

Annual report of the Medical Officer of Health 1910 / Wimbledon Borough Council.

Contributors

Wimbledon (London, England). Borough Council.

Publication/Creation

[1911]

Persistent URL

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

License and attribution

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

This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See the Legal Code for further information.

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



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



Borough of Wimbledon.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

AND THE

SCHOOL MEDICAL OFFICER

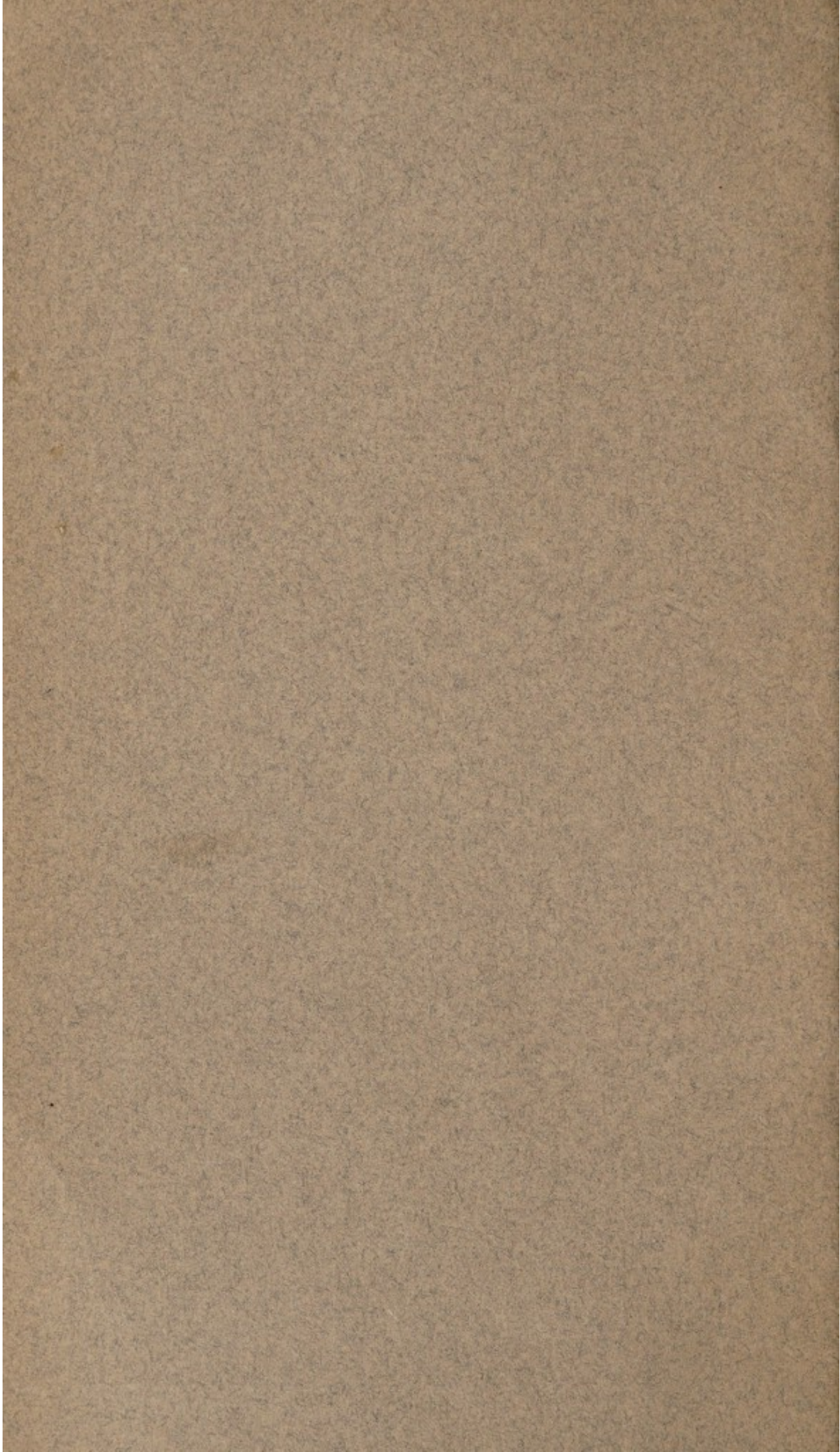
For the Year 1910,

BY

ELWIN H. T. NASH, D.P.H. (Vict.)

TOGETHER WITH THE

REPORT of the SANITARY INSPECTOR.



Borough of Wimbledon.

PUBLIC HEALTH DEPARTMENT.

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE

Year ended 31st December, 1910.

To the Mayor, Aldermen and Councillors
of the Borough of Wimbledon.

GENTLEMEN,—

As required by the General Orders of the Local Government Board of March 23rd, 1891, I beg to present my first complete Annual Report for the year 1910.

The statistics for the year show an extremely satisfactory state of affairs, the death-rate for the district being the lowest on record.

The infantile mortality is also extremely satisfactory, but again we must consider the influence of the cool summer and heavy rainfall. Another fact to be noticed is the continuance of the steady diminution of the birth-rate.

The incidence of the notifiable zymotic diseases has been low, and the figure for Diphtheria would have been lower still in all probability had there not been a much more extensive practice of swabbing suspicious throats, by which means a certain number of cases which would not have been diagnosed as Diphtheria are notified, and help to swell the numbers, so that one may regard the Diphtheria incidence with great satisfaction.

As will be alluded to in other places in the report, it seems to me that the time has come when we should recon-

sider our perspective with regard to the infectious diseases. Year by year the non-notifiable diseases, Measles, Whooping Cough, and Tuberculosis, levy a far heavier toll of deaths than those for which we provide expensive and extensive hospital accommodation, viz.:—Scarlet Fever, Diphtheria, and Typhoid.

Certain parts in the report may seem superfluous with regard to local conditions, but it must be borne in mind that these particulars are asked for by the Local Government Board for comparison with other districts.

The Zymotic death-rate is '49, there being 29 deaths notified under this heading, which is 12 less than last year.

The returns of vital statistics and infectious diseases drawn up on forms supplied by the Local Government Board are appended in Tables I., II., III., IV., and V.

Physical Features and General Characteristics of the District.—The district is wholly situated on London clay. In the higher portions of Wimbledon Common and the district surrounding the clay is capped with gravel which seldom attains a depth of more than eight feet. This gravel covers a considerable area, roughly speaking about 800 acres. Beds of sand are met with in South Wimbledon, which are shallow, not more than three feet deep, and are simply the filling in of pot holes. The clay is covered with an alluvial deposit along the valley of the Wandle and the extreme southern portion of Cottenham Park.

The underground water on the low lying ground near the Wandle is only materially altered by flooding, and is very close to the surface, so much so that special bye-laws are made controlling the erection of houses in this district. On the higher ground the variation in underlying water in the gravel beds on Wimbledon Common is about five feet between extreme dry and wet periods.

The lowest portion of the Borough is along the valley of the Wandle, which is 44 feet above sea level, and the higher part round and on Wimbledon Common is 183 feet above sea level.

Population.—The calculations for the deaths and other rates in the Tables of this Report are based on an estimated population at the middle of the year as 58,222, which figure is obtained by the Borough Engineer ascertaining the number of occupied houses in each Ward, and multiplying that figure by the house factor for the respective Ward.

Area.—The area of the Borough (exclusive of the area covered by water) is 3,173 acres, and the density of the population is 18'3 per acre.

Births.—The number of births registered was 1,159 (603 males, 556 females), which is 22 less than last year, and equal to a birth-rate of 19·9, which rate is 3·9 below the average for the past 10 years.

The corresponding rate for England and Wales for the same period is given as 24·8 in the Report of the Registrar-General.

The rates for the respective Wards of the district were as follows:—

St. Mary's	...	...	...	...	17·9
St. John's	...	...	...	...	7·5
Cottenham Park	...	...	...	...	16·2
Dundonald	...	...	...	...	18·6
Trinity	...	...	...	...	26·5
South Park	...	...	...	...	23·2

Deaths.—The total number of deaths registered in the district was 426 (204 males, 222 females), equal to a death-rate of 7·3 per thousand of the population per annum. This was '6 lower than last year, and 2·5 below the average for the past 10 years, which is seen to be 9·8.

The deaths in public institutions outside the district of persons belonging to this Borough were:—

Kingston Infirmary	...	...	...	39
County Asylum, Brookwood	...	...	...	3
St. Luke's House, Pembridge Square	...	...	...	1
Royal Berkshire Hospital, Reading	...	...	...	1
Lady Margaret Hospital, Bromley	...	...	...	1
Charing Cross Hospital	...	...	...	3
St. Peter's Hospital, Covent Garden	...	...	...	1

The deaths occurring in public institutions within the district of persons not belonging thereto were.—

Atkinson Morley Convalescent Hospital	...	4
South Wimbledon Cottage Hospital	...	7
North Wimbledon Cottage Hospital	...	4

After taking these into account, the total number of deaths properly belonging to the district is found to be 460, and the death-rate 7·9. The rate for England and Wales for the same period was 13·4.

Eighty-six deaths of children under one year of age were registered, and this infantile mortality is represented by a ratio of 74 deaths per thousand registered births, a decrease of 3 per thousand on the previous year and 32 on the average for the past 10 years. The rate for England and Wales was 106. Only on two occasions has the infantile mortality rate fallen below that of this year, namely, in 1905, when the rate was 69, and in 1908, when it was 71.

By the Zymotic death-rate, we understand the number of deaths per thousand of the population which are due to the seven common epidemic diseases:—

- (1) Small-Pox.
- (2) Measles.
- (3) Scarlet Fever.
- (4) Diphtheria.
- (5) Whooping Cough.
- (6) Fever, including Typhus, Typhoid, and Ill-defined fevers.
- (7) Diarrhœa.

These seven epidemic diseases may be divided into notifiable and non-notifiable; and of the former, 2 were due to Diphtheria and 2 to Enteric Fever, and of the latter, 12 were due to Whooping Cough, 9 to Diarrhœa, and 4 to Measles, making an aggregate of 29 deaths as against 41 last year, or equal to a Zymotic death-rate of '49, and '72 last year per thousand of the population.

In addition to the deaths from Zymotic diseases, the principal causes of death were as follows:—

Pneumonia	...	...	...	...	27
Bronchitis	...	...	...	...	19
Cancer	...	...	...	...	54
Phthisis	...	...	...	...	35
Other forms of Tuberculosis	...	...	...	...	8
Heart Disease	...	...	...	...	55
Premature Births	...	...	...	...	24

For the purpose of comparison the following Table is compiled from the returns of the Registrar-General.

Vital Statistics for 1910 (Provisional Figures).

	Annual Rates per 1,000 living.			Infant Mortality of infants under 1 year per 1,000 Births.
	Births.	Deaths from all Causes.	Death-rate seven chief Epidemic Diseases.	
England and Wales ...	24·8	13·4	·99	106
77 Great Towns ...	25·0	13·4	1·23	115
136 Smaller Towns ...	23·7	12·4	·88	104
England and Wales, less the 213 Towns	25·0	13·6	·74	96
WIMBLEDON ...	19·9	7·3	·49	74

Table A shows the births, deaths (registered in district) and death-rates, and the deaths at certain ages and for specified causes for the past five years.

Table B shows for the same years the number of infectious cases notified, and the deaths from each disease.

Table C shows the death-rates from Zymotic diseases, Phthisis, and other forms of Tuberculosis for the past 10 years.

Table A.

	1910	1909	1908	1907	1906
Births	1159	1181	1144	1121	1185
Deaths	426	451	454	480	584
Death-rates	7.3	7.9	8.3	9.2	11.7
DEATHS—					
Under 1 year	86	91	82	125	175
Over 1 year and under 60 years	205	190	221	203	260
Above 60 years	135	171	151	152	149
From Measles	4	10	5	10	19
„ Scarlet Fever	0	3	3	5	5
„ Small Pox	0	0	0	0	0
„ Diphtheria	2	7	9	6	9
„ Diarrhoea	9	9	8	17	90
„ Whooping Cough	12	12	4	30	4
„ Enteric Fever	2	0	1	1	5
„ Puerperal Fever	0	1	1	2	0
„ Erysipelas	0	1	1	0	5
„ Influenza	3	8	18	3	10

Table B.

DISEASES.	1910		1909		1908		1907		1906	
	Cases Notified.	Deaths.	Cases Notified.	Deaths.	Cases Notified.	Deaths.	Cases Notified.	Deaths.	Cases Notified.	Deaths.
Small Pox	0	0	0	0	0	0	0	0	0	0
Diphtheria	65	2	90	7	94	9	83	6	55	9
Erysipelas	31	0	35	1	35	1	54	0	32	5
Scarlet Fever	147	0	316	3	131	3	281	5	229	5
Enteric Fever	9	2	4	0	5	1	15	1	11	5
Puerperal Fever	1	0	2	1	1	1	3	2	1	0
TOTALS	253	4	447	12	266	15	436	14	328	24

Table C.

YEAR.	Zymotic Death-rate.	DEATH-RATE FROM							
		Small Pox.	Scarlet Fever.	Diphtheria	" Fever."	Whooping Cough.	Measles.	Diarrhoea.	Phthisis and other Tuberculous Diseases.
1901	1.5	—	.02	.14	—	.31	.24	.57	1.04
1902	1.02	—	—	.16	.06	.39	.25	.13	.7
1903	.73	—	.02	.08	.04	.19	.08	.28	1.08
1904	1.9	—	—	.12	.08	.29	.48	.9	.83
1905	.78	—	.06	.04	.12	.20	.02	.31	.82
1906	2.7	—	.1	.18	.1	.08	.38	1.8	1.1
1907	1.3	—	.09	.11	.05	.58	.19	.32	1.1
1908	.55	—	.05	.16	.01	.07	.09	.14	.9
1909	.72	—	.05	.12	—	.21	.17	.15	.75
1910	.49	—	—	.03	.03	.2	.06	.15	.6

Small Pox.—There have been no cases of Small Pox during the year in the Borough, but three cases gave some anxiety; one turned out to be Chicken Pox, one a septic infection of the skin, and the third venereal disease.

Scarlet Fever.—The total number of cases notified during the year was 147 from 121 houses, as against 316 and 131 for 1909 and 1908 respectively.

In one house there were 6 cases; in two houses 5; in two houses 3; in nine houses 2; and in the remainder one each.

The disease occurred in the following numbers at the various ages:—

Under one	...	...	...	...	0
One to five	...	...	...	...	21
Five to fifteen	...	...	...	...	111
Fifteen to twenty-five	...	...	...	...	12
Twenty-five to sixty-five	...	...	...	...	3

The following was the Ward incidence:—

St. Mary's	...	14	Removed to Hospital	5	Attack Rate	1·21
St. John's	...	12	"	1	"	2·12
Cottenham Park	...	12	"	2	"	1·77
Dundonald	...	14	"	9	"	1·76
Trinity	...	41	"	37	"	3·59
South Park	...	54	"	37	"	3·60
		147		91		

The average attack and death-rates for the last four quinquennial periods were as follows:—

	Attack Rate.	Death Rate.				
1891—1895	...	4·8	·02	per thousand of the population.		
1896—1900	...	3·3	·04	"	"	"
1901—1905	...	2·3	·02	"	"	"
1906—1910	...	4·07	·05	"	"	"

Ninety-one, or 61·9 per cent. of the patients were treated in the Isolation Hospital.

About 75 per cent. of the cases notified were children of school age, namely, five to 15 years, and of these, 95 attended the following schools:—

Effra Road Girls' and Infants' School	...	17
Durnsford Road Girls' and Infants' School	...	3
Queen's Road Girls' and Infants' School	...	14
Queen's Road Boys' School	...	10
Queen's Road Special School	...	1
Pelham Road Boys' School	...	2
Pelham Road Girls' and Infants' School	...	13
Haydon's Road Girls' and Infants' School	...	3
Haydon's Road Boys' School	...	3
Dundonald Girls' and Infants' School	...	2
St. Mary's Girls' and Infants' School	...	1
Private Schools	...	20
Schools outside the District	...	6

There were 3 definite "return" cases from two houses, which occurred within a week, and one 29 days after discharge of the patient from the Isolation Hospital. In one case a child aged two years returned from hospital, and another case was notified in the house five days after. In the other house two more cases were notified five days after the return of the patient from the hospital.

In the houses where five cases occurred, none of the children had been attended until they had been found to be peeling; there had been a history of sore throats three weeks previously. Three cases, all of which were peeling, were notified on one day, and two more the following day.

One case occurred which was said to have been a second attack of Scarlet Fever.

In one house the second case did not occur until 26 days after the first one, and in another instance the period between the cases was 16 days.

In three cases Scarlet Fever occurred in houses let off either in rooms or three sets of flats; in no case was there any extension beyond the first case notified.

A very strict watch has been kept over Scarlet Fever in order that no "missed" cases should occur. On the occurrence of a notification I visit the school at which the patient attended and examine the class register, and the absence of every child has to be accounted for. Particular care is taken to examine all children who have been absent either on Friday or even Friday afternoon, and on Monday or even Monday morning only, as it must be realised that in both of these cases there is the additional absence on Saturday and Sunday, which gives quite sufficient time for these extremely mild cases to have recovered from any slight indisposition and be back in school spreading infection.

The present type of the disease being so mild causes the general practitioner in many cases great anxiety, owing to the difficulty of making a diagnosis. I have seen several cases in consultation with practitioners in the district, and in the majority of them it has been quite impossible to make a diagnosis on the spot. I have been struck by the fact that in these very mild cases in not a single instance was there anything approaching a typical tongue.

During the year the question of hospital accommodation has had the serious consideration of the Public Health Committee, and a scheme for extension was drafted but referred back by the Council on the question of the cost of other methods of construction.

Owing to our increased knowledge of the disease and its treatment, I reported to the Committee on the whole question of Scarlet Fever, and my reasons for at the present advising against further accommodation for Scarlet Fever patients are fully set forth in my report which appears as appendix, but it must be fully understood that this is done in the light of present knowledge, and it may be necessary in the future to revise this opinion in view of further advances in the methods of treatment.

Diphtheria.—The total number of cases notified during the year was 65 from 61 houses, the attack rate being 1·1 per thousand of the population; this rate is '4 below last year.

In four houses there were two cases, and in the remainder one each.

The disease occurred in the following numbers at the various ages:—

Under one	...	...	...	...	0
One to five	...	...	...	...	14
Five to fifteen	...	...	...	...	32
Fifteen to twenty-five	...	...	...	...	13
Twenty-five to sixty-five	...	...	...	...	6

The following was the Ward incidence:—

St. Mary's	...	16	Removed to Hospital	7	Attack Rate	1·38
St. John's	...	2	"	0	"	·35
Cottenham Park	10	"	"	5	"	1·47
Dundonald	...	4	"	3	"	·504
Trinity	...	13	"	13	"	1·14
South Park	...	20	"	18	"	1·23
North Wimbledon, 44%.		South Wimbledon, 56%.				

Forty-six, or 70·7 per cent. of the patients, were treated in the Isolation Hospital.

About 50 per cent. of the cases notified were children of school age, namely, five to fifteen years, and of these, 29 attended the following schools:—

Effra Road Girls' and Infants' School	...	4
Queen's Road Girls' and Infants' School	...	4
Queen's Road Boys' School	...	3
Haydon's Road Girls' and Infants' School	...	3
Central Mixed School	...	3
Cottenham Park Girls' and Infants' School	...	1
Private Schools	...	7
Schools outside the district	...	4

During the investigation of Diphtheria, in 35 cases the drains were tested, and in 18 some form of sanitary defect was found, that is in 51 per cent. of the houses, whereas in the ordinary house to house inspection in 21 houses tested, at 19 defects were found, that is in 90 per cent., so that it will be

seen that the defects found in the houses in which Diphtheria occurred was about 39 per cent. less than occurs in the ordinary property which is inspected by the Department.

Of the two deaths one occurred at home, which was one of the most malignant cases of Diphtheria I have seen for many years, accompanied by a profuse nasal hemorrhage. The other was admitted to the South Wimbledon Cottage Hospital at first on account of Laryngeal obstruction, where Tracheotomy was performed, after which the child was removed in a dying condition to the Isolation Hospital, where death took place three hours after admission.

In only four houses was there a second case; in the first instance the second case was notified three days after the first case; in the second instance the second case was notified seventeen days after the first; in the third instance the second case was notified twenty-two days after the first; and in the fourth instance the second case was notified two days later; in all four instances the first case was removed to the Isolation Hospital.

In only one instance was there a third case, which was notified twenty-one days after the second case; the first two cases having occurred outside the district. This case will be referred to later.

Two cases show prolonged periods of infection, and seem to point very strongly, in one case, to a "carrier," and in the other either to a "carrier" or to the persistent infectivity of the patient first attacked. In the first instance a child was removed from a family suffering from Diphtheria; two elder brothers, who worked in different shops where food was prepared, were both swabbed with a negative result. The patient was removed on the day of notification, and sixteen days later one of these brothers, who had previously been swabbed with a negative result, was notified suffering from a severe form of Diphtheria. In the other instance a child, aged three, was notified as suffering from Diphtheria on the 29th January. A sister, aged ten years, contracted Diphtheria on 21st December, 1909; she was treated at home and declared free from infection on January 5th, 1910. A brother, aged seven years, was notified as suffering from Diphtheria on January 7th, 1910, and removed to the local hospital, and on the 22nd January the family moved into Wimbledon. On the 29th January, as previously stated, a girl, aged three years, was notified as suffering from Diphtheria, that is twenty-two days after the boy was removed to the hospital, and twenty-four days after the first case was declared free from infection. The father, who worked at a grocer's, was swabbed with a negative result. No other source of infection could be traced.

During the year much more use has been made by the practitioners in the district of the bacteriological diagnosis, particularly in respect to contacts, and in several cases it has been found that those in close association with the patient have been harbouring the Diphtheria (Klebs Loeffler) Bacilli in their throats, and these cases have been temporarily isolated, and, as a rule, a very short time under antiseptic treatment has been sufficient to eradicate the bacilli. It is, of course, in the majority of cases impossible to say whether the infection has come from the patient to the "carrier" or from the "carrier" to the patient, and although these cases are not suffering from Diphtheria themselves, the fact that they are harbouring the Diphtheria Bacilli causes us to regard them as having some measure of infection. Two striking cases occurred in large houses, one of a rental of about £90 per annum and the other about £300 per annum. In one case sore throats presenting no clinical appearances of Diphtheria had been running through the house; the drains had been thoroughly examined and found perfect. On the occurrence of the next case, which was the children's nurse, a swab was taken and Klebs Loeffler Bacilli found. The whole household were swabbed, and one of the children and a fellow maid of the patient were found to be harbouring the Klebs Loeffler Bacilli. In the other case, where the household consisted of two parents, two sons, a governess, and six maids, the mother and governess were found to be harbouring Klebs Loeffler Bacilli, the patient being the youngest boy.

During the year eight infectious "carriers" and two definite cases of Diphtheria were discovered as the result of swabbing.

The importance of the bacteriological diagnosis is best seen by quoting from a standard work on infectious diseases, which states:—

"It must be observed at the outset that certain very mild cases of Diphtheria cannot be distinguished by clinical observations from simple inflammation and ulceration of the tonsils. We have already stated, and we must again draw attention to the fact that Diphtheria may occur without the formation of membrane; indeed, in some cases there is no exudation whatever. Such cases are to be diagnosed only by means of a bacteriological examination, by a history of specific contagion, or by subsequent paralysis. On the other hand, it must be remembered that the membranous exudation may result from other causes than Diphtheria. We have already described such a condition as met with in Scarlet Fever. It may occur quite independently from this disease; and such cases are to be

distinguished from Diphtheria only by bacteriological examination.

"Follicular tonsillitis may be mistaken for Diphtheria; and here again in some cases the diagnosis is by no means easy. In a typical example of this form of tonsillitis both tonsils are swollen, and the follicles are distended with exudation which appears as yellow points upon the reddened surface. Such cases can readily be distinguished. But in some cases the exudation spreads from the yellow points over the adjoining surfaces of the tonsils, and this condition stimulates Diphtheria. There is little, if any, glandular enlargement, and no albuminuria. All we have said with respect to the diagnosis between Diphtheria and simple tonsillitis applies with equal force to these doubtful cases of follicular tonsillitis."

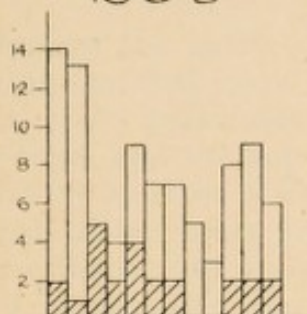
Although it is generally agreed that Hoffmann's Bacillus does not give rise to Diphtheria, the year's work has shown some striking instances supporting the contention of Hewlett and others that it is a non-virulent or attenuated form of the Klebs Loeffler Bacillus, and in a few cases it was noticeable that during convalescence the Klebs Loeffler Bacillus were replaced by Hoffmann's. Again, in certain cases where a member of the family had Diphtheria there was a striking preponderance of Hoffmann's Bacillus in the swabs of the contacts in the family. For instance, in the following case a child, aged five years, was removed suffering from Diphtheria. Nearly all the other members of the house had had sore throats and looked really ill and complained of being weak, although their throats showed nothing, nor was there any fever; the bacteriological state of the family was as follows:

Father	...	...	...	Hoffmann's
Mother	...	...	...	Negative
Male, aged 10	...	...	...	Hoffmann's
Female, aged 6	...	...	...	Hoffmann's
„ „ 11	...	...	...	Negative
„ „ 8	...	...	...	Hoffmann's

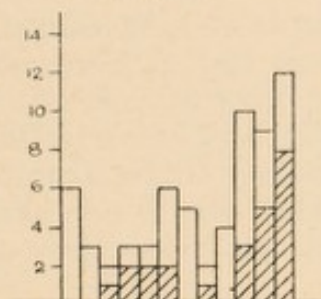
Careful records have been kept of the incidence of the Klebs Loeffler Bacillus and Hoffmann's Bacillus, and although there are a certain number of cases which tend towards the idea that the Hoffmann's Bacillus is the attenuated form of the Klebs Loeffler Bacillus; on the other hand, as will be seen from the chart, the seasonal incidence of the two bacilli is quite different. The charts show the percentages of Hoffmann's and Klebs Loeffler Bacillus in the number of swabs examined, and the variation of the mean month by month.

NUMBER OF NOTIFICATIONS OF DIPHTHERIA EACH MONTH (PLAIN):-
 NUMBER OF CASES CERTIFIED AFTER BACTERIOLOGICAL
 EXAMINATION (SHADED):-

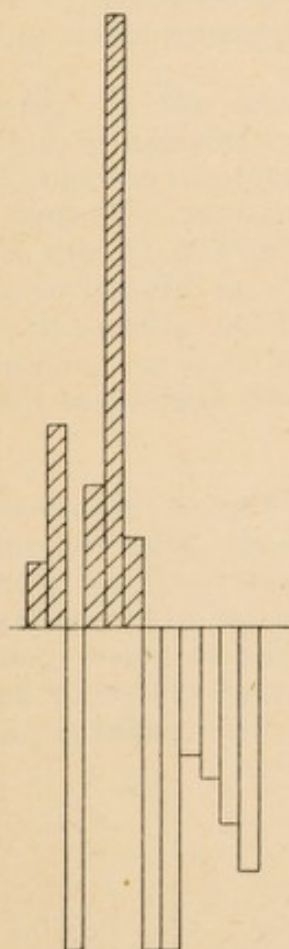
1909



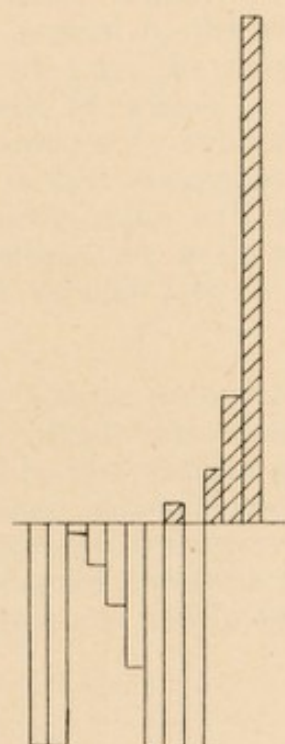
1910



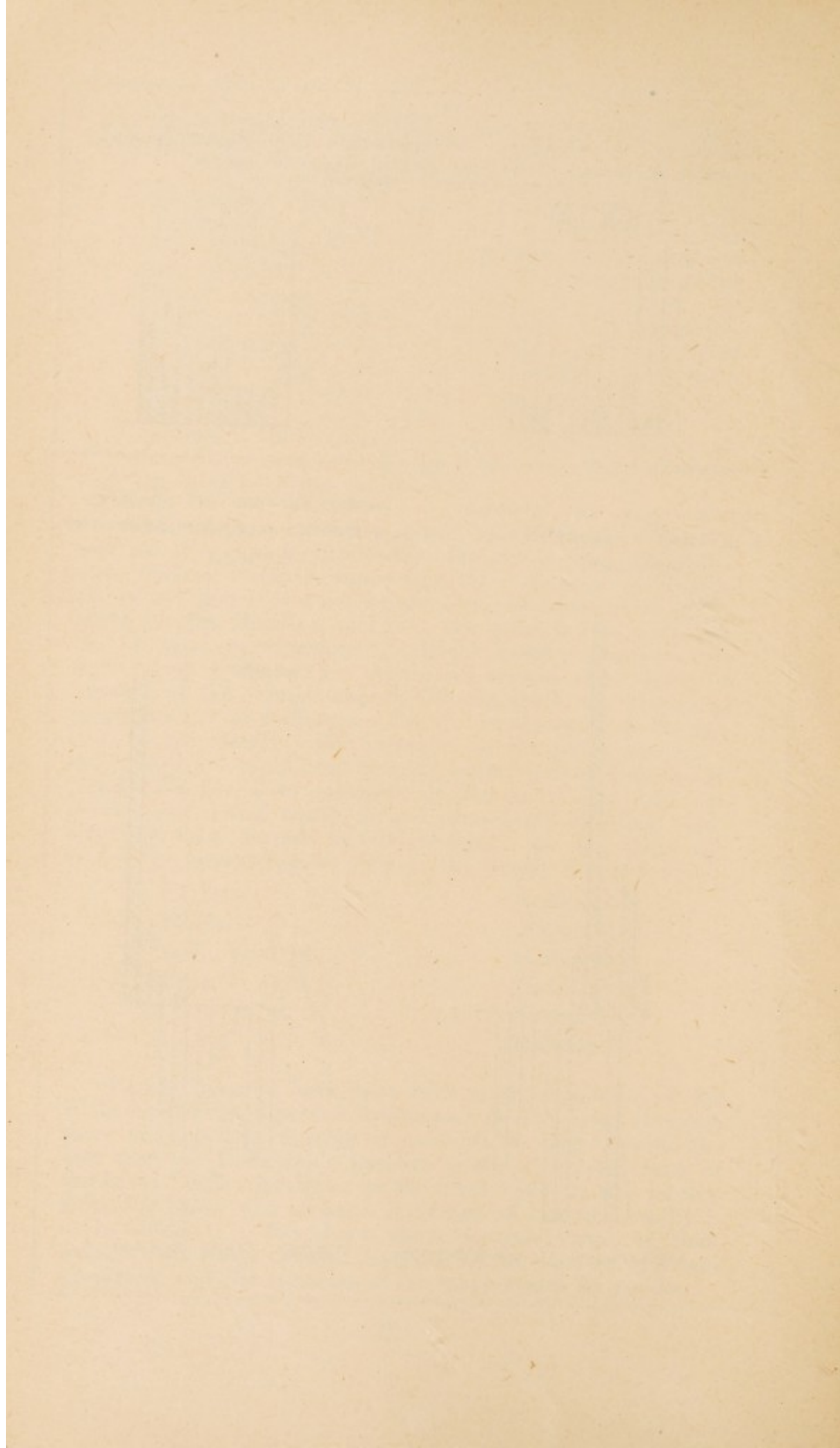
PERCENTAGE OF SWABS
 SHEWING HOFFMAN
 BACILLI



PERCENTAGE OF SWABS
 SHEWING KLEBS-LOEFFLER
 BACILLI



MONTHLY VARIATION FROM THE MEAN



The figures (262), however, are small, but go to a certain extent to corroborate Boycott's figures, except that his seasonal incidence for Hoffmann's more nearly preceded the maximum seasonal incidence of the Klebs Loeffler Bacillus.

During the early summer two outbreaks of sore throats following notified cases of Diphtheria occurred in two of the schools, more particularly in one where the throats were of a severe type, and the appearance of the children was that which one usually ascribes to Diphtheria, but in not a single instance, although these cases kept occurring, was the Klebs Loeffler Bacillus found, but an extremely large percentage of the cases showed Hoffmann's Bacillus.

Much criticism was levelled at my action in freely swabbing the contacts in such cases on the ground of the expense involved, the difficulty being that as we were having to send our swabs away there was an undue expense connected with the procedure, but in dealing with such a disease as Diphtheria it is difficult to estimate the pecuniary value of the advantage obtained by discovering infectious "carriers" and cases which are going about un-notified and unrestrained.

Owing to the number of swabs being taken, I was instructed to ascertain the practice with regard to the swabbing of contacts in other towns, and appended are the answers given from the various towns as a result of which it was resolved that it was to be left to my discretion to swab such cases as I thought fit. My practice now is that six swabs are sent to the doctor notifying the case, asking if he will swab the contacts, but it is left entirely to his discretion to do so or not. All suspicious throats or contacts in schools I swab myself.

Personally, I am of opinion that it is a safer procedure to swab the contacts, than it is to inject a prophylatic dose of anti-toxin, and that this procedure should be reserved for cases of suspicious clinical appearances, or cases bacteriologically diagnosed, when at the most, with our present arrangement, eighteen to twenty-four hours will have elapsed from the time the swab is taken until the result is obtained and the injection given.

DIPHTHERIA.

Town.	Do the Practitioners in attendance or does the Public Health Department swab the whole of the contacts in cases of Diphtheria?	Does the Department swab the contacts of cases in the Public Elementary Schools?
BOOTLE	No.
BLACKPOOL	Yes, when advisable.
BATH	We swab when we think necessary. Swabs are sent to Bristol.
BIRMINGHAM	...	Occasionally.
BRIGHTON	Yes, when considered necessary.
BATLEY	Yes.
BLACKBURN	...	Yes.

BURTON-ON-TRENT ...	Public Health Department.	Yes, when considered advisable.
BECKENHAM ...	Public Health Department unless practitioner undertakes to do it.	Yes.
BRISTOL ...	According to circumstances. Medical Practitioners supply many swabs, but in special cases such as school outbreaks arrangements are made by the Health Committee, who engage a special Medical Officer to visit and take swabs, etc.	Yes, when considered necessary.
BOURNEMOUTH ...	The swabbing of Diphtheria contacts is carried out usually by the Public Health Department, always with the approval of the medical man who attended the first case in the house.	I make use of swabbing freely in the control of school contacts.
ASHTON-UNDER-LYNE	No.	No.
ACTON ...	All the contacts are not swabbed. The contacts of those removed to hospital are swabbed by the Public Health Department.	Yes.
CAMBRIDGE ...	Practitioners paid 1/- per swab.	Yes.
CHELTHENHAM ...	Neither.	No.
CHESTER ...	Practitioners are at liberty to swab if they so wish, but all swabbing desired by the Public Health Department is done by the Public Health Department.	Yes.

Town	Do the Practitioners in attendance or does the Public Health Department swab the whole of the contacts in cases of Diphtheria ?	Does the Department swab the contacts of cases in the Public Elementary Schools ?
COVENTRY	Neither.	Sometimes.
COLCHESTER	In the better class cases the practitioners prefer to swab contacts; in the poorer cases it is understood by the practitioners that the Public Health Department undertake the work unless they state otherwise.	Yes, when considered necessary.
DERBY	This varies with individual doctors and individual cases.	Yes.
DEVONPORT	In all cases admitted to the hospital this is done by the Health Department.	Yes, when considered necessary.
EXETER	Practitioners in attendance.	School Medical Officer.
ECCLES	Practitioners.	Yes.
FOLKESTONE	Public Health Department.	Yes.
HANDSWORTH (STAFFS)	Practitioners never, Health Department occasionally.	Usually, but not invariably.
HUDDERSFIELD	Neither.	No.
HESTON & ISLEWORTH	This matter is arranged mutually between the Practitioner in attendance and the Medical Officer of Health as a case occurs.	Yes.

HEREFORD	...	...	Usually the Medical Officer of Health. In some cases the Practitioner in attendance.	If necessary.
HOVE	...	...	The Medical Practitioners are persuaded to do in some cases, generally when they can make a charge for so doing, but there is a good deal of Club and Dispensary work, and these are swabbed by the Medical Officer of Health.	The Medical Officer of Health who is supervising School Medical Officer has generally visited the school with the School Medical Officer, and both have worked together in swabbing contacts.
IPSWICH	...	...	Usually the Public Health Department.	Yes, if deemed necessary.
ILFORD	...	...	The Medical Practitioner some.	Yes, when necessary.
KINGSTON-ON-THAMES			This is done by the Practitioner at his discretion when urged to do so by the Medical Officer of Health.	Yes.
KINGS NORTON	...	...	This Department now swabs contacts.	
LUTON	...	...	Public Health Department when required.	Not generally.
LINCOLN	...	...	A request is made to the Practitioners in all cases to swab contacts in house or to permit the Medical Officer of Health to do so.	Yes.
NOTTINGHAM	...	...	Sometimes one, sometimes the other, but it is not always done.	Yes.
OXFORD	...	.	Section 2. It depends on the Practitioner.	Yes. No contact returns to a Public Elementary school until I give a certificate after a bacteriological examination.

Town	Do the Practitioners in attendance or does the Public Health Department swab the whole of the contacts in cases of Diphtheria ?	Does the Department swab the contacts of cases in the Public Elementary Schools ?
PORTSMOUTH ...	Practitioner in attendance.	When necessary by the School Medical Officer.
RICHMOND (SURREY)	No, not all cases.	In some instances.
REIGATE ...	Swabbing of contacts in infected houses usually limited to school children. Occasionally younger ones and occasionally elder ones if employment suggests desirability. Offer made to medical attendant to take swabs but not often accepted—in such cases taken by the Medical Officer of Health or School Medical Officer.	Classes or Departments examined only when 2 or more children from different families are attacked. Undertaken by Medical Officer of Health and School Medical Officer jointly, who also examine the swabs.
ROTHERHAM ...	Sometimes the Medical Practitioner—usually the Medical Officer of Health.	The School Medical Officer.
SOUTHEND-ON-SEA ...	We only swab those contacts who attend school. If the Practitioner does not do this we do it. All contacts are examined clinically by the Medical Officer of Health or Assistant Medical Officer of Health as soon as notification is received, though usually we do not swab them till they are about to return to school.	The class is visited, any doubtful sore throat (past or present) is swabbed, as also is any nasal discharge, otherwise swabs are not taken.
ST. HELENS (LANCS)	Not usually.	Yes, usually.

SHREWSBURY	...	The contacts are swabbed by members of the Public Health Department.	Yes.
SCARBOROUGH	...	Only when the first case has been unrecognised for some days Practitioner swabs.	Yes.
STOCKPORT	...	Practitioner in attendance.	Yes.
WEST HAM	...	No.	No.
WALTHAMSTOW	...	Neither. Only those cases showing suspicious symptoms are swabbed, then the Nurse Visitor does it under Medical Officer of Health's instructions. The General Practitioner can do so if he likes, but he does not.	As in No. 1. The Medical Officer of Health then does it.
WORTHING	...	The Public Health Department do what little is done among the poor classes only.	Yes.
WALLASEY	...	The Public Health Department does not, nor so far as I am aware does any practitioner.	No.
WITHINGTON (Sub- district of Man- chester)	...	Neither.	As a rule the Education Medical Officer of Health. In Man- chester a separate official.
WAKEFIELD	...	In some cases the Practitioner, in some cases the Public Health Department. If the doctor does not wish to do it we do it.	Yes.
CROYDON	...	Either the Medical Practitioner, or if he prefers it we do it.	Yes.

A few cases occurred in December amongst the large houses in North Wimbledon; these were all supplied by one milkman, but there was no question of a milk epidemic, as the same milkman supplied a very large proportion of the big houses in and around the district where the cases occurred, and the manner in which the cases arose was not that associated with milk outbreaks.

Hitherto anti-toxin had been supplied by the Department to the medical practitioners, and no charge made where a doctor certified that the people were unable to pay, and to those in a position to pay an account was rendered. This was latterly slightly modified, and on the 15th August, 1910, the following Order was issued by the Local Government Board:—

(51,568)

(15th August, 1910).

Provision, &c., of Diphtheria Anti-toxin.

ENGLAND AND WALES

(EXCLUDING LONDON).

To the Council of every County Borough;—

To the Council of every Urban District;—

To the Council of every Rural District;—

To every Medical Officer of Health of any of the Councils aforesaid;—

And to all others whom it may concern.

WHEREAS under Section 133 of the Public Health Act, 1875, any local authority (including the Council of every County Borough, the Council of every Urban District, and the Council of every Rural District) may, with the sanction of the Local Government Board, themselves provide or contract with any person to provide a temporary supply of medicine and medical assistance for the poorer inhabitants of their District;

And whereas it is expedient that, subject as herein-after stated, the sanction of the Local Government Board should be given under the above-cited enactment to the provision by any of the said Councils of a temporary supply of the medicine known and herein-after referred to as "diphtheria anti-toxin," and of medical assistance in connexion with the temporary supply of diphtheria anti-toxin;

And whereas in pursuance of the enactments in that behalf the Local Government Board by a General Order dated the 23rd day of March, 1891, prescribed in relation to Medical Officers of Health appointed by the Councils of County Boroughs and by the Councils of Urban Districts, and by another General Order of the same date prescribed in relation to Medical Officers of Health appointed by the Councils of Rural Districts, Regulations with respect to the duties of the said Medical Officers of Health, and also with respect to their salaries in every case in which one-half of the salary of a Medical Officer of Health is intended to be payable by a County Council or by the Council of a County Borough under the Local Government Act, 1888;

And whereas, with respect to the said Medical Officers of Health, it is expedient that further provision should be made with regard to the following matters; that is to say,—

- (a) the duties of the said Medical Officers of Health in connexion with the use of diphtheria anti-toxin in cases of disease, as well for the prevention of disease as for the prevention of its extension; and

- (b) the compensation of the said Medical Officers of Health for the discharge of the said duties in every case in which one-half of the salary of a Medical Officer of Health is intended to be payable as aforesaid :

NOW THEREFORE, We, the Local Government Board, in the exercise of Our powers in that behalf, do hereby Order as follows :—

ARTICLE I.—We sanction the provision by the Council of every County Borough, the Council of every Urban District, and the Council of every Rural District, or their contracting with any person for the provision, in pursuance of Section 133 of the Public Health Act, 1875, of a temporary supply of diphtheria anti-toxin, and of medical assistance in connexion with the temporary supply of diphtheria anti-toxin, for the poorer inhabitants of their District, subject to the following condition, that is to say,—

The arrangements with respect to the keeping, distribution, and use of the diphtheria anti-toxin shall be made in accordance with the advice of the Medical Officer of Health.

ARTICLE II.—The duties assigned to the Medical Officer of Health by such one of the two General Orders dated the Twenty-third day of March, One thousand eight hundred and ninety-one, as applies to his case, or other the Regulations for the time being issued by Us and superseding the Regulations prescribed by the said Orders, shall be deemed to extend to and to include all action by the Medical Officer of Health in the execution of this Order.

ARTICLE III.—Where one-half of the salary of a Medical Officer of Health is intended to be payable by a County Council or by the Council of a County Borough under the Local Government Act, 1888, such one of the two General Orders dated the Twenty-third day of March, One thousand eight hundred and ninety-one, as applies to his case, or other the Regulations for the time being issued by Us and superseding the Regulations prescribed by the said Orders, shall apply and have effect as if the Regulations thereby prescribed included a provision authorising the Council of the District, or requiring them at Our direction, to pay from time to time to the Medical Officer of Health, in addition to the salary or other compensation payable under the said Regulations, a reasonable compensation for all action by the Medical Officer of Health in the execution of this Order.

ARTICLE IV.—This Order may be cited as “The Diphtheria Anti-toxin (Outside London) Order, 1910.”

Given under the Seal of Office of the Local Government Board, this
Fifteenth day of August, in the year One thousand nine
hundred and ten.

H. C. MONRO,
Secretary.

JOHN BURNS,
President.

Date of publication in the London Gazette,
16th August, 1910.

The Committee, in compliance with this Order, determined to provide the anti-toxin free to all cases occurring in the Borough, and facilities were made for its supply at any hour of the day or night, and it was arranged that after office hours the supply should be kept at the two fire stations, and a circular letter was sent to every medical practitioner in the district informing him of this arrangement, which commenced on November 6th, 1910. Since the arrangement was made

twelve phials of anti-toxin have been utilised from the fire stations.

The cases notified occurred in the following class of houses:—

Rental up to and including £20	...	14	per cent.
„ from £20 to £25	...	29·7	do.
„ from £25 to £40	...	18·7	do.
„ from £40 to £50	...	6·2	do.
„ from £50 to £100	...	12·5	do.
„ from £100 to £200	...	1·5	do.
„ from £200 and over	...	4·7	do.
Stables attached to large houses	...	10·7	do.
Hospital (post Scarlatinal Diphtheria)		1·5	do.

Of those occurring in houses, 44 per cent. occurred in those rented up to £25, and 55·6 per cent. over £25; of those occurring in houses, 64 per cent. occurred in houses of rental of £40 and under, and 36·7 per cent. over £40. If stables are included, 74·6 per cent. of the cases occurred in houses of £40 per year rental and under.

Two cases occurred in four houses, that is 6·7 per cent. of the cases; families where there had been previous cases of Diphtheria 13·5 per cent. The average population of the houses up to £25 per year 8·3; average number of children 2·87. Average population of houses £100 per year and over 9·7; average number of children 2, which shows that very close contact is needed for the spread of infection, as the occurrence of secondary cases is very little more in the smaller houses, than it is in the larger ones where the population per house is very little larger.

