection lies in the shifting nature of the population. It is, unfortunately, not uncommon to receive fresh families into the district, where three or four children of varying ages are all suffering with ringworm, and these provide active foci of infection.

In July, 1911, Dr. Arthur pointed out that the number of cases was so great that it was impossible to carry on the work at the existing rate of remuneration; as only severe cases were selected, a prolonged exposure to X-rays was necessary, requiring considerable time and expenditure of material. Moreover, in one instance, a child was unruly, and broke an expensive piece of apparatus.

A fresh arrangement was therefore made and sanctioned, by which children are treated at the rate of 10s. 6d. per case, and to meet the increased cost of the treatment the charge of 2s. 6d. to the parents has been raised to 5s. where parents can afford to pay this sum.

During the past year, 33 cases have received this treatment, and in every case the treatment has been completely successful.

It has been found of great value, as no other method results in such speedy return to school.

The working details of the scheme are as follows:—

Suitable cases are brought for inspection to the S.M.O., who interviews the parents and explains the nature of the treatment.

The following paper is then signed by the parent:—

Name..... Address..... .....

School . ...

To the School Medical Officer,

I agree that my child.....
shall be electrically treated by X-rays for ringworm of the head.

Signed..... Date.....

A card is given bearing the child's name and making a special appointment with the Radiographer for one of two days during the week. Treatment is carried out at his private residence, and after treatment the child again visits the Radiographer, for him to see the progress of the case, and each scholar is finally seen by the S.M.O. before re-admission to school.

The difficulty of school attendance before the new hair has grown is overcome by the child wearing a linen cap in school.

So far, this scheme is producing excellent results, but its practical working needs much time and patience. Often, several interviews with parents are required before they are persuaded of the advantages of the eletrical treatment, and many amusing objections are raised, such as, "The child's brain will become like a rabbit's," or, "A neighbour says the electricity will damage the sight."

The greatest difficulty to overcome is the obstinacy of the parent who "doesn't hold with X-rays," without any particular reason for his opinion.

It may be mentioned that no cases are sent when under treatment by a practitioner, unless by his request or at the definite request of the parents, and in all instances the slight risk or difficulty with the growth of hair after X-rays is carefully explained to each parent by the S.M.O. No cases of baldness or thinness of hair have at present occurred in this district.

It is necessary to have the signature of each parent in agreement to the electrical treatment, as occasionally attempts are made to repudiate any obligation when the School Attendance Officers collect the parents' contributions for treatment.

The electrical method is increasing in popularity. Parents who delayed early treatment regret their wasted time, and "wish it had been done earlier."

It is not uncommon to find children absent for between one to two years where drug treatment is irregularly applied. The longest case in the district has been suffering from ringworm for nearly four years, though in fairly regular attendance at a hospital.

All the slighter cases of ringworm, or those in which the body is involved, are also seen by the S.M.O. and kept under close observation. Microscopical examination for spores is carried out in all necessary cases, and the School Nurse does excellent work in treating cases of ringworm of the body where the mothers go out to work and it has been impossible to get treatment regularly applied.

Possibly the spread of ringworm will decrease when the popular round wool caps are no longer in fashion, as these caps become infected with short broken hairs, and a fresh portion of the scalp may be daily infected as the caps are adjusted in a new position.

Tuberculosis.

All cases supposed to be tuberculous in origin are brought for the inspection of the S.M.O., and efforts are made to provide treatment for the cases which are definitely tuberculous or in the pre-tubercular stage.

Suitable cases of phthisis are treated at Northwood Sanatorium where the Council maintains two beds. During 1911 four cases occurring among school children were recommended for admission at the Sanatorium.

Those cases which present no definite physical signs, but appear obviously delicate, often with a history of tuberculosis in the family, are referred to the Acton Central Aid Society.

Through the kindness of this Society, five cases recommended by the S.M.O. were boarded out at the seaside, or in the country, for two or three months, and again medically examined on their return. In all these cases, a considerable gain in weight and improvement in physical condition resulted from this treatment.

During June, 1911, the S.M.O. specially examined 30 children who were submitted by teachers as needing treatment at convalescent homes. Six of these were recommended for convalescent treatment, and five needed a country holiday. It is noticeable that a large number of cases are brought forward by parents for "consumptive chests" in whom no signs of disease are present, though the thoracic development may be poor, owing to the presence of adenoids or some local disorder.

Arrangements made for children with tuberculous joint disease are given in the report on physically-defective children.

TABLE 4.

NUMBER OF CHILDREN REFERRED FOR FURTHER EXAMINATION.

These were from the following schools:—

	Infants.	Girls.	Boys.	Junior.
Acton	19	2	2	—
Acton Wells	4	—	1	—
Beaumont Park	17	7	20	—
Central	13	2	5	19
East Acton	5	—	—	—
Priory	18	9	14	—
Rothschild Road	20	—	—	—
South Acton	63	21	21	15
Southfield Road	36	6	8	12
Turnham Green (R.C.) ...	4	—	5	—
	199	47	76	46

TABLE 5.

AVERAGE HEIGHT, WITHOUT SHOES, AND AVERAGE WEIGHT, WITHOUT CLOTHES,

ANTHOPOMETRIC COMMITTEE, 1883.

