

[Report 1908] / Medical Officer of Health, Handsworth U.D.C.

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Handsworth (England). Urban District Council.

Publication/Creation

1908

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HANDSWORTH
URBAN DISTRICT.

REPORT

ON THE

Sanitary Condition of the District

FOR THE

Year ended December 31st, 1908,

BY

ROBERT A. LYSTER,

M.D., B.Sc., D.P.H.,

Medical Officer of Health to August 31st, 1908,

Fellow of the Incorporated Society of Medical Officers of Health,

AND

W. SISAM,

M.D., B.Sc., D.P.H.,

Medical Officer of Health from September 1st, 1908,

Fellow of the Incorporated Society of Medical Officers of Health.

BIRMINGHAM :

ALLDAY LTD., TYPERS, 128-130, EDMUND STREET.

MEMBERS OF THE HEALTH COMMITTEE.

Councillor W. C. CHANNING, Chairman.

- „ EDWARD ASTON.
„ PETER BENNION.
„ T. HENRY BERRY.
„ A. T. HOLDSWORTH, M.D.
„ W. H. NICKOLDS.
„ DAVID ROSE.
„ THOMAS SILVER.
-

HEALTH OFFICIALS.

Medical Officer of Health—

ROBERT A. LYSTER, M.D., B.Sc., D.P.H.,
to August 31st, 1908.

W. SISAM, M.D., B.Sc., D.P.H.,
from September 1st, 1908.

Inspector of Nuisances—

ALBERT HODGES, Assoc. San. Inst.

Assistant Inspector—

ARTHUR J. GRAY, Certif. San. Inst.

Clerk—


FRANK W. ASMAN.

Superintendent of Cleansing Department—

C. H. WHITWORTH.

Clerk of Cleansing Department—

WALTER OSMAN.



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HEALTH DEPARTMENT,
COUNCIL HOUSE,
HANDSWORTH.

TO THE
URBAN DISTRICT COUNCIL OF HANDSWORTH
IN THE COUNTY OF STAFFORD.

MR. CHAIRMAN AND GENTLEMEN,

We have the honour to present to you the Report upon the Sanitary Condition of the District during the year 1908.

The more important matters to which attention should be particularly directed are as follows :—

1. The inadequate accommodation provided for this Department. There appears to be no doubt that the other Departments have insufficient accommodation for their work, but if that is so it is obvious that this Department suffers worst of all. The matter has been referred to fully in previous Reports, and it will suffice to merely refer to this matter again by stating that the minimum requirements of the Public Health Department should be regarded as three full-sized rooms.
2. It has been found necessary to increase further the clerical assistance in the Department by the appointment of an office boy. The benefit of such an appointment was felt immediately, as it relieved the clerk of a large amount of routine office work that could be equally well done by the boy. The effect of this relief was to enable a considerable amount of arrears to be overtaken in the more important work such as the necessary statistical work of this Department.
3. *Hospital Accommodation.*

Reference is again made to this important matter on page 33. It is necessary again to advise the Council that the provision of the District against such an emergency as a serious epidemic is inadequate. An excellent site has now been acquired for an Isolation Hospital, and it would be greatly to the advantage of the District if some use could be made of this, even if it were only in the form of a reserve building for such an emergency.

4. *Consumption and Cancer.*

These two important diseases are grouped together because one of the most hopeful methods of attacking the problems connected with them is the adequate disinfection of premises that have been occupied by the victims of these diseases. Every effort should be made to educate the public to this end. Doctors in attendance on such cases could greatly facilitate the work of this Department by recommending proper disinfection when death has occurred from either of these diseases, and by advising relations to apply at once for such disinfection to be carried out. It is gratifying to have to record the very considerable help that has been given by many of the Doctors in this way.

In connection with consumption there has now been issued by the Local Government Board the Public Health (Tuberculosis) Regulations, 1908. These have been followed by the issue of a Memorandum by Dr. Newsholme, Chief Medical Officer of the Local Government Board. The issue of these two documents will probably mark a most important step in the history of the crusade against consumption in this country, and if the advice contained in the Memorandum, powers for carrying out which are given in the Regulations, is followed, it will be possible for many Districts to bring about a very considerable diminution in the death-rate from consumption. The more important recommendations are :—

(a) The adoption of a system of voluntary notification of all cases of tuberculosis. Reasonable fees may be paid by all sanitary authorities to medical men for these duties. This matter was referred to in the Report for 1906, and although it is probable that the only really satisfactory method would be a system of compulsory notification, yet the adoption of voluntary notification may be urged in the meantime.