Four cases occurred in tenements with double flats and common entrance, but in none of these instances did a second case arise.

СРЕДНЕЕ МЕСЯЧНОЕ КОЛИЧЕСТВО ОСЛАБЛЕННЫХ РАБОТНИКОВ

Среднее число рабочих, занятых в производстве продукции

Среднее число рабочих, занятых в производстве продукции

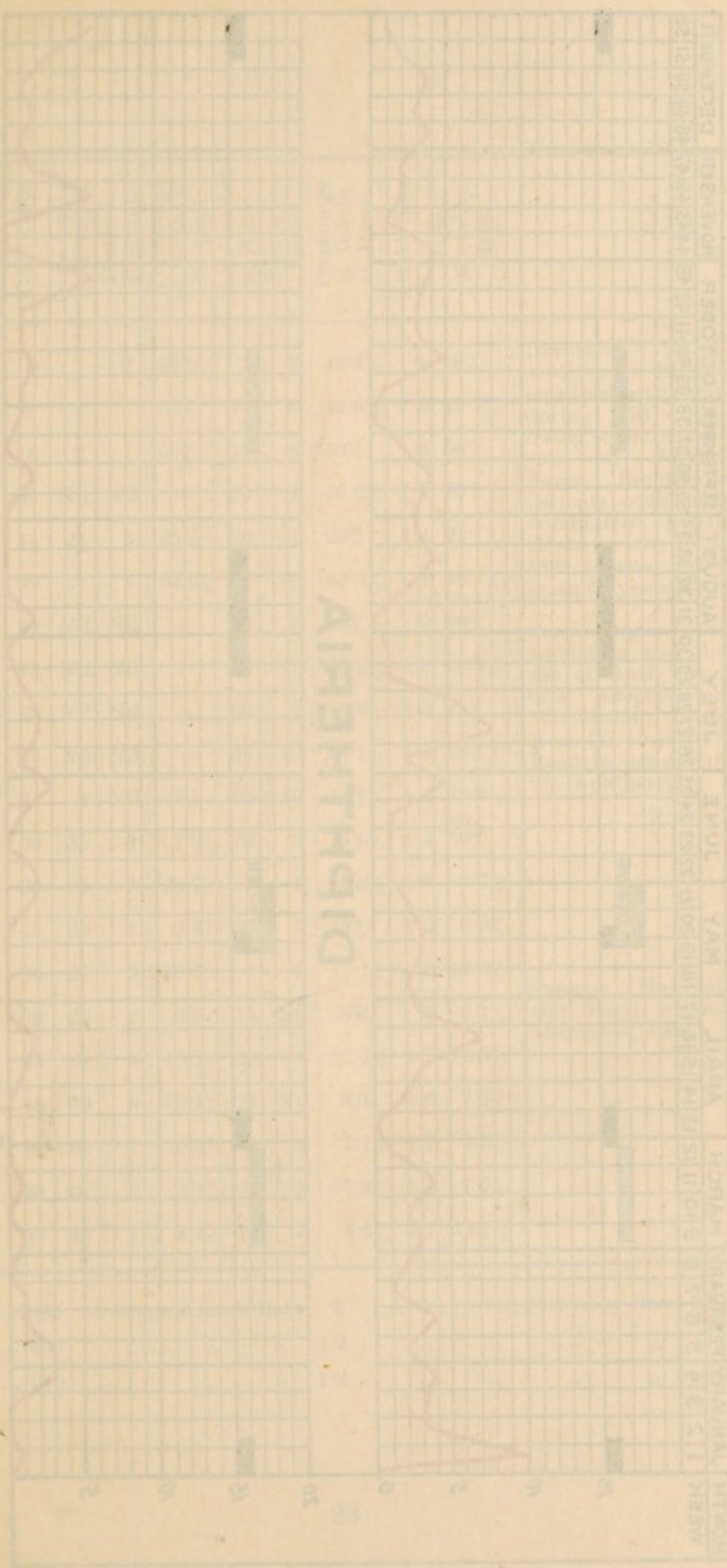
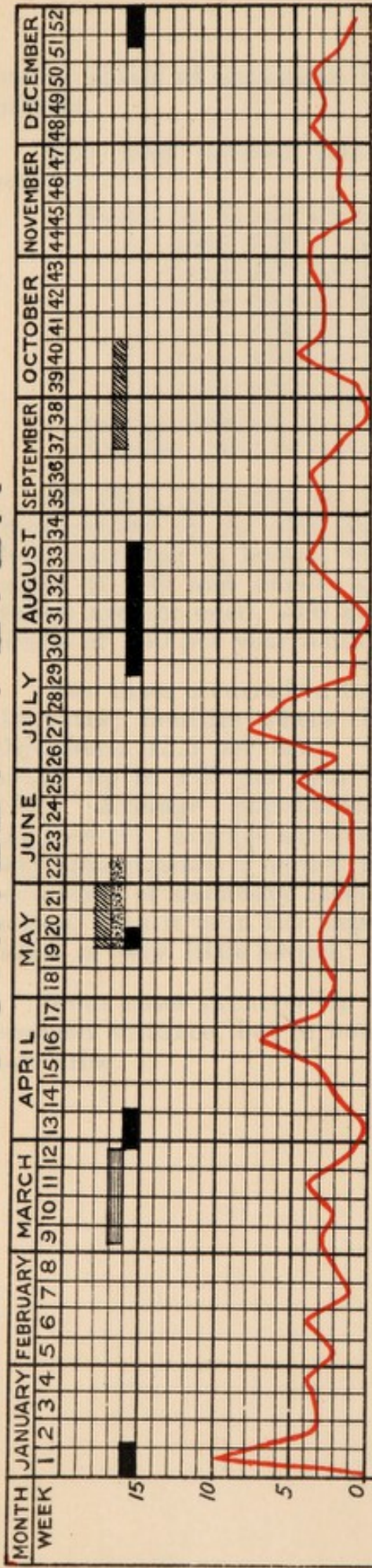
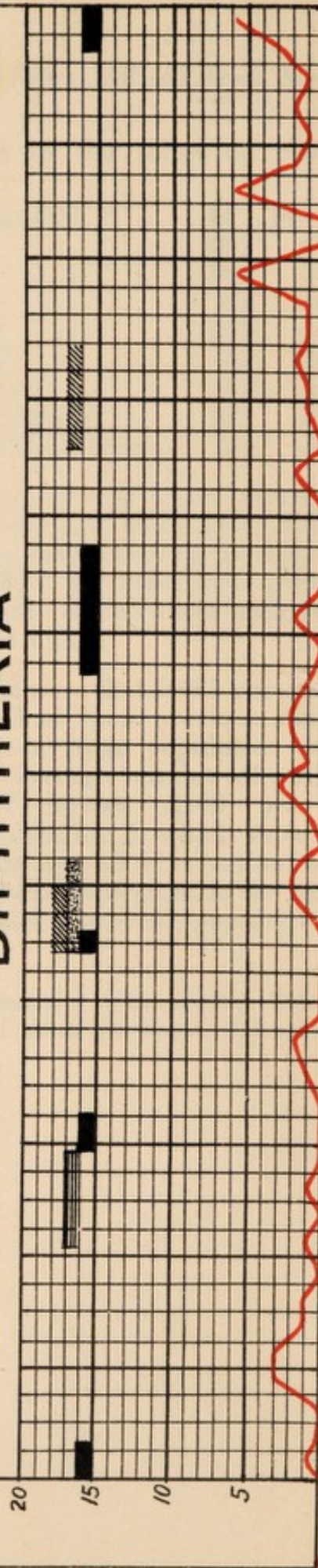


CHART SHEWING WEEKLY NOTIFICATIONS OF SCARLET FEVER



DIPHTHERIA



PERIODS DURING WHICH PUBLIC ELEMENTARY SCHOOLS CLOSED

- ALL SCHOOLS
- COTTENHAM PARK
- HAYDON ROAD, INFANTS' DEPT
- CENTRAL, INFANTS' DEPT
- ORDINARY HOLIDAYS
- MEASLES, MUMPS & WHOOPING COUGH
- MUMPS
- MEASLES

Year.	Total Cases.	Cases treated in Hospital.	Deaths in Hospital.	Percentage of Deaths in Hospital.	Cases treated at Home.	Deaths at Home.	Percentage of Deaths at Home.	Attack Rate.	Case Mortality Rate.	
1890	10	3	2	66·6%	7	3	42·8%	·4	50%	Durnsford Lodge used for all Infectious Diseases except during 1893 when, owing to the prevalence of Scarlet Fever, Diphtheria patients could not be admitted. It was closed on Oct. 10th, 1895, because of its insanitary condition.
1891	16	2	1	50%	14	6	42·8%	·5	43·7%	
1892	18	2	1	50%	16	8	50%	·6	50%	
1893	39	Nil.	Nil.	—	39	4	10·2%	1·3	10·2%	
1894	44	24	6	25%	20	4	20%	1·4	22·7%	
1895	39	27	8	29·6%	12	10	83·3%	1·1	46·1%	
1896	30	Nil.	Nil.	—	30	3	10%	·9	10%	Bacteriological examination and the use of Anti-Toxin first adopted in Wimbledon. Iron Hospital, Durnsford Road, in use except for Diphtheria.
1897	43	Nil.	Nil.	—	43	7	16·2%	1·1	16·2%	
1898	60	Nil.	Nil.	—	60	7	11·6%	1·5	11%	
1899	64	Nil.	Nil.	—	64	12	18·7%	1·5	18·7%	
1900	64	2	Nil.	Nil.	62	10	16·1%	1·4	15·6%	
1901	60	38	3	7·9%	22	3	13·6%	1·4	10%	
1902	80	29	6	20·7%	51	1	1·9%	1·8	8·7%	Present Hospital, Gap Road, opened December, 1900.
1903	58	35	1	2·8%	23	3	13%	1·2	6·9%	
1904	36	27	5	18·5%	9	1	11·1%	·7	16·6%	
1905	39	25	2	8%	14	Nil.	Nil.	·8	5·1%	
1906	55	28	3	10·7%	27	6	22·2%	1·1	16·3%	
1907	83	59	6	10·1%	24	Nil.	Nil.	1·6	7·2%	
1908	94	66	7	10·6%	28	2	7·1%	1·7	9·5%	
1909	90	67	3	4·4%	23	4	17·3%	1·5	7·7%	
1910	65	46	1	2·1%	19	1	5·2%	1·1	3·07%	

1890—1895	Average Attack Rate	·8	Average case Mortality Rate	37·1%
1896—1900	„ „ „	1·2	„ „ „	14·3%
1901—1910	„ „ „	1·2	„ „ „	9·1%

Enteric or Typhoid Fever.—During the year 9 persons in 9 different houses were notified as suffering from this disease, 1 being in Trinity Ward, 1 in St. John's Ward, and 7 in St. Mary's Ward. One case occurred in January, 2 in March, 2 in May, 1 in August, 1 in October, 1 in November, and 1 in December.

The attack rate was '15 and there were 2 deaths, corresponding to a death-rate of '03 per thousand of the population.

In only one case were the drains of the house found defective.

In two cases there was a history of eating shell fish and in one water cress, but nothing definite could be ascertained.

With one exception all the cases occurred in better class houses.

Puerperal Fever.—Only one case was notified during the year.

Whooping Cough was the registered cause of death in 12 instances, representing a death-rate of '20, as against 12 last year and 4 the previous year, with a death-rate of '21 and '07 respectively.

The deaths were distributed over the age periods as follows:—

Under one year	...	...	...	5
Between one and five years	...	...	...	7

and they occurred in the following Wards:—

St. John's	...	...	...	...	1
Dundonald	...	...	...	...	2
Trinity	...	...	...	...	8
South Park	...	...	...	...	1

I should again like to draw attention to the heavy mortality from Whooping Cough year by year, as will be seen from the following figures giving the respective deaths during the last ten years from Whooping Cough, Scarlet Fever, and Diphtheria.

Year.	Whooping Cough.	Scarlet Fever.	Diphtheria.
1901	13	1	6
1902	17	—	7
1903	9	1	4
1904	14	—	6
1905	10	3	2
1906	4	5	9
1907	30	5	6
1908	4	3	9
1909	12	2	7
1910	12	—	2
Totals	125	20	58

Erysipelas.—There were 31 cases of Erysipelas notified during the year, with 0 deaths.

Influenza was certified as the cause of 3 deaths, last year there were 9, and in 1908 there were 18. They were distributed through the Wards as follows:—

St. Mary's	...	...	...	2
South Park	...	...	...	1

Of these 2 occurred over the age of 25.

Measles.—Measles was responsible for 4 deaths during the year, or equivalent to a death-rate of '068, as compared with 10 last year, and 5 the year before, with a death-rate of '17 and '09.

During the year the Infants' Department, Central School and Cottenham Park School had to be closed on account of Measles.

Of the deaths, 1 occurred under one year of age, 1 between one and five years, and 2 between five and fifteen years.

The distribution through the Wards was as follows:—

Dundonald	...	...	...	2
Trinity	...	...	...	1
South Park	...	...	...	1

and the rates:—

Dundonald	...	...	...	'25
Trinity	...	...	...	'08
South Park	...	...	...	'06

Measles has not been very prevalent and only four deaths are recorded as due to this cause, as compared with ten last year. Measles, as will be seen by the accompanying list, levies a heavier toll of deaths than Scarlet Fever or Diphtheria year by year, and so far practically all attempts to check its spread have proved abortive. Not only is it responsible for many deaths, but also for many damaged lives.

Year.	Measles.	Whooping Cough.	Scarlet Fever.	Diphtheria.
1901	10	13	1	6
1902	11	17	—	7
1903	4	9	1	4
1904	23	14	—	6
1905	1	10	3	2
1906	19	4	5	9
1907	10	30	5	6
1908	5	4	3	9
1909	10	12	2	7
1910	4	12	—	2
Totals ...	97	125	20	58

In discussing this matter with the Head Master of one of our schools, he stated that he was able and did give a list of children who had never been the same since they had had Measles, although no definite disease could be assigned as the cause.

The various methods that have been tried to prevent the spread of Measles are:—

1. Scheduling it as a notifiable disease under the Infectious Disease (Notification) Act, 1889, but in almost every instance this has been given up on the score of expense, and also that full control could not be obtained owing to the fact that no doctor was called in in many cases. If the disease is scheduled under the Act the notification fee of 2s. 6d. is payable in each case.

2. The closure of the school on the occurrence of the first case over the period when the next batch of infections is due to mature. This is done so that the cases infected occur at home instead of attending school in the prodromal stage and spreading further infection.

The failure of this procedure has been due, as a rule, to there being no information as to further cases occurring in the homes of the children.

3. The closure of the whole class in which a case occurs.

4. The exclusion of the children in the affected class who have not previously had measles, that is the combustible material, over the period when the next batch should fall ill.

This, of course, necessitates an accurate knowledge of the infectious disease history of each child in the class.

5. The closure of the school when the cases become very numerous, generally carried out on the occurrence of the third batch, by which time experience shows that the epidemic is practically over.

All these methods except the first do nothing towards diminishing the mortality of the disease, as no information is, as a rule, forthcoming during the period of closure.

The method of dealing with the outbreaks during the year was as follows:—

Central Infant School.—A case occurred in the Infants' Department on May 10th, and the Department was closed from the 11th to the 28th; only one other case occurred.

On September 6th two cases were notified as having been at school. I closed the school from September 14th to October 1st, and then for a further period until October 8th. As soon as I decided to close, the following letter and notice were sent to the parents of every child on the register.

BOROUGH OF WIMBLEDON.

EDUCATION COMMITTEE.

MEDICAL OFFICER'S DEPARTMENT,

TOWN HALL, WIMBLEDON,

29th September, 1910.

DEAR SIR,

In view of the fact that the Central Infants' School has been closed on account of an outbreak of Measles, in the event of a case occurring in your family please fill in the enclosed form and forward it at once to the Head Teacher.

Yours faithfully,

ELWIN H. T. NASH,

School Medical Officer.

MEASLES.

CLOSURE OF THE CENTRAL INFANTS' SCHOOL.

Name of child suffering from Measles
 Date of onset of illness
 Name of Sunday School the patient attends
 Names of other children in family with Day School and Sunday School they attend :—

Name.	Day School.	Sunday School.

Signed.....

To the Head Teacher,
 Central Infants' School, Wimbledon Common.

The Central School draws from a very large area, and has greater capabilities of spreading infection than any other school in the district.

The next crop of cases were notified on the following dates:—September 12th, 19th, and 22nd, and October 2nd and 3rd. Forty-two cases in all being notified, and covered the large area shown on the spot map. As soon as the notification arrived, if it showed more children in the family a corresponding number of Form 2 with the accompanying letter were sent, and every case was visited by the School Nurse.

BOROUGH OF WIMBLEDON.

EDUCATION COMMITTEE.

MEDICAL OFFICER'S DEPARTMENT,
 TOWN HALL, WIMBLEDON,
4th October, 1910.

DEAR SIR,

Should any of your other children whose names appear on the previous list develop Measles, please fill in one of these forms as soon as the case occurs and return it to the Head Teacher of the School the child attends.

Yours faithfully,

ELWIN H. T. NASH,
School Medical Officer.

MEASLES.

CLOSURE OF THE CENTRAL INFANTS' SCHOOL.

Name of child suffering from Measles
 Date of onset of illness
 Date of last attendance at Sunday School
 Signed.....

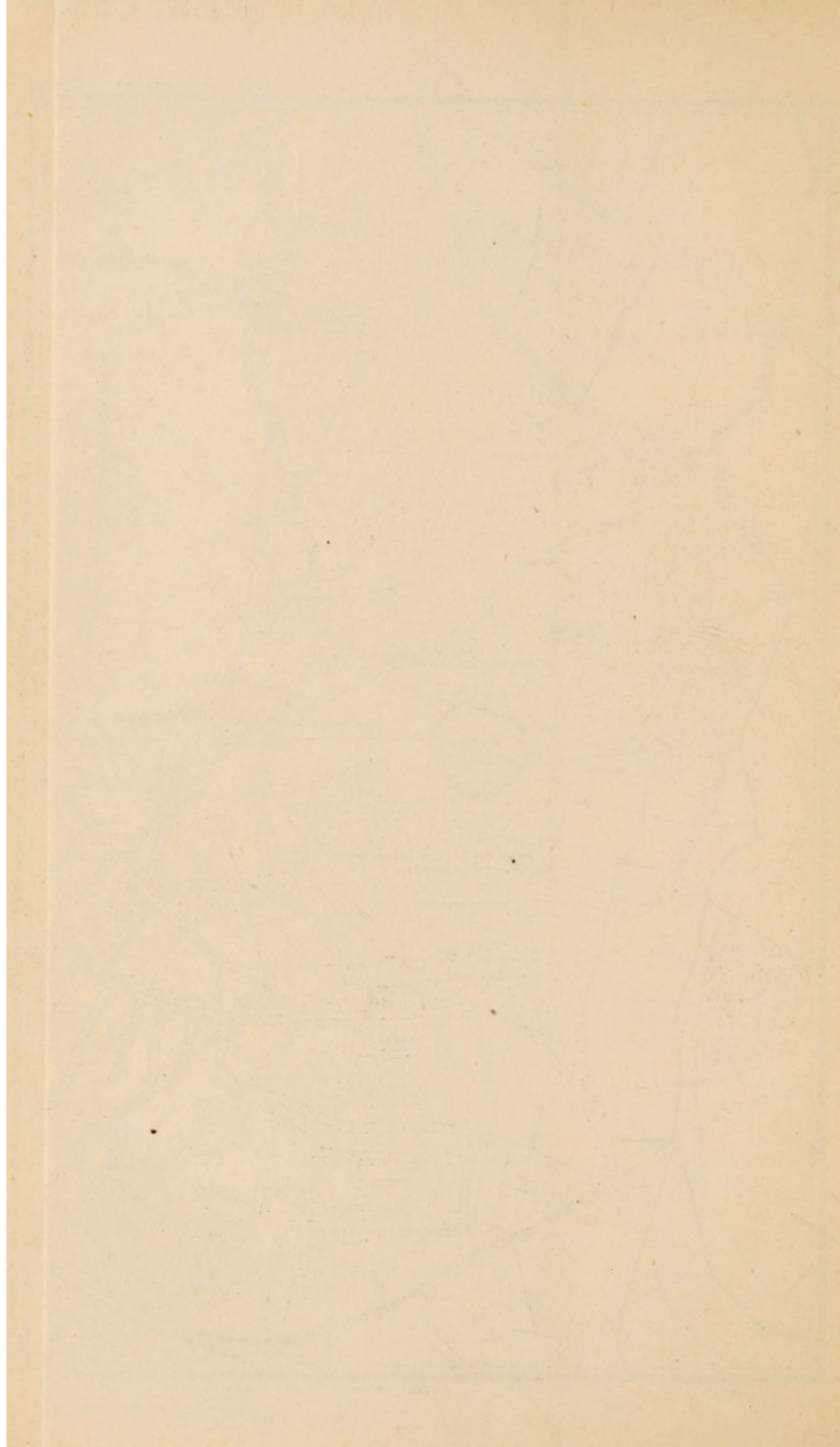
Address

To the Headmistress,
 Central Infants' School, Wimbledon.

MEASLES.—CENTRAL SCHOOLS.

BOROUGH OF WIMBLEDON.





The returns were all sent in, and by this means touch was kept with every case, and only one further case occurred in the town after the school re-assembled, and that was in the mixed school.

The non-immune children in the class-room were excluded over the infectious period, and no further case occurred.

At Durnsford Road on June 2nd cases occurred in two class-rooms, and the children in those two classes were excluded.

At Cottenham Park the cases dribbled in, and the school was eventually closed from May 12th to June 4th on account of Measles and Mumps.

By the method adopted in the September outbreak at the Central School, in isolated schools, particularly in rural areas, I think much might be done, as by this means of notification all the families except those whose eldest child is not yet of school age are kept in touch with, but it remains to be seen what good can be effected if we get an epidemic in the Haydons Road area. The great point is to get in touch with the cases of Measles, as the deaths are mostly caused by ignorance and neglect, and if this method of utilising the schools as the channels by which the information can be obtained without the expense of a notification fee succeeds, it will be a step in the right direction.

Little good can be done, however, unless the cases are visited by a Health Visitor, or nurse, to impress upon the people the necessity for taking care of the patient, and the necessity for precautions against the spread of infection.

But even this is insufficient. What is really necessary is that there should be a small block in all Isolation Hospitals set apart for the treatment of cases of Measles suffering with Pneumonia and other serious complications.

The small number of deaths during the year 1910 is due to two causes:—

1. That the outbreaks have occurred during the warm weather.
2. That there have not been many cases.

It is important to try and postpone the age at which the child is attacked, but it is almost impossible to prevent the children in the poorest quarters getting it with our present

methods of administration, and we may confidently expect a severe epidemic owing to the amount of combustible material.

On account of the carelessness of many parents in respect to the infection of Measles, I have arranged for the co-operation of the Sunday Schools in this district, and all cases are notified to the Superintendents, and they are willing to co-operate by closing where necessary.

Phthisis and other Tuberculous Diseases were the assigned cause of the death of 43 persons (30 males and 13 females) during the year, equal to a death-rate of '73 per thousand of population. Last year there were 48 deaths, and the previous year 58.

Included in this number are six persons, formerly residents in Wimbledon, who died in the Workhouse at Kingston.

In Table IV. is shown the distribution over the age periods, and in Wards.

The following list gives the various occupations and ages:—

Employment.	M.	F.	Ages.
Ticket Collector	...	1	...
Artist	...	1	...
Greengrocer	...	1	...
Tailor	...	1	...
Clerk	...	2	...
Housewife	...	6	...
Accountant	...	2	...
Caretaker	...	1	...
Printer's Reader	...	1	...
Warehouseman	...	1	...
Tobacco Manufacturer	1		...
Carman	...	1	...
Hawker	...	1	...
Schoolmistress	...	1	...
Hairdresser	...	1	...
No occupation	...	9	5
	—	—	
Total	...	24	12

Males : 9 months, 17 months, 2, 5, 5, 10, 19, 19, 19.

Females : 12, 17, 20, 22 & 26.

NOTE.—In addition to the above figures seven deaths (6 male and 1 female) occurred in the Workhouse and the County Asylum at Brookwood.

**Deaths from Phthisis and other Forms of Tuberculosis registered
in the District—1910**

Age Incidence.	*Phthisis.		†Other forms of Tuberculosis	
	Male	Female	Male	Female
Under 15 years	2	1	5	—
15 to 20 years	3	1	—	—
20 to 25 „	1	3	—	1
25 to 30 „	1	1	—	1
30 to 35 „	4	2	—	—
35 to 40 „	2	1	—	—
40 to 45 „	1	—	—	—
45 to 50 „	—	1	—	—
50 to 55 „	3	—	—	—
55 to 60 „	1	—	—	—
60 to 65 „	1	—	—	—
65 and upwards	1	—	—	—
Total	20	10	5	2

Ward.	*Phthisis.		†Other Forms of Tuberculosis.	
	Male	Female	Male	Female
St. Mary's	2	—	1	—
St. John's	2	1	—	—
Cottenham Park	—	—	1	1
Dundonald	2	3	1	—
Trinity	7	4	1	—
South Park	7	2	1	1
Total	20	10	5	2

* 5 Deaths of Residents beyond district excluded.

† 2 Deaths of Residents beyond District excluded, and 1 Non-resident included.

Only 7 notifications were received under the voluntary system in addition to the 13 received under the Public Health (Tuberculosis) Regulations, which came into force on January 1st, 1909.

In all cases of Phthisis inquiries are made by the Department with regard to getting disinfection carried out, but in 21 cases this was refused, and in 1 case the disinfection was carried out by the owner.

Great difficulty is experienced in getting disinfection after deaths from Phthisis carried out, due largely to the fact that unless notifications of the deaths come in promptly week by week the period which elapses between the occurrence of the death, and the notification coming into this Department, is sufficient for the people to have got over the trouble of the funeral and general upset connected with the death, and to have settled down to the ordinary routine again, and they are extremely loth to allow us to upset the whole house again, whereas if we can get into the house within a week the people are usually willing to allow us to thoroughly disinfect. During last year, owing to the delay which has so often occurred in getting in the death returns, we have been much hampered in this direction. At the same time we find in a certain number of the cases the people move out after the funeral, and the new tenants are not at all anxious to be disturbed.

Day by day the necessity of dealing with Tuberculosis is being forced to our notice owing to more accurate knowledge as to the means of its spread and the extent of infection.

The following letter was received from Croydon with respect to using the Joint Small Pox Hospital at Cheam as a sanatorium for Tuberculosis:—

(COPY.)

PUBLIC HEALTH DEPARTMENT,

TOWN HALL, CROYDON,

July 18th, 1910.

GENTLEMEN,

In accordance with your instructions, I beg to report on the question of utilising the hospital for patients suffering from tuberculosis. As desired I have also conferred with the Medical Officer of the Local Government Board who is personally in sympathy with the suggested utilisation of the hospital for other than small-pox patients.

The first question that arises is the legality of utilising a small-pox hospital for patients suffering from other diseases. As the Croydon and Wimbledon Joint Board was constituted for the sole and specific purpose of isolating small-pox it would doubtless be necessary to apply for an amendment of the Provisional Order under which the Board was constituted. It is possible that such an amending Order would be opposed by people living in the neighbourhood of the hospital, and if it were, we might have to face an expensive fight in the Houses of Parliament and the risk of interference with the present use of the hospital. Apart from this difficulty I can see considerable advantage in utilising the hospital for tuberculosis.

The second point which deserves consideration is the suitability of the hospital for the purpose of treating phthisis patients. It should be said at once that neither the soil nor the general surroundings are such as one would select for an ideal sanatorium. On the other hand the conditions are reasonably suitable for the treatment of the class of patients that would be likely to avail themselves of the institution, and I believe that valuable work might be done in a hospital so situated. I do not think that the fact that the hospital was built for small-pox would eventually be a bar to patients seeking admission, though no doubt a certain amount of prejudice would have to be overcome in the first instance. At any rate other towns such as Manchester are using small-pox accommodation for phthisis patients and the South Staffordshire Small-pox Hospital Board has recently adopted a recommendation of their Medical Officer to make similar use of their hospital. In order that the Board might carry out their primary duty of isolating small-pox, it would be necessary either to reserve the small four-bedded block for small-pox emergencies or to erect a small temporary ward at a greater distance from the present buildings and to reserve this for the first case or two of small-pox. Were this done I can see no difficulty in utilising the rest of the hospital for phthisis patients provided they were admitted on the understanding that in the event of an epidemic they might have to be sent home at a few days' notice.

Since the hospital was opened in December, 1901, it has been used for small-pox at the following times (omitting occasions on which patients were isolated owing to errors in diagnosis):—

From December 10th, 1901, to September 22nd, 1902. (Empty nearly five months).

February 17th, 1903, to December 24th, 1903. (Empty nearly three months).

March 17th, 1904, to April, 1904. (Empty nearly four months).

July 31st, 1904, to September 28th, 1904. (Empty seven months).

April 29th, 1905, to May 16th, 1905. (Empty nearly six months).

November 10th, 1905, to December 16th, 1905. (Empty nearly three months).

March 7th, 1906, to April 23rd, 1906. (Empty three months).

July 28th, 1906, to August 9th, 1906. (Empty nearly four years to date).

The hospital has thus been free from small-pox for about 6 years out of the 8½ years that have elapsed since its erection.

It is also important to have some idea of the probable number of patients in the constituent districts. I find from the death returns that the total number of deaths from phthisis for the 10 years, 1900-1909 was 2,435, or an average of 244 deaths per annum. Assuming that each fatal case has an average duration of three years from first symptoms to fatality, there must be at least 732 patients suffering from phthisis within the area of the Joint Board. In all probability this is an understatement as I am of opinion that three years is too short an estimate for the duration of the disease.

As far as the constituent districts are concerned the average annual number of deaths for the past ten years and the estimated number of sufferers were as follows:—

	Deaths.	No. of Patients.
Croydon Borough	146	438
Croydon Rural (including Merton)	37	111
Penge	27	81
Wimbledon	34	102

It will thus be seen that there is ample material from which to select patients for hospital treatment.

It would next be necessary to arrive at some approximate principle to guide the Board or the Constituent Authorities in selecting patients for treatment. Practically one can divide the sufferers from pulmonary phthisis into three great classes:—

(1) *Early Cases* in which there is considerable hope of permanently arresting the disease by open-air treatment provided the patients can subsequently live under hygienic conditions. Unfortunately it is improbable that many early cases would seek admission. Among the class that the hospital is likely to serve the early detection of incipient phthisis is at present impracticable.

(2) *More Advanced Cases* in which six weeks or two months in hospital would be of great value as it would afford an opportunity for instructing the sufferers how they can avoid infecting their relatives and the public generally. Many of them, too, would be so improved by hospital treatment that their working life would be materially prolonged.

(3) *Hopeless Cases* in the last stages. These patients are a great menace to their relatives and there is reason to believe that much benefit would result from their isolation in hospital.

There would be little difficulty in filling the hospital with patients from the second and third classes.

Cost.—This has been carefully considered, and I will, if desired, prepare a detailed estimate. From a comparison of the cost of the Borough Hospital and from figures supplied me by Dr. Reid (Staffordshire C.C.) I am of opinion that the extra cost (over and above present expenditure) of maintaining an average of 44 beds for phthisis patients would be about 30/- per bed occupied per week, or in round figures about £3,400 per annum. To this would have to be added some small expenditure on shelters and other small alterations which would be required in order to adapt the hospital for phthisis patients.

Should the Committee consider the time opportune I would suggest that the Constituent Authorities should be asked whether they approve of the Board admitting cases of phthisis on this basis and whether they would support the necessary application to the Local Government Board for an Amending Order.

H. MEREDITH RICHARDS,
Medical Superintendent.

Owing to the cost per head to the Borough, and to the fact that other methods of dealing with the disease, promise better results for the money expended I advised against the scheme. I was also instructed to report upon the whole question of dealing with Tuberculosis, and that report will be made as soon as I have watched the results of certain methods of treatment.

I reported the result of a visit made to Dr. Camac Wilkinson's Tuberculosis Dispensary in Lambeth, and was instructed by the Public Health Committee to continue my observations until I had formed a conclusive opinion.

On two occasions I was accompanied by the Chairmen of the Committee, Alderman Brasier, and Councillor Abbott.

The result of voluntary notification still remains unsatisfactory, and will do so until we have something to offer in the way of treatment. It has been found, particularly at

Brighton, that where facilities for treatment are offered that notifications increased correspondingly with the increase of the facilities offered for treatment. As I have stated before the time has come when we must either extend our activities with regard to the prevention of infectious disease to include Tuberculosis, Measles, Whooping Cough, or at least to re-focus our ideas with regard to the relative importance of this disease as compared with the ordinary notifiable infectious diseases.

Apart from all other considerations, I am convinced that the efficient dealing with the problem of tuberculosis is a sound financial consideration. It seems an anomalous state of affairs that Scotland should have compulsory notification, and with it the accompanying necessity to provide treatment, while England still gropes along and tinkers with the most pressing problem of the present day.

It cannot be sufficiently instilled into the public generally that Tuberculosis is preventible. This having been done the following question attributed to the late King when informed of this fact is sure to be put, namely:—"If preventible, why not prevented?"

Anthrax.—One case was notified as suffering from Anthrax on August 16th. The patient was a woman who had a sore place on the lip as the result of a carious tooth. The tooth was extracted by an unqualified dentist, but ulceration and necrosis of the surrounding tissues increased and would not yield to any treatment. A blood examination was made by one of the local practitioners, and the diagnosis of Anthrax was made as the result of finding a large gram-positive non-motile bacillus. As a result of this Sclavo's serum was injected, and a further blood examination and culture failed to reveal any Anthrax Bacilli. Unfortunately no culture was made from the ulcerated surface. As a rule cases of Anthrax which do not recover die within a fortnight; this case apparently lingered on for a matter of six weeks. The business conducted at the house where the woman lived was that of a Painter's Merchant, in which considerable business was done in brushes.

In view of the importance of the case, the Coroner was communicated with, but no inquest was held.

Ophthalmia Neonatorum.—One case was notified, which occurred in the practice of a doctor, with a trained nurse in attendance.

Cancer.—During the year 54 deaths have been registered as due to the different forms of malignant disease or Cancer, 20 males and 34 females.

The distribution of the deaths through the Wards was as follows:—

St. Mary's	8	attack rate	0·69
St. John's	10	„ „	1·76
Cottenham Park	9	„ „	1·33
Dundonald	9	„ „	1·13
Trinity	3	„ „	0·26
South Park	15	„ „	1·00

The following table shows the different parts of the body invaded, and the age incidence of those dying in the Borough:—

Part Affected.	Male.	Fe- male.	Total.	Age Incidence.	Male.	Fe- male.	Total.
Stomach and Bowels	7	3	10	Under 35 years	3	—	3
Liver	4	5	9	35 to 40 „	1	2	3
Urinary and Genera- tive Organs ...	2	3	5	40 to 45 „	—	2	2
Breast	—	13	13	45 to 50 „	2	6	8
Tongue, Neck and Throat	2	1	3	50 to 55 „	1	5	6
Other Parts ...	3	6	9	55 to 60 „	4	4	8
				60 to 65 „	1	5	6
				65 to 70 „	2	2	4
				70 to 75 „	1	4	5
				75 to 80 „	—	—	—
				80 and upwards	3	1	4
Total	18	31	49	Total ...	18	31	49

Ward.	Male.	Female
St. Mary's	3	5
St. John's	3	7
Cottenham Park	5	4
Dundonald	3	6
Trinity	2	1
South Park	2	8
Total... ..	18	31

The death-rate for the year was '92 as against '68 last year, and '57 in 1908, the average for the past five years being '81.

Diarrhœa and Epidemic Enteritis was responsible for 9 deaths, corresponding to a death-rate of '15. Last year there were 14 deaths, and a death-rate of '25, whilst the average for the past 5 years is '51.

There were also registered 9 deaths due to Enteritis, which term also includes Muco-enteritis, Gastro-enteritis, and Gastritis, giving a death-rate due to diarrhœal diseases of '15.

The deaths were distributed through the Wards as follows:—

St. Mary's	...	...	...	...	2
Trinity	...	...	...	...	5
South Park	...	...	...	...	2

Infantile Mortality.—By the term “ Infantile Mortality ” is meant the proportion of infants who died before reaching the age of twelve months to the total number born during the year. This is the method required by the Local Government Board in their statistical tables, and permits of accurate comparison with other localities, as in taking the number of deaths only, no reliable data are given for comparison, and to calculate the infantile death-rate on the population, or on the deaths at all ages, as is sometimes done, is absolutely valueless.

There were 86 such deaths during the year, or 74 per 1,000 births, a decrease of 3 on last year's rate, when there were 91 deaths, and a rate of 77. The previous year there were 82 deaths, and the rate 71. The average for the past ten years is 97.

Only twice previously, as pointed out in the commencement of the report, has this low figure been surpassed. This was in 1905 when the rate was 69, and in 1908 when it was 71. The average for the 136 smaller towns in the Registrar-General's Returns, that is towns with populations from 20,000 and under 50,000 at the last Census, is 104. Wimbledon's figure compares very satisfactorily with this.

The infantile mortality amongst illegitimate children was 163, as compared with 70 for the legitimates.

Fortunately for the infantile mortality the last three summers have been cool and damp, and it has been previously pointed out that the general mortality largely depends on the infantile mortality.

The infantile rates for the various Wards are as follows:—

St. Mary's	...	...	...	43·4
St. John's	...	...	...	69·7
Cottenham Park	...	...	...	63·6
Dundonald	...	...	...	87·8
Trinity	...	...	...	102·3
South Park	...	...	...	71·8

During the period (the past eight years) that records have been obtainable of infantile mortality in the various Wards, it is found that South Park Ward has had the highest rate in four years, St. Mary's Ward in two years, Dundonald Ward in one year, and Trinity Ward in one year, the average for the North Wimbledon Wards for those years being 62·2, as against 114 in the South Wimbledon Wards.

Twenty-five babies, or 28·4 per cent., of the total deaths, failed to survive the first week of life, and 43·1 per cent. the first month. Twenty-seven per cent. of the infants died from what may be termed "pre-natal causes."

Plague.—Owing to the outbreak of Plague in East Anglia the following Memorandum was circulated by the Local Government Board, and arrangements were made for forwarding any specimens for bacteriological examination to the Medical Officer of the Local Government Board.

MEMORANDUM ON PLAGUE.

I.—GENERAL CHARACTERISTICS OF THE DISEASE.

After frequent recurrences during several centuries, ending with the great outbreak of Plague in 1664—1679, the disease disappeared from Great Britain for more than 200 years. In 1894 it became prevalent at Hong Kong, and since that time it has spread from Asia into various parts of Europe, America, Africa, and Australia. In 1900 and in two subsequent years small outbreaks have occurred at Glasgow, and one or more cases have also occurred at Liverpool, Cardiff, and Leith during the last ten years.

During the present year (1910), cases suspected to be pneumonic plague were associated in Suffolk with definite occurrence of plague in rats and other rodents.

In view of these facts sanitary authorities and their officers should be on the alert, and especially should they take steps for ascertaining the cause of any recognised excessive sickness in rats, or of human illness of a doubtful nature associated with sickness or mortality in rats in the same district.

The following facts with regard to plague should be borne in mind:—

(1) *Symptoms of Plague.*

An attack of plague usually begins some three to five days after exposure to infection. The attack may develop gradually, but, commonly there is sudden onset with much fever, as indicated by a high temperature, rapid pulse, headache, hot skin, and thirst. The eyes are injected; the expression, at first anxious, becomes subsequently vacant

and dull; the utterance is thick, and the gait unsteady as in one under the influence of drink. There is at times a distinct tendency to faint. The tongue is at first covered with a moist white fur except at the edges, which are red, but later on it becomes dry and of a mahogany colour.

The most distinctive sign of plague is the presence of glandular swellings, or "buboes" as they are called, in the groin, armpit, or neck. These "buboes," which led to the disease being called "bubonic plague," appear, as a rule, about the second or third day of the disease. They are usually painful and tender on pressure, and in size they vary from that of an almond to that of an orange. Later on they may "gather" and burst like an ordinary abscess. In a few cases "carbuncles" occur.

Cases of plague occur in which buboes are greatly delayed or even absent, as for instance in "Pneumonic," "Gastric," and "Septicæmic" plague.

In addition to the above-mentioned forms, plague sometimes takes on the so-called "ambulant" form. In plague of this description the affected person is hardly ill at all, presenting no definite symptoms perhaps beyond indolent, though painful, swellings in groin or armpit. Such plague cases may nevertheless be instrumental in spreading the disease, and any persons therefore who, having been possibly exposed to plague, exhibit these symptoms, should be isolated and watched medically until the nature of their malady has been definitely ascertained.

(2) *Diagnosis of Plague.*

The three most important forms of plague—bubonic, septicæmic, and pneumonic—are very liable to be confused with venereal diseases, enteric or typhus fever, and ordinary pneumonia respectively; and the differentiation will be greatly facilitated (a) if the medical practitioner bears the possibility of plague in mind, (b) if he enquires carefully into the antecedents of the patient, and into the occurrence of rat sickness or mortality, and (c) if he avails himself of the bacteriological aid to diagnosis mentioned below. The occurrence at or about the same time or in succession of more than one case of pneumonia in a house, or the unusual prevalence of disease of a dubious character in a neighbourhood, should at once lead to suspicion and to the action needed to clear up the diagnosis.

(3) *Method of spread of Plague.*

The pneumonic form of plague is directly infectious from patient to patient, the expectoration and possibly also the droplets ejected when the patient coughs containing plague bacilli. The means for avoiding personal infection are set out below.

In bubonic plague there is a consensus of experience that personal infection rarely, if ever, occurs; and that, given elementary cleanliness, including absence of fleas and bugs, little risk is run by doctors or nurses or other attendants. Bubonic plague is the rule, pneumonic plague is rare. That infection from patient to patient seldom occurs is further shown by the comparative infrequency of multiple cases of plague in invaded houses. Experimental observations* have shown that the plague bacillus has only a short extra-corporeal vitality; and that infected soil and dust need not be considered as serious or continuing sources of infection.

It has also been shown that experimental feeding of animals with virulent plague material produces the disease only when the infective

*See Reports on Plague Investigations in India in Journal of Hygiene, particularly Vol. 8, No. 2 (1908).

material is given in enormous doses. Apart from the protection afforded by cooking, such massive infection of human food is highly improbable. It is, however, desirable that the access of rats and mice to human food should be prevented.

In the majority of cases of human plague the virus enters through the skin by means of a flea-bite, occasionally by inoculation in other ways. Under experimental conditions the chance of infection varies with the number of infected fleas which are allowed to bite the subject of the observation. The risk of infection therefore may be regarded as likely to be proportional to the extent to which the house or workplace is infested by plague-infected fleas.

(4) *Rats the source of Plague.*

Plague for administrative purposes may be regarded as a disease of rats which incidentally and occasionally attacks man. Fleas form the intermediaries between the diseased rat and man. If the fleas of infected rats (or the fleas of such other animals as occasionally suffer from plague) are excluded from access to human beings, plague will seldom, if ever, spread from animals to man.

The species of rat and the species of fleas infesting the rat have an important bearing on the likelihood of infection spreading to man.

During the great epidemic of plague in England in the 17th Century, the black rat (*Mus rattus*) was chiefly prevalent. The brown or Norwegian rat (*Mus decumanus*) began to invade England early in the 18th Century, and soon almost entirely replaced its smaller and weaker rival in this country. The change bears on the possibility of the occurrence of human plague in this country. The brown rat in towns is found chiefly in sewers, docks, slaughter-houses, granaries, &c. In the country it lives in burrows in the hedgerows and ditches and in ricks. It is a shy animal and avoids man, seldom taking up its abode in human habitations. In India the black rat lives and breeds in the houses and huts of the natives, in close proximity to man. Both the flea *ceratophyllus fasciatus*, which commonly infests rats in this country, and *pulex cheopis*, which is the usual rat flea in India and other tropical countries, readily feed upon man when hungry and when their natural host is not available; *pulex cheopis* is usually considered to bite man more readily than the former.

II.—MEASURES AGAINST PLAGUE.

The chief measures requiring to be taken to prevent the spread of plague follow from the knowledge of its natural history which has been acquired in recent years, especially as the result of the work of the Indian Plague Commission.

Measures concerned with the prevention of importation of infection from abroad are regulated by the International Sanitary Convention of 1903, and need not be considered in this Memorandum.

The experience of Glasgow shows that in this country the disease in man can easily be controlled under conditions of efficient sanitary administration.

The measures to be taken in respect of plague occurring in this country concern (a) human sources of infection, (b) infection from inanimate objects, and (c) infection from lower animals, especially the rat.

(a) *Precautions against human infection.*

The first step in the control of spread of infection from patient to patient is the discovery of suspected cases of illness and their prompt

Notification.—The Board's Order of September, 1900, requires under penalty immediate notification to the medical officer of health of the district, and by him to the Board, of every recognised case of plague. To aid in this recognition the sketch of the clinical features of the malady given above has been inserted in this Memorandum. Further, in order to aid in identifying plague newly developing in a district, the Board have arranged for

Bacteriological Diagnosis, without cost to the local authority, of material sent to the Board's medical officer by the medical officer of health from the earliest suspected cases.

Isolation and Observation of "contacts."—Although it is only in the pneumonic form of disease that personal infection is likely to occur, the isolation of all patients suffering from plague is desirable, among other reasons, because disinfection and the dis-infestation of premises from vermin can be more efficiently secured after the patient's removal. It is important to keep under observation those who have been in contact with the patient or exposed to the same conditions.

The Production of Personal Immunity.—Those persons who are liable to be exposed to direct infection will do well also to protect themselves beforehand by means of the plague prophylactic, which has been found to be successful in India in protecting attendants and others exposed to infection under very dangerous conditions. Plague prophylactic should be obtained by the medical officers of health of districts actually invaded by plague, for the protection of doctors and nurses who may have to attend cases of plague, or others who may be exposed to infection. Any person attending a patient with recognised or suspected pneumonic plague should use strict precautions to avoid infection. Among such precautions may be mentioned personal cleanliness, especially of the hands, and the use of a respirator containing a film of cotton, made to cover the nose and mouth.