	MALES.		FEMALES.	
Age last Birthday.	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	12-13		13-14		14-15		15-16		16-17	
		Height	Weight	Height	Weight	Height	Weight	Height	Weight	Height	Weight
SENIOR BOYS.											
Acton	23	...	...	58·9	83·5	60·2	102·5	...	...	...	...
Acton Wells ...	13	...	...	57·6	82.7	62·0	101.5	...	...	..	...
Beaumont Park ...	97	...	...	55·4	77·3	56·6	78·9	...	...	...	...
Central	44	...	...	59·0	89·6	59·1	89·0	...	...	...	...
Priory	62	60·5	91·5	57·3	78·3	58·6	91·2	...	...	...	...
Southfield Road ...	49	...	...	59·4	92·3	61·0	95 4	...	...	...	...
South Acton ...	59	...	...	56·4	77·2	59·3	88·1	...	...	57·0	80·5
Turnham Green R.C.	11	...	...	57·3	85.8	59·3	94·2	...	...	...	...
Total	358										
SENIOR GIRLS.											
Acton	15	...	...	61·2	93·9	59·0	78·0	...	...	...	...
Acton Wells ...	1	...	...	63·0	107·0	...	...	...	...	...	...
Beaumont Park ...	41	...	...	59·5	86·8	61·0	96 6	...	...	...	...
Central	43	...	...	60·5	100·3	60·7	99·4	...	...	60.5	119
Priory	31	...	...	56·1	83·8	...	...	...	...	...	...
Southfield Road ...	50	61·5	96·0	60·6	92·9	69·7	98 5	62 0	87·5	59·0	83.0
South Acton ...	38	...	...	57·8	84·3	57·9	76 9	...	...	...	...
Turnham Green R.C.	10	...	...	59·2	89·1	61·7	92·2	...	...	...	...
Total	229										

	No. examined	7-8		8-9		9-10	
		Height	Weight	Height	Weight	Height	Weight
JUNIOR SCHOOLS.							
Central Male ...	35	50·0	56·3	50 9	57·3	52.2	58 5
,, Female ...	42	48·7	51·2	49·8	53·2	68.5	78.7
Southfield Road Male	33	...	...	49·1	55·9	51.7	59·7
,, Female	38	...	...	49·8	54·2	50.6	55·4
South Acton Male ...	78	45·7	47·0	48·0	50·9	48 2	52·6
South Acton Female...	85	...	...	47·6	49·0	47·1	50 9
	311						

TABLE 6—*continued.*

	No. of Scholars exam'd.	Years of Age.																	
		3-4		4-5		5-6		6-7		7-8		8-9		9-10		10-11		11-12	
		H.	W.	H.	W.	H.	W.	H.	W.	H.	W.	H.	W.	H.	W.	H.	W.	H.	W.
INFANTS (MALE).																			
Acton	30	...	...	41·3	38·5	42·9	39·5	44·7	44·0	...	...	...	...	...	...	..	..	...	..
Acton Wells	34	37·7	31·2	40·1	38·5	41·8	38·3	43·6	43·4	...	...	...	...	...	...	...	...	...	...
Beaumont Park ...	70	...	...	38·7	37·0	41·8	40·1	43·6	44·5	46·2	50·2		...	...	...	...	...	...	...
Central	99	35·3	38·0	41·3	40·9	42·6	42·2	45·5	46·4	47·9	50·1	50·0	54·0	...	...	...	...	...	...
East Acton	12	...	...	38·4	36·5	44·0	44·0	46·5	47.0	...	...	49·7	61·8	...	...	...	...	52.5	67.5
Priory	89	39·0	37·2	39·2	35·8	42·0	39·6	43·5	41·5	47·5	49·6	...	...	...	...	..	...	...	...
Rothschild Road ...	48	...	...	41·5	38·5	42·9	41·9	43·5	43·7	46·8	48·8	44·2	44·1	...	...	...	...	...	...
South Acton	120	37·9	36·3	39·1	35·6	41·4	39·1	42·6	41·3	43.2	43·2		...	...	...	...	..	...	...
Southfield Road ...	91	...	...	...	..	42·7	40·8	44·4	43·2	45·0	45·6	48·2	50·5	...	.	...	...	...	...
Turnham Green R.C. ...	24	...	...	41·5	42·9	40·1	36·1	45·5	46·4	44·0	42·4	...	...	...	...	..	...	...	...
Total	617																		
INFANTS (FEMALE).																			
Acton	32	...	...	40·6	36·3	42·9	40·9	45·4	43·5	44·7	41.5	...	...	...	...	...	...	...	...
Acton Wells	39	36·4	32·2	40·2	38·5	42·0	40·4	44·4	46·1	...	...	...	...	...	...	...	...	...	...
Beaumont Park ...	61	...	...	37·8	35·7	41·6	39·8	44·3	43·1	45·0	45·2	...	...	...	...	...	...	...	...
Central	94	38·1	35·5	40·2	37·7	43·4	41·9	44·7	45·0	44.6	44·7	48·0	53·2	..	...	...	...	..	...
East Acton	14	...	...	39·7	35·7	41·5	42·2	42·2	43·5	...	...	...	...	48.5	54·2	50·0	55.7	..	...
Priory	88	36·5	32·7	39·3	36·6	42·0	39·0	44·8	43·9	46·0	44·1	...	...	...	...	...	...	...	...
Rothschild Road ...	46	...	...	...	...	42·2	39·6	44·1	42·6	46·9	45·9	47·0	50·1	...	...	...	...	...	...
South Acton	141	37·1	32·5	38·9	35·3	44·2	40·5	42·6	40·1	45·7	45·6	...	...	..	...	...	..	...	...
Southfield Road ...	104	...	...	...	...	42·5	39·8	45·3	45·3	45·4	45·7	44·5	41·7	...	...	..	...	...	...
Turnham Green R.C. ...	14	...	...	...	...	41·9	41·8	44·0	45·0	45·0	44·5	...	...	...	...	...	...	...	...
Total	633																		

Nutrition.