The part played by man in spreading bubonic plague is small. Hence measures taken against him have a correspondingly limited influence in preventing the propagation of plague. In the case of pneumonic plague direct personal infection occurs. Such outbreaks are successfully dealt with by isolation of the patients and observation of contacts.

(b) *Precautions in regard to Inanimate Objects.*

These are concerned with the destruction of infective material derived from man or from animals, and with removing the harbourage for rats.

As already stated, the plague bacillus does not live long outside the animal body, even in excreta or in discharges from the lungs or abscesses. It is, however, important thoroughly to disinfect and cleanse infected dwellings. The disinfection and cleansing which will be most efficient will be such as will secure the dis-infestation of the rooms and of all articles of bedding and clothing from fleas. Clothing, which may harbour infected fleas, is dangerous. Fleas are to be found in dust and rubbish in dirty, untidy houses; hence the importance of domestic cleanliness in the prevention of plague.

The removal of all heaps of refuse, especially of garbage affording food for rats, the removal of empty boxes or any rubbish allowing rats to hide near houses, the stopping up of rat-runs with broken glass and tar, the repairing or relaying of drains in houses where there are rat-runs, are among the most important methods for preventing the spread of plague by the rat. It is also important securely to stop up entrance to spaces under floors of dwellings and outbuildings where rats may harbour.* These and other like measures, which will occur to all, are directed towards preventing the access of rats to or their entrance into

*The provision of a layer of concrete under the floor, as required in the Board's Model Byelaws for new buildings in urban districts, is of importance in this connection.

houses. If rats are kept out of dwellings, danger is relatively small. There is difference of opinion as to the keeping of cats. Cats which have worried plague-infected vermin may bring rat-fleas into the house; but the presence of a cat in a house is one of the best safeguards against domestic invasion by rats or mice. The balance of evidence appears to be strongly in favour of the protective influence of cats. But a cat which shows signs of illness should be destroyed and buried.

Domestic uncleanness favours plague. The human flea (*pulex irritans*) which flourishes under such conditions, will bite the rat and man; but it is seldom found on rats and soon dies out on them. Uncleanliness also may lead to increase of rats in and about the house.

(c) *Precautions against Rats.*

The continuous suppression or limitation of rats in a district into which rat-plague has been introduced will prevent the occurrence of human plague of local origin. Efforts should therefore be concentrated in such districts towards this end. Complete extermination of rats is perhaps impossible; but decrease of rats, short of extermination, diminishes greatly the chances of infection. Such measures must be persistent, as the rat soon breeds up to its old level of numbers, conditioned only by the amount of food supply and the activity of its enemies. Rats are intelligent, and will migrate to other districts unless the efforts at destruction are combined and systematic. In view of likely migration, medical officers of health and inspectors of nuisances, as well as private persons, in districts bordering on a neighbourhood where rat-plague exists, should make enquiries at intervals, and should submit suspected rats found dead or ill for bacteriological examination.

There are several methods of dealing with rats, but it is unwise to trust to any one of them alone, and, when practicable, all methods should be employed together. Of traps, a spring trap has been found to be the most useful kind. Poisons containing phosphorus or arsenic are effective, but they should not be laid where poultry or other domestic animals may be poisoned. The different forms of bacterial virus are useful, where chemical poisons cannot safely be employed. They are said sometimes to be uncertain in result, and it is important that animals poisoned by them should not obtain access to human food. Hunting with dogs and ferrets is a very effective method, especially in the hands of expert rat catchers. If dogs or ferrets are employed, they should be kept under observation and not allowed in domestic dwellings. The Board of Agriculture and Fisheries are about to issue a leaflet on the subject of rat destruction, which will contain general information on the matter.

Even in districts not affected with rat-plague, nor bordering on districts so affected, the Sanitary Authority should be on the watch for the occurrence of unusual mortality among rats. If excessive mortality is observed, bacteriological examination of rats found dead should be made, and if they prove to have died of plague, steps should be taken to ensure the systematic and continuous destruction of rats. Precautionary measures of this kind are especially called for in and about docks and wharves, and also in places where rats abound, such as granaries, meat markets, slaughter-houses, piggeries, and dumping grounds for refuse. The private slaughter-houses still found in the immediate neighbourhood of dwelling-houses are a special source of danger, being commonly over-run with rats.

Fleas leave the dead rat when it becomes cold. Dead rats should, however, not be handled without precautions. Cremation is the best method of disposal of dead rats, if it can be carried out without involving delay or unguarded handling. Failing this they should be so buried that they cannot be disinterred by other animals.

Rat-catchers as well as those engaged in disinfection of clothing, etc., can, apart from the administration of plague prophylactic,

partially protect themselves by the external application of powders, etc., disliked by fleas, and by wearing puttees or gaiters and gloves.

On a previous page the importance of removing all harbourage for rats in or near houses has been emphasised. So far as possible every house should be rat-proof. It is equally important not to encourage the domestic invasion of rats by allowing morsels of food to lie on or under the floor or in ashpits.

The most important recommendations may be summarised as follows:

1st.—Persistently and systematically destroy all rats.

2nd.—Remove and obliterate their nests, burrows, and habitual haunts, and

3rd.—Make each dwelling as far as practicable rat-proof, and remove all known harbourage for rats in or near dwellings.

4th.—At the same time do not allow waste food (whether for human beings, chickens, or other animals) to accumulate in or about the house.

Rat-plague is not necessarily accompanied or followed by human plague. Freedom from risk of plague can be secured, with almost complete certainty, by any household which acts in accordance with the directions given above.

ARTHUR NEWSHOLME,

Local Government Board,

November, 1910.

(55,578)

Medical Officer.

(2nd September, 1910.)

Complaints were received with regard to rats from various sources in North Wimbledon, and in one case a definite complaint was made of three rats having been found dead in one house. I immediately investigated the circumstances, which, when reduced to real facts, turned out to be that one dead rat had been found by the gardener in the next house three months previously.

In view of the fact that there has been no undue mortality amongst rats in the district, numerous though they are in various quarters, I advised the Committee that there were no grounds for taking municipal action for their destruction on the score of danger from Plague.

Extension of the Infectious Diseases (Notification) Act, 1889.—A Memorandum was received from the Local Government Board stating that they would favourably consider an application to schedule Glanders, Hydrophobia in man, and Anthrax as infectious diseases under the Infectious Diseases (Notification) Act, 1889.

In addition, by reason of the advice of the Central Midwives Board that it would be advisable to schedule Ophthalmia Neonatorum as a notifiable disease, I advised the Public Health Committee so to do, and it was resolved to apply to the Local Government Board for sanction to this procedure. On 1st July, 1910, Ophthalmia Neonatorum, Glanders, Anthrax, and Hydrophobia in man, were officially scheduled as infectious diseases under the Act.

Notification of Births Act, 1907.—This Act, which, if properly carried out, bids fair to be one of the most important Acts influencing the health of the community, has probably caused more irritation amongst the Medical Profession than

any Act in recent years, including even the Midwives Act; and for that reason its adoption has been opposed in almost every town where it has been proposed, and until the obnoxious clause has been erased which makes it the duty of the Medical Practitioner attending the case to notify the birth within 36 hours, or to assure himself that it has been notified, and the omission to do so a statutory offence, there will be continued irritation and consequent friction in the working of the Act. The information required is of the highest importance, and if the Government see fit to require the Medical Practitioner to notify they should recognise that duty in the same way as is done under the Notification of Infectious Diseases Act by the payment of a small fee. Then in common justice a penalty might be imposed for a neglect of the imposed duty. But unless the Act is altered as far as the Medical Practitioner is concerned, the Public Health Authorities will never get the support of the Medical Profession practising in their area, and when in other districts Practitioners are summoned and fined for forgetting their duty it can only have been originated by a report from the Medical Officer of Health, which is the only thing he can do if the returns are not forthcoming, as he has to supervise the working of the Act.

During the year 657 births have been notified by the following persons:—Parents, 389; Midwives, 128; Doctors, 89; and Other Persons, 51.

During the same period 1,159 births were registered, but as this does not form an accurate comparison owing to the fact that registration may take place at any period within six weeks of the time of the birth, the actual births which were registered as having taken place during the months of October and November were obtained and amounted to 194. During the same period 120 notifications were received, from which it will be seen that only 61·8 per cent. of the births were being notified, the following being the percentages of the default in the various Wards:—

St. Mary's	...	...	...	40·2
Trinity	...	...	...	20·7
South Park	...	...	...	19·4
Dundonald	...	...	...	13
Cottenham Park	...	...	...	7·7
St. John's	...	...	...	3·8

The deaths under one year occurred in the corresponding Wards in the following numbers:—

St. Mary's	...	...	...	9
Trinity	...	...	...	31
South Park	...	...	...	25
Dundonald	...	...	...	13
Cottenham Park	...	...	...	7
St. John's	...	...	...	3

It was found that one of the Midwives practising in the district, though living in Merton, was not registered in Wimbledon, and had had no notification forms sent to her.

Owing to the neglect of notification last year, which amounted to 53.7 per cent. of the total births during the period examined, I advised the Public Health Committee and they resolved to obtain the returns of births week by week from the Registrar so as to check all the notifications. Last year I pointed by means of the figures available how great the importance of checking these notifications was, as the proportion of notifications omitted corresponded in a striking manner with the infant mortality in the respective Wards.

The number of cases referred to the Health Visitor was 120 from 119 houses (one case of twins), this being the number of cases notified to the Public Health Department as having been attended by Midwives other than the Midwife attached to the South Wimbledon Nursing Home.

The Health Visitor reports that on the whole the Midwives are conscientious in carrying out the directions of the Central Midwives Board where they fully understand the reasons for them, but that there are still many points upon which the *bonâ fide* Midwife needs much education.

Much of the advice the Health Visitor gives is thrown away if there is opposition on the part of the Midwife; for instance, there is difficulty in getting the mothers to take their children to the "Welcome" for regular weighing owing to the fact that one of the Midwives with the largest connection is opposed to it. There is a general objection to baby weighing in many parts of the country on the part of the uneducated due to the superstition that if the baby is weighed before it is twelve months old it will die. Such superstitions die very hard especially when backed by the midwife and the maternal grandmother.

Hitherto the cases have, as a rule, only been visited twice, but it is important that the visits should continue periodically throughout the first year, as during the first three weeks or so the mothers recognise the paramount claims of the child, as is seen by the statistics of the number of children naturally fed, but the troubles begin later when the mother starts work again and all the evils of artificial feeding begin.

On the whole the mothers are amenable to advice and the services of the Health Visitor are generally appreciated and productive of good, *e.g.*, in the case of a first child 14 months old, breast fed and suffering from diarrhoea in the cold weather, a doctor had been called in and had advised the Health Visitor taking charge of the case. It was found that the baby was being fed every 15 minutes (that is to say every time it cried), and that it never slept soundly or continuously. The mother was advised as to the importance of regular

intervals between the feeds, the child was soon trained to intervals of $2\frac{1}{2}$ hours; the diarrhœa quickly stopped, and the child soon slept well at night and for some time in the day. The artificially-fed babies are almost invariably fed on Nestle's sweetened condensed milk, frequently kept under very dirty conditions, without thought of protection from dirt and dust.

In visiting only the cases attended by Midwives only the more thrifty of the poor have received advice, whereas those needing help and advice even more are those cases under the Poor Law, and even the cases attended by the Midwife from the South Wimbledon District Nursing Association should be followed up after the Midwife has ceased visiting.

I have found it of great service in certain cases being in touch with the "Mothers and Babies Welcome," and I have been able to get relief and help in cases without any delay owing to the co-ordination of the departments, and I find that to some of those who have come within the sphere of influence of kindly treatment and sympathetic understanding in the different departments of our work, it has meant the beginning of a new life in which a ray of hope has penetrated the abysmal darkness of dull despair.

Number of cases visited by Health Visitor	119	(120 children, 1 house twins)
Visits paid	471	
The cases occurred in the following Wards :		
South Park	32'5	per cent.
Trinity	65'0	"
Dundonald	2'5	"
The average size of the houses was	3'6	rooms
" " rent	6s. 9d.	
The number of persons per house	5'9	
Adults	2'3	
Children under 14	3'6	
In the 119 families 92 children had	{	'77 per family
previously died, an average of		
In the 119 families there were 362	{	3 "
living children		
59 of the fathers were in		
regular work	49'5	per cent.
36 of the fathers were in casual		
work	30'0	"
35 of the mothers went out to		
work	29'4	"

These figures show the grave state of affairs that the number of mothers who have to work practically corresponds to the casual worker.

Of the 120 cases three died...	=	2'5 per cent.
Number of cases breast fed ... 113	=	95 per cent.
Artificially fed ... 7	=	5 per cent.

It was found difficult to ascertain in all cases the suitability of the clothing, but of those where it was ascertained,

29 or 24·3 per cent. were properly clothed (flannel, etc.)
25 or 21 per cent. were clothed in flannelette.

In no case was it found necessary to advise that a doctor be sent for for the mother, and only in 4 cases, or 3·4 per cent., for the child.

Five cases attended the "Mothers and Babies Welcome" for dinners before and after the birth of the child.

1 mother, or ·84 per cent., was unable to nurse her baby on account of work.

4 mothers, or 3·4 per cent., were unable to nurse their babies on account of deformity of the nipples.

14 babies, or 11·7 per cent., were taken to the "Welcome" for periodical weighing.

Isolation Hospital.—The following table furnished by the Hospital Medical Attendant, Dr. Clapham, gives the number of patients treated in the Hospital for each disease during the year:—

CASES ADMITTED IN 1910.	Over 5 years.	Under 5 years.	Total.	DEATHS.			REMARKS.
				Over 5 years.	Under 5 years.	Total.	
Scarlet Fever ...	65	26	91	—	—	—	Average daily number of Patients— 20.
Diphtheria ...	31	13	44	—	1	1	
Enteric Fever ...	2	—	2	—	—	—	
Measles ...	—	1	1	—	—	—	
Jaundice ...	1	—	1	—	—	—	Average number of days in Hospital per patient 41.
Tonsillitis ...	3	—	3	—	—	—	
Fractured Fibula (Staff)	1	—	1	—	—	—	
Contusions (Staff) ...	1	—	1	—	—	—	
<i>Carried over from 1909</i>	104	40	144	—	—	—	
Scarlet Fever ...	22	5	27	—	—	—	
Diphtheria ...	7	1	8	—	—	—	
	133	46	179		1	1	

Disinfection.—The following table shows the number of rooms and articles disinfected:—

DISEASE.	BEDDING DISINFECTED					CLOTHING.			No. of Rooms Disinfected.	TOTAL.
	Mattresses	Pallasses and Counterpanes.	Beds.	Pillows and Bolsters.	Blankets and Sheets.	Dresses.	Suits.	Other Articles		
Scarlet Fever ...	289	322	106	730	1224	271	118	6748	243	10051
Diphtheria ...	67	113	39	185	310	55	12	1213	74	2068
Typhoid Fever ...	12	6	5	25	95	4	6	369	6	528
Erysipelas ...	1	3	3	7	8	—	—	13	2	37
Puerperal Fever...	2	2	—	6	3	—	—	11	1	25
Anthrax ...	2	—	—	2	3	—	—	3	1	11
Consumption ...	27	23	12	86	60	7	1	231	39	486
Cancer ...	15	6	4	35	27	7	4	131	10	239
Measles ...	12	3	1	19	30	2	4	81	26	178
Chicken Pox ...	3	3	—	—	12	4	—	54	1	77
Mumps ...	—	—	—	—	—	—	—	15	9	24
Septic Cases ...	36	20	3	92	67	4	—	150	12	384
Vermin ...	11	11	2	16	25	4	1	197	22	289
Sundries ...	30	14	6	88	70	7	—	148	191	554
TOTALS ...	507	526	181	1291	1934	365	146	9364	637	14951

There were 27 library books disinfected.

Diagnostic Tests.—The number of specimens of serum, sputum, and blood submitted for bacteriological examination during the year in doubtful cases of Diphtheria, Pulmonary Tuberculosis, and Typhoid Fever, and the results of such examinations are given on page 47.

Sixty-two bottles of anti-diphtheritic serum were supplied through the Public Health Department for use by medical practitioners for the treatment of Diphtheria, and also three bottles of anti-streptococic serum.

On October 10th, 1910, it was arranged that the bacteriological work should be carried out by Mr. J. H. Johnston, of No. 8, Leopold Road, Wimbledon.

Diagnostic Tests.

	Bacillus found.	Bacillus not found.	TOTAL.
Diphtheria Secretion ...	29	233	262
Phthisis (Sputum) ...	4	34	38
	Reaction obtained.	Reaction not obtained.	TOTAL.
Typhoid (Blood) ...	1	6	7

Mortuary.—From information received from the Superintendent of the Cemetery, there were 92 bodies received into the Mortuary during the year, and 44 post-mortems held.

Inquests were held by the Coroner with respect to 36 bodies, being equal to 8·4 per cent. of all deaths registered in the Borough.

Factory and Workshop Act, 1901.—Section 132 requires the Medical Officer of Health to specifically report annually on the administration of the Act in the workshops and work-places, and to send a copy of such Report to the Secretary of State. The details on the forms prescribed and supplied by the Home Office have been forwarded. In the Tables below is shown the work done in the supervision of workshops and work-places :—

Premises.	Inspections.	Written Notices.	Prosecu- tions.
Factories ...	62	3	—
Workshops ...	433	25	—
Workplaces ...	54	—	—
Total ...	549	28	—

Defects found.

Particulars.	Number of Defects.			Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
Want of cleanliness	17	16	—	—
Want of Ventilation	3	2	—	—
Overcrowding	1	2	—	—
Want of drainage of floors ...	—	1	—	—
Other Nuisances	13	14	—	—
Sanitary Accommodation—				
Insufficient	—	—	—	—
Unsuitable or Defective ...	25	21	—	—
Not Separate for Sexes ...	4	3	—	—
Breach of Special Sanitary Requirements for Bakehouses ...	9	8	—	—
Other Offences	—	—	—	—
Total	72	67	—	—

HOME WORK.

Lists received :—

Twice in the year	20
Number of Out-workers	49
Once in the year	10
Number of Out-workers	14
Number of addresses received from other Councils	36
Number of addresses forwarded to other Councils	35
Notices served on Occupiers as to keeping or sending lists	8
Prosecutions for failing to send lists ...	2
Inspections of Out-workers' premises ...	93
Number of unwholesome premises ...	5
Notices served to remedy	4

REGISTERED WORKSHOPS.

The following are the principal classes of workshops on the register at the end of the year :—

Boot Repairing	51
Dressmaking	51
Bakehouses (including four Factory Bake-houses)	29
Laundries	25
Tailoring	31
Millinery	24
Dining Rooms	19
Cycles	11
Other Trades	65
Total ...	306

OTHER MATTERS.

Matters notified to H.M. Inspector of Factories :—

Failure to affix Abstract of Act	4
Action taken in matters referred to H.M. Inspector as remedial under the Public Health Acts	7
Underground bakehouses in use at the end of the year	3

As a result of the inspection of the workrooms, workshops, and work-places in the Borough, it was found that for the most part they were in a satisfactory condition, and that the requirements of the Act were duly observed by the occupiers.

Systematic examination has been made of the eating-houses, cook-shops, and other places where food is prepared for sale, and the occupiers of these, speaking generally, have kept their places in good and cleanly order.

In no instance was it necessary to take legal proceedings to enforce compliance with the requirements set out in the notices served for the abatement of nuisances.

In addition to the ordinary inspections made of out-workers' premises, each address contained in the list received in the early part of the year, *i.e.*, previous to February, and not including those received in August, were visited in order to ascertain if work was still carried on, and if breaches of the Act had been made by reason of the employer failing to notify the name and address of the out-worker.

In two instances was there neglect to send in a list of out-workers, and legal proceedings were instituted against the offenders, and in each case a fine of £1 and 8s. 6d. costs was inflicted.

Water Supply.—The Borough's water supply is supplied through the mains formerly owned by the Southwark and Vauxhall and the Lambeth Companies. The water is either well water from Streatham or river water from the Norwood or Hampton reservoirs.

Owing to the repeated complaints from various residents about the hardness of the water in North Wimbledon, a deputation of the Public Health Committee, consisting of the Mayor (Councillor Bathgate), Aldermen Brasier and Porter, and Councillors Clement, Hayden and Stuart, waited upon the Metropolitan Water Board on July 13th, 1910, and exhibited examples of the effect of the hard water upon the pipes and boilers, and asked that something should be done to give a softer supply, at the same time keeping the necessary pressure. It was pointed out by the Board that it was impossible to soften the water by any of the usual processes, such as the "Porter Clarke," on the ground of expense, but that they would do what they possibly could to give the town a mixed supply which would be softer in character.

North Wimbledon has been supplied entirely from the Streatham Well, and the analysis of the water, as compared with other districts, shows that although the total hardness does not differ from many other districts, still the temporary hardness, which is the cause of all deposits in pipes and boilers, is, with one exception, the greatest in the Metropolitan area. In other words, from the householders' point of view with regard to the furring of pipes and boilers, North Wimbledon has had, with one exception, the worst supply in the Metropolitan area.

December, 1909.

	Total Hardness.	Permanent Hardness.	Temporary Hardness.
New River	23.91	6.42	17.49
East London (Clapton)	25.79	9.41	15.38
East London (Sunbury)	24.86	9.55	15.31
Kempton Park	20.28	7.29	12.99
Chelsea	22.65	7.80	14.85
West Middlesex	21.25	7.72	13.53
Grand Junction (Hampton)	21.26	7.35	13.91
Grand Junction (Kew) ...	21.47	7.74	13.73
Lambeth	23.16	8.11	15.05
Thames derived	22.05	7.83	14.22
Southwark and Vauxhall	22.30	7.98	14.32
Streatham Well	24.55	5.42	19.13
Kent unfiltered	30.77	8.85	21.92

Numerous complaints were received of boilers having to be cleaned every six months. On 18th October, 1910, the Metropolitan Water Board wrote stating that they were giving a mixed supply to North Wimbledon, and Superintendent Butler reported that the pressure had been maintained.

Brilliant researches by Dr. Houston into the action of storage on bacteria, more especially Typhoid Bacilli, have resulted in a complete alteration in ideas of dealing with the problem of supplying the Metropolitan area with a safe water. Dr. Houston has proved that by storage alone previous to filtration the water can be rendered safe owing to the death of the bacilli, most of which die within a week, and London's needs can be dealt with by the erection of adequate storage reservoirs in the Thames Valley, instead of by some gigantic scheme from the hill districts in the West of England.

Careful tests and examinations are made, and each month a report is presented to the Water Board on the condition of the Metropolitan Water Supply by the Water Examiner (Dr. Houston) appointed under the Metropolis Water Act.

The last monthly report issued shows that chemical analysis was made of 66 samples of raw river water, 213 samples of filtered water, and the bacteriological examination of 66 samples of raw river water, and 685 samples of filtered water.

Information was received that the water supply had been withdrawn during the year from 17 houses for the following reasons:—Six owing to leakages, 8 by request, and 3 owing to arrears of rates.

House Refuse.—In December, 1909, it was decided to make a daily collection in all houses in that portion of the Borough situate on the West side of Haydon's Road, bounded on the south by High Street, Merton, on the west by Montague Road, and on the north by Gap Road. In June, 1910, a daily collection was instituted throughout the Borough, which was in August changed to a bi-weekly collection, and in September the usual weekly collection was reverted to.

During the year 9,145 loads of house refuse were removed to the Durnsford Road Works, and destroyed in the refuse destructor.

Supervision of the Erection of New Houses.—This is under the control of the Surveyor, and there is a special Inspector whose duty is solely devoted to the supervision of the erection of new houses and additions.

Sewerage and Drainage.—No works of importance have been carried out during the year, operations being merely confined to the making of new roads.

Housing, Town Planning Act, 1909.—In company with the Borough Surveyor and the Town Clerk, I attended on the instructions of the Committee, the Housing and Town Planning Conference called for Greater London, held at Caxton Hall, Westminster, on May 6th, 1910.

A Memorandum under the Housing, Town Planning Act, 1909, dated 2nd September, 1910, was issued prescribing the regulations under Section 17.

REGULATIONS UNDER SECTION 17 (1).

TO THE SEVERAL LOCAL AUTHORITIES in ENGLAND and WALES for the purposes of Part II. of the Housing of the Working Classes Act, 1890 ;—

And to all others whom it may concern.

WHEREAS by sub-section (1) of Section 17 of the Housing, Town Planning, etc., Act, 1909, it is enacted that it shall be the duty of every local authority within the meaning of Part II. of the Housing of the Working Classes Act, 1890 (hereinafter referred to as "the local authority") to cause to be made from time to time inspection of their district, with a view to ascertain whether any dwelling-house therein is in a state so dangerous or injurious to health as to be unfit for human habitation, and that for that purpose it shall be the duty of the local authority, and of every officer of the local authority, to comply with such regulations and to keep such records as may be prescribed by the Local Government Board.

NOW THEREFORE, We, the Local Government Board, in pursuance of the powers given to Us in that behalf, by this Order, prescribe the following Regulations; that is to say:—

ARTICLE I.—(1) The local authority shall as early as practicable after the date of this Order take into consideration the provisions of sub-section (1) of Section 17 of the Act of 1909, and shall determine the procedure to be adopted under these Regulations, to give effect to the requirements of that sub-section in regard to the inspection of their district from time to time.

(2) The local authority shall as part of their procedure make provision for a thorough inspection to be carried out from time to time according to the varying needs or circumstances of the dwelling-houses or localities in the district of the local authority.

(3) The local authority shall cause to be prepared from time to time by the Medical Officer of Health, or by an Officer designated by them but acting under his direction and supervision, a list or lists of dwelling-houses the early inspection of which is, in the opinion of the Medical Officer of Health, desirable. The list or lists may, if thought fit, relate to the dwelling-houses within a defined area of the district without specifying each house separately therein.

ARTICLE II.—The inspection under and for the purposes of sub-section (1) of Section 17 of the Act of 1909 shall be made by the Medical Officer of Health, or by an Officer designated by the local authority but acting under his direction and supervision, and the Officer

making inspection of any dwelling-house shall examine the state of the dwelling-house in relation to the following matters, namely:—

- (1) The arrangements for preventing the contamination of the water supply.
- (2) Closet accommodation.
- (3) Drainage.
- (4) The condition of the dwelling-house in regard to light, the free circulation of air, dampness, and cleanliness.
- (5) The paving, drainage, and sanitary condition of any yard or outhouses belonging to or occupied with the dwelling-house.
- (6) The arrangements for the deposit of refuse and ashes.
- (7) The existence of any room which would in pursuance of sub-section (7) of Section 17 of the Act of 1909 be a dwelling-house so dangerous or injurious to health as to be unfit for human habitation.
- (8) Any defects in other matters which may tend to render the dwelling-house dangerous or injurious to the health of an inhabitant.

ARTICLE III.—Records of the inspection of dwelling-houses made under and for the purposes of sub-section (1) of Section 17 of the Act of 1909 shall be prepared under the direction and supervision of the Medical Officer of Health, and shall be kept by the Officer of the local authority making the inspection or by some other Officer appointed or employed for the purpose by the local authority.

The records may be kept in a book or books or on separate sheets or cards, and shall contain information, under appropriate headings, as to:—

1. The situation of the dwelling-house, and its name or number.
2. The name of the Officer who made the inspection.
3. The date when the dwelling-house was inspected.
4. The date of the last previous inspection and a reference to the record thereof.
5. The state of the dwelling-house in regard to each of the matters referred to in Article II. of these Regulations.
6. Any action taken by the Medical Officer of Health, or other Officer of the local authority, either independently or on the directions of the local authority.
7. The result of any action so taken.
8. Any further action which should be taken in respect of the dwelling-house.

ARTICLE IV.—The local authority shall, as far as may be necessary, take into consideration at each of their ordinary meetings the records kept in pursuance of Article III. of these Regulations, and shall give all such directions and take all such action within their powers as may be necessary or desirable in regard to any dwelling-house to which the records relate, and a note of any directions so given and the result of any action taken shall be added to the records.

ARTICLE V.—The Medical Officer of Health shall include in his Annual Report information and particulars in tabular form in regard to the number of dwelling-houses inspected under and for the purposes of Section 17 of the Act of 1909, the number of dwelling-houses which on inspection were considered to be in a state so dangerous or injurious to health as to be unfit for human habitation, the number of representations made to the local authority with a view to the making of closing orders, the number of closing orders made, the number of dwelling-houses the defects in which were remedied without the making of closing orders, the number of dwelling-houses which after the making

of closing orders were put into a fit state for human habitation, and the general character of the defects found to exist. He shall also include any other information and particulars which he may consider desirable in regard to the work of inspection under the said Section.

ARTICLE VI.—The Medical Officer of Health and any other Officer of the local authority shall observe and execute all lawful orders and directions of the local authority in regard to or incidental to the inspection of the district of the local authority under and for the purposes of Section 17 of the Act of 1909, and the execution of these Regulations.

ARTICLE VII.—In these Regulations “the Act of 1909” means the Housing, Town Planning, etc., Act, 1909.

ARTICLE VIII.—These Regulations may be cited as the Housing (Inspection of District) Regulations, 1910.

Given under the Seal of Office of the Local Government Board, this Second day of September, in the year One thousand nine hundred and ten.

JOHN BURNS,

President.

H. C. MONRO,
Secretary.

Practically all the property which would have to be dealt with under Section 17, Sub-section 1, has been regularly inspected under the routine house to house inspection, and under Article 1, Sub-section 3, it was resolved at the meeting of the Public Health Committee held on 13th October, 1910,

“That the Sanitary Inspector be and is hereby designated as the Officer of the Council to make inspections of the Borough from time to time under Section 17 (1) of the Housing, Town Planning, etc., Act, 1909, and to keep records thereof.”

Slaughterhouses.—The number of registered Slaughterhouses remains as last year, viz, six. The visits to these have been, as far as possible, timed to take place whilst the animals were being slaughtered and dressed for food, this being the best time for inspection, as the whole of the organs and carcase can then be examined together. I may mention that the Officers of your Sanitary Department have made inspections of such premises outside the prescribed hours of their duty in order that their visits may coincide with the usual time that the various licensees of slaughter-houses do their killing.

In a few instances some of the organs of animals were found affected with parasitical or local affection, and were at once destroyed.

The Bye-laws as to periodical limewashing of walls, and the removal of garbage, offal, etc., have been complied with, no neglect in this respect having been found.

The Chief Inspector, Mr. Henry Johnson, and the First Assistant Inspector, Mr. E. S. Robinson, both hold certificates of the Royal Sanitary Institute for Inspectors of Meat and Other Foods.

Dairies, Cowsheds and Milkshops Orders.—Twenty persons applied for registration under the Dairies, Cowsheds and Milkshops Orders during the year, 2 as Cowkeepers, 13 as Dairy men and Purveyors of Milk, and 5 as Purveyors only.

The names of 15 persons were removed from the register during the year owing to removals from the district, the discontinuance of the business, or the premises used for such trading being closed.

On the 31st December, 1910, there were 4 Cowkeepers, 48 Dairy men, and 20 Purveyors on the register, showing a net increase of 5 upon last year.

Inspection of Dairy Cows.—There is no system of inspection of dairy cows in the Borough. Cases of generalised Tuberculosis or of Tubercular Mastitis, which is assumed to be practical evidence of generalised Tuberculosis, are destroyed by being put through a special destructor on the premises of Messrs. Harrison and Barber, Horse Slaughterers, so as to be sure that the flesh has not been available for consumption by man or animal.

Public Health Acts (Amendment) Act, 1907.—Application has been made for powers under Part III. of this Act, but has not yet received the sanction of the Local Government Board.

I take this opportunity of recording my appreciation of the way in which the work has been carried out by the entire Staff.

I am, Gentlemen,

Your obedient Servant,

ELWIN H. T. NASH.

APPENDIX I.

REPORT ON SCARLET FEVER.

In considering the question of the treatment of Scarlet Fever it will probably be as well to realise what the nature of the disease is for which the Act of 1889 was passed.

On looking at the chart which gives the death rates from 1855 to 1906, it will be seen that in the earlier years the mortality from Scarlet Fever was very high, some years being extremely so as the result of large epidemics, and it was this which led up to the passing of the Act of 1889, which provided for notification and isolation of the disease.

At the same time, on looking at the chart, it will be seen that the very great diminution in the mortality which has taken place of recent years had already begun before the Act of 1889 came into operation, so that although undoubtedly notification and isolation have done a certain amount to reduce the mortality in the earlier years after the Act came into operation, these facts alone are not sufficient to account for the present diminished virulence of the disease.

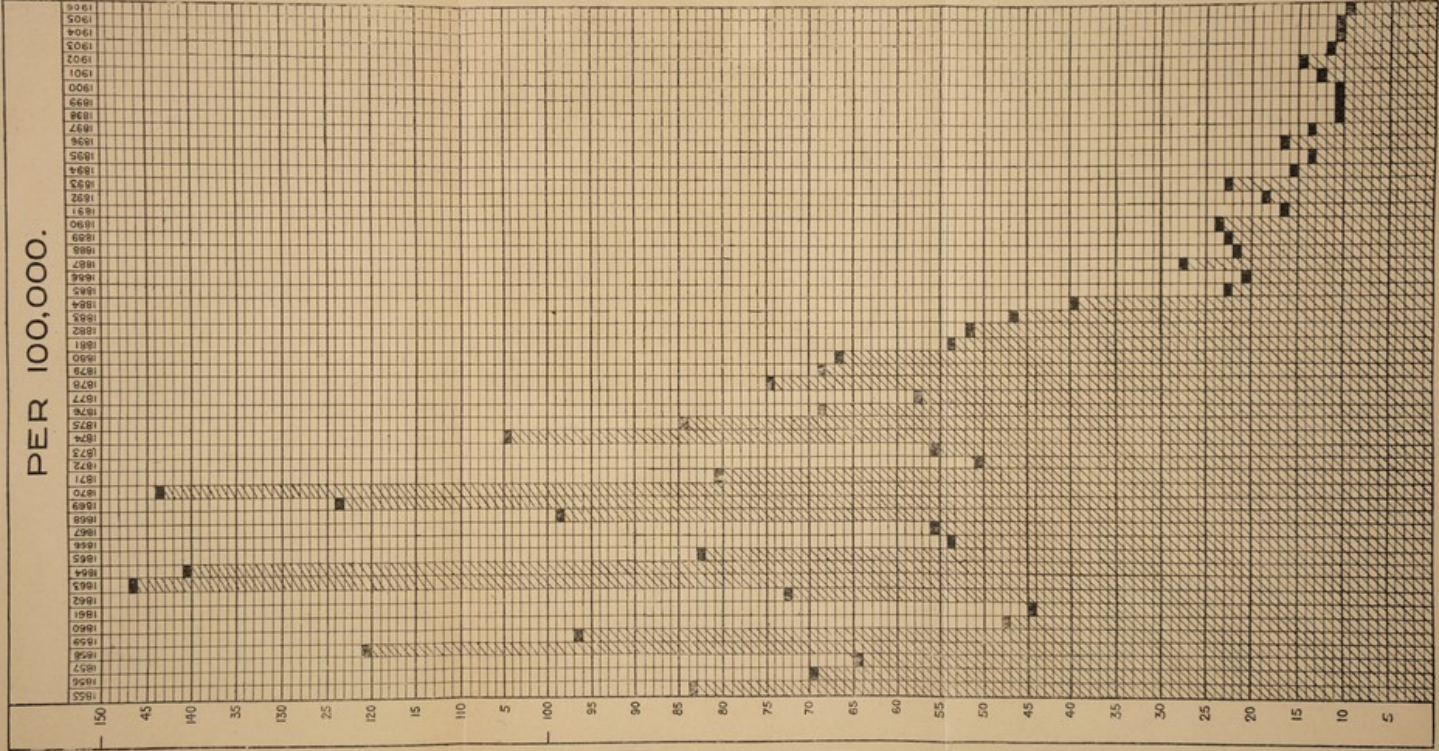
The present type of the disease is entirely different from that of twenty to thirty years ago. What we find at present is that the majority of the cases are of a mild type and quite straightforward, a small percentage so mild that no rash is seen by the doctor called in, and often not by the parent, and the case is only recognised by the occurrence of peeling or the occurrence of a second case in the household or school, and a still further small number which never "peel" in the accepted sense, and which cause great trouble to the practitioner in attendance.

If we contrast this state of affairs with the old type of Scarlet Fever which was so prevalent, and accompanied by what was known as "bull neck" condition, so called on account of the tremendous inflammatory enlargements of the glands in the neck, together with the running discharge from the nose and ears, and the heavy mortality, it will be realised that the disease for which we have to administer to-day is a very different one to that which existed thirty years ago. In fact with the mortality as it is now of a little over 1 per cent., the disease has become rather more an inconvenience than one which causes great anxiety.

If we refer to the second chart, which gives the mortality from Whooping Cough, which is not a notifiable disease, over the same period it will be seen that there is no reduction to speak of in the mortality now as compared with the beginning of the period, and it may be argued from this that notification and isolation have produced the present

ENGLAND & WALES

MORTALITY FROM SCARLET FEVER



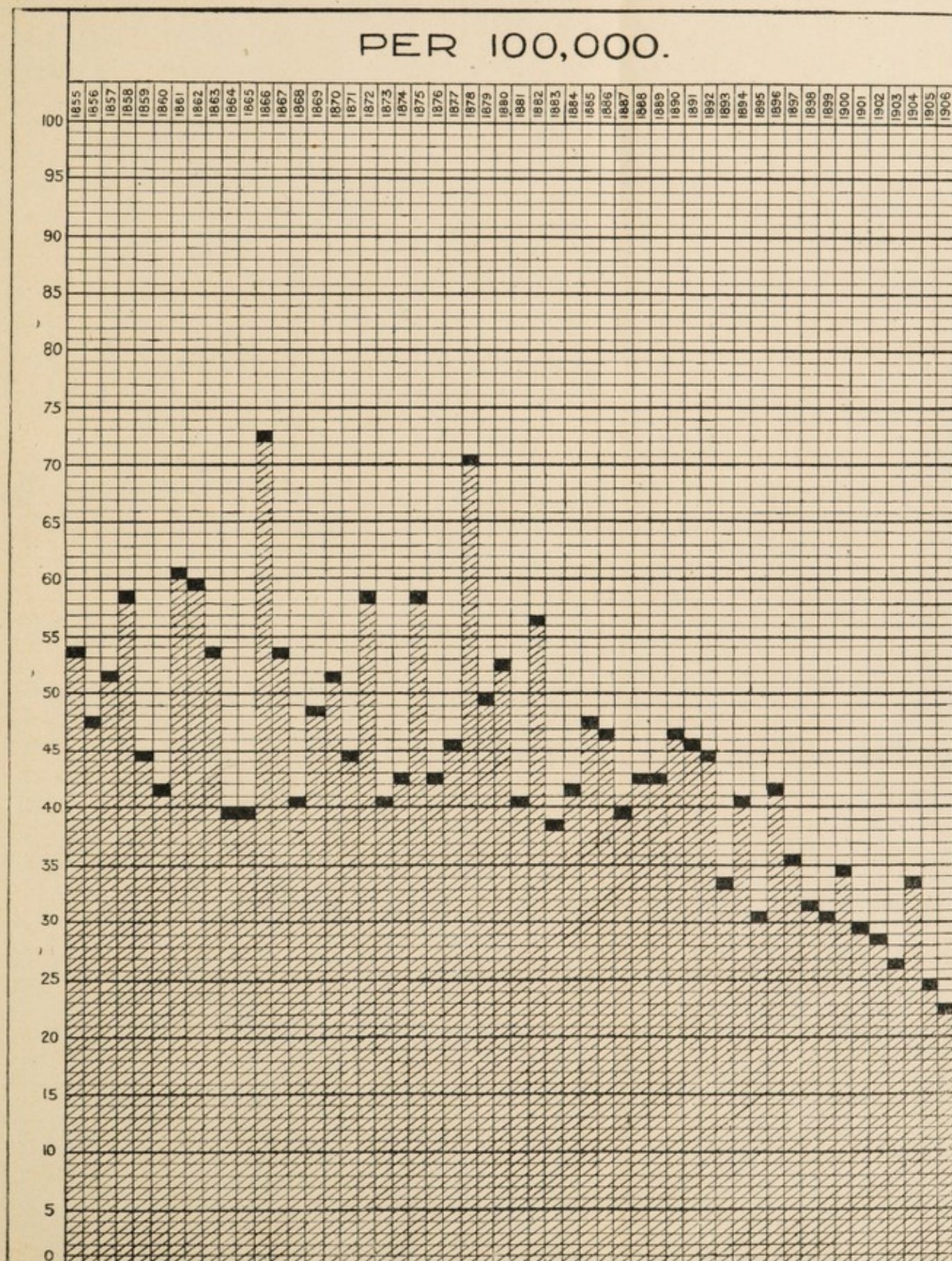
231 JAW & DENTAL
334 T311A5E MOUNT UTILIZATION

0000000000

ENGLAND & WALES

MORTALITY FROM WHOOPING COUGH

PER 100,000.

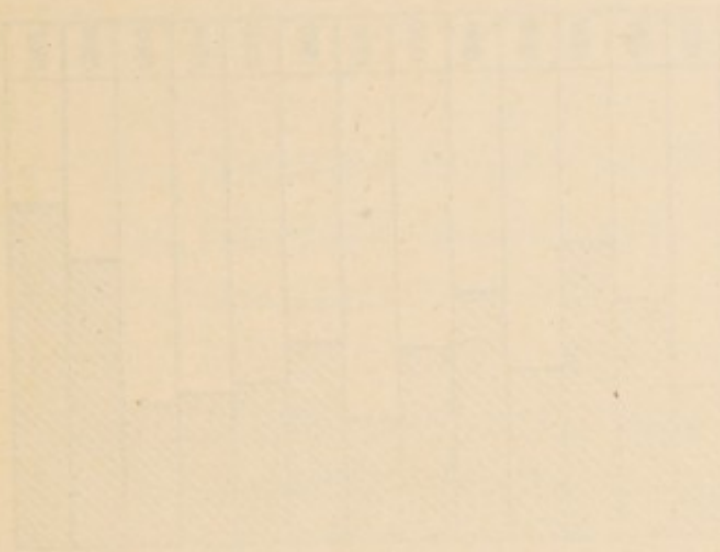


SCARLET FEVER

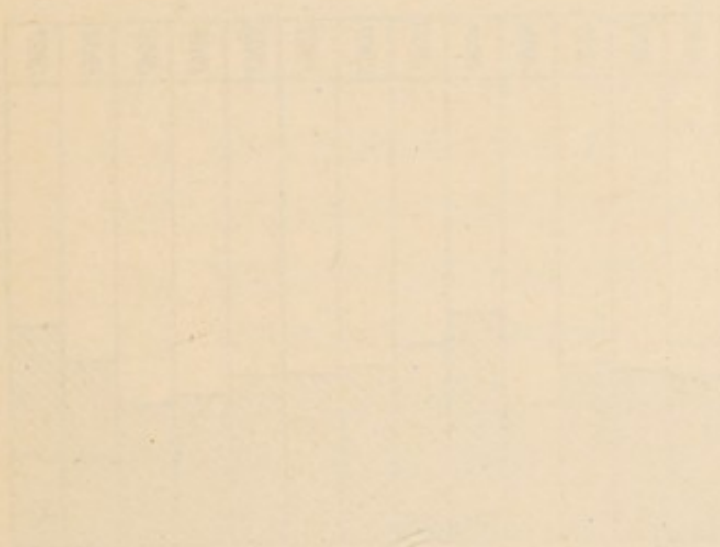
Report of the cases of scarlet fever in the city of New York, for the year 1905.

1905-1906

WILLIAM L. BROWN



WILLIAM L. BROWN



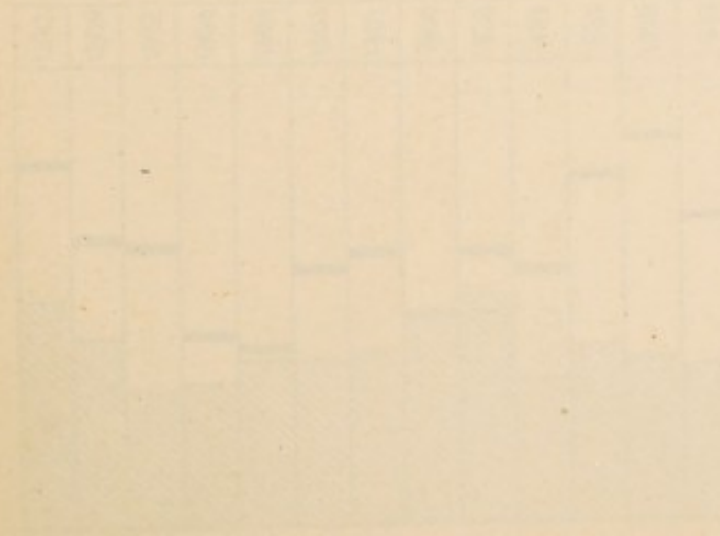
WILLIAM L. BROWN

1906-1907

WILLIAM L. BROWN

WILLIAM L. BROWN

WILLIAM L. BROWN

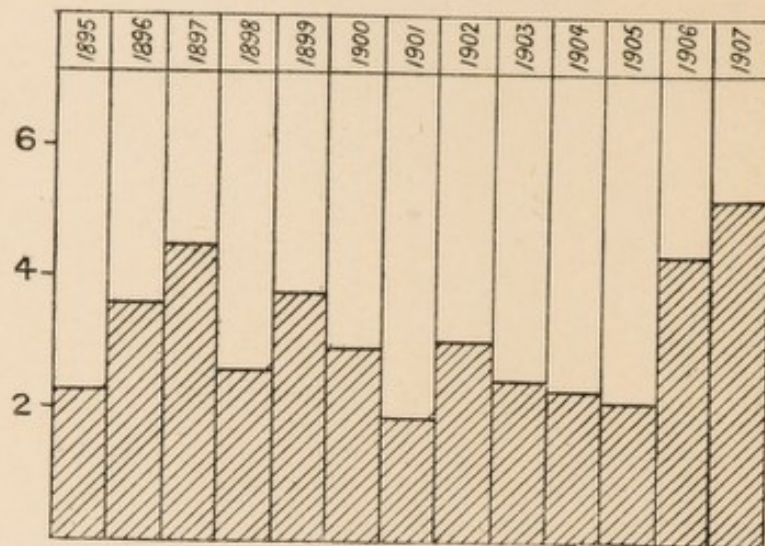


SCARLET FEVER

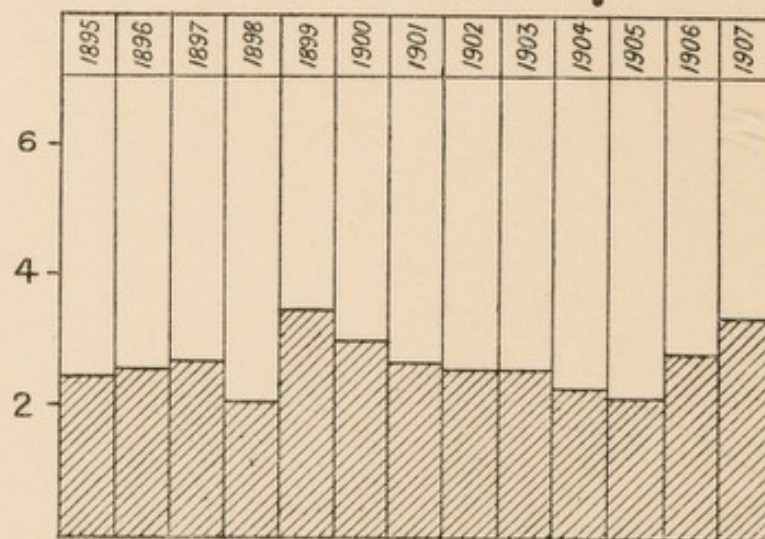
Notification case rate per 1000 of the population shewn by the height of the column year by year for the period of 13 years.

1895 - 1907.

WIMBLEDON.



WHOLE COUNTY.

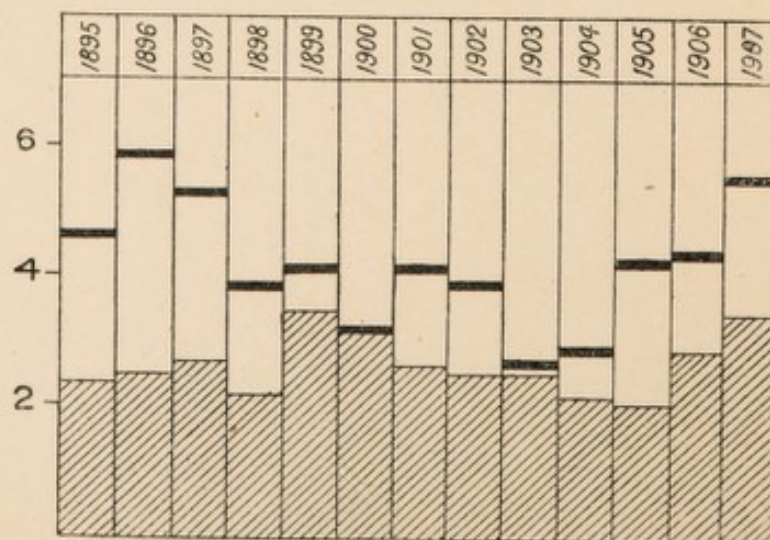


Notification Case Rate per 1000 of the population.

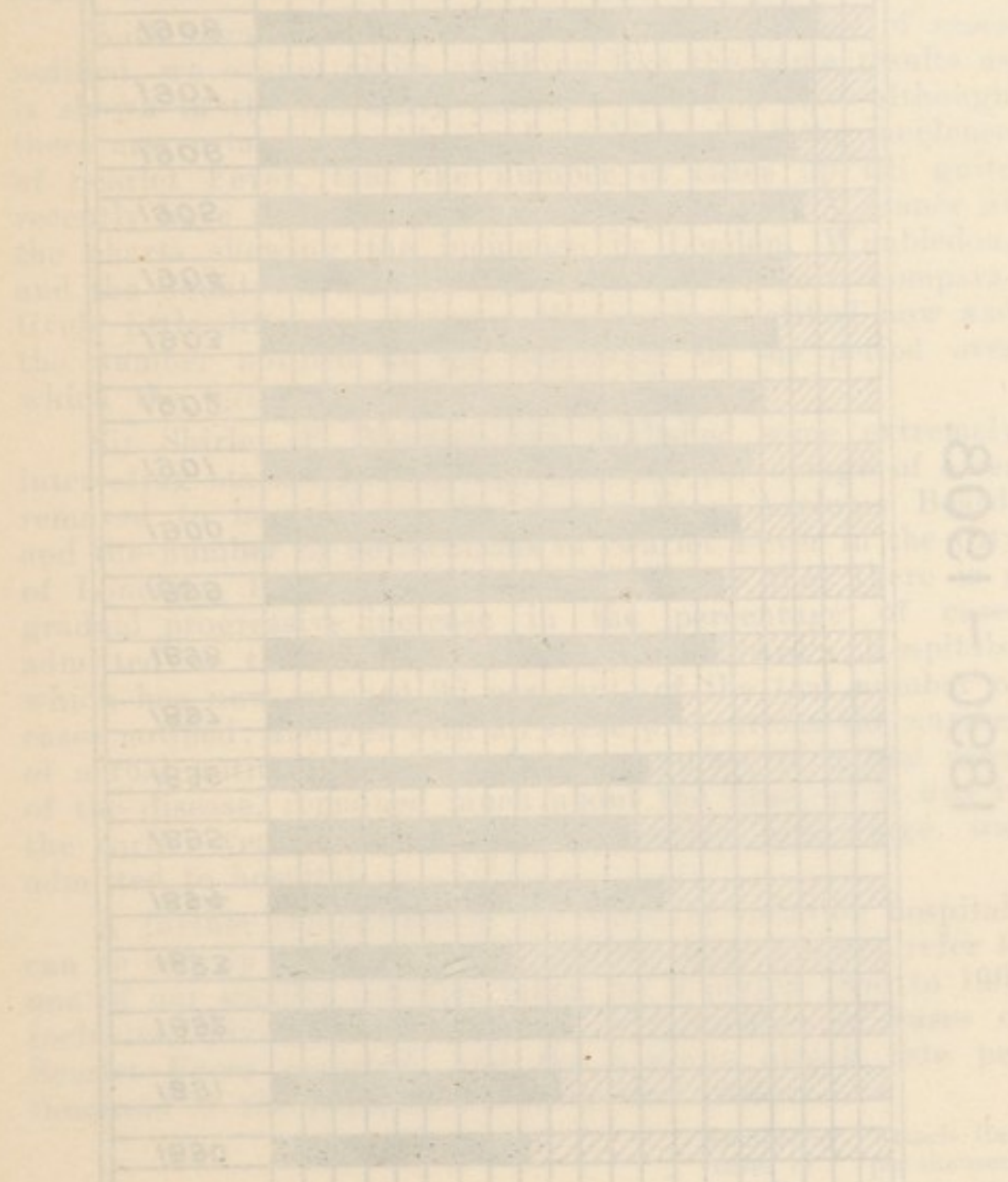
1895 - 1907.

LONDON - PLAIN

SURREY - SHADED.



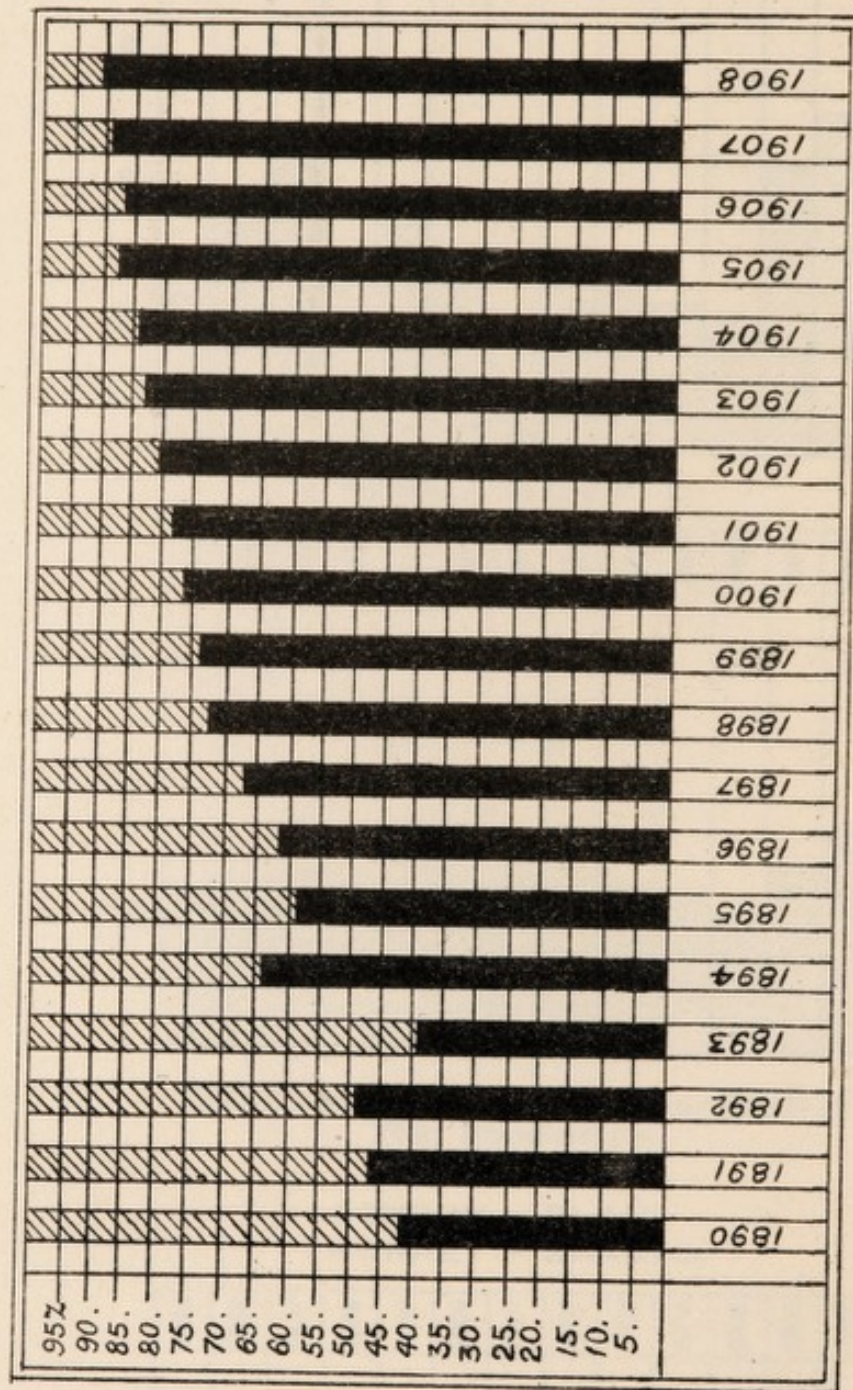
case of Scarlet Fever, but here again I must emphasize particularly the very great drop which took place in the mortality before the Notification Act actually came into force. The present state of affairs with its diminished mortality is undoubtedly due not so much to a diminished prevalence of the disease as to the more efficient treatment of the cases.



Urban Districts	2,011	2,331	2,331
No Isolation Hospital	1,155	1,155	1,155
Hospital Provided	1,155	1,155	1,155
Rural Districts			
No Isolation Hospital	1,155	1,155	1,155
Hospital Provided	1,155	1,155	1,155
Whole County			
No Isolation Hospital	1,155	1,155	1,155
Hospital Provided	1,155	1,155	1,155

Number of admissions to Hospitals of the Metropolitan Asylums Board percent of total cases notified in London.

1890 - 1908.



type of Scarlet Fever, but here again I must emphasise particularly the very great drop which took place in the mortality before the Notification Act actually came into force. The present state of affairs with its diminished mortality is undoubtedly due not so much to a diminished incidence of the disease as to a diminished virulence in the type.

With regard to the diminution in the number of cases notified, we cannot claim anything like the same results as is shown in the mortality tables. We find that although there are certain wave-like cycles which affect the incidence of Scarlet Fever, that the number of cases up till quite recently have remained much about the same. A glance at the charts showing the incidence in London, Wimbledon, and the County of Surrey, will show that there is comparatively little difference between the number notified now and the number notified at the beginning of the period over which the figures extend.

Sir Shirley F. Murphy has published some extremely interesting statistics with regard to the percentage of cases removed to hospital by the Metropolitan Asylums Board, and the number of notifications of Scarlet Fever in the City of London. From this chart you will see that there is a gradual progressive increase in the percentage of cases admitted to the Metropolitan Asylums Board's Hospitals, which has now reached 90 per cent. of the total number of cases notified; and yet with all these precautions the number of actual notifications, that is, the number of actual cases of the disease, remained much about the same as it was in the earlier years when a much smaller percentage was admitted to hospital.

A further comparison of the value of isolation hospitals can be seen in a large district, and the figures below refer to one of our smaller counties taken for a period 1898 to 1907 inclusive, giving the population, the number of cases of Scarlet Fever reported, and the average attack rate per thousand of the population during that period:—

	Population.	Number of cases of Scarlet Fever.	Attack Rate per thousand per annum.
<i>Urban Districts.</i>			
No Isolation Hospital	62,952	1,270	2.01
Hospital Provided	73,377	1,756	2.39
<i>Rural Districts.</i>			
No Isolation Hospital	135,538	3,165	2.33
Hospital Provided	50,838	1,175	2.31
<i>Whole County.</i>			
No Isolation Hospital	198,490	4,435	2.23
Hospital Provided	124,215	2,931	2.35

From this it will be seen that in the urban areas the attack rate was 0·38 per 1,000 in favour of those districts without isolation hospitals, whereas in the rural districts the attack rates were about the same.

With regard to the treatment of Scarlet Fever, matters have undergone very great changes quite recently.

Up till a short time ago many of us in the public health service were convinced that cases of Scarlet Fever nursed at home did far better than when congregated together in isolation hospitals.

We found that in hospitals when a septic case came into a ward almost invariably several other patients got infected, resulting in discharging ears and noses and other complications, which prolonged the patient's stay considerably and often left permanent damage behind. This state of affairs led to action being taken to try to prevent the spread of infection from the septic cases to the other patients.

At first these cases were isolated in separate wards, which to a certain extent abated the difficulty. The next thing to be tried was that they were congregated at one end of the ward and enclosed behind screens covered with disinfectant, or else in half glass cubicles, but it was found that until the doctor and the nurse practised the rigid ritual of surgical asepsis that infection kept on occurring, so that it was borne in upon administrators that the infection was largely carried by the nurse or doctor.

Following these methods simpler means were adopted; a line was painted round the beds of the septic cases which were kept at the end of the ward, and no one was allowed to cross the line without putting on a special overall and adopting surgical cleanliness. Another procedure was that the patients were left wherever they were situated in the ward, and four posts with a cord were placed round, and the same precautions had to be taken behind the barriers as in the previous instance.

Now we come to the latest and simplest, and for the present type of the disease, a perfectly efficient method. At the foot of each bed is a two-tier washstand, the upper basin containing a solution of disinfectant, and the lower one, in the septic cases, containing a special overall, in addition to which each patient has all his own utensils, such as syringe, thermometer, and tooth brush kept in a solution of disinfectant at the bedside. The tooth brush is new for each case, and is burnt when the patient goes out. Those cases which

are considered as septic, moreover, have a label attached to the bed card, and no nurse is allowed to approach the bed to do anything for the patient until she has put on the special overall at the foot of that patient's bed.

The plates, cups, and utensils of these septic cases are washed up separately from those of the rest of the patients, having first been efficiently sterilised. By this means it is found that septic infections do not spread, and that further, with the same precautions, there is no risk of infection in a nurse from a Scarlet Fever block assisting as night nurse in a Diphtheria block, or vice versa, and spreading infection from one ward to another.

A further important experiment has been carried out in the Metropolitan Asylums Board's Hospitals, where cubicles have been introduced, modified from the original " Pasteur " system in Paris of complete cubicles, whereby they are enabled to nurse several different infectious diseases in the same block. In the " Pasteur " system the cubicles, which are made of glass, extend completely to the ceiling, and ventilate themselves separately. In the system in use at Stockwell the cubicles are only seven feet high; there is a door about three feet high into the central passageway, and the whole of the air above the seven feet is common to the whole ward. The distance from the patient to the door of his cubicle is roughly about ten feet, and the passage of air is perfectly free from the cubicle to the central passageway in the ward, or into the cubicles on the other side of the half door, the patients using the same bathroom and the same lavatory, the only precaution being that in each case the patient is conducted to the bathroom or lavatory by the nurse in order to see that he does not go into any other cubicle. In each cubicle is a wash basin with a tap worked by a pedal, and two overalls, one for the doctor and one for the nurse, and these have to be put on whenever either of them visit the patient, and as soon as they have left the bed the overalls are hung up, their hands are washed, and they leave the cubicle; the doors are made to open with just a pressure of the knee, so that they need not be handled.

In this ward, in which, as I have tried to make clear, the air can circulate from cubicle to cubicle above a height of seven feet, are nursed Scarlet Fever, German Measles, Diphtheria, Whooping Cough, Typhoid Fever, and Mumps; Chicken Pox and acute Measles are debarred.

With regard to Scarlet Fever, the cross infection amounts to only half per cent.; by cross infection, I mean cases that

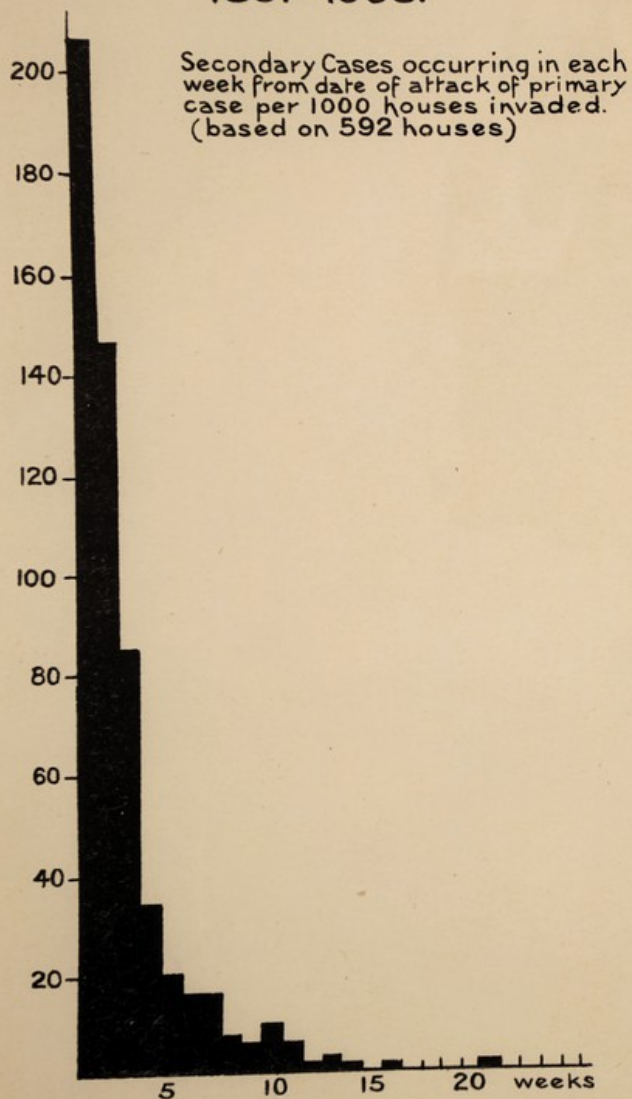
have caught Scarlet Fever who were admitted for some other disease. This experiment to my mind shows very clearly that the striking distance of Scarlet Fever is practically limited to a height of seven feet and a horizontal distance of ten feet from the patient, and that the doctors and nurses, provided they take strict precautions, can go from one disease to another with practical immunity, showing what we find to be the fact in the ordinary administration of Scarlet Fever, that the chances of a person who is looking after a case of Scarlet Fever nursed at home infecting any other member of the family if precautions are taken is practically nil, and that we need not have the same exaggerated fear with regard to the spread of infection in cases nursed at home or of the doctor carrying infection to his patients. If we examine the difference between the cases nursed at home and those nursed in hospital in producing secondary cases, that is second cases in the same household, we find that hospital isolation is producing a particular type of case, which is known as a "return" case, and which is caused by the infection of another case in the house after the return of the patient from hospital.

Very striking records have been made by the County Medical Officer for Surrey with regard to this matter, as will be shown very clearly on the accompanying charts which demonstrate the fact that secondary cases occur, with the exception of the first week, more frequently during the first eight weeks, in the cases nursed at home, but that after the eighth week there is a marked increase in the secondary cases occurring in houses where the first case had been removed to hospital, so that on the whole the balance in favour of removal to hospital is not very great. Two other charts are shown which bring out these facts very well, the cases being taken from cottages only so as to be able to make the figures as fairly comparable as possible. It is also rather striking that an increased number of secondary cases occurs during the first week in houses where the first case has been removed to hospital, pointing very clearly to the fact that the infection had already occurred before the case was notified, and this is undoubtedly due largely to the very mild type of the disease, in which the doctor is not called in at the beginning.

The following figures refer to a large north country town in which, in the years 1887 and 1888 and 1901 and 1902 there were about the same number of cases of Scarlet Fever, but during the earlier years only 8 per cent. of the patients were isolated in hospital, whereas during the two latter years 80 per cent. were isolated:—

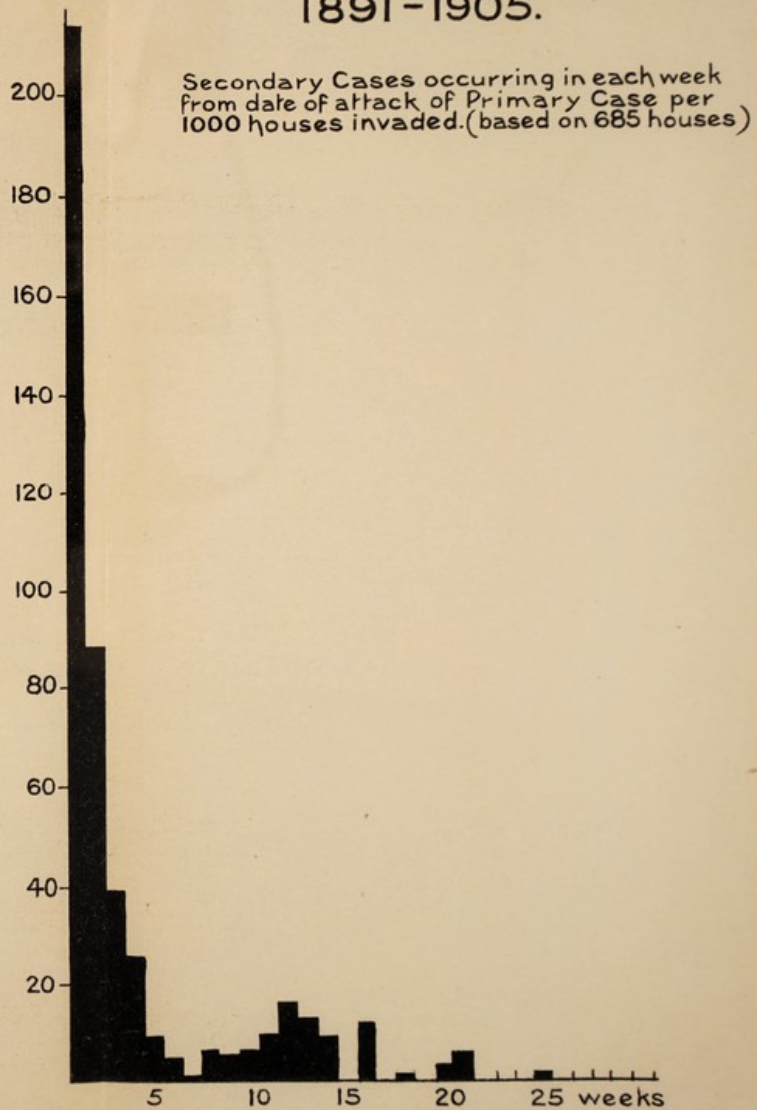
SCARLET FEVER

HOME CASES (COTTAGES ONLY)
1891-1905.



SCARLET FEVER

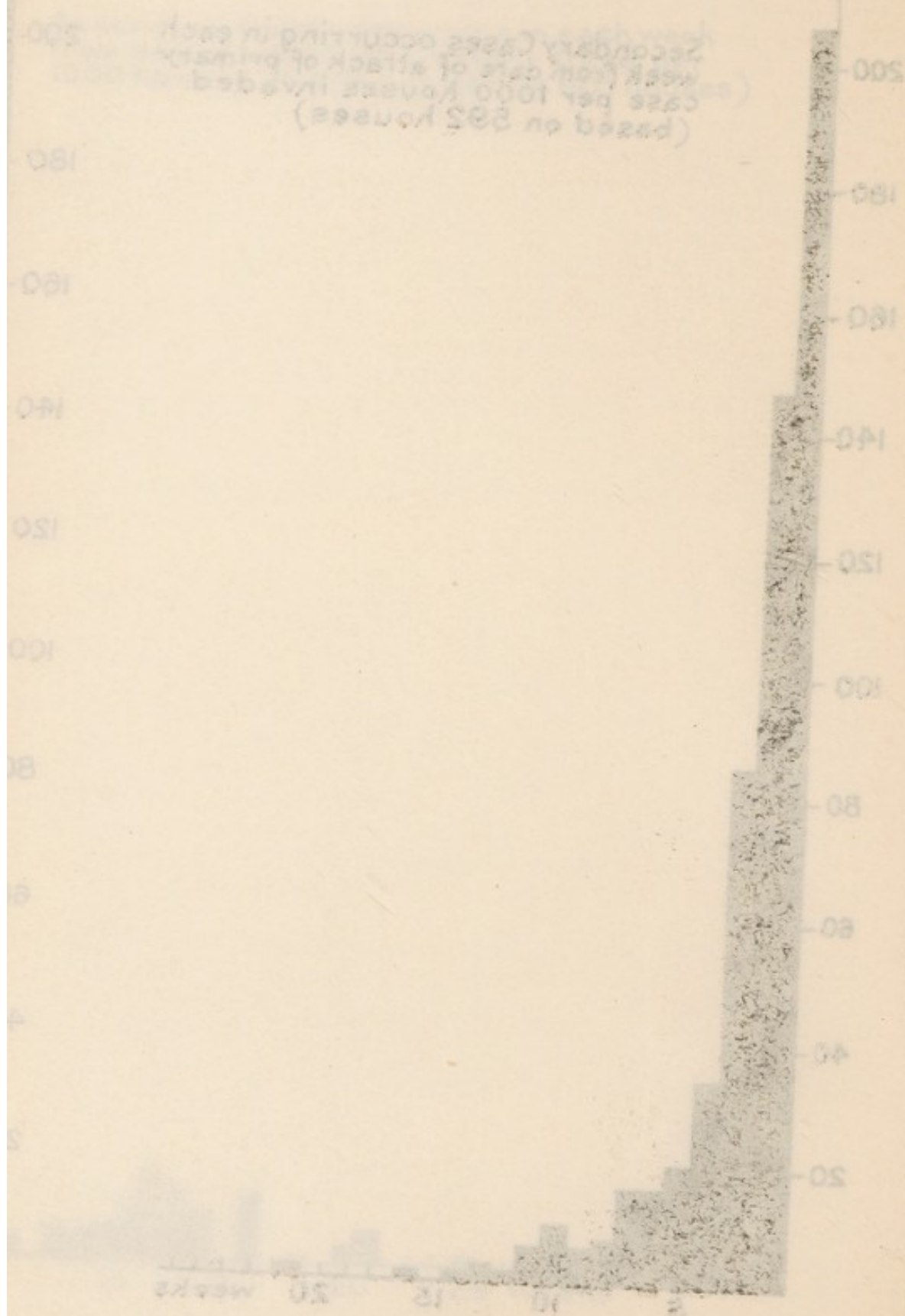
HOSPITAL CASES (COTTAGES ONLY)
1891-1905.



SCARLET FEVER

HOME CASES (COTTAGES ONLY)

1891-1905



Years	Number of cases notified.	Number of second'ry cases.	Percentage of second'ry cases.	Number of houses in which occurred.		Percentage in which second'ry cases occurred.	Percentage of cases isolated in Hospital.
				Primary cases.	Sec'nd'ry cases.		
1887	727	145	20	513	92	17.8	8
1888	440	87	20	314	65	20	
1901	736	113	15	569	68	12	80
1902	452	85	18	340	52	15	

It will be seen from the figures that in the earlier years there were 20 per cent. of secondary cases as against 15 and 18 per cent. of secondary cases, when 80 per cent. of the cases were removed to hospital. During the same years as are referred to above, 97 per cent. of the secondary cases occurred during the first six weeks and only 3 per cent. afterwards in the "non-isolation" years, whereas during the "isolation" years only 62 per cent. occurred during the first six weeks and 37 per cent. afterwards, so it is very clearly shown that hospital isolation produces a very definite increase in the number of later infections in the same household, which are called "return" cases.

On the other hand, figures from such a district as East Ham point to a definite benefit derived from cases being removed to hospital, and the same conclusion was come to by the Chief Medical Officer of the Local Government Board with regard to Brighton, in a paper read before the Epidemiological Society. The figures for East Ham are given below and show a difference of 18.7 per cent. in the attack rate of secondary cases, but at the same time the character of the neighbourhood must be taken into consideration.

	Number of houses in which no further cases did occur.	Number of houses in which one or more additional cases occurred.	Total Number of additional cases of the disease.	Number of children who had not previously had Scarlet Fever.	Percentage of these children.
Home Treated in 235 Houses.	172	63 or 26.8 per cent.	83 or 35.5 % <div style="display: flex; justify-content: space-around; font-size: small;"> 33 occurred within 7 days. 50 occurred later. </div>	531	15.6
Hospital Treated from 288 Houses.	253	35 or 12.1 per cent.	48 or 16.6 % <div style="display: flex; justify-content: space-around; font-size: small;"> 26 occurred within 7 days. 22 occurred later. </div>	823	5.8

For some time a new method of treatment has been carried out by Dr. Milne in the Barnardo Homes at Barking Side. His method is to swab the throat as soon as the case is notified with a one in ten solution of carbolic oil, and to anoint the body from head to foot with pure eucalyptus oil every two hours for the first thirty-six hours, except in severe cases or delayed notification, in which case it must be done for forty-eight hours. By this method he claims to entirely abolish all infection once the treatment is thoroughly undertaken, so much so that he allows the infectious cases to mix with healthy children outside, if they are well enough at the end of a fortnight.

At the Barnardo Hospital at Stepney, Scarlet Fever cases treated by this method are nursed in the ordinary wards amongst surgical cases of all degrees of severity. Dr. Clapham and I visited the Hospital and saw a case peeling profusely with an operation case on either side of it. To anyone who has been brought up in the ordinary ideas of infection, such a thing was little short of amazing.

Referring to thirty-five cases admitted to the Stepney Hospital, Dr. Milne writes:—

“ During the time these thirty-five cases were in hospital we had some 200 patients in residence. These

included 14 under five years of age. The operations performed during the whole period Scarlet Fever patients were in hospital and in the same ward included:—

Removal of large portion of scapula 1	Empyema 1
Hernia (radical cure) ... 13	Fracture of femur (treated) 1
Cataract needled 2	Bruised and torn hand and fingers 1
Osteotomy of femur 8	Removal of sequestrum 6
Tonsils and adenoids removed 17	Resection of rib 1
Nerve grafting of facial nerve 2	Skin grafting 3
Suture of median nerve and separation of tendons 1	Amputation of leg and thigh 2
Mastoidectomy 3	Lithotomy (supra-pubic) stone 4½ oz. 1
Circumcision 4	United fracture 1
Excision of knee 6	Tendon grafting 1
Movement of elbow joint 4	Cleft Palate 2
Paraffin injection for bridgeless nose 2	Hammer toes 2
Astragalectomy 3	Arthrotomy 4
	Osteomyelitis of tibia (upper end) 1

And all the time side by side with these Scarlet Fever cases, the beds so near that the lads could touch hands.”

Dr. Milne goes so far as to say that, if a case has been treated from the beginning, he has no hesitation in putting an operation case or a healthy child straight into the bed which has just been vacated by a patient suffering from Scarlet Fever without changing the bed clothes, nor does he think it necessary to disinfect anything except the things which have been used previous to treatment, if the patient has been moved from one room to another or from one bed to another. Further, with regard to his treatment, he says that the complications of Otorrhoea (inflammation of the ears) and Nephritis (inflammation of the kidneys) he never knows, a great contrast to the varying percentages occurring in the different Fever Hospital records which follow. At the same time I can see considerable difficulty in carrying out Dr. Milne's treatment in general practice. The repeated swabbing of the throat with such a strong disinfectant as a ten per cent. solution of carbolic oil is not at all a pleasant procedure, and likely to arouse considerable opposition in the patient, also the inunction with eucalyptus oil is apt to make the eyes smart and again arouse opposition, and I would point out that it is a very different matter carrying out such procedures in the house of the patient, particularly when the child does not appear to be very ill, and especially where

there is a sensitive parent, to carrying out the same treatment in a self-contained institution like Dr. Barnardo's Home, or even an isolation hospital.

It will be understood that in the present state of the law such apparent heresy is a great difficulty to overcome, as every one in authority is very loth to take any action, as should any accident of infection occur the public are only too ready to blame any official whom they consider responsible. At the same time, I feel the evidence is so strong, that although in the present position of the law and public opinion, I am not prepared to take the responsibility of advising this as an alternative to isolation until there is some Government Report on the matter directing what official action shall be taken, I contend that in view of Dr. Milne's book and writings on the subject, any practitioner is justified in carrying out Dr. Milne's instructions, even to the extent of shortening the period of detention without running any risk under the Act for exposure of persons suffering from a dangerous infectious disease, but I am afraid it will take a long time to convince the public of the safety of Dr. Milne's methods.

The official attitude is best shown by the remarks of the Medical Officer of Health of one of our largest counties on a paper by Dr. Milne read before the Epidemiological Society in November, 1909:—

“ The treatment of Scarlet Fever patients by inunction with eucalyptus oil has interested me for several years, and when I had charge of the small Isolation Hospital belonging to the Chelmsford Rural District, I used it in nearly all cases. During one epidemic the hospital was overcrowded, and about a dozen patients were accommodated in a tent. All the patients did extremely well.

“ I formed a very pronounced opinion upon its value, but whether it rendered a child non-infectious after ten or twelve days I was not able to determine. The popular opinion that a child is infectious so long as it shows the slightest sign of ‘ peeling ’ is so strong that I did not dare to send out a child until desquamation had practically ceased.

“ Many medical officers to hospitals would, I believe, try the experiment, if they could feel certain that they were not laying themselves open to an action for damages if a return case occurred.

“ The enormous pecuniary and other advantages which would accrue to the community, if Dr. Milne's

claims were substantiated, as I believe they can be, lead me to hope that some means may be devised whereby the treatment can be tested under conditions which would render the results conclusive."

With our present knowledge of the personal element in the spread of infection, and that the main sources of infection are the discharges from the throat, ears and nose, it is hoped that much may be done by stopping the "missed" cases which spread the disease.

In Wimbledon, upon the notification of a case attending school, I inspect the register of the class which the patient was in, and a satisfactory explanation has to be given of the absence, even for half a day, of every child that has been away within a fortnight or even more, the reason of insisting on the half day absences, especially Friday afternoon and Monday morning, is that all day Saturday and Sunday intervene, so that a mere half-day's absence on the register means two and a half day's absence from school, which, with the very mild cases which occur now, is sufficient for the child to have recovered from its temporary sore throat and be back at school spreading the disease. If any suspicious throats are reported the homes are visited and the cases examined if they are not under a doctor. If a second case occurs in a class every child in that class is examined, and in cases where a second case occurs in another class and I suspect infection in school, I examine every register in the department and investigate the reason of absence of every child that has been away, and with such a constant watch one hopes to be able to prevent a certain amount of infection by "missed" cases.

We in Wimbledon are removing about 60 per cent. of the cases to the hospital, and the practice prevailing will be gathered from the reports I have received from the subjoined towns of the percentage of cases treated in the isolation hospitals:—

Town.	Percentage of cases of Otorrhoea in cases removed to Hospital.	Percentage of cases of Scarlet Fever admitted to Fever Hospital.
Ashton-under-Lyne	... ..	About 12% for 1909.
Acton	... ..	1908 68%
	Varies enormously according to the amount of overcrowding that prevails in the ward from 1 to 20 per cent.	1909 66%

Town.	Percentage of cases of Otorrhoea in cases removed to Hospital.				Percentage of cases of Scarlet Fever admitted to Fever Hospital.			
Bootle	No record kept	...	1909 68% - average for the past 19 years 55%			
Blackpool	About 6%	...	From 84 to 96%, generally nearer the higher figure.			
Bath	Average about 2%	...	Varies year by year from 58 to 95%, average 1900 to 1909 76%			
Birmingham	1905	1906	1907	1908
					88	86	87	86
					1909			
					78			
Brighton	Last 2 years 9.3%	...	1905	1906	1907	1908
					80	72.4	85.6	86.8
					1909-81.2			
Batley	About 90%			
Blackburn	14.8	...	75%			
Burton-on-Trent	86%			
Beckenham	88.5%			
Bristol	14.6 in 1909	...	69.9%			
Bournemouth	90 to 95% of Scarlet Fever & Diphtheria			
Croydon	Not available	...	1907	1908	1909	
					78	78	73	
Crewe	Very small	...	Over 90% (91.9 in 1909)			
Cambridge	90%			
Cheltenham	86% last year, some- times more.			
Chester	Varies from year to year. In 1909 12.1%	...	In 1907 (an average year) 83%			
Coventry	11% in 1906	...				
Colchester	About 5%. Of these 3% are temporary and clear up before the child leaves the hospital	...	1907	1908	1909	
					84	75	83	
Derby	8% (past 2 years)	...	69% (1909)			
Devonport	9%	...	Average for 5 years 68.5%			
Exeter	5%	...	83% for the past 5 years.			
Eccles	Very small	...	20%			
Folkestone	8% during period of 3 years	...	82% average for 3 years.			

Town.	Percentage of cases of Otorrhoea in cases removed to Hospital.		Percentage of cases of Scarlet Fever admitted to Fever Hospital.
Handworth (Staffs)	Cannot say	...	26% (average 1905-1909).
Huddersfield	...	...	1908-86% 1909-92%
Hornsey	8%	...	78%
Heston & Isleworth	No information	...	1909-76.9%
Hereford	3% in 1909	...	1909-76%. Average for last 10 years about 70%.
Hove	About 4%	...	From 80 to 90%, varying in different years.
Ipswich	...	...	1909-91%
Ilford	6%	...	69.7% (1909)
Kingston-on-Thames	...	...	About 25%
Kings Norton	3 or 4%	...	About 80%
Luton	About 2%	...	39%
Lincoln	...	...	36.8% in 1908.
Nottingham	6% the past 2 years	...	About 60%
Oxford	...	...	77% average for 5 years.
Portsmouth	6.34% (1909)	...	54.2 (1909)
Richmond (Surrey)	About 3%	...	74% in 1909.
Reigate	...	...	About 85% average for 10 years.
Rotherham	Less than 1%	...	74.5%
Southend-on-Sea	About 8%	...	85%
St. Helens (Lancs)	...	...	75 to 80%
Shrewsbury	The Hospital was only instituted in May of last year and the number of cases is not sufficiently large from which to make trustworthy percentages.		
Scarborough	...	...	83% in 1909
Stockport	...	...	1900-1909 55%
West Ham...	15 to 20%	...	62% in 1909
Walthamstow	4%	...	1908, 63.4% 1909, 72.2%
Worthing	6.1% since 1906	...	68% ten years aver- age, 74% last five years.
Wallasey	...	...	71% in 1909
Withington (sub-district of Manchester).	...	...	60% in 1909
Wakefield	5.5% in 1909	...	About 25% during the last 5 years.
Willesden	8.9% average 1905-1909	...	86% average for five years, 1905-1909.

But in spite of these facts, and in spite of the reply of the President of the Local Government Board in the House of Commons on Monday, June 20th, 1910, to the effect that:—

“ I am not at present in possession of complete information on the points mentioned in the first part of the question. I may say, however, that by the General Order which will shortly be issued in pursuance of Sub-section 2 of Section 68 of the Housing, Town Planning, etc., Act of last Session, the County Medical Officer of Health will be required to inquire into and report upon the hospital accommodation in each county, and upon any need for the provision of further accommodation. As regards the second part of the question, I am advised that there can be no doubt as to the utility of isolation hospitals in the prevention of the spread of infectious diseases, when conjoined with good administration in regard to the other means necessary to prevent the spread of infection, among which the careful search for overlooked or non-notified cases of the same disease bears an important part.”

In answer to Major Adam's question, viz.:—

“ To ask the President of the Local Government Board, if he will state the number of infectious hospitals provided by the various local sanitary authorities in England and Wales, their cost for erection and maintenance, and the number of patients admitted over a convenient period of years; and whether, in view of the diversity of the skilled and medical experience which exists on the subject, and the cost to the ratepayers which is involved, he will cause an inquiry to be made into the whole question of the usefulness of infectious hospitals, other than Small-pox hospitals, as a means of preventing the spread of disease, and generally, in view of the extended experience which now exists on the subject, into the advantages or disadvantages which may be found to attend their use.”

In spite of the fact that one is departing somewhat from generally accepted ideas, I feel that no case can be made out for the indiscriminate thrusting into isolation hospitals of every case of Scarlet Fever that does not occur in a large house, nor has a case been made out for spending large amounts of money on extending or even erecting Scarlet Fever hospitals with the idea of stamping out or seriously diminishing the disease, as to my mind their claim to have controlled the disease is not proven.

When I first took up my duties in Wimbledon, I found the Committee pledged to a scheme of enlargement which made no proper provision for treating septic cases or for the isolation of doubtful ones, so I felt it my duty to advise the alteration of that scheme to make it really efficient and to obtain value for the money that was to be spent, but now that the matter has been referred for re-consideration, in view of the present knowledge of the infection of Scarlet Fever and its treatment, I feel that I cannot advise the Committee to make any extensions to the hospital at present, with this exception, that I think there must be provided, and that as early as possible, an observation block, where doubtful cases can be removed from their homes and isolated, and if the disease turns out to be a non-infectious one, they can be removed again to their own homes without having incurred the risk of contracting Scarlet Fever or Diphtheria.

Two cases alone will suffice to show the difficulty in which a practitioner is placed. In both cases I was called in consultation and the diagnosis was extremely difficult, and in one case I did not consider that the practitioner would have been justified in making a definite diagnosis. In one case the mother had just been confined when one of the elder children was taken ill and the rash appeared, and in the other case there was only the mother at home with an infant of fourteen months, and the father worked for a very well-known firm of tailors. In such cases, in the interests of public health, it is extremely important to be able to isolate such cases until the diagnosis is certain.

We must, in the interests of public health, be prepared to take in all cases occurring in the houses of purveyors or manufacturers of food, milk sellers, clothing makers, and such like trades, or where the bread winner is engaged in such trades, and cases occurring in the poorest homes, but it should be most clearly understood that an isolation hospital is established primarily for the controlling of infectious disease and is not a charitable institution, nor does it exist to relieve the ratepayers of the inconvenience of having to nurse cases of infectious disease. It is the Local Authority's means of attempting to control the spread of disease, and no ratepayer has any right of admission or to compensation in any form if not admitted. I have gone through the cases occurring during the last twelve months, and had we been pressed for room, about 10 per cent. more might have been nursed at home by reason of the home circumstances. If no further extension is made, should there happen at any time to be a temporary pressure and only one or two beds left, it must be left entirely to me to discriminate as to which cases applying

for admission shall be admitted, and I must have the entire support of the Committee in this matter, as every medical man is apt to think his case the most important, and here, as in other towns, the word of the Medical Officer of Health must in these instances be paramount.

I think we must also face the fact that with improved administration, which I hope is going to decrease the length of stay of the cases in hospital, we shall have to sacrifice a certain number of the cots which have been placed in the wards comparatively recently. I do not think we should have more cots or beds than will give 2,000 cubic feet for each patient.

As to the observation block, considering the extremely small number of cases of Enteric Fever that we get, I think the most economical thing that could be done at present is to convert the present Enteric Fever block into a four-bedded cubicle block, in which we can then nurse a case of Typhoid Fever just as easily as in the present block, and at the same time have three other cases under observation. I think the question of any other block must be considered together with the report on the question of Consumption, as if we put up, say, a six or eight-bedded block for Enteric Fever in place of the one we use as an observation block, this could be adapted so that it could be used for either Consumption, Measles, or Whooping Cough.

The Iron Hospital we can always use as a stand-by in times of pressure, but I understand that when it is in use there is great discomfort and dissatisfaction among the nurses owing to the present accommodation in the Home. I certainly think that some improvements should be made in the Home for the benefit of the Staff.

APPENDIX II.

THE USES OF A BACTERIOLOGICAL LABORATORY.

Diphtheria.—The chief use of a bacteriological laboratory at present is in the control of Diphtheria. In this disease, more than any other, it is of the utmost importance that diagnosis should be made at the earliest possible moment, as the patient's prospect of recovery depends upon the earliest administration of Anti-toxin, and it is still a fact that a large number of medical men wait until the diagnosis is bacteriologically certified, rather than give a precautionary dose of Anti-toxin to a suspicious case on the grounds of the painful nature of its administration.

The importance of the early administration of Anti-toxin as influencing the recovery of the patient can best be illustrated by the following figures, quoted from the Brook Hospital of the Metropolitan Asylums Board from 1898 to 1903, in which Anti-toxin was administered as soon as possible after admission.