During the summer months of 1911, the examination of children who were eight years of age was commenced. The work was undertaken at this season of the year in order to detect cases of malnutrition or early disease which would specially benefit by a country holiday, and the names of these children were added to the list kept by the teachers to be forwarded to the organisers of the Country Holiday Fund.

It will be generally agreed that malnutrition may be due to many causes, among which poverty, improper feeding, and the economic conditions of the district must be considered.

In order to find out in some degree the relative importance of these factors, a comparison was made between the children attending the Central and Southfield Road Schools with those in the South Acton district. The numbers examined are too small to draw very definite conclusions, but from the figures given below it will be seen that the scholars of eight years of age attending South Acton School show a lower average in height and weight than those from the other schools in the district examined at the same age period. It is interesting to note how closely the figures showing heights and weights from the Central and Southfield Road Schools correspond, and this might be expected, as the children attending these schools are derived from homes where conditions of housing, food supply and parental care are very similar.

Juuior Schools.	No. of children aged 8 examined.	Height in inches.	Weight in lbs.
South Acton Boys ...	78	48	50·9
,, ,, Girls ...	79	47·6	49
Southfield Road Boys ...	33	49·1	55.9
,, ,, Girls ...	38	49·8	54·2
Central Junior Boys ...	35	50·9	57·3
,, ,, Girls ...	42	49·8	53·2

It is probable that the actual difference is even greater than that shown by statistics, as the South Acton figures are often raised by the presence of heavy, large-boned children, whose

parents are of the agricultural type, and who have drifted into town in search of higher wages. These children may be reared in poverty, but for one generation the effects of town life are not sufficiently marked to lower their physique. As contrasted with these, in the other schools the children are often derived from homes where the parents come from generations of town dwellers, where small incomes do not permit of a sufficient holiday in the summer, and where there are no relatives living in the country to whom the children can be sent for a change of air. These children are intelligent, but their height and weight are smaller than those of the country type, and they seem specially prone to glandular overgrowth, enlarged tonsils or adenoids, which retard their later development.

In former reports we have laid stress on the factors of improper and unsuitable feeding as a cause of malnutrition, and under the economic conditions of the district it is hard to find a remedy for this. As so many of the women are engaged in laundry work, they have no time to prepare a proper meal in the middle of the day, and often the mothers do not return home until evening. On questioning the children, we find they are given slices of bread and butter for a mid-day meal, or we are told, "We hots something up for ourselves"—an answer given by a diminutive member of a large family.

An alternative to this is that the children are given coppers to buy food, and then the diet selected is more remarkable than nutritious, and the habit thus formed of passing over plain, wholesome food clings to the children through later life.

On enquiry in the poorer parts of Acton, it is found that the principal meal of the day is supper, held at varying hours, but usually far too late for children. This is unsuitable from many hygienic reasons. The children eat a heavy meal before bed-time, which leads to indigestion, disordered sleep and night terrors; their sleep is often taken in rooms heavy with the smell of cooking and ill ventilated (for the gospel of the window open at night as well as day is not yet sufficiently preached), and with

the bustle of family life the children get far too short hours for sleep.

When morning comes the children are pale, with dark circles under their eyes, and have no appetite for breakfast. It is under such conditions that the scholars begin their educational day, and it is doubtful whether the burden falls heavier on the teachers or the pupil.

The evidence of insufficient sleep is not confined to the working-class homes, for the need of at least ten hours' sleep is not always understood by parents, and over-excitable, intelligent children need more than this amount.

A few cases of mal-nutrition associated with heart-strain occur in children who are engaged in some occupation besides their school work. These cases are mostly found among the boys leaving school where they are employed to run errands on Saturdays, or to deliver papers or milk in the mornings before attending school. Here insufficient sleep and poverty (which makes the scanty earnings of these children a necessity), are associated factors in contributing to the mal-nutrition, besides the additional labour involved to the child.

It is interesting to note that cases of heart-strain are much fewer since the Employment of Children Act, 1903, has come into force in this district.

Occasionally, mal-nutrition may be due to some local cause, such as decayed teeth. The presence of many carious teeth either prevents the child from masticating its food, or, if the mouth is in a septic and unhealthy condition, the food material is swallowed with products of decomposition which are harmful to digestion, and produce a slow poisoning of the body.

The mothers who attend the medical inspection of their children sometimes complain that they have difficulty in getting the children to eat. On examination in several cases it was found

that these children had extensive dental caries, so that the nerves of the teeth were exposed.

The children probably discovered that eating was always associated with toothache; to avoid pain, the affected side of the mouth would be used as little as possible, and in this way the food which collects undisturbed around the teeth still further aids the process of decay.

In many cases the removal of enlarged tonsils and adenoids is followed by remarkable improvement in the nutrition of the child, owing to the increased power of respiration and better oxygenation of the blood.

Provision of Meals.

The Provision of Meals Act, 1906, is put in force in this district for those children who are under-nourished, and where poverty appears to be the cause of the mal-nutrition.

Meals are provided at a restaurant in Osborne Road, South Acton, and the dinners are supplied at a cost of 2½d. per head.

During the year 1911, 9217 dinners have been supplied to 257 children, at a total cost of £89 2s. 7½d.

The following shows the weekly menu of dinners supplied to the children:—

Monday.	Soup and bread, currant roll.
Tuesday.	Stewed meat and cabbage and potatoes.
Wednesday.	Soup and bread, plain suet pudding with syrup.
Thursday.	Irish stew and potatoes, plain pudding.
Friday.	Soup and bread, rice pudding.
Saturday.	Stewed meat and two vegetables.