181 cases admitted on first day, no deaths, Percentage 0						
1186	„	„	„ second „	51	„	4'3
1233	„	„	„ third „	146	„	11'03
963	„	„	„ fourth „	167	„	15'2
1260	„	„	„ fifth „	251	„	19'9

From the foregoing figures it will be seen how great is the truth of the statement in Sir Clifford Allbutt's System of Medicine to the effect that "nothing can have a greater effect upon the success of Anti-toxin treatment than the day upon which it is employed."

Under our present system of sending swabs away, the average time which elapses before the result is obtained is about a day and a half. If this work were done on the spot, a doctor handing in a case before the office closes would have his result, in the majority of cases, telephoned to him before he starts out on his round next morning, and a case handed in first thing in the morning might often have the result the same night, so that it will be seen there would be practically a clear saving of eighteen to twenty-four hours, which is shown by the above statistics to be a matter of extreme

importance to the patient. Moreover, in this, as in Consumption, a negative result does not necessarily close the matter, whereas a positive one does, and in a suspicious case it is often advisable to have several swabs taken, as it often happens that either the patient has been using a disinfectant gargle shortly before the swab was taken, or else that the swab did not touch a patch on which the organisms of Diphtheria were actually present, and sometimes the first two or three swabs may be negative, and the third or fourth positive. In this case it will be seen that the advantage of being able to act as rapidly as possible in a series of results is very marked.

The present day administrative control of Diphtheria which has been in practice in most of the large towns, but has only in this last memorandum of the Board of Education received the official seal of the Department, has been to swab all patients in the house from which a case of Diphtheria has been notified, and to swab all the children in close proximity to the patient at school, also not to discharge from hospital any case without getting three successive negative swabs, as it is found in a certain number of cases that virulent infection is contained in the throats and noses of those cases up to the second and third months, also not to admit any child to school who has not shown either in private or hospital practice three consecutive negative swabs. The importance of swabbing the contacts, particularly in schools, is very well illustrated in the report of the Medical Officer of Health of the City of Bristol, which has suffered from a continuous and serious epidemic of Diphtheria for several years past.

Speaking of 1907, of the outbreak in May, he says "12·5 per cent. of the 190 scholars examined were discovered on examination to be in an infectious condition, and in the November outbreak, examination showed eleven positive cases, and resulted in the discovery of a twelfth case at one of their own homes, attending another school." Then in discussing Diphtheria in 1908, he draws attention to one school in which 146 children were examined, 109 bacteriologically. Of these 109, four showed typical Diphtheria bacilli in large quantities, 24 in small quantities, and in 68 the organisms found were suspicious, and only 13 were negative. This experience corresponds almost precisely with what has occurred in Derby, where Diphtheria has been very rife.

The accompanying diagram shows very well the possibility of dissemination in school of Diphtheria by cases which, although harbouring the germ, are not actually suffering from the disease in the form in which it can be notified.

CLASS 7.

Wall

	Suspicious ? † Carrier	Notified case	—
	Discovered † Carrier	Notified case	—
	Suspicious ? † Carrier	—	Suspicious Carrier ?

CLASS 3.

Wall

	Discovered †	Notified case	—
	Discovered †	Suspicious ? †	—
	—	Suspicious ? †	Vacant

In concluding his report he states, "the foregoing facts show that school attendance is still an important factor in determining the number of infections owing to the influence of close personal contact. There is only one effective method of dealing with Diphtheria, which has no relation to the "sanitary" condition of the school, and that is, by prompt and careful examination by bacteriological methods of the throats and noses of children in the affected class, and all contact cases in school or at home."

"The importance of mere disinfection in this disease may, however, be greatly overestimated, just as the cardinal importance of personal contact and the influence of mild cases (carriers), whether of throat or nose, Diphtheria has been fatally underestimated."

Experience also shows that where a Department does its own bacteriological investigations, and there is a more personal connection between the medical men of the district

and the Public Health Department, they avail themselves far more of the facilities offered than they do if all the material has to be sent away with the consequent delay in getting their results.

Since the last meeting of the Public Health Committee, the Education Sub-Committee dealing with the Medical Inspection of School Children, has resolved to recommend that the recommendations contained in the memorandum of the Board of Education with regard to the control of infectious diseases in schools be acted upon, so that we are faced, with the present incidence of Diphtheria in the district, with an expenditure on this score alone of over £100 per year if the swabs are to be sent away as at present.

The comparative danger of Diphtheria as compared with Scarlet Fever is seen by comparing the deaths since 1904 in this Borough.

		Diphtheria.		Scarlet Fever.
1908	...	10%	...	2'3%
1907	...	7'2%	...	1'7%
1906	...	16'4%	...	2'1%
1905	...	5'1%	...	2'7%
1904	...	16'6%	...	0

Of these deaths, varying up to 1 in every 6 of the cases attacked, the majority can be prevented by modern treatment provided it is early enough.

Consumption.—Along with Diphtheria, Consumption is a disease in which the early diagnosis, particularly of the Bronchitic form, may mean the question of the life or death of the patient.

In its early form the public have yet to realize that Consumption is one of the easiest diseases to cure. When it is realised that 1 in 11'3 of the total population die of Tuberculosis, and that it is shown by the post mortem records that 1 in 3 of the total population have had and recovered from Consumption at some time in their life, it will be seen that the power of recovery is very great, and that in cases where it has got even a firmer hold, the question of the life or death of the patient may turn on the diagnosis.

The diagnosis can only be made with certainty by the discovery of the bacillus in the sputum, and here again, as

in Diphtheria, if not found in a suspected case the sputum should be examined again and again at short intervals, until one is practically certain that the case is not one of Consumption. The fact that the bacillus has been found immediately places the case on a scientific basis for treatment, particularly is this the case in the Bronchitic form, where the treatment for Bronchitis with its warm fires, closed windows, steam kettles, and low diet is diametrically opposed to the open air, and over feeding of the recognised Consumptive. I regret to say that very little use is made of this method of diagnosis in Wimbledon considering the number of cases which must always be cropping up. Only 22 examinations were asked for in the year 1908, whereas the deaths are recorded of 40 cases, and taking as a working basis three cases for every death, and the many other cases in which the diagnosis is doubtful, it will be seen that far greater use should be made of this branch of the work.

How little is being done in this town, and how serious is the problem and deaths from Consumption may be seen from the following figures:—

Death-rate per 1,000 in Wimbledon.

Scarlet Fever.	Diphtheria.	Consumption.
·05	·16	1

which means that whereas Diphtheria, which is regarded as one of the most dread diseases, has a mortality 3·2 times as great as that of Scarlet Fever, Consumption, for which we are doing practically nothing, causes twenty times as many deaths as Scarlet Fever, and 6·2 times as many as Diphtheria, and yet for Scarlet Fever, which only produces a death-rate of ·05 per cent. of the population, one-twentieth that of Consumption, we have to spend in the near future about £8,000 in addition to the present annual expenditure of about £4,000.

It is estimated throughout the country that one-eleventh of the total amount spent in poor relief is caused by Consumption, so that we spend in Wimbledon £3,198 5s. 5d. per annum on Consumption.

The comparative deaths and the present need of doing everything in our power to reduce the mortality is seen in the accompanying table of the deaths in England and Wales in 1904:—

Measles	...	...	...	...	12341
Whooping Cough	...	...	...	...	11909
Diarrhœa and Dysentery	...	...	...	...	29674
Enteric Fever	...	...	...	...	3153
Diphtheria	...	...	...	...	5763
Scarlet Fever	...	...	...	...	3770
Typhus Fever	...	...	...	...	37
Small Pox	...	...	...	...	507
Total					67154
Tuberculosis	...	...	...	...	62215

Ringworm.--The whole diagnosis of Ringworm and the exclusion from school of children suffering from this disease must rest on microscopical examination and discovery of the organism.

My own experience has been that of the cases sent back to school certified by a doctor (without microscopical examination) as free from infection, considerably more than half show infection on microscopical examination, and the burden of certifying whether or not these cases should be admitted to school should not be thrown upon the general practitioner, as he has, as a rule, neither the necessary apparatus nor the expert knowledge to enable him to certify as to the presence or absence of the organism.

During last year 112 cases were excluded from school on the ground of Ringworm, and under our present method of treatment, some four or five, and in some cases up to 12 or even more, examinations for each case must be made, so that it will be seen that there is a considerable amount of work to be done in this direction alone.

As this work is the direct outcome of medical inspection, the Education Committee should be asked to contribute not only to the establishment of the laboratory, but also to its upkeep.

Ophthalmia Neonatorum.--The gonorrhœal origin of this disease of the new born can only be definitely diagnosed as the result of microscopical examination, and as this disease is responsible for 30 to 40 per cent. of all the inmates under 18 in our blind asylums, it will be seen that it is important that in any case of doubt there should be available methods

for immediate diagnosis. Here again, as in Ringworm, the majority of the practitioners have not the necessary apparatus or expert knowledge enabling them to deal with it.

Typhoid Fever.—This is an extremely important test for the presence or absence of Typhoid Fever, and in a certain number of cases is the only means of diagnosing the disease.

When it is realised that three diseases apparently so widely different to the lay mind as inflammation of the brain due to ear disease, Pneumonia, and Typhoid Fever in their initial stages present almost identical symptoms, the important bearing on the treatment is seen.

Milk.—At present I understand there is nothing being done with regard to checking the milk supplied into Wimbledon in respect of its cleanliness, a most important matter bearing on infantile disease.

This is a serious matter, which can only be done by comparing the number of bacteria found in a given sample with a standard.

Shell Fish.—Another matter which during these last three years has come very much into prominence in matters concerning public health is the question of the investigation of the contamination of shell fish.

Several recent epidemics of Typhoid Fever, some of high mortality, have been traced to oysters, mussels, cockles, and it has been held in the Courts that it is the duty of the vendor to make sure that the source of supply is above suspicion.

Although the germs of Typhoid Fever may not actually be found on bacteriological examination, others indicating sewage pollution are often found, thereby demonstrating the extreme risk of still further contamination. A periodical examination of the shell fish sold in our district, even if nothing may be discovered, tends to keep the vendors on the watch as to the safety and purity of their supplies.

Since this report was commenced the extreme importance of this subject is shown by the fact that the French Government has appointed a Commission to inquire into the condition of the oysters obtained in France with the object of preventing the spread of disease by means of oysters, the Chairman of the Commission being the Inspector-General of Fisheries (British Medical Journal, Jan. 8th, 1910).

Ice Cream.—Of later years several outbreaks of severe intestinal disease, and poisoning have been found to be due to contaminated ice cream, and in many towns now a periodical examination is made of ice cream sold in the district.

This again, although no actual disease may be found, tends to keep the standard of the goods supplied, particularly in the poorer districts, at a much higher level, and consequently with less chance of damaging the health of the children.

Air.—Bacteriological examination of air and dust in schools.

Recorded below is a kind of rough balance sheet of the advantages and disadvantages:—

Advantages Summarized.

The control of Diphtheria, particularly in schools.

The early diagnosing of Diphtheria, saving on an average 24 hours.

The early diagnosing of Ophthalmia Neonatorum.

The control of milk supply, shell fish, ice cream, &c.

Greater facilities for repeated examinations in cases of Consumption.

Control of Ringworm.

After the initial establishment charges, working expenses, roughly about £24 per annum for work which, efficiently done, would run into £200 and £300.

A considerable amount of this apparatus can be used in the analysis of Foods and Drugs when that is undertaken by this Department.

Disadvantages Summarized.

Initial Cost.

Question of cleansing of the laboratory.

Upkeep.

Time involved.

As far as the installation of the laboratory is concerned, I am of the opinion that we shall practically save the whole

of its cost within the first year in the administration of Diphtheria alone at its present rate of incidence, and that after the first year we shall be saving, if the other branches of the work are carried out in a thorough up-to-date manner, a sum, which if we had to pay for on the present basis, would be in the region of £200.

As the bulk of the work at present will have to be done in response to the demands of the Education Department Committee, I feel they ought to be asked to bear the greater part of the cost of the installation at least, and half, if not more, of the annual upkeep.

In addition to the above items there will be the necessary benches, sink, and gas, to be provided together with warming, and either the covering or altering of the flooring. Roughly I estimate the benches, and the necessary plumbing and gas fitting, would cost about £15—20.

The annual upkeep for ordinary use should be under £24.

Borough of Wimbledon.

SANITARY DEPARTMENT.

ANNUAL REPORT

OF THE

SANITARY INSPECTOR

FOR THE

Year ended 31st December, 1910.

GENTLEMEN,

I have the honour to present to you my Report for the Year 1910, detailing the results of the supervision exercised by the Officers of your Sanitary Department over the Borough.

Table VI. gives an epitome of the nuisances abated and the various sanitary improvements effected through the application of the numerous Acts of Parliament, and powers given to Sanitary Inspectors under the Orders of the Local Government Board.

Much of the substance contained herein will, of necessity, be but a repetition of matters to which the attention of the Council has been directed through the medium of my monthly reports to the Public Health Committee, but this recapitulation will give a clearer and more comprehensive record of the work of the year than is likely to be derived from reports made month by month.

Notices Served.—Six hundred and sixty-one Preliminary Notices or intimations have been served in respect of 810 houses, and it was only necessary to serve 72 Statutory Notices upon the owners of 87 houses. No Legal Proceedings in default were taken.

This record compels me to again point out that the owners of property have in most cases readily complied with my

demands, and this I feel sure is due to the methods adopted by the Department. The preliminary intimations of defects existing usually take the form of an ordinary letter, and more than one owner has expressed his appreciation of the way his attention has been called to work required to be done, with the result that prompt compliance has been obtained.

Opening up of Drains under Section 41 of the Public Health Act, 1875.—The usual procedure has been adopted with regard to the application of this Section, and at 33 houses, as a result of either the smoke or chemical test, authority has been obtained from the Council to enter the premises, open the ground and examine the drains, water closets, etc., written notice being given to the occupier.

The results of such inspections have been submitted to the Public Health Committee, and, where necessary, notices have been served on behalf of the Local Authority, and in every instance except one the work has been executed by the owner of the property. With respect to Nos. 11 to 21, Hartfield Crescent, Statutory Notices were served late in 1909 and expired early this year, but the owners failed to comply within the specified time. The work was carried out in default by the Corporation, and accounts for the cost rendered; these were paid.

House Drainage.—The drainage systems and sanitary fittings of 62 houses have been re-constructed, and repairs and amendments have been carried out at 85 other houses. These include the following groups:—

124 to 140 Haydon's Road (9 houses).

11 to 21 Hartfield Crescent (6 houses).

and 6 houses (3 pairs), one pair in each of the following streets:—

Queen's Road.

Park Road.

Amity Grove.

The smoke and water tests were applied by officers of the Department to drains and sanitary fittings on 763 occasions.

New drains are required to be constructed of salt glazed stoneware, or heavy cast iron pipes laid on a bed of cement concrete and haunched halfway up the sides of the pipes. When, however, they pass underneath a building they are required to be encased in at least four inches of concrete all round. The drains are disconnected from the Public Sewer by means of intercepting traps of approved and suitable type situated in a brick-built manhole to give access to such trap, and proper means provided for efficient ventilation, cleaning, testing, etc.

In accordance with the usual practice the water test was applied to drains in sections during re-construction, and again after the ground was filled in. Block plans are subsequently made showing the line of drains and other necessary details, and these are filed for future reference.

It is sometimes found that drains of houses which have only been built a few years, or the drainage systems of which have been re-constructed in recent years, are in a defective condition, and when the ground is opened up and an inspection made, that the collars have become fractured owing to the expansion of the cement used in the making of the joints, or in consequence of a settlement or movement of the ground having taken place. In certain parts of the district which are more subject to settlements, I have advised the use of heavy cast iron coated pipes, and their use is becoming much more frequent: owners, architects and surveyors of good property are also on their own initiative using such pipes.

House to House Inspection.—In my report last year I referred to the fact that House to House Inspection was a prominent feature of the Housing and Town Planning Act, 1909. During the year under review the Local Government Board issued an Order under this Act, termed the Housing (Inspection of District) Regulations, 1910, which provide, *inter alia*, as follows:—

Article 1.—(1) The Local Authority shall as early as practicable after the date of this Order take into consideration the provisions of Sub-Section (1) of Section 17 of the Act of 1909, and shall determine the procedure to be adopted under these Regulations, to give effect to the requirements of that sub-section in regard to the inspection of their district from time to time.

(2) The Local Authority shall as part of their procedure make provision for a thorough inspection to be carried out from time to time according to the varying needs or circumstances of the dwelling houses or localities in the district of the Local Authority.

In considering the application of these Regulations to our own Borough, it should prove interesting and instructive to draw a comparison between the directions contained therein, as interpreted by the covering letter of the Local Government Board, with the methods now in operation under the Public Health Acts.

The Regulations require the inspection of the district and of special areas more frequently as suggested by their Officers.

Present Method.—The Board points out that “Many Local Authorities have already instituted a system of inspection under which inquiries are made by the Inspector of

Nuisances or Sanitary Inspector in respect to matters referred to in Article 2; the results being recorded in a form which contains information on other points besides those mentioned in the article. The Board do not suggest that this form should be abandoned or altered, provided that it includes all the matters covered by Article 2. The provisions of the Order are necessarily limited to matters to be recorded as the result of inspections under and for the purpose of Section 17 of the Act."

Wimbledon is one of these districts, systematic House to House Inspection having been carried on for some years at some 1,700 houses, particularly in the following streets:—

Amity Grove.	Hotham Road.
Caroline Road.	Hubert Road.
Cowper Road.	Leyton Road.
Cross Road.	Milton Road.
Deburgh Road.	Norman Road.
Dryden Road.	North Road.
Durham Road.	Palmerston Road.
East Road.	Pelham Road.
Garfield Road.	Railway Place.
Graham Road.	Russell Road.
Hartfield Crescent.	South Road.
Haydon's Road.	Tennyson Road.
High Street, Merton.	Wandle Road.

Regulations, Article 2, requires "That for the purposes of Sub-Section (1) of Section 17 the officer making inspection of any dwelling house shall examine the state of the dwelling house in relation to the following matters, namely:—

- (1) The arrangements for preventing the contamination of the water supply.
- (2) Closet accommodation.
- (3) Drainage.
- (4) The condition of the dwelling house in regard to light, the free circulation of air, dampness and cleanliness.
- (5) The paving, drainage and sanitary condition of any yard or out-houses belonging to or occupied with the dwelling house.
- (6) The arrangements for the deposit of refuse and ashes.
- (7) The existence of any room which would in pursuance of Sub-Section (7) of Section 17 of the Act of 1909 be a dwelling house so dangerous or injurious to health as to be unfit for human habitation.
- (3) Any defects in other matters which may tend to render the dwelling house dangerous or injurious to the health of the inhabitant."

“The records may be kept in a book or books or on separate sheets or cards, and shall contain information under appropriate headings, as to:—

- (1) The situation of the dwelling house, and its name or number.
- (2) The name of the officer who made the inspection.
- (3) The date when the dwelling house was inspected.
- (4) The date of the last previous inspection and a reference to the record thereof.
- (5) The state of the dwelling house in regard to each of the matters referred to in Article 2 of these Regulations.
- (6) Any action taken by the Medical Officer of Health, or other officer of the Local Authority, either independently or on the directions of the Local Authority.
- (7) The result of any such action taken.
- (8) Any further action which should be taken in respect of the dwelling house.”

Present Method.—The records which have been kept in my office hitherto embrace all these headings.

The obligation to inspect the district in order to ascertain whether any dwelling house is so injurious or dangerous to health as to be unfit for habitation, is neither new or novel, and was an obligation imposed by the Public Health Act, 1875, and by various statutes since.

The houses to be inspected under Section 17 of the Act are restricted to houses occupied by the Working Classes, the Section not applying to any other class of dwellings. (The expression “Working Class” is defined by the Housing of the Working Classes Act of 1903 as including “Mechanics, artisans, labourers and others working for wages; hawkers, costermongers, persons not working for wages, but working at some trade or handicraft without employing others, except members of their own family, and persons other than domestic servants whose income in any case does not exceed an average of thirty shillings a week, and the families of any such persons who may be residing with them.”)

Sections 14 and 15 are the only sections that can be made use of to any considerable extent in the course of House to House Inspection, and it will be seen that notices under this section to do work must be served on the “Landlord,” who is defined as any person who lets to a tenant the house under any contract, and the expression “House” also refers to part of a house. The landlord, therefore, may be an agent or even a less responsible person still, and in the case of a tenement house may be the person who has rented the house and sub-let to lodgers. The only remedy for non-compliance with this

notice appears to be for the local authority to do the work and recover the cost incurred in so doing from the landlord. No provision, however, is made for it being a charge upon the property, and the landlord, if he be a man of little or no means, cannot be made to pay, and even if he be more substantial has only to sell the property in its improved state (if indeed he ever owned it) and decamp, leaving the burden of the work carried out to be borne by the local authority.

Closing orders are only to be made in the cases of houses that are in such a state as to warrant demolition, as in the event of the owner taking no action when the closing order has been made the local authority must itself proceed to consider the question of demolition. (See decision of the Local Government Board in the case of the "Borough of Camberwell v. Arlidge.")

In the case of flats or maisonettes which have been held to be separate houses, it is difficult to see how a Demolition Order could be carried into effect in the event of a closing order being made in regard to one flat.

It would also appear that the Authority having made the order, the Justices cannot vary it or extend the time. It should be remembered that these powers are only necessary for the purpose of dealing with recalcitrant owners or tenants, or for some few special cases where legal difficulties arise owing to foreclosure of mortgage, combined ownership, etc.

In many crowded towns and rural districts the Act may be of great service, but in a comparatively new district like Wimbledon, under constant supervision, there appears to be little improvement within the four walls of the Act. We are able generally to deal with neglected premises long before they reach the stage contemplated, and in the few isolated cases persistent pressure usually attains our end.

The Public Health Committee at their meeting in October considered what steps should be taken by the Public Health Department in order to comply with the regulations in Section 17, Sub-Section (1), of the Act, as to the periodical inspection of dwelling houses in the Borough and to the records to be kept of such inspections. The Committee were satisfied that the methods and procedure which had hitherto been adopted under the Public Health Acts by myself fully met the requirements, and decided that the same methods and procedure should be continued; but if occasion arose where the new Act gave additional powers, they should be used; and resolved:—

"That the Sanitary Inspector be and is hereby designated as the Officer of the Council to make inspections of the Borough from time to time under Section 17 (1) of the Housing, Town Planning, etc., Act, 1909, and to keep the records thereof."

During the year house to house surveys were made at four hundred and six houses, and the conditions of the respective premises recorded in the Department's registers.

The subjoined list shows the streets to which special attention has been given by your Inspectors under this heading:—

Haydon's Road	121	houses
Hartfield Crescent	32	„
Railway Place	14	„
East Road	24	„
Deburgh Road	78	„
Pelham Road	4	„
Durham Road	40	„
Amity Grove	89	„
Cross Road	4	„

Total	406	houses
-------	-----	--------

As a result of letters written or notices served consequent upon these surveys, the following works were carried out:—

Cisterns repaired or covered	33
Drains. New	14
Drains. Repaired	13
Drains. Stoppages removed	4
Dustbins provided	34
Flush-boxes. New provided	4
Flush-boxes. Repaired	27
Overcrowding nuisances abated	3
Rainwater pipes disconnected	15
Roofs repaired	47
Rooms stripped and cleansed	147
Vent pipes. New	18
Vent pipes. Repaired	3
Waste pipes. New	8
Waste pipes. Repaired	8
Water closets. New	19
Water closets. Repaired	6
Yards paved	22
Guttering repaired	21
Floors ventilated	19
Nuisances abated from damp walls	32
Other nuisances abated	118

Total	615
-------	-----

At ten houses in Hartfield Crescent, owing to the absence of damp courses and the level of the space beneath the floors being below the surface of the adjoining road and forecourts, conditions of a most insanitary nature existed; the walls of the

lower rooms were sodden to a considerable height, and the drains and sanitary fittings of the premises were in a most defective state. To make the houses thoroughly sanitary, it was necessary to underpin the walls, insert damp courses, re-construct the drains, repair the roofs and pave the portions of the yards abutting on the walls of the dwellings. On a re-inspection being made some time after the work was completed, the changed conditions were most marked.

The occurrence of defects, especially in poorer class property (where house to house inspection is chiefly carried out) is continuous. It is only by systematic inspection, followed by persistent re-inspections, that such property can be kept up to a reasonable standard of sanitary efficiency.

Generally speaking, the Public Health Statutes provide ample scope for securing the abatement of nuisances arising from structural defects, but the powers allotted under the various Acts are often inadequate to effectually deal with many matters arising from personal neglect and abuse by the tenants.

Common Lodging Houses.—There is only one registered Common Lodging House in the district, which is situated in High Street, Merton, and provides accommodation for 30 adult persons. It has been inspected at irregular intervals, and the bye-laws regulating the manner in which the premises are used, and condition of the sanitary conveniences, the periodical lime-washing of the walls and ceilings, etc., enforced.

Houses Let in Lodgings.—Sixty-seven houses are on this Register—a similar number to last year. To these 212 visits of inspection were made, and the Bye-laws applicable to such property (made under Section 90 of the Public Health Act, 1875) have been rigidly enforced.

These Bye-laws are of a comprehensive nature, the paramount objects of which are (*a*) the maintenance of sanitation and cleanliness, and (*b*) the prevention of overcrowding; dirty and careless habits, together with overcrowding, being frequent breaches of the Bye-laws which are found.

The periodical inspections revealed a number of insanitary conditions, such as verminous rooms, defective and leaky roofs, choked water closets, absence of or dilapidated dustbins, yards not properly paved, insufficient water supplies to water closets, etc. The attention of persons responsible was directed to these matters and compliance with the Bye-laws promptly obtained.

Where necessary, cleansing work as required by Bye-law 27 was carried out.

Fifty-nine tenements which were occupied last year were, at the time of inspection, found to be uninhabited, and this, to

my mind, is accounted for by the fact that the number of unoccupied dwelling houses in the immediate vicinity of such tenements has resulted in the lowering of rents, and this has enabled a number of former tenement dwellers to enter into possession of separate houses or self-contained flats.

Cowsheds, Dairies and Milkshops.—All the premises in respect of which new applications were made for registration under the Dairies, Cowsheds and Milkshops Orders were thoroughly inspected prior to the Medical Officer of Health submitting such applications to the Public Health Committee. These have, with one or two exceptions, been in respect of small general shops selling almost a negligible quantity of milk—as a rule to oblige customers and entice other trade. These places, from a public health point of view, are far from satisfactory, as it is almost impossible to keep milk clean under such conditions. At present, however, the Local Authority has no option but to register all persons making application, and only in the event of a breach of the Regulations can proceedings be taken.

In the course of inspections to registered premises great emphasis is laid upon the importance of cleanliness of the milk-shop furniture and fittings, the cleansing of milk vessels, the covering of milk pans, etc. Generally there has been a marked improvement in the way pans and receptacles in which milk is kept for sale over the counter are covered; they are seldom found unprotected from the accession of dust except in the small general shops.

Two unregistered persons were found carrying on business as Cowkeepers and Purveyors of milk, viz.:—

Joseph Fleet, Warren Farm, Wimbledon Common.

John Sopp, Haydon's Road Mews.

The Council directed that Legal Proceedings should be taken against the first-named, when the Magistrate inflicted a penalty of £1. In the second instance, as the offender undertook to, and did, discontinue the business, proceedings were not deemed necessary.

Visits of inspection at irregular intervals have been made at all premises registered and the Regulations and Orders applicable to such places enforced. The number of visits during the year was 153.

Sanitary defects were found and remedied at nine houses. In one case—a shop in High Street, Merton—the provisions for washing-up cans, and storing the milk were in a small wood and galvanised iron shed erected in the yard; this was abolished and a brick-built, well-ventilated dairy and store erected and a new system of drainage laid.

At another shop—in the Broadway—the dairy premises were much extended and re-constructed on modern lines. Ample supplies of hot water and steam for cleansing purposes were provided, a separate supply being laid on to each washing-up tank, which enables the cans from each man's round to be washed up separately. A good cold storage and "Pasteurising" plant were laid down, with the result that the milk-seller is now able to provide fresh milk—even in the hottest weather—without resorting to the use of preservatives.

Infectious Diseases and Disinfection.—At 243 houses where cases of infectious disease occurred visits of inquiry were made. A full history of each case embracing such important points as the onset of the illness, the number of contacts, the source of milk supply, etc., were submitted to your Medical Officer of Health, and any further inquiries requested by him carried out.

A thorough examination of the sanitary arrangements at each house was subsequently made, and during the year defects in the drainage or insanitary conditions were found at 55 houses from which notifiable diseases had been reported. Abatement of the nuisances was obtained by the Department.

The method of disinfection in vogue is as follows:—Infected rooms are fumigated either with sulphur dioxide, or sprayed with Formaldehyde, as the circumstances require. Bedding and other effects are removed to the Disinfecting Station at the Isolation Hospital to be dealt with in the Steam Apparatus.

The number of rooms fumigated and articles disinfected will be found in the table dealing with "Disinfections" in the Report of the Medical Officer of Health.

School Disinfection.—All the Public Elementary Schools in the district were disinfected thoroughly, as in previous years, during the summer recess, and also when compulsory closing of particular schools has taken place on account of outbreaks of notifiable or non-notifiable infectious diseases. In addition to this certain class rooms in several schools have been disinfected after the occurrence of infectious illness among the children congregated in such rooms.

Yard Paving.—Continued attention has been given to the paving of open spaces about dwelling houses. During the year impervious paving of widths varying from 3 to 6 feet has been laid either round the side walls or the back additions, or in some instances the forecourts, of 83 houses.

This paving is necessitated by the fact that in many of the houses occupied by the poorer classes the yards are common to two or possibly more families, the floors being let separately

by the owner, with the result that no one tenant can be held responsible for keeping these spaces in a cleanly condition; they are used not only for the keeping of fowls, rabbits, etc., in a more or less dirty state, but the ground is constantly polluted by the careless depositing of refuse and garbage of all kinds. I know of no work carried out at the instigation of the Local Authority which appears to obtain a more ready response from the occupiers of houses in maintaining a higher standard of cleanliness than this; the immediate vicinity of dwelling houses, always in a disgusting state of untidiness before, has, after the carrying out of some measure of paving, become much cleaner and better kept.

Nuisances arising from dampness in the walls of houses are also frequently remedied by the paving of the adjoining ground surface, and the interior of the house has been more easily kept clean owing to less mud and dirt being carried into the house.

At the present time in many houses the hygienic conditions would be much enhanced by the provision of paving, but it is difficult to prove the existence of a nuisance; however, if the Bye-laws with respect to new buildings, now under the consideration of the Council which contain one section dealing with this question, are sanctioned, much more useful work in this direction can be accomplished.

Paving of Passage-ways.—During 1909 I reported to the Sanitary Committee on the neglected and insanitary condition of a considerable number of passages at the rear and side of houses, especially on the Ashen Grove Estate.

At the time when these houses were built the passage-ways were not made up in any way, and from that time their condition has, in most cases, become worse, being used as dumping grounds for refuse of all kinds, not only from the adjoining houses, but also from the carts of hawkers and itinerant vendors of vegetables, fish, etc.

The Committee strongly recommend that they should be made up under Section 150 of the Public Health Act, 1875; however, considerable objection was made by some of the frontagers, and after a meeting between them and the Council's representatives it was decided that the Borough Surveyor should prepare an estimate for the paving of these passages with concrete slabs, and an endeavour made to persuade the owners of the houses to agree to divide the cost equally.

At the end of the year the matter was still in abeyance.

Shop Hours Acts, 1892 to 1895.—It is a pleasing duty to record the marked improvement in the way the obligation on shopkeepers—who employ young persons—to exhibit a card

showing the number of hours in the week during which a "Young person may lawfully be employed" has been complied with. In 1908 only 30·2 per cent. of the shops where young persons were employed had the notice exhibited; in the year 1909 this was raised to 76·1, and this year to 98·3 per cent.; a result due to the shopkeepers realising that neither the Council or the Magisterial Bench intend to permit the Act to become a dead letter in Wimbledon, and that the issuing of several summonses in each of the years before mentioned had the good effect of backing up our efforts to see that the Act was observed.

At 4 of the 5 shops where the notice was not exhibited, the employment of young persons had commenced after last year's inspection when no such person was employed; whilst in the fifth case the notice had, during re-decoration of the premises, become displaced. A new one was, however, promptly obtained and exhibited upon attention being directed to the matter by an Inspector.

The following table shows the number of premises inspected:—

Number of premises visited.	Young Persons Employed.		Young persons not employed.	Provision of seats for Female Assistants.	
	Notice exhibited.	Notice not exhibited.		Places where seats provided.	Places where seats not provided.
654	291	5	358	192	—

Note.—Notices were exhibited in 98·3 per cent. of the shops where young persons were employed.

Stable Refuse.—The Mews and Stable Yards have been inspected at least once a week in rotation in order to ascertain whether the Bye-laws regulating the keeping of animals, which require, amongst other things, manure to be removed "Once at least in every week," have been complied with.

Very few complaints are now received of nuisances arising from accumulations of manure, but before the practice of regular inspection was instituted complaints of this nature were frequent.

Inspections under the Factory and Workshop Act, 1901.—The administration of this Act so far as factories are concerned is principally in the hands of H.M. Inspector. The Borough Council is charged with the duty of seeing that every factory in the district where more than forty persons are employed is

provided with means of escape in case of fire, whilst there are special duties in regard to bakehouses and domestic factories somewhat similar to workshops. Furthermore, in districts where Part III. of the Public Health Acts (Amendment) Act, 1890, is in force, the Local Authority is responsible for the enforcement of Section 22 of that Act, which relates to the provision of suitable and sufficient sanitary conveniences.

Sixty-two inspections of factories were made and three written notices served referring to sanitary conveniences and other nuisances.

With regard to workshops and work-places, the Borough Council's duty of supervision may be classed under four heads :

1. The sanitary condition generally, which embraces—
 - (a) Cleanliness ;
 - (b) Air space ;
 - (c) Ventilation ;
 - (d) Drainage of floors ; and
 - (e) Sanitary conveniences.
2. The provision of means of escape in case of fire.
3. Special sanitary regulations of bake-houses ; and
4. Homework.

There are 306 Workshops and Work-places on the Register, to which 487 visits were made.

Sanitary Condition of Workshops.

(a) *Cleanliness.*—Speaking generally the larger workshops, especially in the case of new buildings or part of new buildings, are kept in a cleanly condition ; but this cannot be said to the same extent of the smaller workshops, particularly where they are situated in or at the rear of residential houses, or, as in some instances, in sheds which were not erected under the supervision of the Local Authority's Officers ; in such cases it is most difficult, owing to their construction and situation, to maintain a good standard of cleanliness.

Seventeen workshops were cleansed and white-washed at the request of the Department.

(b) *Air Space.*—Taking the standard of 250 cubic feet per head as laid down by Section 3 of the Act, it may be said that few of the workshops are found to be overcrowded, but in the few instances when overcrowding has been found it can usually be remedied by a re-adjustment of the number of workers in the various rooms in the one occupation. This is always suggested and usually carried out without a notice being served.

One nuisance, under this heading, found in 1909 was remedied this year, together with one other case discovered during 1910.

(c) *Ventilation*.—Insufficient ventilation is rarely found and generally only exists in the case of workshops first coming on the Register and at the time of the first visit; those which have been previously inspected are provided with sufficient means of ventilation, but re-inspections sometimes bring to light a certain number where the provisions of Section 7 (1), which requires that “Sufficient ventilation shall be maintained,” are not complied with, and where the means which have been provided are not taken advantage of and efficient ventilation not maintained.

Three instances of insufficient ventilation or of ventilation not being maintained were dealt with, one of which was on a notice from H.M. Inspector respecting a bakehouse.

(d) *Drainage of Floors where Wet Processes are carried on*.—The “Wet Processes” carried on in this district are chiefly small laundries, of which there are 25 on the Register. The suggestions made in previous years have had good effect; it was not necessary to serve any notice during the year, but one notice outstanding from the previous year was complied with.

(e) *Provision of Suitable and Sufficient Sanitary Accommodation*.—To this matter it has been found necessary to devote considerable attention. At 29 factories and workshops, principally steam laundries, the sanitary accommodation provided was found to be insufficient, defective, unsuitable, or not properly separated for the sexes as required by the Home Office Order, dated 15th August, 1905. In nearly all cases the requirements were complied with before the close of the year, but at 4 the defaults came under the notice of the Department late in December; whilst the necessary instructions had been given for the work to be done, it had been impossible for the occupiers to complete the improvements before the 31st day of the month.

In some instances as soon as the occupier's attention was called to any breach of Orders, Regulations, etc., immediate orders were given for its remedy; it was therefore unnecessary to send either a notice or a letter.

Other general nuisances to the number of 13 were discovered during the inspection of workshops, and remedied.

Special Sanitary Regulations for Bakehouses.—Breaches of these numbered 9, consisting principally of failure to carry out the periodical cleansing and lime-washing.

Homework.—Ninety-three visits of inspection were made to Out-workers' Premises, and at five minor defects were found which were promptly remedied.

There has been an improvement on the part of employers in sending Lists of Out-workers employed by them at the times

specified by Section 107 of the Act. In only 8 instances was it necessary to send letters reminding them of the requirements, and these were readily complied with except in two cases.

The Council decided it was necessary to institute proceedings, the offenders in both instances having been warned the previous year that in the case of continued default no option would be left to the Council but to take legal proceedings.

The Magistrates inflicted a fine of £1 and 8s. 6d. costs upon each delinquent, stating they viewed the requirements of the Act as very necessary and which should be rigidly enforced.

Food Inspection.—The Butchers', Fruiterers' and Fish Shops, as well as the stalls in the streets, have been inspected from time to time, particularly on Saturday evenings, and small quantities of meat and fruit, mostly from the stalls, withdrawn from sale and destroyed.

A large proportion of the meat and fish sold in the district is brought from the Metropolitan Meat and Fish Markets, where it has already been the subject of inspection.

The following have been surrendered and destroyed as trade refuse at the refuse destructor, or buried by the owner:—

- 5 boxes Mackerel (each containing about 100).
- 1 small box Haddock.
- 4 Stone Plaice.
- 1 leg of Mutton.
- 6 Stone Skate and Whiting.
- 5 Stone of Hake.
- 1 Ham.
- 3 Pigs.

The Slaughter-houses—six in number—have been regularly inspected, and, as far as possible, at the time when slaughtering was in progress. The Bye-laws regulating the conduct of the trade and the cleansing of the premises have been well respected.

I would here acknowledge the ready assistance and facilities which the food purveyors in the district have always given me for the inspection of their premises and the business in progress, and whether my visits have been made during or after official hours, the same courtesy has been extended to me.

Sale of Food and Drugs Acts, 1875 to 1889.—The Table below shows the number and nature of articles purchased and submitted for analysis during the year, the test samples were examined by the Council's Analyst, and those taken in accordance with the Acts submitted to the Public Analyst for Surrey:

ARTICLE.	TEST SAMPLES.				OFFICIAL SAMPLES.				Prosecutions
	No.	Genuine	Adulterated or Inferior	Slightly inferior or deteriorated.	No.	Genuine.	Adulterated or Inferior	Slightly inferior or deteriorated.	
Milk	68	61	6	1	1	1	...	...	...
Butter	129	109	6	14	...	...	...	...	...
Lard	9	9	...	...	...	...	...	...	...
Margarine ...	7	5	2	...	...	...	...	...	...
Coffee	2	2	...	...	...	...	...	...	...
Coffee Mixture	10	10	...	...	...	...	...	...	...
Demerara Sugar	7	6	...	1	...	...	...	...	...
Vinegar	18	18	...	...	...	...	...	...	...
Cocoa	9	7	...	2	...	...	...	...	...
Cocoa Essence	4	4	...	...	...	...	...	...	...
Seidlitz Powder	4	3	...	1	Trace of iron ...				...
Tea	1	1	...	...	...				...
Water	1	1	...	...	Deposit consisting almost entirely of rust.				en-
Pork Sausage...	1	1	...	...	...	...	...	...	...
Beef Sausage...	1	1	...	...	...	...	...	...	...
Total	271	238	14	19	1	1	...	...	...

Observations.—*Milk*—Of the 68 test samples taken, 6 were reported as not genuine, all having an amount of added water varying from 2 to 18 per cent., whilst one was certified as slightly inferior or deteriorated.

Two of the samples containing 13 and 18 per cent. of added water were in respect of milk from cows kept in Wimbledon, but retailed in another borough. Legal proceedings in respect of Official Samples from the same source, but sold out of Wimbledon, were taken in the Police Court of that area by the County Authority.

The other samples were followed by a series of test samples which in each case complied with the Standard, and the milk in the only Official Sample taken was found pure.

Butter.—One hundred and twenty-nine test samples of butter were taken, and of these 6 were reported as not pure, 2 being margarine, 2 containing margarine, and 2 foreign fats; 14 were returned as slightly inferior or deteriorated, 11 of which were partly milk-blended butter, and 3 old butter renovated.

One of those returned as Margarine was purchased at a shop almost immediately after a new tenant came in; other test samples at the same shop were taken from time to time, but all found pure.

The other sample found to be Margarine and the two samples which contained Margarine were obtained from

vendors in the street; after the receipt of the Analyst's Certificates efforts were made to find the vendors for the purpose of taking Official Samples, but without success.

I am satisfied that a large amount of Margarine is sold in the district as butter, especially by itinerant vendors who come from other districts and vend from door to door what they describe as "Best Dorset" and other County butters, but which is often Margarine. Difficult as it is to catch this class of offender owing to the fact that they are here only for a few days and then move on to pursue their trade in some other district, every effort is being made by the Officers of the Department to stamp out this imported evil.

Petroleum Acts, 1871 to 1879.—Forty samples of petroleum were taken during the year, and in each case the notice required by the Statute to be given to the vendor intimating when and where the sample would be tested, was given, in order that the test might be witnessed by the vendor if he so desired. In no instance was this opportunity taken advantage of.

The sample is tested to ascertain at what degree of heat an inflammable vapour is emitted, 73 deg. Fahrenheit being fixed by law as the limit of safety; any petroleum oils having a flash point below that figure can only be kept under licence from the Local Authority. All the samples were about 73 deg.

Thirty-four licences were granted during the year, 24 being renewals and 10 new applications. All the premises have been inspected from time to time to ascertain that the conditions attached to the licence have been adhered to; no breach or neglect was discovered.

The quantities of Petroleum spirit authorised to be kept by the licences ranged from 20 to 1,000 gallons.

The applications were granted in the following instances:

- 31 for the storage or sale of Petrol, chiefly for use in Motor Cars.
- 2 for Benzoline.
- 1 for Hydrocarbon.

Diseases of Animals Acts, 1894 to 1903.—The outbreak of Swine Fever mentioned in last year's Report necessitated the premises off Somerset Road being inspected from time to time, and on the recovery or death of all swine on the premises at the time of the outbreak disinfection was carried out. On May 19th the Board of Agriculture gave notice that the premises ceased to be "an infected area."

On August 11th, at premises in Merton Road, a case of Glanders occurred. To the Mallein Test applied by the Veterinary Inspector a re-action was obtained, and the post-mortem examination showed the lungs to be studded with nodules, thus confirming the test and diagnosis made before slaughtering.

In each instance the necessary information was sent to the Board of Agriculture or to the Police, and notices for the detention of the infected and contact animals served. The disinfection and cleansing were promptly carried out.

The Surrey (Parasitic Mange) Order of 1909 came into force in December of that year; the Local Authority caused copies of the Order to be posted on all the posting stations in the Borough; copies were also left at the premises of all horse-keepers, contractors, livery yards, etc.

Outbreaks at five separate premises have occurred during the year. Detention notices were served and visits made from time to time in order to see that the necessary isolation and disinfection were being carried out.

There is strong reason for thinking that in some instances cases occur which are not reported either to the Local Authority or to the Police; a belief appeared to be prevalent in the Borough that there was no penalty attached to the Order for failing to notify the existence of cases of the disease by owners of the affected animals. In July the Local Authority caused to be published a notice calling attention to the fact "That any person having in his possession or under his charge a horse, ass, or mule affected with or suspected of *Parasitic Mange*, who fails, with all practicable speed, to give notice of the fact of such horse, ass, or mule being so affected or suspected to a Police Constable, is guilty of an Offence against the Diseases of Animals Act, 1894, and renders himself liable to the penalties by that Act prescribed."

The necessary monthly and quarterly returns under the Acts have been made to the Board of Agriculture, and some 200 visits made to premises during the year in connection with the administration of the Acts.

There has been no change in the Inspectorial or Clerical Staff during the year, and I again have much pleasure in testifying to the loyalty and zeal displayed by them in the service of the Council.

I am, Gentlemen,

Your obedient Servant,

HENRY JOHNSON, M.R.San.I.

RAINFALL, 1910.

Months.	Recording Stations.				Monthly Average.	Average for 4 Years from Sewage Works Record.	Temperature.		Maximum fall each month and fall of over 1 inch in 24 hours.
	Sewage Works, Durnsford Road.	Pumping Station, Raynes Park.	No. 12, The Downs.	No. 28, Leopold Road.			Maxi-mum.	Mini-mum.	
January ...	1.52	1.71	1.87	1.81	1.73	1.69	57	17	.45 fell on the 23rd { Frost on 18 days Snow fell on 22nd
February ...	2.75	2.85	3.11	3.02	2.94	1.36	56	23	.45 ,, 20th, Frost on 10 days
March ...	.96	1.04	1.10	1.04	1.03	1.47	64	27	.45 ,, 9th { Frost on 11 days Snow fell on 18th
April ...	1.29	1.18	1.48	1.38	1.33	1.60	68	29	.36 ,, 16th, Frost on 4 days
May ...	1.80	1.54	1.92	1.97	1.81	1.82	76	29	.35 ,, 18th
June ...	2.09	2.41	2.50	2.38	2.34	2.15	86	46	.78 ,, 25th
July ...	2.77	2.84	3.13	—	2.91	2.37	72	47	.65 ,, 18th
August ...	2.89	2.59	2.76	2.66	2.72	2.33	76	48	.74 ,, 5th
September ...	.76	.65	.52	.83	.69	2.16	72	41	.40 ,, 13th
October ...	2.56	2.92	3.06	2.58	2.78	2.83	69	40	.58 ,, 31st
November ...	2.63	2.95	3.11	3.10	2.95	2.11	52	20	.59 ,, 27th { Frost on 21 days Fog 1 day
December ...	2.74	3.26	3.48	3.27	3.19	1.79	52	26	.39 ,, 15th, Frost on 4 days
Total ...	24.76	25.94	28.04	24.04	26.42				

Borough of Wimbledon.