The S.M.O. endeavours to keep in touch with this branch of the work in the district.

The selection of children is made from suitable cases of insufficient nutrition observed in the course of medical inspection, whether routine inspection or as special cases brought forward by the teachers.

Records of these children are kept in most of the schools, and their monthly weights are taken, so that the effect of the Authority's dinners can be observed.

Other selections are made at the suggestion of the teachers or School Nurse, and in some instances on the application of the parents.

Careful inquiries are made by the Attendance Officers into the circumstances of the families receiving benefits, and records are kept. One condition of granting meals is that the parents must be out of work, and if false evidence be given the parents are prosecuted, and the cost of the dinners recovered.

The S.M.O. visits the dinner centre to test the satisfactory working of the scheme.

The hygienic conditions of the centre are observed, also the quality and quantity of the food provided, and surprise visits are paid to ascertain that the menu is being followed. While watching the children at dinner, any specially-delicate children are noticed and their names and addresses are taken. These children are subsequently medically examined, and, if necessary, provision is made for them to obtain a country holiday through the help of the Central Aid Society.

On the whole, the scheme is working fairly well, though the conditions of service are not ideal, and the educational advantages of refined table manners cannot be insisted upon, as there are no lay helpers and the restaurant staff is hard-worked. In former reports we have drawn attention to this point, but it does not seem possible to obtain regular voluntary helpers to supervise the conduct of the children.

Arrangements by which the children were fed from a specially-organised centre could only be performed at greatly-increased expense. A point for consideration would be the arrangements of a scheme by which dinners were provided at cheap rates for those children where mal-nutrition appears the result of improper or unsuitable feeding, as, for instance, where the mothers go out to work and the children are given coppers to buy food at the middle of the day.

Dinners are provided throughout the school holidays in necessitous cases.

Following on the consent of the Board of Education, the School Nurse carried out the treatment of certain minor ailments in the schools.

During the year 1911, 895 visits were paid and 126 children were treated. The distribution of these cases and the diseases treated were as follows:—

SCHOOL.	Number of children treated.	DISEASES FROM WHICH CHILDREN WERE SUFFERING. Eye disease.	Blepharitis.	Ringworm.	Impetigo.
Acton Boys	2	2	...	..	...
„ Girls	4	4	...	...	...
„ Infants	3	1	1	2	...
Beaumont Park Boys ...	1	1	...	...	...
„ „ Girls ...	7	7	...	...	...
„ „ Infants ...	7	6	...	1	...
Central Senior	1	1	...	...	...
„ Junior	5	5	...	...	...
Priory Boys	10	6	...	4	...
„ Girls	11	11	...	...	...
„ Infants	18	13	...	4	1
Rothschild Road	6	4	2	...	...
Southfield Road Senior ...	1	1	...	...	...
„ „ Junior ...	7	7	...	...	...
South Acton Senior Boys ...	5	5	...	...	...
„ „ Junior Boys ...	12	10	1	...	1
„ „ Girls	15	15	...	...	...
„ „ Infants ...	8	6	...	1	...
Turnham Green R.C. ...	3	1	...	1	1
Totals ...	126	106	4	13	3

Visits Paid by School Nurse.

	N.-East.	N.-West.	S.-East.	S.-West.	Total.
Priory	77	96	37	137	347
Acton	15	48	1	25	90
Beaumont Park ...	...	2	180	220	402
South Acton ...	2	4	23	278	307
Rothschild Road ...	...	...	27	179	206
Acton Wells ...	144	...	...	1	145
Roman Catholic ...	...	1	5	11	17
Southfield Road ...	65	...	264	1	330
East Acton ...	72	...	1	...	73
Central	88	79	2	15	184
No School	2	...	1	1	4
Sirdar Road M.D. ...	1	...	...	...	1
Ackmar Road Special	..	...	...	1	1
Total ...	466	230	541	870	2107

Diseases.	N.-East.	N.-West	S.-East.	S.-West.	Total.
Diphtheria ...	2	1	1	...	4
Scarlet Fever ...	...	...	...	2	2
Measles	246	98	289	466	1099
Suspected Infectious Disease ...	6	1	5	1	13
Chicken Pox ...	33	13	12	47	105
Whooping Cough ...	12	3	37	19	71
Mumps	8	7	6	18	39
Sore Throat ...	8	6	9	10	33
Colds	6	5	11	6	28
Tonsilitis	15	6	23	17	61
Ringworm	27	25	40	66	158
Scabies	9	2	6	12	29
Eczema	10	9	3	5	27
Impetigo	17	12	16	47	92
Herpes	...	...	1	...	1
Influenza	2	...	...	1	3
Blepharitis ...	2	2	8	58	70
Discharging Ears ...	...	1	...	1	2
Psoriasis	1	...	...	...	1
Dirty heads ...	8	13	20	36	77
Miscellaneous ...	38	20	31	40	129
Measles contact ...	16	3	22	18	59
Urticaria	...	1	1	...	2
Jaundice	...	2	...	...	2
Total ...	466	230	541	870	2107

Clothing.

After carrying on the work of school inspection for four years and medically examining some thousands of children—an examination often hampered by difficulties in clothing—it seems fitting to draw attention to some of the defects found where faulty clothing is a prominent factor in poor physical development, and even minor deformities.

Insufficient Clothing.

Some children are found with insufficient clothing, but in justice to the teachers it may be remarked that most of these cases are already known to them, and that unsuitable home surroundings or thriftlessness seem the primary cause of this condition. On many occasions we have been impressed with the kindness of the teachers in providing or begging clothes from friends for the most neglected of their scholars.