Population, Birth and Death Rates for each Ward, 1910.

WARD.	Occupied Houses.	Factor.	Popula- tion.	Birth Rate.	Death Rate.
St. Mary's	2152	5.35	11513	17.9	3.8
St. John's	999	5.66	5654	7.5	8.4
Cottenham Park	1331	5.08	6761	16.2	7.8
North Wimbledon	4482	5.33	23928	15.04	6.05
Dundonald	1348	5.88	7926	18.6	7.3
Trinity	1952	5.84	11400	26.5	10.0
South Park	2884	5.19	14968	23.2	7.2
South Wimbledon	6184	5.54	34294	23.2	8.1
WHOLE DISTRICT ...	10666	5.46	58222	19.9	7.3

BOROUGH OF WIMBLEDON.

TABLE I.

Vital Statistics of Whole District during 1910 and Previous Years.

YEAR,	Population estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.				TOTAL DEATHS IN PUBLIC INSTITUTIONS IN THE DISTRICT.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	NETT DEATHS AT ALL AGES BELONGING TO THE DISTRICT.	
		Number.	Rate.*	Under 1 Year of Age.		At all Ages.					Number.	Rate.*
				Number.	Rate per 1000 Births Registered.	Number.	Rate.*					
1	2	3	4	5	6	7	8	9	10	11	12	13
1900	39,500	1075	27.2	156	145	559	14.1	18	13	24	570	14.4
1901	41,631	1074	25.7	133	123	457	10.9	20	4	40	493	11.8
1902	43,000	1144	26.6	134	117	455	10.5	21	4	46	497	11.5
1903	46,000	1204	26.1	99	82	389	8.4	18	5	40	424	9.2
1904	47,719	1142	23.9	153	133	487	10.2	29	5	46	525	11.02
1905	48,240	1146	23.7	80	69	397	8.2	29	6	35	426	8.8
1906	49,860	1185	23.7	175	147	584	11.7	31	8	55	631	12.6
1907	51,700	1121	21.6	125	111	480	9.2	44	9	58	529	10.2
1908	54,274	1144	21.07	82	71	454	8.3	35	7	71	518	9.5
1909	56,944	1181	20.7	91	77	451	7.9	30	7	64	508	8.9
Averages for years 1900-1909.	47,886	1141	23.8	122	106	471	9.8	27	6	47	512	10.6
1910	58,222	1159	19.9	86	74	426	7.3	31	15	49	460	7.9

* Rates in Columns 4, 8, and 13 calculated per 1000 of the estimated population.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

Area of District in acres (exclusive of area covered by water) 3173 | Number of inhabited houses (at Census of 1901) ... 7,572
Total population at all ages (at Census of 1901) ... 41,631 | Average Number of persons per house ... 5.49

BOROUGH OF WIMBLEDON.

TABLE II.

Vital Statistics of separate Localities in 1910 and previous years.

NAMES OF LOCALITIES.	1.—Whole District.				2.—St. Mary's Ward.				3.—St. John's Ward.				4.—Cottenham Park Ward.				5.—Dundonald Ward.				6.—Trinity Ward.				7.—South Park Ward.			
	Population esti- mated to middle of each year.	Births regis- tered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
1900 ...	39,500	1075	570	156																								
1901 ...	41,631	1074	493	133																								
1902 ...	43,000	1144	497	134	5270		48	11	5044	—	45	5	3204	—	37	7	4858	—	57	14	11,783	—	162	51	12,841	—	148	46
1903 ...	46,000	1204	424	104	5857	72	47	8	4968	82	39	3	3789	61	38	4	4600	129	41	10	12,488	437	126	39	14,298	423	133	40
1904 ...	47,719	1142	525	161	6104	86	40	8	5393	56	40	5	3990	92	44	11	5480	131	63	17	13,326	396	167	54	13,426	381	172	66
1905 ...	48,240	1146	426	80	6556	78	45	3	5326	42	39	4	4075	69	27	2	5580	127	63	11	13,251	424	127	31	13,452	406	125	29
1906 ...	49,860	1185	631	175	5733	79	51	6	5280	42	40	4	5574	113	62	13	8279	183	94	24	10,634	347	165	59	14,360	421	219	96
1907 ...	51,700	1121	529	132	6749	104	55	8	5399	59	34	4	5752	83	37	2	8160	172	85	19	11,140	312	135	43	14,500	391	183	56
1908 ...	54,274	1144	518	86	8612	137	53	3	5518	59	39	1	6105	107	43	3	8138	164	98	14	11,213	323	147	37	14,688	354	138	28
1909 ...	56,944	1181	508	97	10255	188	68	16	5756	47	49	3	6515	103	51	2	8120	173	80	14	11,330	321	120	25	14,96	349	140	37
Averages of Years 1900 to 1909.	47,886	1141	512	125	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1910 ...	58,222	1159	460	88	11513	207	45	9	5654	43	50	3	6761	110	45	7	7926	148	65	13	11,400	303	127	31	14,968	348	128	25

Alterations to the boundaries of all the Wards, except South Park, were made under the Charter of Incorporation, 1905.

BOROUGH OF WIMBLEDON.

TABLE III.

Cases of Infectious Disease Notified during the Year 1910.

NOTIFIABLE DISEASE.	Cases Notified in Whole District.						Total Cases Notified in Each Locality.						No. of Cases Removed to Hospital from each Locality.						
	At all Ages.	At Ages—Years.					St. Mary's Ward.	St. John's Ward.	Cottenham Park Ward.	Dundonald Ward.	Trinity Ward.	South Park (H) Ward.	St. Mary's Ward.	St. John's Ward.	Cottenham Park Ward.	Dundonald Ward.	Trinity Ward.	South Park (H) Ward.	Total Cases removed to Hospital.
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.														65 and upwards.
Small-pox ...	—	—	—	—	—	—	1	2	3	4	5	6	1	2	3	4	5	6	7
Cholera ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria (including Membranous croup)	65	—	14	32	13	6	16	2	10	4	13	20	7	—	5	3	13	18	46
Erysipelas ...	31	—	—	—	5	22	2	2	5	3	3	16	—	—	—	—	—	—	—
Scarlet fever...	147	—	21	111	12	3	14	12	12	14	41	54	5	1	2	9	37	37	91
Typhus fever...	—	—	—	—	—	—	7	1	—	—	1	—	2	—	—	—	1	—	3
Enteric fever ...	9	—	—	1	3	4	—	—	—	—	—	—	—	—	—	—	—	—	—
Relapsing fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Continued fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal fever ...	1	—	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—
Plague ... [rum]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ophthalmia Neonatorum	1	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Anthrax ...	1	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Totals ...	255	1	35	144	34	36	40	17	29	21	58	90	14	1	7	12	51	55	140

The Isolation Hospital for Scarlet Fever, Enteric Fever and Diphtheria Patients is situated in Gap Road, Wimbledon; and the Hospital for Small-pox (Croydon and Wimbledon Joint Board) at Cheam, Surrey.

BOROUGH OF WIMBLEDON.

TABLE IV.

Causes of, and Ages at, Death during year 1910.

CAUSES OF DEATH.	DEATHS AT THE SUBJOINED AGES OF "RESIDENTS " WHETHER OCCURRING IN OR BEYOND THE DISTRICT.							DEATHS AT ALL AGES OF "RESIDENTS" BELONG- ING TO LOCALITIES, WHETHER OCCURRING IN OR BEYOND THE DISTRICT.						TOTAL DEATHS WHETHER OF RESIDENTS OR "NON-RESIDENTS" IN PUBLIC INSTITU- TIONS IN THE DISTRICT.
	All Ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and up- wards.	St. Mary's Ward.	St. John's Ward.	Cotten- ham Park Ward.	Dun- donald Ward.	Trinity Ward.	South Park Ward.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Small-pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	4	1	1	2	—	—	—	—	—	—	2	1	1	—
Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	12	5	7	—	—	—	—	—	1	—	2	8	1	—
Diphtheria (including Membranous Croup)	2	—	1	—	1	—	—	—	—	1	1	—	—	1
Croup	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fever { Typhus	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric	2	—	—	1	1	—	—	2	—	—	—	—	—	1
Other continued	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Epidemic Influenza	3	—	—	—	1	2	—	2	—	—	—	—	1	—
Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Plague	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Diarrhea	...	...	...	9	7	1	—	—	—	1	—	—	—	—	—	—	3	6	—
Enteritis	...	...	...	9	7	2	—	—	—	—	—	—	—	—	—	—	5	2	—
Gastritis...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phthisis (Pulmonary Tuberculosis)	...	...	...	35	1	—	2	8	23	1	2	3	—	6	14	10	—	—	1
Other tuberculous diseases	...	...	...	8	—	2	3	1	2	—	1	—	—	1	2	3	—	—	1
Cancer, malignant disease	...	...	...	54	—	1	—	—	39	14	8	10	9	9	3	15	—	—	1
Bronchitis	...	...	...	19	2	—	—	—	6	11	1	1	4	2	8	3	—	—	2
Pneumonia	...	...	...	27	5	5	1	2	7	7	2	2	1	5	8	9	—	—	—
Pleurisy	...	...	...	3	1	—	—	—	—	2	—	—	—	1	2	—	—	—	—
Other Diseases of Respiratory organs	...	...	...	6	1	—	—	—	5	—	—	1	1	2	1	1	—	—	—
Alcoholism	...	...	...	6	—	—	—	—	6	—	—	1	1	2	2	—	—	—	—
Cirrhosis of liver	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Veneral Diseases	...	...	...	3	3	—	—	—	—	—	—	—	—	1	2	—	—	—	—
Premature birth	...	...	...	24	24	—	—	—	—	—	4	—	5	4	6	5	—	—	—
Diseases and accidents of parturi-	...	...	...	3	—	—	—	—	3	—	2	—	—	—	—	1	—	—	—
tion	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Heart Diseases	...	...	...	55	2	—	2	2	29	20	6	8	6	9	13	13	—	—	1
Accidents	...	...	...	7	—	—	2	—	4	1	—	—	1	—	3	3	—	—	5
Suicides	...	...	...	3	—	—	—	1	1	1	—	—	1	—	1	1	—	—	—
All other causes	...	...	...	166	29	6	8	6	49	68	13	23	14	18	45	53	—	—	18
All causes	...	...	...	460	88	26	21	23	176	126	45	50	45	65	127	128	—	—	31

BOROUGH OF WIMBLEDON.

TABLE V.

Infantile Mortality during the Year 1910.

Deaths from stated Causes in Weeks 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.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under One Year.
All Causes.	Certified	25	8	3	2	38	11	3	6	4	5	2	4	2	4	3	4	86
	Uncertified	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Common Infectious Diseases.	Small-pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Chicken-pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
	Measles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Diphtheria (including Membranous Croup)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diarrhoeal Diseases.	Whooping Cough	—	—	—	—	—	1	—	1	1	1	—	1	—	—	—	—	5
	Diarrhoea, all forms	—	—	—	—	—	—	1	1	1	—	—	1	1	—	1	1	7
	Enteritis, Muco-enteritis, Gastro-enteritis	—	—	—	—	—	—	—	1	—	2	—	1	—	1	—	—	6
	Gastritis, Gastro-intestinal Catarrh	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

[illegible]

Births in the year—Legitimate, 1,110. Illegitimate, 49.	Deaths in the year of—Legitimate Infants, 78. Illegitimate Infants, 8.
Deaths from ALL CAUSES AT ALL AGES, 426.	Population—Estimated to middle of 1910—58,222

TABLE VI.

The following is a summary of the nuisances abated and sanitary improvements carried out under the supervision of the Inspectorial Staff:—

Accumulations Removed	72
Cisterns Provided	12
Cisterns Repaired, Cleansed or Covered ...	125
Drains, New Provided	62
Drains, Repaired or Altered	85
Drains, Stoppages Removed	84
Dustbins Provided	84
Flushing Boxes, New Provided	70
Flushing Boxes, Repaired	111
Manure Receptacles, Provided	7
Overcrowding Nuisances Abated	17
R.W. Pipes Disconnected	80
Roofs Repaired	119
Rooms Disinfected	637
Rooms Stripped and Cleansed	654
Soil Pipes, New Provided	40
Soil Pipes, Repaired or Altered	29
Ventilating Pipes, New Provided	102
Ventilating Pipes, Repaired or Altered ...	38
Waste Pipes, New Provided	115
Waste Pipes, Repaired, Disconnected, or Trapped	66
Water Closets, New Provided	130
Water Closets, Repaired or Ventilated ...	46
Water Service Restored	12
Yards Cleansed	24
Yards Paved	83
Guttering Repaired	86
Floors Ventilated	65
Nuisances Abated from Damp Walls	74
Other Nuisances	372
<hr/>	
Total ...	3501

Borough of Wimbledon.

EDUCATION DEPARTMENT.

ANNUAL REPORT

OF THE

School Medical Officer

FOR THE

Year ended December 31st, 1910.

To the Members of the Education Committee
of the Borough of Wimbledon.

LADIES AND GENTLEMEN,

I beg to present my first Annual Report on the Medical Inspection of the children attending the Elementary Schools in Wimbledon. The work has been interrupted by various causes, firstly owing to a clerk not being appointed until February so that he was unable to take up his duties here until March 14th, and later, in recommencing work in the Autumn an important point as to the interpretation of the Board of Education's ruling in connection with the Medical Inspection arose, and as it was a point which might cause friction I postponed my inspection until I had had an interview with the Chief Medical Officer of the Board of Education. Owing to inability to fit in appointments, this caused considerable delay before the point was settled.

It will be seen that the number actually examined in the routine manner is smaller than the number last year. This is due to two reasons, first, that last year a great many children were examined who did not come in the required age periods, and secondly, that a large number of perfectly unnecessary examinations were made owing to the way in which an "entrant" was interpreted. An "entrant" had been interpreted as a child entering a Wimbledon school at any age, instead of a child entering school life, *i.e.*, at five years old. This meant that some children were examined

within a month or so of having been examined in another district. Also the Board's year dates from July to July instead of the calendar year on which this report has to be based so that although the number for the twelve months reported on is below the number of entrants and leavers to be examined, that number will be made up by the end of July, 1911. My predecessor had already examined a large proportion of the children in the Autumn of 1909.

Some disappointment may be evinced owing to the poor results shewn in regard to malnutrition, cleanliness, and clothing, but the first is an extremely difficult matter to decide and in a great many cases can only be diagnosed by the help of the family history. In the report only the most obvious cases are recorded. As regards cleanliness and clothes, the statistics are almost valueless as the children are specially cleaned and clothed for the Medical Inspection.

I have aimed at making the work of the School Medical Officer much more than a mere recorder of statistics, many of which are of little value owing to the fallacies that enter in, and I would suggest, now that considerable data have been obtained, that we might be allowed to devote less time to statistics and more to the individual child. It is of no use merely recording that so many children suffer from this or that disease unless something is done to remedy the defects found. The number of children who have had defects remedied has been very disappointing. In spite of all our efforts in following up the cases, only 50 per cent. of the defects have received attention. Every case that has been advised treatment has been visited at least twice by one of the nurses, and the results are set forth later. Many of the recommendations for treatment have come as a result of Class Room Inspection in addition to the routine inspection under the Act.

The number of cases referred to the Invalid Children's Aid Association this year was only 62 as compared with 186 in 1909. This is due to the fact that I regard it as a direct violation of the Board of Education's Circular No. 596, viz. :—

“ Where Medical Inspection reveals any defect or malady in a particular child, the first step will naturally be to notify the parents, and unless the ailment is a minor one which can be removed by home treatment, or (under the direction of the School Medical Officer) by the School Nurse, to urge upon the parent the desirability of obtaining treatment by an ordinary medical practitioner ”—

to refer any case direct to such an institution, as the idea

underlying the memorandum was that the general practitioner should always be the first person to whom cases were referred, as if not, friction would certainly ensue between the general practitioners in the district and the School Medical Officer so that the rule at present is that no case is referred to the Invalid Children's Aid Association until it is found, on a visit to the home, that no treatment has been obtained and the parents cannot afford to obtain it. Owing to the neglectful way in which large numbers of the children suffering from ringworm and other minor ailments were treated, I found it necessary to give up one afternoon per week to seeing those cases at various intervals. Thursday afternoon was set apart at Southey Hall for this purpose and this branch of the work has become so great that it may be necessary to set apart another afternoon. The average attendance since the commencement in June was 33 and the greatest number seen in any afternoon was 59.

Certain matters in the report may seem superfluous from the local point of view but the information is demanded under Circular 596 of the Board of Education, and in accordance with this my report is arranged under the heads suggested by the Board of Education.

A.—“ General review of the hygienic conditions prevalent in the Schools in the area of the Local Education Authority in respect of such matters as surroundings, ventilation, lighting, warming, equipment, and sanitation, including observations on the type and condition of sanitary conveniences and lavatories, water supply for washing and drinking purposes, the cleanliness of schoolrooms and cloakrooms, arrangements for drying children's cloaks and boots, and the relation of the general arrangements of the School to the health of the children.”

1. TYPE OF BUILDING.

The two largest schools are of the Central Hall type with additional air-shafts for ventilation. In the newest school all the class-rooms are separated from each other by brick walls, but there are half glass partitions to those surrounding the Central Hall which make the class-rooms very noisy if any singing or drill is being carried on in the hall.

One of the points needing most attention in the schools is the question of cloak-rooms. It is extraordinary how school architects entirely neglect this extremely important part of a school building, and the poorer the neighbourhood,

the more important is the proper planning of the cloak room. Wimbledon, in this respect, is no different from other places, all the cloak rooms being equally carelessly planned. What is usually found is that the cloakroom is either somewhere near the centre of the school, or in the school passage, or ventilates direct into the centre of the school. Only those who have experienced what a cloakroom in a poor neighbourhood smells like on a warm wet day, can realise the crying need of due consideration in the planning of cloakrooms, not only with regard to ventilation but also with regard to space. There is no doubt whatever that, in the poorer schools, vermin are spread very largely in the cloakrooms, as the pegs are much too close together, and the clothes on the upper row hang over and touch those on the lower row, and vermin may spread from an infected hat on to a clean child's clothes below.

In no school are there any arrangements for drying the children's clothes, which, in the schools that are heated by hot water, is a matter for very little ingenuity and very little expense, as instead of wooden partitions on which the pegs are screwed the supports can be made of iron pipes through which the hot water circulates.

It should be a fundamental principle that all cloakrooms are completely shut off by cross air currents from the school proper, and have at least three sides open to the fresh air; in addition it is advisable that the windows be replaced by glass louvres or perforated zinc. The cloak room at Dundonald Road Girls' and Infants' School is by far the best in the town in design, except in size. Owing to complaints received about this cloakroom amongst others, I was directed to suggest a remedy, and, in addition to insisting that all the windows be kept open, the top panes of all windows were replaced by perforated zinc, with the result that the Head Teacher reports that, for the first time, the cloakroom is practically free from smell. I would suggest that in designing the further school extensions required in the Borough, due regard be given to this extremely important point of the size and ventilation of cloakrooms.

The ventilation of some of the older schools leaves much to be desired, and the lighting in some of them is very deficient and, unfortunately, the school that requires the freest ventilation and the largest amount of light is the one which gets least of both. Unfortunately the bettering of these conditions is a financial consideration and it can only be undertaken gradually.

The heating of most of the class-rooms is good, with the exception of Durnsford Road Temporary School, where, during the cold weather, the following records were taken in the class-rooms:—

DURNSFORD ROAD SCHOOL. TEMPERATURE CHART. TABLE I.

January 24th to 28th, 1910—Coldest period.

ROOM.	MONDAY.			TUESDAY.			WEDNESDAY.			THURSDAY.			FRIDAY.		
	a.m. 8.45	a.m. 10.30	p.m. 3.0	a.m. 8.45	a.m. 10.30	p.m. 3.0	a.m. 8.45	a.m. 10.30	p.m. 3.0	a.m. 8.45	a.m. 10.30	p.m. 3.0	a.m. 8.45	a.m. 10.30	p.m. 3.0
J.	46	53	53	34	46	50	33	41	50	32	45	47	45	49	56
H.	47	58	51	36	56	55	30	46	56	32	47	56	49	57	54
G.	44	54	53	36	46	46	35	46	52	34	43	54	43	53	54
F.	47	58	50	42	56	56	29	51	57	36	51	58	46	55	56
E.	46	50	50	38	56	44	33	44	50	26	38	53	42	51	57
D.	46	52	56	40	44	56	32	46	50	30	44	50	44	54	58
C.	46	53	51	42	48	50	30	44	48	28	34	49	45	50	52
B.	44	50	50	40	34	34	30	40	46	31	43	49	43	53	58
A.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Outside	41	43	—	33	34	35	22	26	32	18	26	32	40	41	44

This, however, is being remedied by the installation of a hot water radiator system.

The playground at Haydon's Road Boys' School has been a great source of trouble owing to the condition which follows the fall of rain. At one of my visits, in December, there were two large lagoons separated by the path, one being 42ft. by 40ft. and the other 60ft. by 48ft., and the constant repetition of this state of affairs led to an enormous amount of dirt being carried into the School and a considerable number of boys coming into school with their feet sopping wet.

2. CLEANLINESS OF SCHOOLS.

Experiments have been carried out during the year with dust-allaying preparations in three of the schools, damp sawdust being tried in addition to proprietary preparations. There is no doubt that if these preparations are used as their makers intend them to be used their efficiency is extremely high and the difference of watching a room swept with practically no dust being raised as compared with the absurd system I have seen in some of the schools where the dust is simply stirred up from the floors and settles on everything else in the school, is enormous, but the whole question of efficient working depends on the caretakers, and one of them reported, when I found him stirring up clouds of dust with a little damp sawdust scattered around, that if he did it as I suggested, he would never get finished, whereas in one of the other schools where the instructions were more nearly followed, the results were good. In another instance the method of procedure was an utter farce and no fair test of the preparation, as I found the caretakers sweeping all the dried dust from under the desks to the clear space in front, meantime filling the room with a cloud of dust, and then putting down their line of dust preventer to finish the room with, regardless of the fact that the dustiest part of the room had been carefully stirred up first. I think it would be well to experiment with some form of vacuum cleaner both as to efficiency and economy.

On the whole the schools are well-kept.

B.—“ General description of the arrangements which have been made for the co-relation of the School Medical Service with the Public Health Service and for the organisation and supervision of medical inspection, and an account of the methods of inspection adopted.”

(a) Co-Relation of the School Medical Service with the Public Health Service.

As I am both School Medical Officer and Medical Officer of Health, the closest touch is kept in matters in connection with infectious diseases and anything which requires attention from a sanitary point of view. In practically every case where a case of infectious disease occurs in a school, the class is visited and suspicious contacts examined, or, in the case of diphtheria, swabbed. On a case of infectious disease being notified to the Public Health Department, immediately the investigation is completed a notice is sent to the Head Teacher of the School the child attends and to the Head Teachers of the Schools the other children coming from the same house attend. The other children attending school and living in the same house are excluded according to the schedule, which was drawn up as a result of the joint memorandum of the Chief Medical Officers of the Board of Education and the Local Government Board.

As regards verminous children, in one case it was found necessary to cleanse the home, and arrangements were made to carry this out and at the same time to sterilise the bedding and any clothing, at the disinfecting station.

(b) Methods of Inspection.

(i.) The following notice is given to the parents of every child on its admission to school:—

BOROUGH OF WIMBLEDON.

EDUCATION COMMITTEE.

DEAR SIR,

As it is very important for the children's welfare in School to know exactly what illnesses they have had, I should be obliged if you would put a (X) against the infectious diseases your child..... has suffered from, and also fill in the space marked "Other Diseases," with the names of the diseases suffered from, and return this to me to-morrow.

Yours faithfully,

Head Teacher.

Infectious Diseases.				Any other Diseases.	
				Make X here.	
Measles					
Whooping Cough					
Scarlet Fever					
Diphtheria					
Chicken Pox					
Typhoid Fever					
German Measles					
Small Pox					
Mumps					

Arrangements are made for the particulars to be at once filled in on the Inspection Card, with the child's name, address, date of birth, and school and department, so as to be ready when I visit the school, thus diminishing the amount of clerical work which has to be done when the Inspection falls due.

(ii.) Notice is sent to the Head Teacher of the Department concerned stating when the Inspection will take place and the number of children to be examined. The Head Teacher then arranges for a fixed number to attend every half-hour through the day, and the following notice is sent to each parent inviting their attendance:—

Notice to Parents—Date of Medical Inspection.

WIMBLEDON EDUCATION COMMITTEE.

.....School.

Date.....19...

To.....

DEAR SIR (OR MADAM),

I am instructed by the above Committee to give you notice that the Medical Officer, appointed in accordance with the Education (Administrative Provisions) Act, 1907, will attend at this School on..... ato'clock, for the purpose of Medically Inspecting the children.

I have to request you to see that your child.....is present on that date. You may also be present at the Examination if you wish.

The School Nurse is present at the Examination.

Yours faithfully,

Head Teacher.

MEDICAL INSPECTION.

CHART SHEWING THE NUMBER OF CHILDREN WITH THE VARIOUS DEFECTS AND PERCENTAGE WHO HAVE RECEIVED TREATMENT.

	QUEEN'S ROAD.			HAYDON'S RD.			DUNDONALD.			CENTRAL.			COTTENHAM PK.			EFFRA RD.		PELHAM.			ST. MARY'S.			DURNSFORD.			TOTALS.			TOTAL for Whole School.
	Boys.	Girls.	Infnts.	Boys.	Girls.	Infnts.	Boys.	Girls.	Infnts.	Boys.	Girls.	Infnts.	Boys.	Girls.	Infnts.	Girls.	Infnts.	Boys.	Girls.	Infnts.	Boys.	Girls.	Infnts.	Boys.	Girls.	Infnts.	Boys.	Girls.	Infnts.	
Serious Defect in Vision.	3	3	...	2	3	1	3	...	1	...	...	1	...	...	...	1	...	...	1	1	...	...	...	...	...	9	7	4	20	
	66%	100%	...	100%	33.3%	Nil.	66.6%	...	100%	...	...	100%	...	...	...	100%	...	...	100%	Nil.	...	...	...	...	...	66.6%	71.4%	75%	70%	
Defective Vision.	12	8	...	6	9	...	6	3	5	1	4	3	...	...	...	...	1	...	1	2	...	...	1	...	...	...	25	25	12	62
	50%	37.5%	...	50%	22.2%	...	50%	Nil.	20%	Nil.	Nil.	Nil.	...	...	...	...	100%	...	Nil.	50%	...	...	Nil.	...	...	...	48%	20%	25%	32.2%
Carious Teeth.	5	3	4	11	5	5	12	1	3	2	1	1	...	...	3	3	4	...	1	11	1	...	...	...	3	31	14	34	79	
	60%	33.3%	Nil.	18.2%	80%	20%	33.3%	100%	100%	Nil.	Nil.	Nil.	...	...	33.3%	Nil.	100%	...	Nil.	27.3%	Nil.	...	...	...	33.3%	29%	42.8%	38.2%	35.4%	
Nasal Obstruction.	6	5	7	3	4	1	2	1	9	...	...	3	...	...	...	...	4	1	...	7	...	...	1	...	...	1	12	10	33	55
	16.6%	60%	42.8%	33.3%	50%	100%	Nil.	Nil.	77%	...	...	66.6%	...	...	...	...	75%	100%	...	57.1%	...	...	100%	...	...	Nil.	25%	50%	63.6%	52.7%
Otitis Media.	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1	2	
	...	...	...	Nil.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	100%	...	...	...	...	...	...	Nil.	...	100%	50%	
Other Diseases.	...	5	4	5	8	9	7	3	1	1	...	4	...	...	3	1	11	...	3	10	1	...	1	1	2	6	15	22	49	86
	...	80%	75%	20%	75%	77.7%	57.1%	100%	100%	Nil.	...	100%	...	...	33.3%	Nil.	81.8%	...	Nil.	60%	Nil.	...	Nil.	100%	50%	66.6%	40%	63.6%	71.4%	64%
Totals.	26	24	15	28	29	16	30	8	19	4	5	12	...	...	6	5	20	1	5	32	3	...	3	1	2	10	93	78	133	304
	46.1%	58.3%	40%	32.1%	51.7%	56.2%	43.3%	50%	68.4%	Nil.	Nil.	58.3%	...	...	33.3%	20%	85%	100%	Nil.	50%	Nil.	...	33.3%	100%	50%	50%	38.7%	44.8%	57.1%	48.3%
Totals for Whole School.	65			73			57			21			6			25		38			6			13			304			...
	49.2%			45.2%			52.6%			33.3%			33.3%			72%		44.7%			16.6%			53.8%			48.3%			...

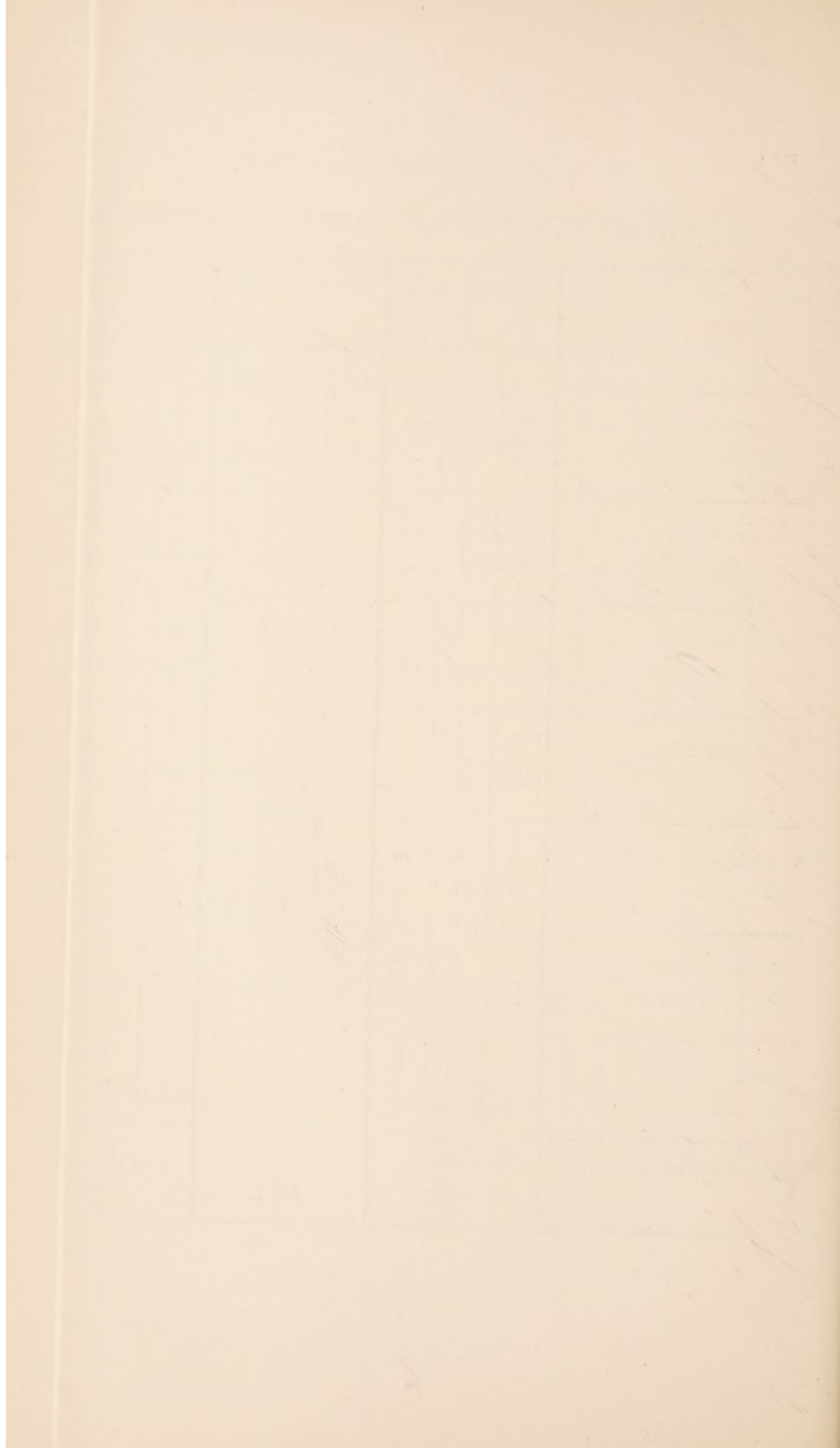


TABLE III.

CLASS ROOM INSPECTION.

CHART SHEWING THE NUMBER OF CHILDREN WITH THE VARIOUS DEFECTS, AND PERCENTAGE WHO HAVE RECEIVED TREATMENT.

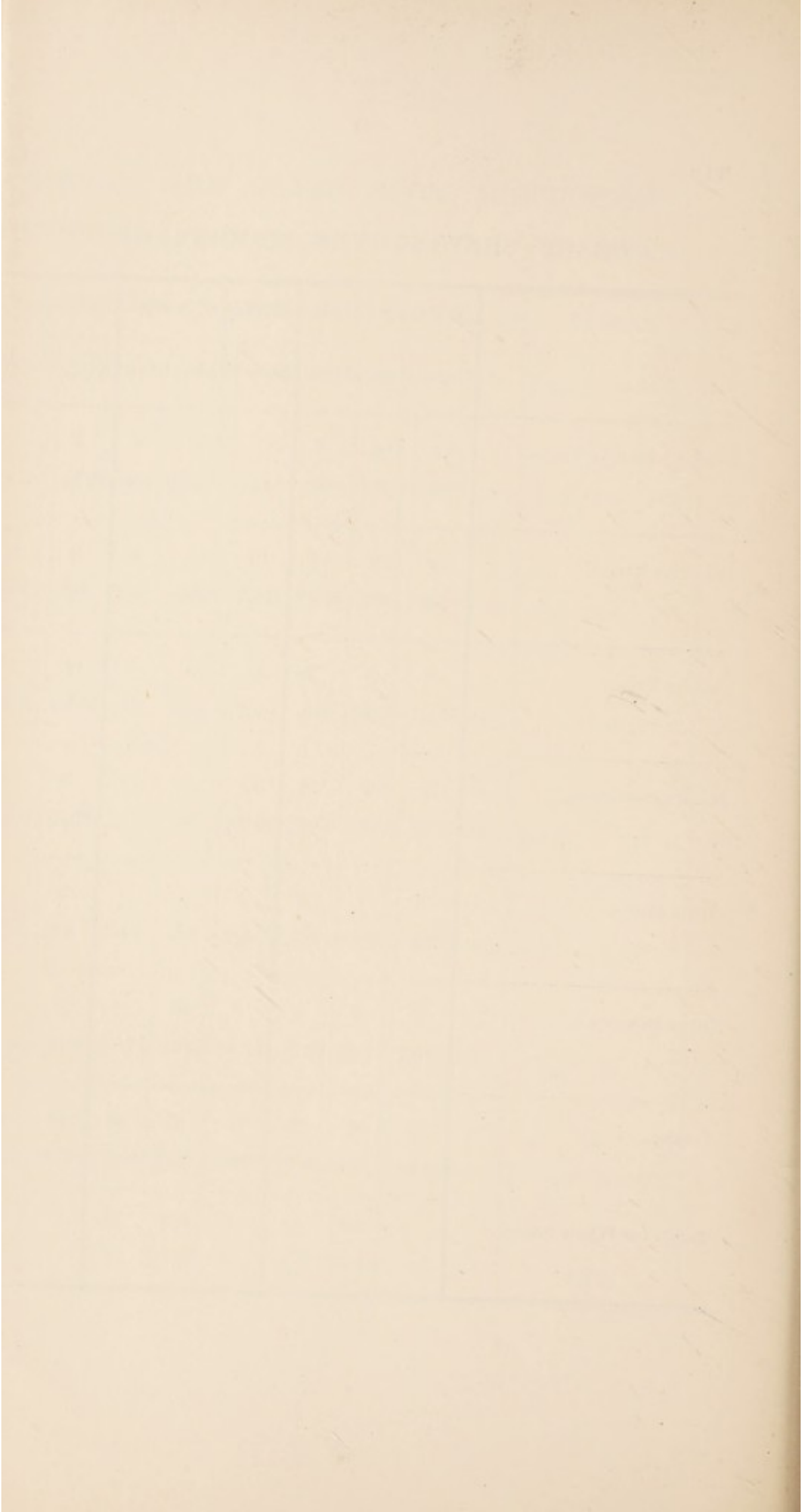
	QUEEN'S ROAD.			HAYDON'S RD.			DUNDONALD.			CENTRAL.			COTTENHAM PK.					EFFRA RD.			PELHAM.			ST. MARY'S.			DURNSFORD.			TOTALS.			TOTAL for Whole School.
	Boys.	Girls.	Infnts.	Boys.	Girls.	Infnts.	Boys.	Girls.	Infnts.	Boys.	Girls.	Infnts.	Boys.	Girls.	Infnts.	Girls.	Infnts.	Boys.	Girls.	Infnts.	Boys.	Girls.	Infnts.	Boys.	Girls.	Infnts.	Boys.	Girls.	Infnts.				
Serious Defect in Vision.	15	9	5	15	1	3	...	...	1	1	1	2	...	...	1	...	1	2	7	2	1	...	1	1	...	1	35	18	17	70
	33.3%	22.2%	80%	46.6%	Nil.	33.3%	...	...	Nil.	100%	100%	100%	...	...	100%	...	100%	100%	57.1%	100%	Nil.	...	Nil.	Nil.	...	100%	51.4%	39%	70.6%	52.8%
Defective Vision.	8	12	12	13	6	4	...	2	4	1	...	...	1	...	1	5	...	2	5	3	2	1	2	1	1	...	28	32	26	86	
	37.5%	41.6%	33.3%	46.1%	33.3%	50%	...	50%	50%	100%	...	...	100%	...	100%	100%	...	50%	40%	66.6%	Nil.	Nil.	Nil.	100%	100%	...	46.4%	50%	42.3%	46.5%	
Carious Teeth.	4	...	...	...	...	...	2	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	5	6	1	7	14
	100%	...	...	...	...	...	100%	...	100%	...	...	...	...	...	...	...	100%	...	...	...	...	...	...	...	100%	60%	100%	100%	71.4%	85.7%
Nasal Obstruction.	13	27	41	9	6	14	7	5	10	1	...	6	1	...	1	3	5	2	...	8	1	1	4	1	1	4	35	43	93	171			
	38.5%	40.7%	44%	33.3%	50%	71.4%	100%	20%	60%	100%	...	33.3%	100%	...	...	Nil.	40%	Nil.	...	75%	Nil.	100%	75%	100%	Nil.	100%	51.4%	37.2%	54.8%	49.1%	
Otitis Media.	2	1	1	4	1	1	5	1	1	...	...	...	1	...	1	...	2	3	...	2	...	1	...	...	...	...	15	4	8	27
	Nil.	Nil.	Nil.	25%	Nil.	100%	60%	100%	100%	...	...	...	100%	...	100%	...	50%	66.6%	...	50%	...	100%	...	...	...	...	46.6%	50%	62.5%	51.8%
Other Diseases.	7	2	4	2	7	...	4	3	2	...	...	1	...	...	1	3	1	5	4	6	...	...	1	...	...	1	18	19	17	54
	42.9%	50%	50%	Nil.	28.6%	...	50%	33.3%	50%	...	...	Nil.	...	...	100%	66.6%	100%	80%	75%	33.3%	...	...	100%	...	...	100%	50%	47.3%	53%	50%
Totals.	49	51	63	43	21	22	18	11	19	3	1	9	3	...	5	11	10	14	16	21	4	3	8	3	3	11	137	117	168	422			
	47%	37.2%	44.4%	39.5%	33.3%	63.6%	77.7%	36.4%	57.9%	100%	100%	44.4%	100%	...	80%	63.6%	60%	64.3%	56.2%	62%	Nil.	66.6%	50%	66.6%	66.6%	Nil.	51.8%	43.6%	55.3%	50.9%			
Totals for Whole School.	163			86			48			13			8			21			51			15			17			422			...		
	43%			44.1%			60.4%			61.5%			87.5%			61.9%			60.8%			60%			76.5%			50.9%			...		



MEDICAL AND CLASS ROOM INSPECTION.

CHART SHEWING THE NUMBER OF CHILDREN WITH THE VARIOUS DEFECTS, AND PERCENTAGE WHO HAVE RECEIVED TREATMENT.

	QUEEN'S ROAD.			HAYDON'S RD.			DUNDONALD.			CENTRAL.			COTTENHAM PK.				EFFRA RD.		PELHAM.			ST. MARY'S.			DURNSFORD.			TOTALS.			TOTAL for Whole School.
	Boys.	Girls.	Infants.	Boys.	Girls.	Infants.	Boys.	Girls.	Infants.	Boys.	Girls.	Infants.	Boys.	Girls.	Infants.	Girls.	Infants.	Boys.	Girls.	Infants.	Boys.	Girls.	Infants.	Boys.	Girls.	Infants.	Boys.	Girls.	Infants.		
Serious Defect in Vision.	18	12	5	17	4	4	3	...	2	1	1	3	...	...	1	1	1	2	7	3	2	...	1	1	...	1	44	25	21	90 56.6%
	53.5%	41.6%	80%	53%	25%	25%	66.6%	...	50%	100%	100%	100%	...	...	100%	100%	100%	57.14%	100%	Nil.	...	Nil.	Nil.	...	100%	54.5%	48%	71.4%		
Defective Vision.	20	20	12	19	15	4	6	5	9	2	4	3	1	...	1	5	1	2	6	5	2	1	3	1	1	...	53	53	38	144 Nil.	
	45%	40%	33.3%	47.3%	26.6%	50%	50%	20%	33.3%	50%	Nil.	Nil.	100%	...	100%	100%	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	...	Nil.	Nil.	Nil.			
Carious Teeth.	9	3	4	11	5	5	14	1	4	2	1	1	...	...	1	3	5	...	1	11	1	...	...	...	1	8	37	15	39	91 44%
	77.7%	33.3%	Nil.	18.2%	80%	20%	42.8%	100%	100%	Nil.	Nil.	Nil.	...	...	33.3%	Nil.	100%	...	Nil.	27.3%	Nil.	...	...	...	100%	50%	40.5%	46.6%	46.1%	
Nasal Obstruction.	19	32	48	12	10	15	9	6	19	1	...	9	1	...	1	3	9	3	...	15	1	1	5	1	1	5	47	53	126	226 50.4%	
	31.5%	43.7%	43.7%	33.3%	50%	73.3%	77.7%	16.6%	68.4%	100%	...	44.4%	100%	...	Nil.	Nil.	55.5%	33.3%	...	66.6%	Nil.	100%	80%	100%	Nil.	80%	44.6%	39.6%	57.1%		
Otitis Media.	2	1	1	5	1	1	5	1	1	...	...	...	1	...	1	...	2	3	...	3	...	1	...	...	...	...	16	4	9	29 51.7%
	Nil.	Nil.	Nil.	20%	Nil.	100%	60%	100%	100%	...	...	...	100%	...	100%	...	50%	66.6%	...	66.6%	...	100%	...	...	...	...	43.8%	50%	66.6%	
Other Diseases.	7	7	8	7	15	9	11	6	3	1	...	5	...	...	4	4	12	5	7	16	1	...	2	1	2	7	33	41	66	140 58.6%
	42.8%	71.4%	62.5%	14.3%	53.3%	77.7%	54.5%	66.6%	66.6%	Nil.	...	80%	...	...	50%	50%	90.9%	80%	42.8%	50%	Nil.	...	50%	100%	50%	71.4%	45.5%	56.1%	66.6%	
Totals.	75	75	78	71	50	38	48	19	38	7	6	21	3	...	9	16	30	15	21	53	7	3	11	4	5	21	230	195	299	724 59%	
	46.6%	44%	43.6%	36.6%	44%	60.5%	56.3%	42.1%	63.1%	42.9%	16.6%	52.4%	100%	...	66.6%	50%	76.6%	66.6%	42.9%	54.7%	Nil.	66.6%	45.5%	75%	60%	66.6%	46.5%	44.1%	56.5%		
Totals for Whole School.	228			159			105			34			12			46		89		21		30			724			...			
	44.7%			44.7%			56.2%			44.1%			75%			67.4%		53.9%		33.3%		66.6%			50%			...			



By means of a carbon duplicating book much unnecessary duplication of work has been avoided without any increase of the clerical work imposed upon the Head Teachers. The number of parents present varied considerably, in the poorer schools the number being very small owing to the number that have to go to work, and in all the schools the proportion is greatest in the Infants' Departments, less in the Girls' Departments, and extremely small in the Boys' Departments.

Very few refusals have been met with and most of these, when they have had the circumstances explained to them, have come up for examination, and curiously enough, needed much advice.