It is often noticed thst the physical development of these children is remarkably good; this is partly due to the fact that their insufficient clothing leaves the lungs and chest free to expand and entails an increased amount of bodily exercise to keep warm. Also the doctrine of "survival of the fittest" plays some part, as the more delicate children probably succumb before reaching school age.

Overclothing.

It is far more common to find children burdened with an excess of clothing. Children who appear robust on entering the room are revealed as puny little objects when the many layers of clothing over their chests have been removed. It is not uncommon to find seven thick layers of clothing, three or four of them consisting of heavy cloth or flannel, tightly wrapped over the child's chest, while the innermost layer is of brown paper soaked in goose-grease, carbolic oil or some pungent ointment. We are told these children do not like play, and easily catch cold, to avoid which the anxious parent adds yet another layer.

It is not surprising that the children dislike games, as the weight of clothing is considerable, and the restricting effect on their arms and chest renders any movement difficult. When the skin is reached, it is found sodden with perspiration and the remains of the latest drug applied. This excess of clothing is largely confined to the upper part of the body, the lower part of the trunk and the legs having no close cover.

Some of these overburdened children wear short socks and sleeves even in the coldest weather.

It is rather difficult to persuade mothers to leave off superfluous clothing owing to their preconceived idea that the child is "weak in its lungs" (an idea not supported by medical evidence), though many consent to give up one layer of padding "to oblige the school doctor," and the task is easier now than when medical inspection was first instituted.

Unsuitable Clothing.

The evils of unsuitable clothing due to maternal ignorance are found all through the school life of the child. In the poorer part of the district the children inherit the clothes of the elder brothers and sisters: small boys appear with trousers hitched up to their armpits with braces of a tight, cord-like nature, often crossed over the sternum to obtain the correct length. Small girls wear stays with many restricting tapes, which cut into the shoulders and afford the maximum opportunity for faulty position. In both sexes the marks of the binder are often revealed by the lateral compression of the thorax.

In other parts of Acton, defective carriage was found due to clothing which had become so shrunken in the process of washing that it was no longer of use. One small boy was noticed with a forward droop of the shoulders and very stiff movements of the arms. He was wearing a woollen jersey of most suitable shape and size, but a closer inspection revealed another jersey underneath which the child had completely outgrown, and which was so tight at the shoulders that the child's circulation was impeded.

Among the evils resulting from unsuitable clothing are rounded shoulders, hollowed clavicles, deficient air entry to the lungs and poor thoracic development.

As regards the clothing of older girls, there is a marked difference in the wards of the district. In some of the schools, most of the scholars wear gymnasium costume for routine work, and as this is made on the lines of the costume designed in the syllabus of Physical Exercises as laid down by the Board of Education, it is both rational and hygienic in type.

Unfortunately, in the poorer parts of Acton, the old-fashioned busked corset still holds sway, with its rigid lines and unyielding form. There seems a deep-rooted conviction that girls' figures require "support," but it is a great pity that growing bodies should be encompassed by clothing which prevents elasticity of movement. It is practically an impossibility to perform drill or physical exercises efficiently with these unsuitable garments, and yet this occurs in the very schools where drill is most essential to overcome the tendency to lateral curvature produced by the care or carrying of heavy babies while the mother goes out to work.

There seems to be an increasing tendency to purchase ready-made clothing at the shops, and the value of timely repairs to save underclothing is not understood. Garments are either held together with a multitude of pins—not of the safety type—or in some instances the children are sewn into their clothes, which are not removed until the weekly bath comes round. (In cases like this it is not difficult to understand the occurrence of "missed" cases of scarlet fever, where the disease is of a mild tvpe and the rash has faded before the ablutions of Saturday night.)

During medical inspection, it is not infrequent to find quite new garments, obviously bought to do honour to the occasion, or to save further enquiry if the bodies of the children had many fleabites. On one examination, a child was seen in rather ragged clothing surmounted by a collar of real lace, of whose value the

mother was evidently ignorant, as it would have purchased several complete outfits. It is hoped that this parent will appreciate the results of medical inspection.

It would be well if the large stores which cater for the needs of the working classes would stock school children's garments of a more hygienic type than those which are now supplied. The expense need not be greater, it is only a question of altered pattern, but at present the only firms sufficiently enlightened in this direction provide materials whose cost is beyond the reach of the working-class income.

Many of the mothers are really anxious to do the best by their children, but both ways and means must be made very simple before they are willing to accept innovations. As more instruction is given in hygiene and home management to the older girls while at school, we may hope that increased knowledge in the ways of physiological righteousness will filter through to the homes.

Hindrances to Treatment.

In the process of giving advice to parents who are present during the medical inspection of their children with reference to the treatment of simple ailments, we are often confronted with a fixed belief in some remedy which has been in use through several generations of a family, and treatment of this kind is persisted in to the exclusion of more scientific remedies.

In some cases the principle underlying the treatment is quite obscure, but in others it is interesting to sift out the grain of truth at the foundation of the wide-spread belief in a remedy. For instance, every School Medical Officer will have met with cases of ringworm to which ink has been freely applied with no result in checking the spread of the ringworm. It is possible that in former days the ingredients of ink were more caustic in character, and thus genuine cures may have resulted. The present variety of ink merely serves as a danger-signal, and this function is still better discharged by the use of iodine, which has the advantage of also being curative.

There are still parents who hold that whooping-cough may be cured by taking a child near gas works or through a tunnel. Whether improvement is obtained through the counter-irritant action of the vapours inhaled, or due to the mild antiseptic effect of the sulphuric fumes, are certainly not problems considered by the parents, but they are more ready to adopt this dramatic remedy than the simpler treatment of antiseptic vapours like Sanitas or Formalin through the medium of a bronchitis kettle in a bed-room.