(iii.) The children are weighed and measured, their heads examined, and their sight tested by the School Nurse. If any child's vision does not reach $\frac{6}{9}$ I test it again myself. The dressing and undressing of the children is done by the Nurse if the parents are not there. The examination is carried out according to the Board's Schedule, the chest being in every case sufficiently exposed as to be able to thoroughly examine the heart and lungs, both back and front, as well as the spine. In the case of the infants, the boys, and the younger girls, they are taken in batches, but all girls over twelve are inspected separately. Of those who appeared to be examined there have been no objections to a thorough examination. I can regard nothing short of a thorough examination as serving the purpose for which the Act was instituted as many cases of early curvature of the spine, or serious lung trouble are easily overlooked in a more cursory examination. I have always found that the parents appreciate a thorough overhauling of their child, particularly in those cases where any defect has been revealed, and in such cases the parents are often loud in their praises and grateful for the proper administration of the Act. Amongst the older boys, taking them in batches has a salutary effect in this respect, that if a boy is personally dirty, he takes very good care that his school-fellows shall not see it; and amongst the infants, if the best results are to be obtained, it is absolutely necessary to take them in batches and to treat the whole thing as a kind of kindergarten as they all gain confidence from seeing their little school-mates weighed, measured, and examined and when their hearing is tested, after confidence has been established, there is little or no difficulty. By this means tears become an absolute rarity and the children regard the whole thing as a kind of game and all fear of the Nurse and Medical Officer is abolished and the most friendly feelings established. This also has another very important effect as children who have once suffered at the hands of a doctor

are apt to dread the very name of doctor and the family physician is often hampered on this account, but this is counteracted by the friendly relations established between the children and the School Medical Officer and they learn that a doctor is not a person who is always associated with painful proceedings or nauseating physic.

The hearing is tested in each case by a forced whisper, at 30 feet if possible, in the case of infants generally listening with both ears, while in the case of the older children each ear is tested separately with their back towards me.

Eyesight.—Each eye is tested separately with Snellen's type at six metres, but in the younger children, owing to various difficulties, I devised a special type which is explained later.

The results of the examinations are recorded on cards, different colours being used for the boys and girls and a special one for any case which wants prolonged watching. On the subject of Inspection Cards it would be well if the Board insisted on a uniform size of card as if cards are forwarded from other districts, when the children move into Wimbledon, varying in size from about 6in. by 4in. to an ordinary sheet of foolscap, it is impossible to file them and it means copying out a fresh card for many of the children that enter the district. All this labour would be saved if a standard card were insisted on.

In the case of children where any defect which wants remedying is found, the right hand corner of the card is cut off, so that on visiting the school one is able to easily run through the cards and pick out the children that it is important to re-inspect.

A certain amount of disturbance is inevitable and every effort has been made to inconvenience the teachers as little as possible, but at the same time the inspection cannot be allowed to suffer for it is worth doing thoroughly. I wish to acknowledge the ready way in which the teachers have co-operated in this direction.

(c) *Results of Notices sent to Parents with regard to Treatment.*

This work has been laid more stress on than anything during the past year. In the case of Eye Defects, Ear Diseases, Nasal Obstruction, Defective Teeth, and Unclean Heads, little homilies have been drawn up and printed on cards, shewing why treatment is required and urging the parents to obtain treatment. With a view to finding out how many were

seen by their own practitioners, a space was left on the back to be countersigned by the practitioner in attendance, with a notice that the card should be returned to me. This, unfortunately, proved of little value. On the whole the results have been disappointing as, in spite of everything that has been done, only 50 per cent. of the defects have been remedied. Careful records have been kept as to where the treatment has been carried out, and also with a view to ascertaining what age period shewed the greatest percentage of cases attended to and whether the younger children were paid more attention to than the older ones with the object of ascertaining whether it would pay to concentrate one's efforts more on one age period than another. Separate records were also kept to ascertain whether more attention was given to advice given during Medical Inspection, when a large proportion of the parents were present, than to the notices sent as a result of Class-room Inspection. From Table III. it will be seen that there is a balance of 2·6 per cent. in favour of the notices sent as a result of the Class-room Inspection. It will be seen also that the higher percentage of defects remedied are those found in the Infant Departments and that these percentages are higher in the schools drawing their pupils from the poor areas of the town. Some of the numbers are small on which to base statistics, but on the whole the record is a fairly reliable and complete guide of the results of one's labours.

Besides these defects there are a considerable number which have come under notice at Southey Hall which have been discovered by the Nurse in the intervals of Medical and Class-room Inspection, more particularly Ringworm and Chronic Skin Diseases. There is no doubt that the total number of cases which received treatment would have been very much smaller had it not been for the efforts of the Nurses in following up the cases.

(d) Assistance given by Nurses, Teachers, School Attendance Officers, etc.

The School Nurse who assists at Medical Inspection, as has been stated, weighs, measures, tests the sight, examines the heads, and dresses and undresses the children.

In some cases the Head Teachers make a point of being present at the examination and assisting with the infants, but this is seldom necessary except in the poorer districts where the mothers go out to work and cannot attend the inspection.

The teachers fill in the particulars asked for with regard to the name, address, age, date of birth, and the history of previous infectious diseases. I think they also should be asked to fill in the heading of cleanliness and clothing, because it is an utter farce for the medical officer to do so as only in the very dirty and neglected cases the children are not prepared for examination, and amongst the poor children one finds a considerable amount of new under-garments produced for the occasion.

The co-operation of the teachers is invaluable and if possible arrangements should be made either for the Head Teacher or Class Teacher to be present at the examination as it is impossible to say what the intelligence of certain children is without the help of the child's teacher. In addition, their intimate knowledge of the children is often of immense value to the medical officer. Their influence in the matter of obtaining cleanliness amongst the children is of immense value, in fact, I would say that the cleanliness of the children in a school depends more on the teachers than anything else and my only regret is that in one or two instances the Head Teachers are not strict enough in insisting on clean heads among their girls, as it is apt to interfere with their attendance record.

The results obtained from Class-room Inspection are entirely due to the way in which the teachers watch and supervise the children, some teachers particularly drawing attention to very minor defects that one is surprised they have noticed.

The Attendance Officers assist the work of treatment very considerably by keeping close watch on children who have been excluded from school, and are responsible for sending a considerable number of children to Southey Hall to know whether they have been kept away from school for sufficient reason.

C.—“ General statement of the extent and scope of the medical inspection carried out during the year.”

(I.) Visits paid to Schools.

I paid 203 visits during the year to the various schools. The School Nurse paid 234 visits to the schools and inspected 1,472 children.

(II.) The following groups of children were examined:—

- A. (i.) Entrants under the code.
- (ii.) Leavers under the code.
- (iii.) A certain number of children admitted to the schools of various ages, according to the custom of my predecessor until the Committee authorised the present arrangements.
- (iv.) Children at the Defective School.
- B. Children whose names appeared in the Medical Officer's book in each class and seen during Class-room Inspection.

(III.) Number of children inspected.

The number of children medically examined during the year was 1,472.

(IV.)—The number of children referred for further examination was 724, 230 boys, 195 girls, and 299 infants. A certain number of these were excluded on account of chronic illness, such as Phthisis and Heart Disease, and were under continued observation at Southey Hall.

(V.)—Time occupied by Inspection.

The average number examined per hour is eight.

D.—“ General review of the facts disclosed by medical inspection, under the headings contained in the Schedule to Circular 582, including tables shewing the height and weight of children inspected according to age at date of inspection, and sex.”

(a) History of Infectious Diseases.

This was most disappointing as no history could be obtained in the cases where the parents did not attend, but latterly I have arranged that when a child is admitted to a school, a notice is sent to the parents, and now I find little difficulty in obtaining the desired information, but during the year under review the information was so piecemeal as to be of practically no value.

(b) History of other illnesses and Family History.

The same remark applies in this case as to the history of infectious disease.

(c) Clothing and Footgear.

The statistics in respect to this condition are absolutely valueless for the following reason, very few cases are recorded and these are only the worst ones. Except in the most neglected cases it is satisfactory to find that the children are specially cleaned and clothed, and for this reason the only fair way of estimating what the normal condition of the children is, is either for the teacher to make notes during the ordinary school session or for surprise visits to be paid to the schools. There is one point which I wish to draw attention to in this connection, which is, that a certain number of children come to school so ragged as to be beyond the ordinary bounds of decency, and I submit that some steps should be taken to compel the parents to send the children to school in a decent condition. In the majority of cases these children come from homes which are the result of pure neglect. No efforts are made to patch their clothes and I do not think that such children should be suffered in the midst of the other decent children. Respectable shabbiness is a thing we all feel for and sympathise with, but this is quite a different matter. I cannot help thinking that the introduction of clogs, such as are common in the north, would be of immense benefit to the poor of this and similar districts. The initial cost of clogs is small and when the irons wear out they can be re-ironed for 1d. or 1½d. and they are warm and weather-proof. Certainly, if badly made, they have their drawbacks, but speaking from

TABLE VI.

TABLE SHEWING AVERAGE HEIGHTS (IN INCHES) OF CHILDREN MEDICALLY EXAMINED ACCORDING TO AGE AND SEX.

AGE.	QUEEN'S ROAD.		HAYDON'S ROAD.		DUN-DONALD ROAD.		CENTRAL.		COTTENHAM PARK.		EFFRA ROAD.		PELHAM.		ST. MARY'S.		DURNS-FORD ROAD.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
5	18	18	39	21	19	14	13	13	7	20	20	30	36	35	7	9	23	13
	38·6	40·3	40·6	40·5	41	41	43	41·5	43	41·7	41·4	41·8	42	41	42	41·5	41·9	41
6	9	8	5	3	6	6	—	—	1	3	6	15	13	7	2	1	—	—
	43	42	42	42	44	45	—	—	43·5	42·5	42·8	43·8	43·4	44·4	41·5	43·5	—	—
7	7	4	8	7	10	4	—	—	—	—	—	5	10	14	1	1	—	—
	45·3	45	48	43	45·3	43·8	—	—	—	—	—	45·7	46	46·3	45·5	45·5	—	—
8	6	18	32	30	11	5	—	—	—	—	—	—	2	—	1	1	—	—
	47·3	49·9	47	47	46·6	44	—	—	—	—	—	—	46·3	—	49	46	—	—
9	19	—	25	18	8	6	—	—	—	—	—	—	—	2	4	4	—	—
	50	—	49·4	49·3	50·6	50	—	—	—	—	—	—	—	47·8	46·5	49	—	—
10	8	12	5	3	10	5	—	—	—	—	—	—	—	—	—	—	—	—
	52	49	50·7	50	50	49	—	—	—	—	—	—	—	—	—	—	—	—
11	10	12	5	3	5	2	—	—	—	—	—	—	—	—	—	—	—	—
	53	52·8	51·3	50·5	52	58·3	—	—	—	—	—	—	—	—	—	—	—	—
12	9	11	4	2	6	6	—	—	—	—	—	—	—	—	1	—	—	—
	54·3	54	54·8	58·5	54	55	—	—	—	—	—	—	—	—	56	—	—	—
13	15	4	4	15	14	5	3	3	—	—	—	—	2	8	—	2	1	1
	57	57·5	55	57	56·2	57	55·6	57·5	—	—	—	—	59·3	61	—	59	61·5	62
14	6	1	—	4	1	1	7	13	—	—	—	14	5	3	1	1	1	4
	58·5	57	—	58	61·5	57·5	59·5	60	—	—	—	61·4	59·4	57	55	61	58	59·4
15	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	61·5	—	—	—	—	—	—

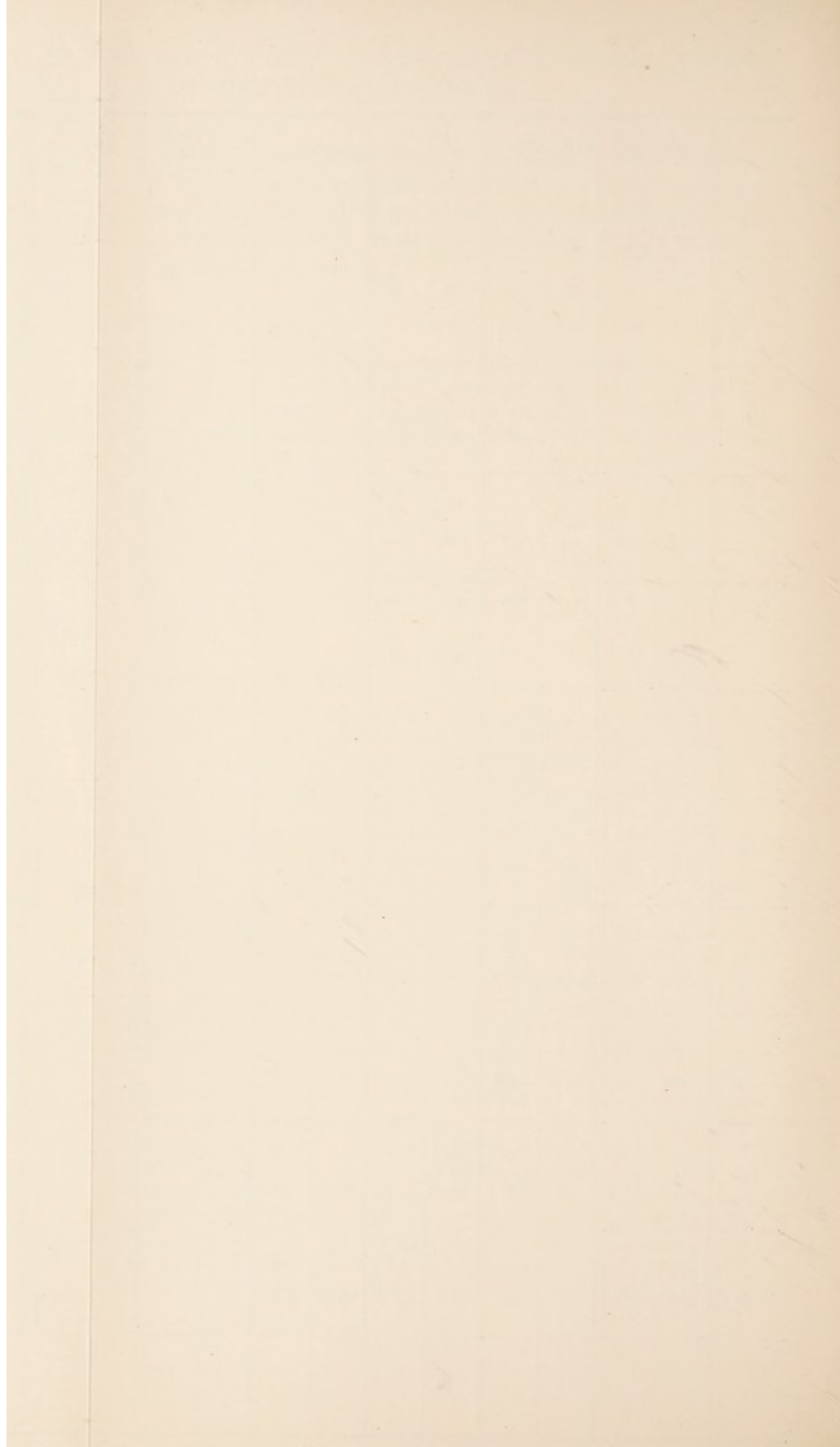
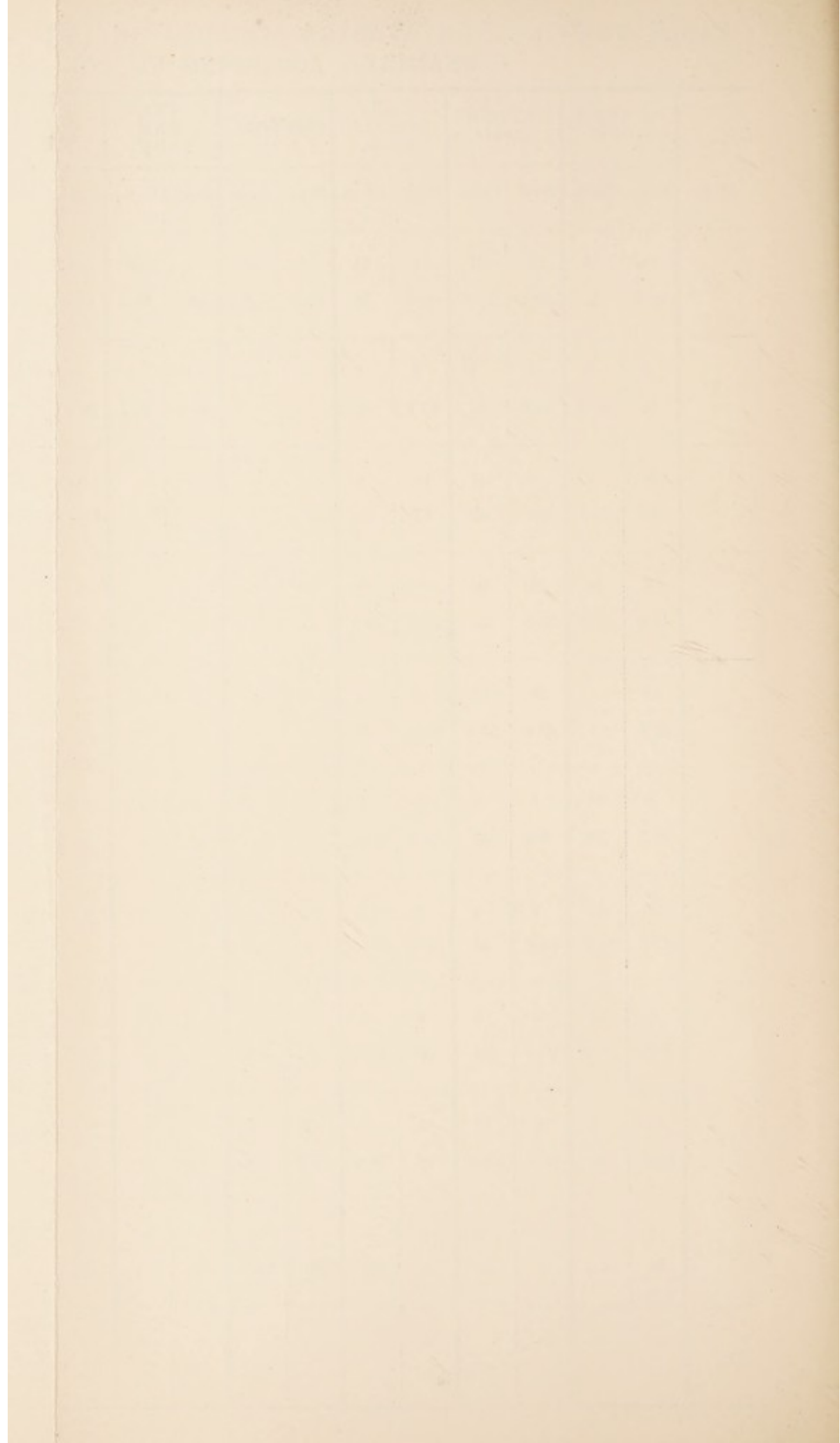


TABLE VII.

TABLE SHEWING THE AVERAGE WEIGHTS (IN LBS.) OF CHILDREN MEDICALLY EXAMINED ACCORDING TO AGE AND SEX.

AGE.	QUEEN'S ROAD.		HAYDONS ROAD.		DUN- DONALD ROAD.		CENTRAL.		COTTEN- HAM PARK.		EFFRA ROAD.		PELHAM.		ST. MARY'S.		DURNS- FORD ROAD.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
5	18	18	39	21	19	14	13	13	7	20	20	30	36	35	7	9	23	13
	39.5	38	38.4	37.8	39.7	39	42.3	37	39.6	39.2	38.7	39	40.3	37.4	40	40	39.6	37.5
6	9	8	5	3	6	6	—	—	1	3	6	15	13	7	2	1	—	—
	43	41.8	41.3	42	45.3	46	—	—	44.5	39.7	39.8	42.2	41.5	43.6	37	44	—	—
7	7	4	8	7	10	4	—	—	—	—	—	5	10	14	1	1	—	—
	45	45.4	50	42	47	44	—	—	—	—	—	44.6	48.9	46.7	46.5	45.5	—	—
8	6	18	32	30	11	5	—	—	—	—	—	—	2	—	1	1	—	—
	49.9	54.3	50.3	50	50.7	49.8	—	—	—	—	—	—	49.8	—	52	44	—	—
9	19	—	25	18	8	6	—	—	—	—	—	—	—	2	4	4	—	—
	58.3	—	53.8	53.8	56.4	59	—	—	—	—	—	—	—	48.8	43.5	53	—	—
10	8	12	5	3	10	5	—	—	—	—	—	—	—	—	—	—	—	—
	63.7	59	58.8	57	57.7	55.4	—	—	—	—	—	—	—	—	—	—	—	—
11	10	12	5	3	5	2	—	—	—	—	—	—	—	—	—	—	—	—
	67.1	64.3	61.8	55	67.6	84.8	—	—	—	—	—	—	—	—	—	—	—	—
12	9	11	4	2	6	6	—	—	—	—	—	—	—	—	1	—	—	—
	70.8	72.5	70.8	75	69	68.5	—	—	—	—	—	—	—	—	75	—	—	—
13	15	4	4	15	14	5	3	3	—	—	—	—	2	8	—	2	1	1
	82.9	80	76.8	83.4	78	78.6	74.3	79	—	—	—	—	98.3	94	—	94	93	82.5
14	6	1	—	4	1	1	7	13	—	—	14	—	5	3	1	1	1	4
	88	76.5	—	88	91	86	88	94.5	—	—	95	—	89.4	76.6	69	107	79.5	81.4
15	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	82	—	—	—	—	—	—	—



considerable experience I would say that, if they are properly made, one does not come across the exaggerated deformities which are so often ascribed to their use.

TABLE V.

AGE.	CLOTHING.			FOOTGEAR.	
	Insufficient,	Poor & Ragged	Smelly & Dirty	Insufficient.	Poor : below average.
5	—	4%	1.1%	28% (none)	2%
13	—	6.5%	—	—	7.8%
14	—	—	—	—	—

(d) Height and Weight.

The following Tables shew the heights and weights in the various schools for boys and girls.

(c) *Nutrition.*

With regard to malnutrition only the worst cases have been recorded. This is one of the most difficult things to decide, except in very marked cases, and my results do not correspond with those of 1909. A thin child is not necessarily a child suffering from malnutrition.

More particularly is this in the case of boys who have run off their superfluous flesh by constant activity, and thus, although they appear thin, some of them are hard and wiry, whereas, as in the case of three children which I shewed to the Committee suffering from most serious malnutrition, they may be quite plump, and in these three cases the history confirmed the diagnosis that they were suffering from chronic starvation.

TABLE VIII.

AGE.	NUTRITION.		
	Below average.	Thin.	Very small.
5	14·6%	·56%	·28%
13	2·6%	—	—

(f) *Cleanliness and Condition of Head and Body.*

The statistics with regard to this condition are almost valueless as, except in the very neglected cases, such as are shewn by the flea-bitten bodies, the children are specially cleaned for the occasion and as evidence of what the normal condition of the children in the school is the statistics are not worth the paper they are written on. This, as in the case of the clothing and footgear, can only be ascertained by the teacher or by surprise visits of the School Medical Officer. The question of dealing with the verminous child is one of the most difficult problems the medical officer has to face. A certain number of people seem to regard vermin and nits as normal conditions in a growing child, in fact some parents go so far as to say that a child will not thrive unless it produces nits. A great number of people cannot be made to understand that nits are the eggs laid by the lice that will, in course of time hatch out, and, if not dealt with, promptly proceed to deposit more nits which in their turn will increase the trouble, nor can they be made to understand that killing the vermin with paraffin or other preparations does not do

away with the necessity of removing the nits. It is unfortunate that one is compelled to resort to strong measures, but as children are compelled by law to attend school it is our duty to see that the children of clean parents are not infected by a verminous neighbour. Everything is done to prevent these cases from getting into the schools and arrangements are made so that the days for admitting children at each of the schools are different, and one of the nurses attends at each school and examines all the applicants, and no child is admitted to school until it is thoroughly clean. Children who have been excluded on account of an unclean head are re-examined at stated intervals after the first inspection, and so callous are some of the parents in this respect that prosecutions have had to be undertaken for non-attendance owing to the length of time that had elapsed before the child was able to be re-admitted to school. It is surprising, too, how many really decent children coming from good homes are found to be infected with vermin. The whole question is one of a little trouble, as the removal of nits only necessitates taking the child into a good light and cutting off each hair that has nits on it, but it is really surprising how few parents will take the trouble to do this and I have seen many heads of really beautiful hair well on the way to ruin for the want of a little patient care. Any child in Class-room Inspection or Medical Inspection found to have vermin or nits, is excluded until the child is cleansed, and the following notice is sent to the parents:—

WIMBLEDON EDUCATION COMMITTEE.

Parents should pay special attention to the hair of school children. Even clean children are liable to be infected with vermin, and it is therefore necessary to examine the hair every week.

The best way to prevent trouble at School in the case of girls with long hair is to have it done in two plaits, and in either sex to wash the hair occasionally with paraffin.

Should the hair become infected all hairs with nits on must be cut off, as nits are the eggs which will eventually hatch out into lice.

The head must be washed and scrubbed daily with Paraffin Oil, to which an equal quantity of Olive Oil may be added.

Repeat this treatment for a week.

Iron the collar of the clothes with a hot iron.

CAUTION.—Do not use paraffin near the fire or naked light.

Where possible the nurse visits the home and tries to get the parents to do something towards cleansing the child, and the great difficulty in the majority of cases, and particularly the worst ones, is that the parents will not cut off the hair

with the nits on. This trouble of verminous heads is not confined to the dirtiest people, and it is also a matter for wider public concern as, for instance, the worst head full of nits I came across during the whole year was that of the daughter of a chef, and another child who was excluded for being verminous was that of a purveyor of food in a large way of business. During the year it was found that at Dundonald Road School there was a considerable number of children who had to be excluded week after week for unclean heads, and a vigorous campaign was made. A few cases were cleansed by the nurse, with the parent's permission, others were prosecuted and fined. In addition, as a protective measure, all the girls were induced to do their hair in two plaits and the results were remarkable. After getting the school clean, it remains clean, and whereas the number of exclusions on each inspection day often exceeded 20, it soon dropped to two or three and even to zero. It was found that the girls themselves were only too keen to get their heads cleansed and it was really very trying to have to exclude some of the older girls, who felt very keenly the ignominious position they were placed in. Once having been cleansed, and with the extra attention and care bestowed on their hair, it was surprising how the condition of the hair, in the older girls particularly, improved, and not only that, but how self-respect and general brightness of some of the worst cases re-asserted itself and Dundonald Road School is now not only a credit to the district, but it is difficult to find a tidier looking lot of girls than those that attend there.

The Special School continues to be a source of trouble, and week after week the same children are excluded for being verminous. In one case, the whole house was cleansed, clothing and bedding disinfected, and everything done that it was possible to do, but within a week or two the children were back again swarming with body lice.

Table IX. on the following page, shews the particulars with regard to the cleanliness and condition of the skin found during Medical Inspection.

TABLE IX.
CLEANLINESS AND CONDITION OF SKIN

AGE	HEAD.					BODY.						
	Ver- min.	Nits.	Dirty.	Ring- worm.	Other skin dis- eases.	Ver- min.	Vermin- bitten and flea bitten.	Smelly and dirty.	Ring- worm.	Other skin dis- eases.	Head and body both unclean.	Body clean, but head un- clean.
5	1.1%	15.8%	.84%	1.1%	1.4%	.56%	.84%	6%	—	1.7%	4%	12.9%
6	1.2%	14.1%	—	—	3.5%	1.2%	11.8%	11.8%	—	3.5%	3.5%	11.8%
13	3.9%	26%	—	—	2.6%	—	18.2%	7.8%	—	—	13.1%	16.8%
14	1.6%	16.1%	—	—	5%	—	1.6%	5%	—	1.6%	1.6%	16.1%

The total amount of School Attendance lost through verminous conditions, during 1910, was 23.89 school years.

The following is a summary of the children examined by the nurses during the year:—

Heads examined	...	...	...	30209
Number of exclusions for unclean heads				1015
Number of examinations for body vermin			209	
Number of exclusions for body vermin				108
Number of exclusions for verminous con- ditions				1123

To shew the difference between the actual number of children excluded and the number of exclusions for verminous conditions, the number of exclusions, by Nurse Stewart, from January 1st to July 20th, was 772, while the actual number of children excluded was only 491, one of the children being excluded nine times.

(g) *Teeth.*

As will be seen from the accompanying chart, the amount of Dental Caries is enormous and in not a single age period are there less than 64 per cent. of the children with some caries, and with the present-day knowledge of the far-reaching effects of septic teeth, it is impossible to over-estimate the importance of something being done to remedy this trouble, and there is no doubt that much of the debility and ill-health in after years finds its origin in Oral Sepsis during childhood. In some cases children are found with as many as 16 decayed teeth and it will be seen that the average number of decayed teeth varies in the different age periods from 4.4 per child to 2.3. Conservative dentistry is an extreme rarity amongst children attending Elementary Schools, as will be seen from the number who have had their teeth stopped. Very little attention seems to be paid to the school-child's mouth and some of the conditions found are truly lamentable. The number of cases that have been advised to seek treatment will be seen to be extremely small, the reason being that only the worst cases have been recommended to seek treatment as one knows from sorry experience the utter futility of trying to get anything done. The majority of parents cannot afford a dentist's fee and the only alternative is to take the child to some hospital, with the loss of a day's work in many cases. It must also be realised that if the children were examined with a dental probe and mirror, the figures would be very much greater than they are at present. I see no possible means of dealing with this enormous mass of morbid material except by the establishment of a clinic. It must be remembered that Conservative Dentistry amongst children, if left till the tooth is badly decayed, is apt to be a painful process, whereas if it is done as soon as decay shows itself there is little or no pain accompanying the treatment, and experience has shewn that if conservative treatment is to be of any use it must be done in the earliest possible stages because if the child is put to any considerable amount of pain, the tender-hearted mother is apt to bring her attendances to an abrupt conclusion owing to the child's not unnatural qualms at a repetition of the pain inflicted at the first visit. It is only within the last two years or so that medical men have been

brought to realise the grave and far-reaching effects of septic teeth, and the only thing which has prevented treatment being carried out is the appalling extent of the trouble to be dealt with.

The following is a copy of the card which is given where treatment is advised for the treatment of dental caries.

WIMBLEDON EDUCATION COMMITTEE.

DEFECTIVE TEETH.

Decayed teeth are a serious menace to the health of the child, causing Dyspepsia, partly from the constantly swallowing of the discharges from decaying teeth and partly from the swallowing of half-chewed lumps of food due to the tenderness of the teeth and gums, and the desire of the child not to put pressure on them. In addition there is the loss of rest, and pain resulting from decaying teeth which further interferes with the child's health.

The Medical Officer has to-day examined your child.....and finds that he has.....decayed teeth; you are, therefore, urged to seek the advice of a properly qualified Dentist, with a view to remedying this condition.

Date.....

TABLE X.

AGE.	TEETH.								
	Per-centage with decayed Teeth.	Aver-age number of decayed Teeth.	Stopped	Abc-esses and Sinuses in Jaw.	Over-crowd'd	High Arch.	H'tchin-sonian.	Irr'gul'r	Open bite.
5	65·6%	4·4	—	·56%	—	—	·28%	—	·28%
13	75·3%	2·3	2·6%	—	15·6%	—	—	—	—
14	66·1%	3·7	3·2%	—	3·2%	3·2%	—	—	—

(h) *Nose and Throat.*

The importance of this group, and particularly adenoids, should not be under-rated. Adenoids, and with it in many cases, enlarged turbinate bones are the precursor of many of the cases of deafness which occur in the schools, and there is no class of case which, with proper treatment, yields such

beneficial results to the children. The worst of these cases are often to be found amongst the dull and backward children.

Mouth breathing is much more common than adenoids and is particularly marked amongst the younger children. This is often ascribed to adenoids, but in the poorer children in whom it is mostly seen, it is very largely simply due to habit, as one knows that in the poorer homes where the housewife is busy all day with a large family, the young ones have largely to shift for themselves, and in the cold weather, with a constantly running nose which only gets periodic attention from the corner of an apron, the mouth becomes the common air-channel instead of the nose, and this habit, once firmly established, takes many years to eradicate and one is often struck by the absence of any adenoids or enlarged tonsils in cases which have much of the characteristic expression.

The difficulty in a large number of cases is that after the adenoids have been removed, care is not taken to see that the child makes every effort to use the nose for breathing purposes, and I have asked, in several instances where an operation has been performed, that these children should be put in the front row during drill and physical exercises so that the teacher may be quite sure that the child's mouth is quite closed. Much of the benefit of any operative treatment is lost if the after treatment is not persevered with.

The following is a copy of the card which is given where treatment is advised for the relief of nasal obstruction:—

WIMBLEDON EDUCATION COMMITTEE.

OBSTRUCTED BREATHING.

Obstruction to breathing is due to unnatural conditions of the nose and throat which gradually enfeebles the constitution, blunts the intellect, and prepares the way for many diseases. Removal of the cause of obstruction is followed by marked improvement in the health and intelligence. The School Medical Officer has to-day examined your child.....and finds that he is suffering from.....and you are, therefore, urged to place him under treatment by a properly qualified medical practitioner as soon as possible.

Date.....

TABLE XI.

AGE.	NOSE AND THROAT.							
	Mouth bre'thing	TONSILS.				ADENOIDS.		
		Both Enlarged	One Enlarged	Slightly Enlarged	Remov'd	Marked.	Slight.	Remov'd
5	9%	8.2%	1.4%	6%	84%	5%	5%	2.3%
13	2.6%	3.9%	1.3%	5.2%	—	1.3%	1.3%	1.3%
14	3.2%	1.6%	3.2%	3.2%	—	—	—	1.6%

(i) *Glands.*

The table shows the percentage of cases in which the glands of the neck were enlarged. Some of the enlarged submaxillary glands are undoubtedly tubercular and a considerable number are due to carious teeth or enlarged tonsils. As a rule the enlargement of the cervical glands is due to irritation from the head, chiefly due to vermin or impetigo. It is difficult to make the parents understand that enlarged glands are of any consequence. These glands are, as it were, the watch-dogs of the body and become enlarged as a result of some infection which, if not too great, can be stopped at the first barrier, but if the barrier be broken down, then further infection occurs beyond. People are wont to describe the glands as "coming down" as though they were normally hidden in some recess and only came forth from their hiding-places if the child got a chill or something equally remote from the real cause of the trouble. It is very hard to convince them that their enlargement is due, in the majority of cases, to some removable cause.

TABLE XII.

AGE.	GLANDS.			
	SUBMAXILLARY.		CERVICAL.	
	Enlarged.	Slightly Enlarged.	Enlarged.	Slightly Enlarged.
5	28.7%	22.8%	2.5%	13.8%
13	15.6%	15.6%	—	1.3%
14	22.6%	17.7%	—	5%

(j) *External Eye Disease.*

External eye diseases are practically limited to blepharitis, in most cases due to dirt, and to squint, caused really by defective sight. Cases of blepharitis are a constant source of annoyance as it is extremely difficult to get the parents to pay any attention to this very chronic and disfiguring disease and one finds that in nearly all of these cases, the help of the nurse is required to get anything like persistent treatment.

TABLE XIII.

EXTERNAL EYE DISEASE.	AGES.										
	5	6	7	8	9	10	11	12	13	14	15
Blepharitis	7	1	1	1	—	1	—	—	—	—	—
Blepharospasm	1	—	1	—	—	—	—	—	—	—	—
Strabismus	7	1	—	1	3	—	2	—	—	1	—
Nystagmus	—	—	—	—	—	—	—	—	1	—	—

(k) *Vision.*

Table XIV. shews the number of cases (112) in either sex, and the different age periods, with defective vision worse than $\frac{6}{9}$ for either, or both eyes. The older children are tested with Snellen's test-type at 20 feet, which is correctly measured so that strictly comparative records can be kept. With the younger children it is not sufficiently realised that testing their vision is not only a visual test, but also a mental test, partly due to the want of familiarity with the letters on the Snellen's type and partly due to the lack of mental concentration normal to the young child. It must also be borne in mind that the letters used in the Snellen's type are not those with which the children are first familiar, all the letters in their earliest reading being printed in what is known as "lower case" type. In order to overcome these defects I devised the following test card, in which it will be seen that the test letters are entirely drawn from the five vowels which are the letters they are most familiar with, and printed in "lower case" type.

THE INSPECTION EYESIGHT TESTS.

(Snellens)

90 Metres

300 Feet



36 Metres

120 Feet



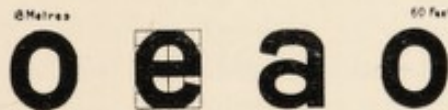
24 Metres

80 Feet



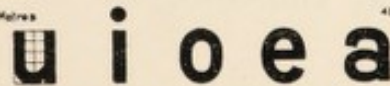
18 Metres

60 Feet



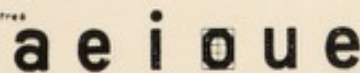
12 Metres

40 Feet



9 Metres

30 Feet



6 Metres

20 Feet



Copyright Published by the Central Educational Co. Ltd. Derby

Even with such a type, fallacies are apt to enter in owing to the want of concentration of the child and it is important to get someone to point to the letters whilst the test is being conducted and at the same time to leave a complete margin of white background round each letter. One finds

from experience that the person who is pointing, that is, either the nurse or teacher, almost invariably puts the pointer or finger touching the letter and partly obscuring it. Very often the subtle influence of a sweet will produce the necessary concentration, and $\frac{6}{6}$ will be visualised, whereas all the wiles and blandishments of the inspectorial staff had realised nothing higher than $\frac{6}{12}$. It has also to be realised that to the youngest children these letters represent sounds and it is necessary for the nurse to be absolutely familiar with these, otherwise she is apt to be quite at sea when testing the younger children. With this form of test-card I have little difficulty in testing the vision of a child who has been in the school but a few weeks. In all cases, each eye is tested separately and children wearing glasses are tested with the glasses on. Amongst the poorer children it is very common to find the spectacles bent out of shape, and in cases of astigmatism this is often responsible for headaches, and great care should be taken to see that in these cases the spectacles are put right.

A certain number of cases are seen by a local doctor, through the instrumentality of the I.C.A., and a certain number privately, but the majority of them go up to the London Hospitals, thereby losing a large amount of time, and amongst the poorer classes this is a very real sacrifice, as it often means a day's work for the mother, in addition to the expense of getting there. Unfortunately, amongst some of the older girls, there is a great objection on the part of the parents to the provision of spectacles, as they say it jeopardises their chances of going into service. The same argument has been raised in a few instances, with regard to the boys, the parents stating that employers do not want short-sighted workmen.

The following are copies of the cards, one of which is given where treatment is advised for the relief of defective vision:—

WIMBLEDON EDUCATION COMMITTEE.

(Card 1)

NOTICE OF DEFECTIVE EYES.

The School Medical Officer having examined.....reports defective eyes, which may get worse, and for which you are advised at the earliest opportunity to seek proper medical advice as to the advisability of wearing glasses or adopting other means of relief.

It is particularly requested that a parent or some other responsible person should accompany a child when medical advice is sought.

Date.....

Other Side:—

Please take this card to the Doctor.

You are cautioned against the grave risks children may incur by wearing glasses which have not been prescribed by a doctor.

When you take your child to be tested for spectacles, the Doctor usually orders either drops or ointment to be used at home. It is most important that you should follow out exactly the directions given with the bottle or box. If you have not done so the Doctor, at your second visit, may be unable to prescribe the spectacles. Disappointment and waste of time are the result. Be careful, therefore, to use the drops or ointment exactly as directed.

Signature of Doctor treating the patient.....191 .

WIMBLEDON EDUCATION COMMITTEE.

(Card 2)

SPECIAL NOTICE OF SERIOUS DEFECT IN VISION.

The School Medical Officer having examined.....reports a defect in Vision likely seriously to affect not only progress in school, but future prospects in life, and you are strongly urged to seek *immediate medical advice* as to the advisability of wearing suitable glasses.

It is particularly requested that a parent or some other responsible person should accompany a child when medical advice is sought.

Date.....

Other side, similar to Card No. 1, above.

TABLE XIV.

Ages.	5.		6.		7.		8.		9.		10.		11.		12.		13.		14.		TOTALS. ALL AGES.	
	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G
Vision.																						
6-12 Both Eyes	3	—	—	—	2	—	2	2	—	—	2	—	—	—	—	—	2	1	3	2	14	8
6-18 " "	1	—	—	1	1	—	1	1	—	—	—	—	—	—	—	—	—	—	1	—	4	2
6-24 " "	—	1	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	2	3
6-36 " "	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
6-60 " "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6-6 and 6-12	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1	3	—	5	2
6-6 " 6-18	1	—	—	—	1	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	4	—
6-6 " 6-24	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	2	—	—	1	3
6-6 " 6-60	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	2
6-6 " nil	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—
6-9 " 6-12	—	1	—	1	1	—	2	2	—	—	—	—	—	—	—	—	—	—	3	1	11	7
6-9 " 6-18	—	—	—	—	2	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	3	3
6-9 " 6-24	—	—	—	—	—	—	—	1	3	—	—	—	—	—	—	—	—	—	—	—	3	2
6-9 " 6-36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1
6-9 " 6-60	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	1	1	3	1
6-9 " nil	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
6-12 " 6-18	—	—	—	1	—	—	—	1	1	—	1	—	—	—	1	—	—	—	—	—	2	5
6-12 " 6-24	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	2	1
6-12 " 6-36	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	1
6-12 " 6-60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
6-12 " nil	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—
6-12 " P.L. only	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
6-18 " 6-24	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	3
6-18 " 6-36	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	2
6-18 " 6-60	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
6-24 " 6-36	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—
TOTALS (Vision)	5	5	4	5	8	4	6	9	8	4	7	4	1	4	3	4	8	6	12	5	62	50
With Glasses	4																					

(l) *Ear Disease.*

Table XV. shews the number of cases of Otitis Media. Fortunately there are not a great number of these cases, but most of them are extremely troublesome owing to the difficulty in getting treatment, and it is only by the nurse attending to these cases that any satisfactory results can be obtained. As a rule these cases occur in the poorest homes where the mothers are at work all day. The extreme importance of getting this condition attended to is that it is in many cases the precursor of serious brain trouble, often with a fatal result.

The following is a copy of the card which is given where treatment is advised for the relief of Ear Disease.

WIMBLEDON EDUCATION COMMITTEE.

EAR DISEASE.

Continued discharge from the ear is due to inflammation of parts of the hearing apparatus. If neglected this leads in most cases to deafness and often to inflammation of the brain as a result of the inflammation spreading to a thin portion of bone which separates the ear from the brain. It is hardly necessary to remind you of the severe handicap that deafness is in after-life, not only seriously diminishing the individual's wage-earning capacity, but also many of their enjoyments. The Medical Officer has to-day examined your child.....and finds that he is suffering from discharge from theear. You are, therefore, urged to place the child under the care of a properly qualified medical practitioner at once and to persevere with the treatment until a cure is effected.

It is particularly requested that a parent or some other responsible person should accompany a child when medical advice is sought.

Date.....

TABLE XV.

EAR DISEASE	AGES.										
	5	6	7	8	9	10	11	12	13	14	15
Otitis Media.....	1	2	—	.	1	—	1	—	1	—	—

(m) *Hearing.*

Table XVI. shews the number of cases with defective hearing. One of the most satisfactory experiments carried out during the year was that of a girl aged 13 who was in Standard IVb, and the results are best described in the report

of the Headmistress of the School with samples of her Dictation. In this case I instructed the teacher to put the child further and further from the front until she was put in the furthest corner of the room near the window, so that when the teacher was addressing her, the light was on the teacher's face. By this means the child was entirely dependent on lip-reading for ascertaining what was being done and I regard this case as the particular triumph of the whole year's work, the child now being a bright intelligent child, taking part in everything that is going on.

Head Teacher's Report.

"D. was admitted into this school, being then 13 years old, very deaf, very sullen-looking and inclined to think everyone was against her. The Class Teacher and I imagined we should have great difficulty with her.

"Of course her attainments were far below the average girl of her age, but I put her into Standard IVb as she was too big to be with little ones.

"She was placed in the front row of the class, that she might hear as much as possible, but most lessons were a blank to her I am afraid, and Dictation almost a failure, she used only to get one or two words down occasionally.

"After testing her hearing, doctor inquired as to where was her position in class. He then asked me to get her into the back row where she would have to take all her commands more from watching her teacher than from hearing. We have tried this steadily ever since, and the dictations below, one part way through the experiment, and the second nine months after the commencement, will furnish an example of the great gain to the child that has accrued from this treatment.

"I may add, D. now looks bright and happy and is a different girl from nine months ago."

DICTATION TESTS.

They all grow in such similar shapes and clusters that it is a most difficult, nay, impossible, thing for a person once lost to (*the*) recover his bearings; and *worst* than all, the *draght* is *terriable* so that thirst *were* cause a more painful death than even hunger. Stout men, *sturted* *exprollerer*, have been known to lie down famished, to die in this inhospitable forest; and what could be the fate of the poor children?

SECOND DICTATION TEST AFTER NINE MONTHS.

When the elder brother was carried past the places that the blacks had pointed out, his account of their wanderings and adventures exactly agreed with what the natives had inferred. He said that this whole time they had been without food, and had had only one drink of water—perhaps from the “pitcher-plant” which has a wonderfully-shaped cup, that holds water.

TABLE XVI.

	AGES.										
	5	6	7	8	9	10	11	12	13	14	15
Total number with Defective Hearing	6	2	1	3	1	3	4	—	5	3	—

TABLE XVII.

AGE.	DEFECTIVE HEARING.					
	VERY DEAF.		DEAF.		SLIGHTLY DEAF.	
	Boys.	Girls	Boys.	Girls.	Boys.	Girls.
5	—	—	—	1	2	3
13	—	1	3	—	1	1
Total ...	—	1	3	1	3	4

(n) *Speech.*

Table XVIII. shews the number of children whose speech was defective. Amongst these are classed the thick speech of the child with nasal obstruction, and the other curious abnormalities which occur from time to time. Many of the defects in which a child cannot say certain sounds are undoubtedly due in many instances to the strange idea, unfortunately so common, that it is necessary to talk to an infant in a curious language composed largely of absurd sounds which the fond parental mind perverts from ordinary every-day English with the idea that the developing intelligence of a child

can grasp it better than the language which it will have to use during the greater part of its life, and these speech defects are, in many cases, extremely difficult to eradicate.

There was only one case of stammering seen during Medical Inspection proper, although others were seen during Class-room Inspection and are not recorded here as they would vitiate the statistics for Medical Inspection. The majority of those cases are not of a severe type and could all be cured with a little patience. In every case examined the child was made to sing or intone some sentence, when the trouble disappeared.

TABLE XVIII.