Other "cures" are of a pleasanter nature. If sufferers from measles are conducted "through a field of new-mown hay," we can well believe that improvement may result to the health of the patient from country air as opposed to the stuffy atmosphere of a bed-room, where doors and windows are tightly closed "to avoid a chill," though again the counter-irritation theory may play some part in lessening the coryza of this complaint.

During the course of a year's work the routine examination of children accompanied by their mothers brings to light an astonishing number of popular beliefs.

In lung complaints there is a special value in goose grease, it is considered far superior to other oils or medical remedies. Possibly this is due to the energy and faith with which it is applied.

Bronchitis is held to be a necessary accompaniment of teething, and is not supposed to respond to treatment until the period of dentition is finished.

The eyes are a field for many observations, a squint is often considered a hereditary distinction—"styes" may be treated by friction applied by a wedding-ring which must be of gold, and blepharitis is numbered among the maladies peculiar to the "spring of the year" for which it would be contrary to Nature to attempt a remedy.

The value of ear-rings as a cure for weak sight may have a basis in the old treatment by counter-irritation or blistering.

Bead necklaces are exceedingly common among young children, or in the case of boys an amulet may be worn. This is partly for ornament and partly as a prophylactic against disease; blue beads have a special merit in "keeping away colds or quinsy," and coral is for "luck." Both are probably a relic of the times when people feared the Evil Eye, and even now these beads are worn next the skin and never removed by night or day, lest some dire illness should result.

There is a considerable amount of ignorance with regard to discharge of the ear; one popular idea is that no harm can result while the ear continues to discharge. Another fallacy which exists is that the discharge will cease when the child reaches the mystic age of seven years, or at puberty. It is true that in some cases the mischief clears up of itself, but not before the hearing of the child has been permanently damaged.

It is difficult to understand why a plug of "chewing tobacco" should be inserted into the ear in cases of otorrhoea, but in some parts this is a popular remedy.

With regard to infectious diseases we learn that these may be of the "inward" or "outward" variety. There is a great dread of any application of soap and water on these occasions, either during the actual illness or apparently during convalescence, and as the chief idea is to keep the sufferer warm, the condition of the patient's skin leaves much to be desired.

It is interesting to note that there is no opposition to weighing the children during medical inspection, when one remembers the popular prejudice against weighing new-born infants. This process is held to be unlucky and the children will not thrive unless a medicine containing rabbits' brains be administered!

Perhaps the most deep-seated of all superstitions circles about the mystic age of seven. Numbers of parents of fairly educated type explain their delay in getting treatment of some childish ailment because "he will grow out of it when he is seven." At that

age enlarged tonsils and adenoids are miraculously supposed to vanish, ear discharge or squints will be things of the past, and for this reason the inspection of children at a third age period will be an advantage, as necessity for treatment can be urged in a child of eight years old where the magic number has failed, and where the child will still be under medical observation for several years of his school life.

Mothercraft.

In last year's report we suggested a scheme by which the senior girls from the Council's schools might attend the crêche in Bollo Bridge Road to have lessons in infant care and management.

Unfortunately owing to illness and changes among the staff of the crêche it has not been possible to put the scheme into working order during 1911. We hope that future years will bring into practice this very important branch of education for the elder scholars in the Girls' Department.

Mentally and Physically Defective Children.

It has been the practice of the Education Committee of this district to enter into an arrangement by which physically and mentally defective children are sent to the special schools of the London County Council.

At present, three mentally defective children are conducted to and from school by a guide appointed for the purpose. Unfortunately, we have been informed that there will be no further vacancies for children outside the London area in these schools; so in future the education of further cases of physically or mentally defective children will present some difficulty, as there are too few children to warrant the establishment of a special school in this district.

The following cases are among those which have received special consideration :—

M. J., aged 11, came from Norwood, where she had attended a special class for backward children. Her case seems to be one of arrested development, as she did not walk or speak until

six years of age. On examination, no sign of feeble-mindedness is shown, but the child is backward for her age; so she has been kept in an ordinary school in the class suited to her attainments, and has made fair progress there.

A. G., aged seven, had never been to school. He appeared to be a border-line case between feeble-mindedness and imbecility, and was quite unsuited for an ordinary class. Failing a special school, this child has remained at home, but it is possible that the L.C.C. would have considered him ineducable.

V. D., aged 11, formerly attended a special school in Clerkenwell, and was backward rather than mentally defective. He is in attendance at one of the Council's schools, but makes very little progress.

Cleft Palate.

One child, L. McC., who was found during medical inspection to be suffering from cleft palate, has been admitted to the Royal Free Hospital, under Mr. James Berry, F.R.C.S., and has undergone two operations there. Her condition is now much improved.

Blind Children.

Two blind children attend the Blind School in Edinburgh Road, and one is in a residential school for the blind at Southsea. There are three cases of progressive myopia in the district; one of these is in attendance at Moorfields Hospital, and two are under the observation of the School Oculist. One of these children is excluded from school; in the other case arrangements have been made with the head teacher that the child does on fine work, or anything involving strain to the eyes.

One child, R.E., who was noted in last year's report as suffering from progressive myopia, was drowned in the river at Kew during the summer holidays.

Deaf Children are sent to the Ackmar Road School under the L.C.C. Six children are at present attending this school and are conducted under care of a guide, We have recently recommended the admission of three other children to this centre. One child has been in attendance at the Victoria Hospital for Sick Children, and was considered by the doctor there to be a case of word-deafness; the two other cases have been under observation of the S.M.O. for some time, and their condition does not improve, in spite of hospital treatment.

Dumb Children.

Arrangements are being made to transfer one child, who formerly attended the Ackmar Road Centre, to a residential school for the deaf and dumb at Margate.

Physically-Defective Children.

The arrangements made in previous years continue in force, and physically-defective children are specially examined by the S.M.O., and it is now possible to suggest that children with slight curvature of the spine shall be treated with special exercises, under the care of a certificated instructor who lives in the district. This is a private arrangement made by the parents, and in all cases the instructor only works under the direction of a doctor, but it should prove of some value in the district.

The following cases needed the special consideration of the Committee during the past year:—

E. B., aged 10, suffers from tuberculous disease of the knee-joint, and his leg is in a plaster support. He has resided at Putney, and attended a special school under the L.C.C. Since July, 1911, he was in a convalescent home at Walberswick, and was discharged in September. The child gets about well on crutches and lives near Southfield Road Schools. He is a bright, intelligent child, and is anxious to attend school, so the plan is being tried of allowing him to go to the Junior Department, where he is provided with a special Ilkley chair and table on the L.C.C. pattern, as in this way the injured leg is kept straight.

I. C., aged 10, had her left leg amputated at the hip-joint, but she can walk fairly well on crutches. She has not previously been to school, but both parents and child are anxious that she should receive some education. The girl lives very near the Beaumont Park Schools, and the mother has made arrangements with a neighbour's child to escort her to school, so I. C. is being tried in the Infants Department in order to avoid the difficulty with stairs.

In all cases of physical deformity, parents are warned that full responsibility cannot be undertaken by the teachers, though special arrangements are made to minimise risk of any accident.

We have much pleasure in reporting the progress of A. B., a child who was suffering from tuberculous disease of the knee-joint. The child had to wear an apparatus to keep her knee stiff, and at the request of the S.M.O. in 1908 the Education Committee provided her with an Ilkley couch and table, which the child used in school.

The child has been under observation of the S.M.O., and has always made good progress, both physically and mentally. In October, 1911, she had improved so much that the special couch and apparatus were no longer necessary. A. B. is now able to use an ordinary desk, to her great delight, and the head mistress states that she is one of the most promising pupils in the dancing class!

The chair and table have been transferred to another school for a similar case, where an equally satisfactory result is much desired.

The original cost of the special chair was £1 10s. 6d., and it has the advantage of being suitable for children of different sizes. An alternative method of education in the case of A. B. would have been attendance at one of the L.C.C. special schools, at a cost of £10 per annum in addition to the charge of conveyance, and the special chair is still in use; so the financial outlay has proved a good investment.

Organised Games are now part of the curriculum of the public elementary school, and the following remarks are intended to show the purpose of these games as carried out in the Acton Schools. Organised games may be considered under the heading of physical exercises, because it has been shown that the exercises which have a beneficial effect upon both respiration and circulation, and contribute to the better nutrition of the body, are to be found in the natural play movements of the children—running, jumping, skipping, dancing, or games of all kinds.

If these movements can be executed under conditions where a good supply of fresh air and suitable food are obtained, it will be seen that the structure of the body is built up wisely during the growing period.

Children are therefore encouraged to take part in all kinds of running games, in which a considerable number can take share at the same time, as this develops the spirit of fair play and comradeship. For girls, the exercise of skipping is particularly useful.

Naturally, this new form of physical development along pleasant paths is more popular with the children than the mechanical precision of the formal "drill" lessons, though both serve a useful purpose. It has been said that, "as a test of true discipline, good play is as real as good work," and some of the organised games are not only interesting and exciting, but also in many cases instructive.

Throughout the schools the games are well adjusted to the size and age of the children, though some schools are more fortunate in playground accommodation than others. In the senior departments, the principal games for the boys are football and cricket, while the girls have basket-ball, net-ball and hockey. Of course, on the asphalte the play in hockey is very fast, and somewhat unfits the girls for field play, but the value of the games cannot be over-estimated, and the girls thoroughly enjoy them.

One of the Councillors has taken great interest in the hockey, and presented a number of sticks to one of the poorer schools for the use of the scholars. Teams are selected from the picked players in each school, and matches are arranged with the schools of the surrounding districts.

On Saturday morning the scholars in one school are sometimes taken by the Teachers to the park for special coaching to work up for a match; in another part of the district a pitch laid out in the Recreation Ground, a short distance from the school, is eagerly desired by both teachers and scholars.

In some of the newer schools the playground is marked out for tennis, but this is not so popular, as only four can play at a time. Moreover, for drainage purposes the asphalte cannot be entirely level, and this is a great drawback in tennis.

Other games include bean bags, twos and threes, circular jumping, leapfrog in columns, fox and geese, &c.

The value of these games lies in the free muscular movements which they encourage and the precision of hand and eye which is developed. Those who have watched these games can easily understand how a few minutes' recreation on a cold morning would improve the children's circulation and render them in a better condition for subsequent lessons. Certain games, such as bean bags, could be employed even within the limits of a class-room, but all recreative exercises should be performed with open windows, to get the air of the room thoroughly changed.

In the Infants Department, the children have an interesting combination of work and games. Geography is taught in the happiest manner by dances and songs. For instance, a Japanese song and dance is represented by the children carrying Jap. umbrellas and copying the postures adopted by the people of the country. We have also seen delightful dances of elves and fairies, where the children wore beautiful but inexpensive paper caps which had been made by the teachers.

At one school, in the kindergarten section, each of the tiny children has a little armchair and a table, which gives them ample space for their free games, and in an attractive way they begin their education.