	AGES:										
	5	6	7	8	9	10	11	12	13	14	15
Number of Children with Defects of Speech	21	5	3	7	6	1	2	3	7	—	—

(o) *Mental Condition.*

Table XIX. shews the percentage of children with the various stages of mental incompetence. The really dull and backward children are one of the most serious problems in our schools and I feel very strongly that some special provision should be made for these children. In nearly every case their mind is entirely a "motor" mind, that is a mind which grasps nothing which the child does not actually physically perform. It must be borne in mind that, from their earliest days, these children's amusements and education at home have been almost entirely "motor" rather than "sensory," their amusements and toys have all been "motor" in character. Books, and sensory amusements of that type, were practically unknown in their earlier training. I must say that I feel very strongly that the principle of rushing these children up according to their age is absolutely bad. These children are the ones which want the greatest possible attention and can be made into good, efficient, self-supporting citizens, but I am convinced that our method of dealing with the majority of them is simply helping to swell the ranks of those who are heading for what Mrs. Sidney Webb trenchantly terms "the morass of destitution." Everyone of us has intimate acquaintance with the parable of the house builded upon the rock, but in dealing with these children, despite our knowledge of the consequences, we are very busy building houses

upon the sand. It is absolutely impossible to rear any kind of educational structure without a sound foundation, and personally I must say that I view with considerable misgivings the results, both to the individual and to the State, of these jerry-built educations we are erecting for many of these children. Before a child of this type has grasped the fundamentals, which have to be conveyed to him in quite a different way to the ordinary child, he is moved into a higher standard, there to add a few more bricks of imperfect knowledge to his jerry-built structure. What is the position of a teacher with a large class of children and three or four dull and backwards who should be at least three standards lower down in the school? He must either pay special attention to these backward children and leave the rest of the class, or else, as is generally the case, must do the normal work of the class and leave these children to follow as best they can. I would most earnestly ask the Committee to think seriously of taking this "heavy goods traffic" off the line as it only obstructs the "fast traffic" of the normal child. If we had some separate classes on the lines of the German *Furderklassen* we should be doing untold good to these children as we should make sure that their educational foundations were secure before beginning to build another story, and the educational superstructure they require is of a quite different character to that required by the normal child, at the same time we should leave the teachers to devote their time to the normal children of the school, to their advantage. There is undoubtedly a disadvantage in allowing children much older than the ordinary standard to be doing the same work, and associating with children much younger than themselves, but at least, under these conditions, they make sure of an educational foundation.

TABLE XIX.

AGE.	MENTAL CONDITION.		
	Dull.	Backward.	Mentally Defective.
5	56%	—	28%
13	13%	3.9%	—

(p) Heart and Circulation.

Table XX. shews the number of cases of Heart Disease discovered during Medical Inspection. Practically all the cases of Organic Disease are those of mitral incompetence.

Cases of heart disease discovered during Medical Inspection are very difficult to deal with as it is very often a questionable point as to whether they are better out of school or in, and much depends on the home from which the child comes as to what is best for it, and amongst the poorer people it is extremely difficult to get them to realise the importance of a suitable occupation being chosen for the child. In one case I excluded a boy from school on account of bad Heart Disease only to find that he was carrying large bundles of papers about as a street-vendor. I at once saw the parents and pointed out the serious risk to the boy, but they replied that it meant 5/- a week to the home. I got them, however, to realise what the boy's future would be and they promised to keep him quiet at home, but in a short time he was again discovered carrying papers. In such cases there appears to be nothing left, after you have appealed to such decent feelings as the parents possess, but to institute proceedings under Section 12 of the Children's Act.

In some cases there was a history of previous rheumatism, but in the majority there was no history to be ascertained and the parents were completely ignorant of any serious trouble.

TABLE XX.

AGE.	HEART DISEASE.					
	ORGANIC DISEASE		HAEMIC MURMUR		EXO-CARDIAL	
	Boys	Girls	Boys	Girls	Boys	Girls
5	4	7	—	—	1	—
13	1	1	—	2	—	—
Totals ...	5	8	—	2	1	—

(q) Lungs.

The statistics under this heading are extremely variable and fallacious as it depends at what time of the year the younger children are examined, as during the winter time a number were found to be suffering from bronchitis in various degrees, and again, if during the warm weather a sudden cold snap occurs, it is surprising how many of the younger children examined are found to be suffering from slight bronchitis. Well-marked cases of consumption have not come under my notice as most of them were already out of school, but some

few appear at Southey Hall. The majority of cases put down under the heading of phthisis are those in which the symptoms are somewhat indefinite and in which a real diagnosis can only be made by continued observation. Common though tuberculosis be in children, consumption with clinical signs is one of the rarest diseases encountered. One comes across a large number of children which the French class as pre-tubercular, and it is one of the difficult things to know what to do with these and the definitely tubercular cases. Short of an open-air school there is practically nothing which can be done in the district and the question of dealing with this class of child is a sound financial proposition as these are the children who, in after years, form the bulk of our consumptive poor and it is far cheaper to attend to them in their earlier days than it is in after years when they are definite victims of the disease.

TABLE XXI.

AGE.	LUNGS.					
	PHTHISIS.		ENLARGED VEINS ON CHEST.		BRONCHITIS.	
	Boys.	Girls.	Boys.	Girls.	Boys	Girls.
5	3	3	8	1	3	3
13	1	—	—	—	—	—
Totals ...	4	3	8	1	3	3

(r) *Nervous System.*

Nervous diseases may be said to have been practically non-existent in the year's work. Only one case could really be classed under this heading, and that was a case of slight hydrocephalus.

(s) *Tuberculosis.*

Chart XXII. shews the number of cases coming under the head of tuberculosis. Several cases are shewn in which the veins are definitely enlarged over the chest, either on one side or both, which are generally ascribed to some deep-seated bronchial glands. It will be seen that no notice is made of enlarged submaxillary glands under the heading of tuberculosis although the number found to be enlarged was very great. This is due to the fact that it is impossible to say how many of them are due simply to septic teeth or tonsils or how many to premature tuberculosis.

TABLE XXII.

AGE.	TUBERCULOSIS.	
	PHTHISIS.	? PHTHISIS.
5	1·7%	·56%
13	1·3%	1·3%

(t) *Rickets.*

It is an extraordinary fact that well-marked rickets is not more often seen considering what the population is in certain parts of the district. Bow-legs and knock-knees are extremely rare.

(u) *Deformities, Spinal Disease, etc.*

A number of cases of slight scoliosis were seen, some of which, however, on careful examination, disappeared when the boots were taken off, having been caused by unequal heels. Practically all the cases were slight in degree.

TABLE XXIII.

Showing Abnormalities found during Medical Inspection.

ABNORMALITY.	AGES.									
	5	6	7	8	9	10	11	12	13	14
Scoliosis, Severe	—	—	1	—	—	—	—	—	—	—
„ Slight	2	—	2	3	1	—	1	1	1	4
Right Side of Chest, flat and smaller. Right Shoulder dropped. Old Empyoema										
Scar in right side at back ...	—	—	—	—	1	—	—	—	—	—
Asymmetrical	—	—	—	—	—	—	—	—	1	—
Sternal Depression	4	1	3	—	—	1	—	—	—	—
Flat Chested	2	—	1	1	—	1	—	—	—	—
Pigeon Breast	1	2	—	—	—	—	—	—	—	—
Rickets	1	—	—	—	—	—	—	—	—	—
Rosary Ricketty	1	—	—	—	—	—	—	—	—	—
Torticollis corrected by Operation	—	—	—	1	—	—	—	—	—	—
Accessory Auricles	—	—	1	—	1	—	—	—	—	—
Supernumary Nipple	—	1	—	—	—	—	—	—	1	—
Harelip Operated on	1	—	—	—	—	—	—	—	—	—
Bifid Uvula	—	—	1	—	—	—	—	—	—	—
Complete transposition of Viscera	—	—	1	—	—	—	—	—	—	—
Bell's Palsy	—	—	—	1	—	—	—	—	—	—
Deformed Toes	3	—	—	—	—	—	—	—	—	—

(v) *Infectious or Contagious Disease.*

The only cases found during Medical Inspection were one case of Whooping Cough and one of Mumps. The reason why there are such a small number of cases of Impetigo and Ringworm seen at Medical Inspection is that they are excluded from school, directly they are found, by the School Nurse, and so do not appear for Medical Inspection. Such cases are here recorded as had not been seen or discovered by the Nurse.

TABLE XXIV.

INFECTIOUS OR CONTAGIOUS DISEASE.	AGES.										
	5	6	7	8	9	10	11	12	13	14	15
Ringworm	4	—	—	1+?1	2	1	—	—	—	—	—
Impetigo	1	—	—	—	—	—	1	—	—	—	—
Pertussis	1	—	—	—	—	—	—	—	—	—	—
Mumps	1	—	—	—	—	—	—	—	—	—	—

(w) *Other Disease or Defect.*

Table XXV. gives the list of other diseases and defects found.

TABLE XXV.

TABLE SHEWING OTHER DISEASES OR DEFECTS
FOUND DURING MEDICAL INSPECTION.

DISEASE OR DEFECT.	5	6	7	8	9	10	11	12	13	14
Abnormal Gait	1	...	...	...	...	...	...	...	...	...
Anæmic	11	...	...	...	...	...	...	...	...	...
Birth-mark—Left Arm and Hand	1	...	...	...	...	...	...	...	...	...
Burns	2	...	...	...	...	1	...	1	1	...
Delicate	2	...	...	1	...	...	...	...	...	...
Diurnal Incontinence	1	...	...	...	...	...	...	...	...	...
Enlarged Jugular—External ...	...	...	...	1	...	...	...	...	...	...
Factitious Urticaria .....	...	...	...	...	...	...	...	...	1	...
Fissured Tongue .....	...	...	...	...	...	...	...	...	1	...
Geographical Tongue	1	...	...	...	...	...	...	...	...	...
Glands in Groin .....	...	...	...	...	...	...	...	...	1	...
Fractured Left Clavicle, 2nd time	1	...	...	...	...	...	...	...	...	...
Mole at Root of Nose .....	...	1	...	...	...	...	...	...	...	...
Multiple Moles on Chest .....	...	...	1	...	...	...	...	...	...	...
Multiple Papillomata, Forehead and Arms	1	...	...	...	...	...	...	...	...	...
Nævus in Back	1	...	...	...	...	...	...	...	...	...
„ on Face .....	...	...	...	2	...	...	...	...	...	...
„ on Chest and Left Arm ...	...	...	...	...	1	...	...	...	...	...
Right Ptosis .....	...	...	...	...	...	...	...	...	1	...
Scar of Operation Right side of Neck .....	...	...	...	...	...	...	1	...	...	...
Scar of Operation for Right Inguinal Hernia .....	...	1	...	1	...	1	...	...	...	...
Scar of Operation for Tuberculosis, Left Ankle .....	...	1	...	...	...	...	...	...	...	...
Scar of Operation for Intussusception	1	...	...	...	...	...	...	...	...	...
Scar of Operation for Double Hernia .....	...	...	...	1	...	...	...	...	...	...
Scar of Appendicitis Operation .....	...	...	...	...	...	...	1	...	...	...
Scar of Old Stacke Operation, Jugular Tied .....	...	...	...	...	1	...	...	...	...	...
Scar of Old Tracheotomy Wound .....	...	2	1	...	...	...	...	...	...	1
Scar of Supra-Pubic Lithotomy .....	...	...	...	...	...	...	...	1	...	...
Supra-Acromial Dimples	3	...	...	...	...	...	...	...	...	...
Suppurating Sores on Left Heel .....	...	1	...	...	...	...	...	...	...	...
Tonsillitis	1	...	...	...	...	...	...	...	...	...
Ulcerated Nose.....	...	...	...	...	...	...	...	...	1	...
Very Hairy Back.....	...	...	1	...	...	...	...	...	...	...
½d in Oesophagus, 4 months	1	...	...	...	...	...	...	...	...	...

E.—“ General review of the relation of home circumstances and social and industrial conditions to the health and physical condition of the children inspected, so far as facts bearing on this point have come under notice.”

The large number of mothers who go to work in the laundries, which are the chief industry in the district, has an important bearing on the physical well-being of the children. It is found that nearly all the cases which are most neglected, particularly those who are excluded from school for any particular condition, are children whose mothers work at a laundry. Particularly is this so in the case of widows, the children being left practically all the day unattended and the women are too tired to do much when they come home. Time after time in the most troublesome cases we have to deal with in respect to unclean heads, the mother gives us the excuse that she is at the laundry all day.

F.—“ Review of the methods employed or available for the treatment of defects, such as defective eyesight, carious teeth, nasal obstruction or adenoids, tonsillitis, discharging ears, pediculosis, ringworm and other skin diseases, including an account of the action of School Nurses in obtaining or assisting in the treatment of such defects.”

For the medical treatment of defects, the following agencies are available in the district:—

The Local General Practitioner.

A comparatively small Provident Dispensary.

Two Cottage Hospitals, which treat a number of cases of tonsils and adenoids.

The I.C.A.A. through whom a certain number of defects in vision are treated by a local practitioner, and other cases sent to homes or Hospitals.

The Poor Law Medical Service.

Outside the district there are the London Hospitals, and it is to them that a very large number of the cases referred for treatment go.

It might be thought that with these various agencies to deal with the different defects requiring treatment that there would be little difficulty in any case in which a defect was found, receiving treatment, but the fact remains that despite all our efforts, only 50 per cent. of those requiring treatment received it. The greatest difficulty is with the chronic conditions such as blepharitis, ringworm, running ears, and skin

diseases. The bulk of the children suffering from these complaints come from the poorer homes and the parents cannot afford the doctor's fees for the continuous attendance that is necessary, and even if they are in a dispensary the doctor's instructions are seldom carried out. With regard to the hospitals it is not realised what a fearful waste of time is involved in taking a patient to a London hospital. The commonest history one hears is as follows:—The mother has to lose a day's work to take the child, and, on the score of expense, they catch the workmen's train in the morning. They have to loiter about till 11 o'clock, then see the doctor about 12 when they are given an out-patient's ticket to see the visiting physician or surgeon, who does not come to see the out-patients till 1.30, and they may think themselves quite lucky if they leave the hospital between three and four o'clock, absolutely dead-beat with the day's work. Under such circumstances can it be wondered at that, unless the illness appears serious, to the parents, that they put off getting anything done as long as possible. Certain cases are taken up to the hospitals by the I.C.A., but there is another question involved in all this, and that is that it is quite unnecessary, if provision were made locally, for any of these cases to be taken out of Wimbledon. What I find happens here is that the parents are told by philanthropic individuals to take their child to such-and-such a hospital, which gives the parents the idea that the practitioners in Wimbledon are not capable of dealing with their complaint, and this idea is spread from one to another to the detriment of the practitioners in the district. I would state that the occasions in which it would be necessary for any child to be taken out of the district to have its ailment treated are extremely rare. Everything necessary for the welfare of the school-children can be carried out in the district and I would suggest that the I.C.A. consider the advisability of enlarging its scope to that of a Care-Committee, and if they could find the funds I could arrange that all these cases are treated locally, and I could assure them of better value for money expended than they have every had before. The question of a School Clinic is one which wants careful consideration, and although I am the firmest believer in parental responsibility I would ask what parental responsibility in these matters you can expect in this direction from a family whose total income never rises above 22 or 23 shillings per week, and be they never so industrious, they have all their work cut out to keep themselves clean and respectable, and it is all very well to say that for these there is the Poor Law Medical Officer available and that medical relief does not disenfranchise but be it said to the everlasting honour of the British working man, that, as a rule, nothing will induce him,

except the direst necessity, to have anything to do with the Poor Law. The great trouble is that the majority of diseases which give most trouble to the Education Department are the curse of a doctor's life and of absolutely no interest except to those connected with education.

Ringworm has given a large amount of trouble to the Department, and has been responsible for great loss of attendance. The increase of numbers during 1910 as compared to 1909 is not, I think, due to an increase in the number of cases existing in the schools but to the fact that cases which had hitherto been overlooked have been brought to light, and since the institution of the School Centre a very large proportion of the work has been caused by the supervision of these cases. With the rigorous system of inspection of every child applying for admission to the schools, and the periodic inspection of the classes by the nurse and myself there is practically no chance for any case to escape for long, and if the teachers are suspicious about any case which they come across between our visits, they are sent to the Clinic on the following Thursday.

In order to prevent any possibility of friction between myself and the practitioners of the district over certifying for the re-admission of the cases of ringworm, I advised the Committee to insist that no child should be re-admitted after it had been excluded for Ringworm unless it had been certified as microscopically free from infection. This was done, arrangements were made with the bacteriologist to report on specimens sent and the expense was provided for in the estimates, and not a single case has been re-admitted from that time unless it has been microscopically free. This has led to an entire absence of friction, and the cases that are under the treatment of the local medical men are almost all sent up to me to pass or not. The wisdom of this strict examination has been shewn by the fact that I have had to exclude some cases that had been certified as free by the London Hospitals, where no specimen hairs have been examined, and some of them have remained infectious for months. Some of the cases were so widespread and had been under treatment so long that when the matter was reported to the Committee, they resolved to set aside £10 every six months for the treatment by X-Rays of cases which were considered suitable, and arrangements were made with Dr. Findlay, of Wimbledon, to treat these cases at a fee of one guinea per child, no matter how many applications were required, in fact, for treatment until cured. As this was treatment under the meaning of the Memorandum, application was made to the Board of Education for sanction, and one of the Medical Inspectors of the Board came down on December 19th, and the scheme is awaiting the formal sanction of the Board.

There is no more disappointing work in connection with School Inspection than the treatment of Ringworm. Very few, indeed, of the parents can afford the prolonged treatment necessary by medicinal means or the expense of the application of X-Rays. If they go to the Hospitals the treatment is, in the majority of cases, by ointments, and this is seldom properly carried out by the parents. A large proportion simply use domestic remedies, of which the three commonest are Ink, Iodine, and Washing Soda, many go to the chemists, and are treated by them with results as futile as those produced by domestic treatment, some go to the Club Doctors, and a large proportion of these are told to get Oleate of Copper, some are blistered, and some told to paint with Acetic Acid.

The general attitude of the parents is one of despair at getting no benefit, and a willingness to try anything that is advised, no matter how outlandish, or incongruous, but each in turn is cast aside unless early improvement is apparent.

The great trouble with the parents is that they cannot understand that the Ringworm Infection is still present if the hair has grown over the patch. This is particularly so in the case of some of the girls, and any treatment is rendered difficult because the parents will not cut the hair so that the scalp can be got at, one such case in better circumstances, having been out of school three years.

As is usual, a large proportion of the cases occur in the poorer homes.

The question is, what can be done to combat the disease which is so disastrously interfering with the educational life of those afflicted with it? As far as the medical profession of the district is concerned, they would be only too glad to be rid of the majority of the cases as they are cases which cause infinite trouble, and from which neither kudos nor cash are to be obtained, and if treatment were provided by the Education Authority I am convinced the Doctors would recommend the majority of cases. As to treatment for the worst cases, there is nothing but X-Rays, and, in many of the cases of lesser degree, this is the only practical method of treatment as the parents are too busy or too careless to carry out any other treatment.

The recent cases can, in a large proportion of the cases, be treated by drugs which should certainly be tried, and such a statement as that made by Dr. Parry at the Congress of the Royal Sanitary Institute at Brighton, that there was no treatment of any use except the X-Rays, is utterly wrong, and it has to be borne in mind that although Sabouraud and all his followers have been curing thousands of cases of Ringworm without any untoward results to the brain, because the dose is accurately measured, yet there are a certain number of

parents who are strongly opposed to the treatment by X-Rays, as the result of sensational articles in the public Press about the sufferers from X-ray Dermatitis and Cancer as a result of unmeasured doses, and it would be most unwise to attempt to force X-Ray treatment on these cases. In addition it is not advisable to use X-Rays in children under five years of age.

In order to meet these objections, I made enquiries respecting the prospects of treatment by Copper Ionisation, but this seemed quite useless, one of the best known workers in this field writing:—

“ The fact is, the ionisation of *metallic* salts in this disease is not satisfactory. They form a coagulation at the surface which prevents proper penetration, so that a number of the follicles escape and subsequently cause a re-infection. The ionisation of Salicyllic Acid by the negative pole seems to be more satisfactory, but on account of the pain it is only applicable, in children, to early cases when the disease is confined to a few small areas.

“ For School work, the idea with most of us is that ionisation is not a practical method of dealing with Ringworm.”

The administrative method of dealing with these cases is that every case is excluded, whether it be Ringworm of the head or body, until it is cured. Every case is seen by me periodically at the School Centre as it is found that a certain number go and see a Doctor once or twice, and, as there are no immediate results, on the score of expense fall back on domestic remedies or go to the Chemist. Practically no case is allowed to go more than a month without being examined, and in this way I manage to keep a constant watch over every case in the schools. In a certain number of cases no real effort is made to get the condition cured. Each child attending the Clinic has a separate card, different in colour from that given for all the other diseases, showing the condition, what treatment is being obtained, the progress of the cases, the Day School and Sunday School, and whether the persistence of the condition was diagnosed simply by removing hairs and naked eye inspection or whether by microscopical examination. Each child is also given a white card with the name, address and school of the child, and stating the date on which it is to attend again. This is taken home, and is a check for the School Attendance Officers, as in looking up absentees they ask to see the white card, if it is produced and shows the date for the next attendance, well and good, if the date shown has past, there is trouble.

The final examination of hairs before re-admission is always microscopical, if found free from infection, a simultaneous note is sent to the Education Office, the Parent, and

the Head Teacher of the School the child attends, should the hairs however turn out to be still infective, a notice is sent to the parents informing them of the fact, so that they must present themselves on the date which I have provisionally filled in on the white attendance card.

The cases are all numbered consecutively in a Ringworm Register, each card bearing the corresponding number. As the children come to the Clinic, they present their white attendance card, which is then placed with their office ringworm card, and the two are then given to the Nurse and then handed on to me. After I have seen the child and filled in the two cards, they are handed to the clerk who keeps a record of the numbers, and as I manage to see an average number an hour, he fills in the approximate time at which they are to attend on the date which I have filled in. I find it often important, in the Winter, to tell the fair-haired cases to come in the early part of the afternoon owing to the difficulty of examining them in the artificial light.

Since it was found that some of the cases that were excluded were attending Sunday School, I have communicated with the Superintendents of the various Sunday Schools with a view to co-operation.

Below will be found a summary shewing the number of cases seen for Ringworm, and the number still infective at the end of the year.

No. of cases returned after the first examination as cured (head)	...	...	...	51
No. of other cases returned to school during the year (head)	...	...	...	57
No. of cases of ringworm of the body (returned to school)	...	...	...	9
No. of cases still infective at the end of the year	...	...	...	54
				<hr/>
Total number of cases seen during the year				171
				<hr/>

The 51 cases returned to school as cured after the first examination were cases which had been under treatment but which had been sent to me for examination previous to re-admission to school. The average length of time absent for each case during 1910 was 22·3 weeks. This figure would have been higher if the total absence from school in any district had been taken into consideration as for instance, two children had been out of school for three years but had only been in the Wimbledon district rather less than a year, but taking the estimate of 22·3 weeks it will be found that our

loss of school attendance was 84·7 weeks, or taking the average grant lost per child as £1 14s. 0d., a loss in grant for the year of £144.

As has been mentioned before, Southey Hall has been used as a School Centre for the periodic inspection and examination of cases, and running ears have been syringed, wounds dressed, and such work as a district nurse can carry out has been done.

The number of examinations from June 30th to the end of the year was 558.

Table XXVI. gives a list of the various ailments of the children who attended at Southey Hall during the year.

TABLE XXVI.

DEFECT.	NUMBER OF CASES.	DEFECT.	NUMBER OF CASES.
Ringworm	171	Hæmorrhage from Nose and Throat	1
Abscess on Forehead	1	Habit Spasm of Nose	1
Adenoids	5	Hydrocephalus, slight	1
„ removed.....	1	Impetigo	12
Anæmia	4	Impediment in Speech	1
Asthma	2	Lupus	2
Bradycardia, slight	1	Lamella Cataract	1
Blepharitis	8	Lichen	1
Bronchitis	1	Malnutrition	3
Bronchial Catarrh	1	Mumps.....	3
Bruise, Left Buttock	1	Morbus Cordis	4
Conjunctivitis	3	Musical Inspiration all over Right Back, increased at base, ? cause	1
Corneal Ulcer	1	Onychia Suppurating	1
Chorea	8	Ophthalmia	1
Chicken Pox	1	Otalgia	1
Colic.....	1	Otitis Media	6
Cyst in Left Cheek, ? Fibroma	1	? Phthisis	6
Cardiac.....	1	Phthisis (1 had Tuberculin)...	5
Debility	3	Rickets.....	5
Defective Sight	7	Scar of Small Abscess	1
Deaf	3	Scabies	1
Epilepsy	3	Septic Finger	2
Epistaxis	1	Sesamoid Bone in Left Hand	1
Erythema	2	Tonsils, enlarged	3
Eustachian Obstruction	1	„ „ Cough	1
Fainting Attacks	2	Tuberculosis, Old Healed ...	1
Fibroid Disease of Left Lung	1	Tubercular Peritonitis	1
Feverish	1	Traumatism	1
Feverish Cold	1	Twitching of Face.....	1
Glands ..	1	Two Weals, Left Side of Buttock ..	1
Glands in Neck	5	S. T. Old Tubercular Hip ...	1
Glands in Neck, Sore on Head	1	Post Varicellar Debility	1
Inflamed Corvical Glands,		For Special School.....	1
Nits	1	?	3
Tubercular Glands in Neck...	2		
Glands in Axilla	1		
Glands in Groin	1		
Headache.....	1		

Number of attendances at Southey Hall made by children with Ringworm ...	282
Number of attendances made by other cases	276
Total number of attendances at Southey Hall	558

MALNUTRITION.

This has not been dealt with personally except that during the summer months a few cases which I recommended for feeding were fed at a separate centre, otherwise the feeding is carried out as a voluntary matter by a Committee. During the summer, when these few children were fed, care was taken to see that the meals had an educative influence, in addition. Table-cloths were provided, and flowers put on the table, and it was most gratifying to find that one's usual experience was confirmed and that the children lived up to their environment. Their behaviour improved in every way and it was the rarest thing to find the cloth much soiled at the end of the week. The meals were good, but, owing to the small number the cost worked at about 3½d. per head.

The number of children fed by the Voluntary Committee was 558, the average attendance being 309. The meals were provided from January 10th to March 17th (except Friday, January 21st), and from November 30th until the end of the year in 1910. The number of scholars that received meals was 558 and were drawn from the following schools:—

Dundonald Road, Boys'	17
„ „ „ Girls' and Infants'	19
Pelham, Boys'	26
„ „ Girls'	6
„ „ Infants'	12
Special	11
Cottenham Park	7
Effra Road, Girls'	1
„ „ „ Infants'	1
Haydon's Road, Boys'	138
„ „ „ Girls'	53
„ „ „ Infants'	67
St. Mary's, Mixed	21
„ „ „ Infants'	14
Queen's Road, Boys'	53
„ „ „ Girls'	79
„ „ „ Infants'	63
	558

There is a great difficulty in the administration of these meals as the cramped quarters precludes anything but the simplest dietary from being provided and much as one would wish to see a more satisfactory state of affairs with regard to the nature of the food supplied, the administrative difficulties stand in the way. The dietary in use as drawn up by the School-Meals Committee is as follows:—

Monday.	Pea Soup and Bread.
Tuesday.	Pea Soup and Bread.
Wednesday	Cocoa, Bread and Jam, and slice of Currant Bread.
Thursday.	Pea Soup and Bread.
Friday.	Cocoa, Bread and Jam, and slice of Currant Bread.

INFECTIOUS DISEASE.

A full report on infectious diseases in the schools is contained in the Report of the Medical Officer of Health on pages 6 to 30, with a special report on the limitation of an outbreak of Measles in the Central Infants' School.

Now that school-closure is being limited as much as possible and attention concentrated on contacts and carriers, I feel very strongly that the time has come when efforts should be made to re-insert Clause 101*, the abolition of which is a serious handicap to Education Authorities which are conscientiously doing their duty on the advice of their School Medical Officer, in respect to infectious disease. No grant ought to be stopped for children excluded on the advice of the School Medical Officer for the purpose of limiting the spread of infectious disease and further, the Medical Officer should not be put in the position of knowing that by his actions for the protection of the public, his Authority is being pecuniarily penalised.

H.—“ Review of the methods adopted and the adequacy of such methods for dealing with blind, deaf, mentally or physically defective and epileptic children under the Acts of 1893 and 1899.”

MENTALLY DEFECTIVE.

The School for Mentally Defectives at Queen's Road, has been practically full the whole year, the average number on the books being 42·8, and 18 children were admitted during the year. The great difficulty in dealing with this School is that the numbers are not large enough to separate the

different grades, particularly the older boys, and there is no great facility for teaching these older boys useful trades so that it has been difficult to detain the children, and the Committee have not insisted on the detention of the children beyond the age of fourteen. One of the greatest troubles we have to deal with in the Special School is the verminous condition of some of the children who, week after week, have to be excluded on account of body vermin. The usefulness of such a school as this is entirely hampered by the present state of the law. It seems to me it is hardly necessary to emphasize the danger of educating certain of these defectives up to a certain pitch and then casting them loose upon the world to propagate their species and to increase the number of defectives that have to be dealt with. Until there is power of detention for mentally defectives I am afraid that, in a large number of instances, we are doing more harm than good.

I.—“ Arrangements for Open-Air School.”

There is no open-air school in the district at present but my predecessor reported strongly in favour of one and the Committee are fully alive to the necessity of dealing with the class of children whose needs such a school meets, and I was asked to report on the whole question and the report which I made appears as an appendix.

SCHOOL NURSES.

The School Nurses have been supplied from the South Wimbledon District Nursing Association, there being two Nurses devoting their whole time to the work and one devoting part of her time visiting Cottenham Park and the Central Schools but early in the year the services of the part time nurse were dispensed with and the whole work carried out by the whole time nurses. One nurse devotes herself to accompanying the Medical Officer on all visits to the schools for the purpose of Medical Inspection and Class-room Inspection and attends at Southey Hall on Thursday afternoons, and devotes the rest of her time to following up cases referred for treatment and attending to such cases as Chronic Otorrhoea and Blepharitis. The other Nurse attends on the fixed admission days at each school and examines each candidate for admission and no child with a dirty head is allowed in the school. She also does any dressings, etc., which may be required in the schools and makes periodic examinations of all the children's heads in the various schools. Any spare time she has is devoted to following up cases referred for treatment. Nurse Stewart who was responsible for examining the heads, and new admissions, left in July and was succeeded by Nurse

Thackeray, who left at the end of the year. Nurse Mercer, who was appointed in February, resigned at the end of the year, and she and Nurse Thackeray were appointed as School Nurses under the L.C.C.

I much regret the loss of Nurse Stewart and Nurse Mercer, both of whom were eminently fitted for the work which they had to carry out, and it is a great pity that the conditions of service under the L.C.C. should be such as will attract our best nurses just when they are becoming of the greatest use to the Committee. School work is somewhat peculiar in its requirements, and as far as I am concerned I want the School Nurses to become, in the words which the Board of Education uses as its ideal for the School Medical Officer "a pervading influence making for better conditions in the homes and lives of the people," and I trust the Committee will see their way to make the conditions of service such that we will be able to retain our nurses and not have a constant succession of fresh ones who have no time to become a real influence in the district. With regard to the work done during the past year, I wish to place on record my very high appreciation of the work done by Nurse Mercer and Nurse Stewart.

The following is a summary of the Nurses' work during 1910:—

New Scholars seen on admission	...	1731
Visits paid to Schools	... ..	661
Visits paid to homes	... ..	1601
Dressings done at Schools	... ..	766
Heads examined	... ..	30209
Children seen for various ailments	...	634
Number of Medical Examinations at which Nurse Mercer assisted	... ..	1472
Number of Examinations at School Clinic at which Nurse Mercer assisted	...	558

Finally, I wish to acknowledge the cordial co-operation of the Teachers in all matters in which the welfare of the children has been concerned, and the best results for Medical Inspection can only be obtained by the Teachers and myself regarding each other as co-workers in the effort to better the conditions of the children.

I would also wish to tender, to the members of the Committee, my thanks for their support and interest in the various phases of my work.

ELWIN H. T. NASH,

School Medical Officer.

REPORT OF THE SCHOOL MEDICAL OFFICER ON OPEN AIR RECOVERY SCHOOLS.

In discussing the subject of Open-Air Recovery Schools, the first question that requires to be answered is, what is going to be obtained in return for the expenditure of the ratepayers' money? The difficulty at present is that the balance sheet is not entirely in the hands of one authority, the Education Authority at present having to bear the brunt of the expenditure, and the profit due to this investment will only be shown in years to come in the figures of the Public Assistance Authority, as the class of case which at present is admitted to those schools is that which causes endless trouble to the Poor Law Authorities owing to damaged health and the necessity for its relief and support of them, and any family for whom they may be responsible. Since 1904, when the first School was started in Charlottenberg, no Authority which has undertaken this class of work has had anything but good to say for the results obtained. Since the opening of the London County Council School at Bostal Wood, six schools were opened in 1908, three in London, one in Halifax, one in Bradford, one in Norwich, and one in the early part of 1909 at Sheffield. With the exception of the one at Norwich, which is limited to mentally defective children, the others are for the physically defective or delicate children, many of whom in the light of recent researches appear to be affected with tuberculosis to a small extent from which complete recovery can be made. The class of case which would be benefited by this type of school may be seen by taking the lists of those admitted into Bostal Wood, the first school opened in England, and in the Bradford and Sheffield Schools, which are the two latest of which there are any public records.

Children Admitted into Bostal Wood School.

Glands in neck palpably enlarged	63
Pallor sufficiently great to indicate considerable Anæmia	47
Enlarged Tonsils	27
Adenoids (nasal obstruction)	7
Heart Disease	6
Lungs—Phthisis	1
Lungs—Bronchiectasis	1
Slight Lung Symptoms, clearing up during attendance, and probably due to Adenoids	4
Enlarged Glands in Chest	4
Chorea (St. Vitus' Dance)	2

Bone Diseases :—

Old cervical caries of spine	...	...	1
Old necrosis	...	...	2
Lateral Curvature	...	...	1
Eye diseases, Corneal Ulceration, and Blepharitis	...	...	4

Thirteen children showed marked signs of tuberculous diathesis, one of hydrocephalus, one of congenital syphilis, and four evidence of damage through infantile rickets.

Similarly the following conditions were found in the forty children attending the open-air school at Bradford :—

Phthisis (consumption of lungs) present in	2
Tuberculous Peritonitis	1
Tuberculous scars on neck	2
Bronchitis	1
Adenoids	7
Otorrhœa	2
Rickets	5
Anæmia	18
Enlarged Submaxillary Glands	28
Eczema	2
Blepharitis	2
Keratitis	1

and the following at Sheffield School :—

Anæmia and bad nutrition	...	...	43
Oral Sepsis	...	...	13
Tuberculosis of Lung	...	...	3
Tuberculosis of Glands	...	...	9
Convalescing after Pneumonia	...	...	2
„ „ Kidney Disease	...	...	1
„ „ Operations for Enlarged Tonsils and Adenoids	...	...	4

So far these schools are only opened during three months or so in the summer, but the idea is to extend the period, as has been done in Germany, into the colder months of the year. It must not be imagined that the open-air recovery schools as such are going to produce the excellent results which have been recorded simply as a mere educational establishment under excellent hygienic surroundings, but one of the greatest factors in the result is produced by the careful and sufficient feeding of the children during the time they attend the school, the idea being to take a child as early as possible in the morning, keep it at school in the open air all day, give it three square meals, and then allow it to return home in the evening, and this matter of meals forms one of the principal items of expense in

running an open-air recovery school. It is found that in most cases the weight of the children rises steadily and rapidly, but if there are holidays or the child is away for any reason, in the majority of cases the weight becomes stationary or more often drops until the child returns to school and its daily meals. With regard to the cost of the schools the items at first sight seem large, but a special grant is obtained from the Board if a school is established and recognised under the Elementary Education (Defective and Epileptic Children) Act of 1899, which has a further advantage that in the first place the children must be selected for admission by the Medical Officer of the Authority, who certifies that only such cases are chosen as are incapable, by reason of physical defect, of receiving proper benefit from instruction in the ordinary Public Elementary Schools, in addition to which manual instruction must be provided, and the school can be kept open during ordinary school holidays. Another great point gained as the result of taking this school under the Elementary Education (Defective and Epileptic Children) Act is that the number in each class is limited to 25.

Much importance has been attached to the site of such a school. Personally, as long as the school has a large open space, I do not attach half so much importance to the site as to open air and sunshine, although if possible a site outside the town on rising ground has certain advantages. There are, on the other hand, advantages in having the school as near as possible to the district from which the pupils are brought. The buildings necessary for such a school can be of the simplest description, simply a shed to keep off the sun and rain during certain lessons, and the necessary cooking accommodation, lavatories and baths. It is important in one sense that the children should not be open to the public gaze, and therefore feel that they are being made show beasts of. One of the most important things that is insisted on in all open-air schools is a long mid-day rest in the open air. Practically all the authorities, German and English, have provided for this purpose that unique abomination of discomfort called the deck-chair. One or two have realised their unsuitableness and have not followed with sheep-like devotion the example which has been set in other places, but have provided tarpaulins or rugs so that the child may sleep on the ground. This, to my mind, although an advance on the extreme discomfort of a deck-chair, is not exactly the sort of thing for these children, many of whose bones are none too well covered as a result of under-feeding. The extreme discomfort and impossibility of obtaining complete rest is shown by the photographs accompanying the report of the London County Council. The discomfort in a deck-chair is mainly caused by the front bar causing pressure

under the back of the legs. Personally I suggest that this problem be solved by the provision of three strong parallel rails, between which two rows of Willesden canvas hammocks can be suspended so as not to be more than 18in. from the ground. This would give absolute comfort to the children, and the hammocks could afterwards be rolled up and put away. The expense would be slightly greater in the first instance, but the hammocks would last much longer and the difference to the children's rest would be enormous. The extreme importance of this mid-day rest is due to the fact, as pointed out by Miss Alice Ravenhill, of the insufficiency of sleep that most of these children get in their own homes largely due either to late hours or to broken sleep due to crowded beds, stuffy rooms, or constant irritation from vermin.

The principle underlying the open-air recovery schools is that which underlies the modern treatment by Vaccines and Bacterio Therapy, namely, that of increasing the power of the individual to fight his own battle against disease, or, to be more strictly accurate, the power of the white cells to devour the bacilli of the invading disease, and the whole open-air treatment of phthisis is based on this, and the attempts to attack the disease by means of strong and nauseous medicines has given place to such simple means as stimulating the appetite with simple bitters and the provision of good and suitable food to satisfy the appetite created in order that the individual might fight his own battle, and it is from this point of view that we realise that the feeding of the children is one of the most important functions of the open-air recovery school. The German system has been rather to give a succession of smaller meals throughout the day; this has given place in the English schools to the more ordinary routine with respect to meals. With regard to this feeding an important point must not be lost sight of, which unfortunately is so often overlooked by those attempting to feed children under the Act, and that is, even when children are greatly underfed they will not touch the food unless in the first place it is appetising, and, second, it is a food with which they are familiar. This second point has often led to children who are on the borders of starvation being put aside as not wanting their food, when in reality it was that the jaded stomach rebelled at something with which it was unfamiliar, and it is important that whoever has charge of the feeding should understand this point and realise that the children must be educated to the foods which are provided, and a little tactful persuasion, with the example of the other children, will soon overcome these difficulties. It is only those of us who have had the feeding of large numbers of underfed children, and also children in better circumstances, with unfamiliar foods who realise how much depends on this matter; for instance, such things as porridge and haricot beans, whilst

of the most nourishing description, are foods with which the majority of the poor are entirely unfamiliar. A further point which is often overlooked in these dietaries is the deficiency of fat, for it is a fact that most of the children who come within the purview of these schools require not only the full allowance of fat, but a greatly increased quantity. In the case of the younger children sugar is very often insufficiently provided. These meals can be provided at a very small cost if they are scientifically worked out under the supervision of somebody who understands the children and methods of cookery. In addition to the bare provision of food these school meals should be made an opportunity for inculcating into the children cleanliness and the decencies of table manners; in fact, here is the opportunity to realise that education means far more than simply "learning things from books." I would strongly advise that in every case decent spoons and forks and tablecloths be provided and the children be encouraged to place flowers on the table whenever possible. I have been immensely struck by efforts in this direction and the result of the general behaviour of the children. I have seen a tablecloth which had been in use for five days by children drawn from the slums of Whitechapel which would have been a credit to the nursery of any upper-class house, and much can be accomplished by the fact that the teachers spend the whole of the day with the children. In every case where children have gone back from an open-air school to an ordinary Public Elementary School the teachers have remarked on the great improvement with regard to order, cleanliness, self-help, punctuality, and good temper.

With regard to the day's work it should run somewhat after the following:—

8.45 a.m.	...	...	Breakfast.
9.30 — 10.30	...	...	Ordinary school work.
10.30 — 10.45	...	...	Play.
10.45 — 11.45	...	...	Ordinary school work.
11.45 — 12.15	...	...	Play.
12.15 — 12.45	...	...	Dinner.
12.45 — 2.45	...	...	Rest.
2.45 — 3.15	...	...	Play.
3.15 — 4.45	...	...	School work, outdoor lessons, such as nature study, geography.
4.45 — 5.15	...	...	Play.
5.15 — 5.45	...	...	Tea.
5.45 — 6.30	...	...	Play.

At the Teachers' Conference in 1909, on the discussion of the open-air schools, one of the most striking features was a speech made by one of the assistant masters of Burleigh House

in which he described, at the opening of the school, the uphill methods and mental fatigue caused by trying to get the children's attention fixed on the work they were doing or even to interest them, and his description of these children as time went on, brightening up and taking such interest in their lessons, until, as he said, at length the fatigue was not produced by vain endeavours to engage their attention, but by trying to satisfy the constant demand on the part of the children for more information.

It must be realised that the curriculum is altogether different to that of the ordinary elementary school. These schools have brought into prominence the fact which has only just been realised by educationalists as a whole that the ordinary child's brain learns most from its motor side and not from its sensory, this being particularly the case in the lower type. In these schools everything is taught, as far as possible, by being done by the pupil himself rather than having the fact constantly reiterated by the teacher, as, for example, geography is taught by a map of England being constructed in a large trough or in the garden, the hills and rivers are all filled in in relief, and the exports and imports are all there in actual samples, such as grain, coal, iron, cotton, and little boats are provided for the children, those containing imports are placed in the position pointing towards the point of entry, and those containing exports pointing from the point of exit, and each little vessel has to be loaded up with the actual exports or imports as the case may be. Such is the relish with which the children learn these otherwise dry facts in connection with the various towns and the permanency with which they retain them, that derision and often buffetings are the result of an incorrectly loaded cargo.

Physical Results.—The two most obvious results under this heading are the increase in weight and the increase in the hæmoglobin, the hæmoglobin being the red portion of the blood and the most important part concerned in the conveyance of oxygen inhaled by the lungs to the nutrition of the body as a whole. If this is deficient it will be readily understood that the whole body suffers from what may be termed oxygen starvation. The results obtained from the various schools are rather striking, the following being the results taken from the Bradford records:—

Hæmoglobin on Admission (100 being taken as "normal").

	Boys.	Girls.
Less than 70 per cent.	1	1
Between 70 and 75 per cent. ...	3	1
„ 75 and 80 per cent. ...	5	6
„ 80 and 85 per cent. ...	6	4
„ 85 and 90 per cent. ...	2	4

Increase in Hæmoglobin.

	Boys.	Girls.
Stationary	1	3
Under 5 per cent.	3	0
5 to 10 per cent.	5	5
10 to 15 per cent.	3	5
15 to 20 per cent.	3	2
20 to 25 per cent.	1	1

In the following is given a summary of the above:—

Average percentage of Hæmo- globin on admission (normal being represented by 100) ...	78	80
Average percentage of Hæmo- globin on leaving	88	90
Average increase per cent ...	10	10

With regard to the increase in weight it must be realised that not every child admitted to such a school is one that is going to show an increase in weight, and as the Assistant Inspector of the Board of Education points out in his report, "Some children may be very good subjects for treatment who nevertheless have good nutrition to start with, others may be even unhealthily heavy as may be seen in the case of ricketty children. One of the children who improved greatly was ricketty and showed practically no increase in weight."

With regard to the cost, the latest results we have to hand are those of Sheffield, in which the working expenses are given thus:—

	£	s.	d.
Salaries of Teachers	67	10	3
Provisions	98	18	0
Conveyance of children	80	7	0
School Equipment	88	14	4
Fuel, Light and Cleaning, and Rates ...	31	7	1
Gross Cost ...	£366	16	8

Less—Estimated £70 in grant and £18 3s. 6d. in parents' contributions.

In looking at these expenses one is struck by the very heavy item of £80 7s. 0d. for the conveyance of the children, but in the case of the Sheffield School it was situated five miles from the town, and if a school is established in Wimbledon this item should at the most not exceed £30, then as to the next large item, school equipment; this at first appears something of a stumbling block, but it must be

realised that practically all this is capital expenditure which will not occur in future years including as it does hammocks, chairs, the necessary school appliances and all the appliances for cooking the meals of the children and staff. Working out the Sheffield expenses it comes to four guineas per head, but with the decreased expenses of conveyance we are likely to have to meet in Wimbledon one may say I think with safety that we could reduce the cost to about £3 6s. 8d. per head. In looking at the money expended on an open-air recovery school one must bear in mind the results that are likely to be accomplished, and one could not do better than quote the result of the Sheffield school from examination made at the end of October, which is:—

Cured	...	...	...	...	...	17
Improved	...	...	...	...	...	32
Same condition	...	...	...	...	...	1

One important matter of hygiene from an educational point of view is the provision of baths for the daily cleansing of the children. This is found to have a very great effect on their health, and also to be a great educational help to the children in the matter of alertness at their work and as a lesson in cleanliness.