History lessons afford scope for dramatic talent, though this may lead to unusual developments, as the following incident shows. A teacher in one of our infant schools was watching her class at play, and found they were acting a story which represented their last history lesson; so she was much pleased with their originality and interest. On another occasion, the subject of the game seemed unfamiliar, and on enquiry the teacher was told, "Oh, we are playing C———," alluding to a recent murder trial which had attracted much popular interest, and which the children must have heard discussed at home.

An interesting lesson is given on the laying of the tea table and dinner table, and the manner to be observed at meal time. The little scholars are taught how to speak to each other, how to handle their food and to eat and drink. This seems a very useful lesson, as, even if food be scanty, every child should be taught to behave properly at table.

Nature study is encouraged in a most delightful way. Each child is taught the steps in the growth of a plant, from the sowing of the seed to the full development of the plant.

In one school, eggshells tinted in various colours are used as flower pots; each child has its own "pot," and the teacher instructs how the seeds are to be sown. After this, the growth is watched daily by the children, and thus they become familiar with the laws of Nature.

In other schools, instruction is given in animal and bird life by the school aviary or aquarium, where goldfish are kept; or, for other lessons, the children sometimes bring their pets.

In some of the Infants' Departments, excellent examples are shown of toys or models manufactured by the children themselves from simple materials.

One consists of a large doll's house, whose walls are formed of empty matchboxes, strengthened by paper on either side. A very elaborate staircase is also constructed of matchboxes, and has an inviting appearance; the chairs and tables are of paper, cut out and folded by the children and then ornamented with a coat of paint. Carpets and rugs have been plaited and woven to measure by the children, so that as many scholars as possible share in the work. The occupants are dolls wearing crinkled paper dresses, which can easily be renewed when soiled.

Another department has made beautiful models of a light-house constructed of paper, and a large pillar-box made of glazed linen, in which the letters written by the scholars to one another are posted, and the children take weekly turns to act as school postman.

The whole effects obtained are excellent, and are highly creditable both to teachers and scholars concerned in the production.

The general combination of work and play has a wonderful fascination, and tends to arouse feelings of envy as we remember days when the rudiments of learning were only attained by more laborious and less interesting methods.

Gardening.

In former reports we have drawn attention to the good work which is being performed in Nature-study, especially where the playground space permits of small plots being used as individual gardens for the scholars.

At Acton Wells Boys' School a further development of a gardening scheme has taken place during the past year.

Two plots of land have been secured, providing space for 28 boys (forming two classes) to receive instruction in practical gardening; each boy possesses his own plot and unites with the others in the care of a propogating plot, under the direction of the teacher.

All measurements of the ground into plots and formation of paths are done by the boys, who also make careful drawings showing the distribution of the crops.

Each plot is divided into three sections, with a view to provide for a proper rotation of crops in successive years, and the boys are thus taught how to obtain the maximum value from the land at their disposal.

Careful notes are made of each day's work, and accounts kept by each boy of the expenditure upon his plot, with the value of the produce obtained from it The scholars are allowed to have the produce from their own plots. An allowance of 1s. per head is granted to provide seed. In the first year's working an expenditure of 8½d. per head produced a return in garden produce of 5s. 2d. per head, but it is estimated that when in full working order a return of 10s. worth of produce may be expected from an outlay of 1s. per head for seed.

A disused shed has been secured as a tool-house, and the scholars are given directions on the care of their tools. As mentioned in last year's report, a small greenhouse has been erected in the playground of the school, the wooden portion of which is mainly composed of disused school desks. Practical instruction in gardening is given for two hours weekly, and the scholars seem exceedingly keen on their work. This interesting scheme has been drawn up by the Head Teacher, who has done much practical gardening, and he is assisted in giving the instruction by one of the class teachers.

We feel the educational advantages of this kind of training for boys are as important as lessons in mothercraft are for the

elder girls, as education on these lines is not only an immediate benefit and a healthy training, but tends to produce an improved class of citizens in the future

Examination of Teachers.

Fifteen candidates have been medically examined during 1911. These are either examined as bursars or on appointment to school in this district.

Of these, three were referred, and were subsequently re-examined; one was passed, and directions were given in the case of the other two.

A record of each physical examination, together with the family history of the candidate, is entered on a card and filed for subsequent reference. This method has been found useful when, for various reasons, it is necessary to make a second examination.

Special Examination of Teachers.

Two teachers have been examined, as the Committee required special reports concerning their health.

SWIMMING.

During the season of 1911, 35 swimming classes were held weekly during school hours and four out of school hours. Total, 39 classes weekly.

During the season, 240 scholars—167 boys and 73 girls—have earned the swimming certificate awarded by the Committee for children who this year have learned to swim, 40 yards in the case of boys and 20 yards in the case of girls.

School.	Classes per week.	No. of attendances made	No. of Scholars in School who can swim.	No. of Scholars who have learnt to swim this season,
Acton Boys	1	860	19	12
Acton Wells Mixed	2	899	50	34
Beaumont Park Boys	6	3058	117	77
Beaumont Park Girls	1	478	29	18
Central Senior	5	2197	139	55
Central Junior	2	966	24	16
Priory Boys	5	2249	77	51
Priory Girls	2	972	24	13
South Acton Boys	5	2054	82	65
South Acton Girls	2	1061	24	11
Southfield Road Senior ...	6	2533	114	72
Roman Catholic	2	678	38	29
Total	39	18005	737	453

In conclusion, we beg to thank the staff of the Education Department and the teachers for the assistance we have received, not only in compiling this report, but also in the work of medical inspection.

We remain,

Your obedient servants,

D. J. THOMAS.

LILIAN E. WILSON.