(b) The disinfection of infected rooms and infected articles. If a patient has kept the same room for some time it is extremely likely that he has surrounded himself with a mass of infected material. Proper disinfection will give

such a patient a fresh start. The further disinfection of the rooms and articles on change of address or death of the patient will serve to protect the public against such infection.

(c) The provision of bye-laws prohibiting all spitting in public carriages, halls, waiting rooms, places of public entertainment, etc. The provision and the vigorous enforcement of such bye-laws should do much to prevent the spread of infection.

(d) Educational measures. The education of the public concerning the manner of spread of consumption is urged. The educational measures that are advocated include teaching in schools, the teaching of nurses, mothers, trades unions, friendly societies, and various social groups, and the issue of posters.

(e) Provision of sanatorium treatment. All sanitary authorities have power to provide such treatment in all cases, and it is suggested in the Memorandum that empty rooms or wards of isolation hospitals may well be used for such purposes. If it is decided, therefore, to provide this District with an isolation hospital, such a building could be kept in continuous use by tuberculous cases, when the building was not required otherwise. Extended sanatorium treatment is not at all necessary. In most cases a month's treatment would be quite sufficient, because it is now recognised that the great value of sanatorium treatment lies in the fact that the patient is educated in the proper means to prevent him being a danger to himself and the general public. After proper treatment and education for a month in a sanatorium the tuberculous patient may be regarded as non-infectious.

5. *Development of the District.*

It is still necessary to urge the desirability of seeking powers to guide and to control the development of all building operations in the District. Additional powers in the direction of town planning are urgently necessary. All local authorities should be in the position to be able to criticise the plans of those who are about to develop estates, and such plans should be considered both from

the point of view of the whole district and the neighbouring estates as well as the estate itself.

6. *Poor Law Administration.*

In the Report for 1907 attention was drawn to the need for re-organisation in the relations between the public health and the poor law, and it was suggested that there should be the closest intimacy between the public health organisation and the poor law work. It was also suggested that improved and more easily available means for treating disease among the poor should be devised and that the mere existence of disease, altogether apart from any consideration as to whether it is accompanied by destitution or not, should be sufficient to ensure proper medical treatment. The report of the Royal Commission upon the Poor Law has now been published, and it appears at all events likely that the present methods of poor law administration will undergo very considerable changes in the near future and that the medical work connected with the poor law will be linked up eventually with the public health organisation of the District. There is no doubt that such a development would result in a considerable increase in efficiency and economy.

7. *Notification of Births Act.*

Reference to the work of this Act is made on pages 17 and 18. The working of this Act in this District has been perfectly smooth since the date of its adoption, and there can be no doubt whatever as to its usefulness. It should be remembered that although the total death-rate in this District rose during 1908 from 10 to 10·8 per thousand, yet the infantile mortality decreased from 100 to 90. At the same time the infantile death-rate in England and Wales rose from 118 to 121, and in the 76 large towns it rose from 127 to 128. In the face of such figures it becomes necessary to account for the fact that the experience of this District differs from that of the country as a whole. One reason is undoubtedly the excellent work that has been done by the voluntary health visitor in the District since the date of the adoption of the Notification of Births Act.

8. *Public Health Acts (Amendment) Act, 1907.*

A special Report upon this subject was presented to the Health Committee and special Clauses recommended for adoption in this District. The Surveyor also presented a Report and recommended such Clauses as would be useful to his Department. In the interests of the public health of this District the advantages of all these Clauses are urgently desirable.

Application has been made to the Local Government Board for an order declaring certain sections of the Act to be in force in Handsworth, and the matter is receiving the consideration of the Board.

9. During the year considerable changes have taken place in the Staff of the Public Health Department—Dr. R. A. Lyster being appointed County Medical Officer for Hampshire, and Dr. W. Sisam being elected in his place. The Assistant Sanitary Inspector, Mr. A. H. Chard, left this District in order to take up his duties as Sanitary Inspector for the Rural District of Droxford, and the Clerk, Mr. J. M. Orr, accepted the position of Chief Clerk in the Public Health Department of the Hampshire County Council. Mr. A. J. Gray and Mr. F. W. Asman have been appointed in the positions that were thus rendered vacant.

Lastly it should be unnecessary to point out that money wisely spent in improving the public health, although it neither bears interest nor contributes directly to the relief of the rates, yet it yields an abundant return in the increased well-being of the people, and in happier, healthier, and longer lives, and will, moreover, relieve the rates ultimately, by steadily decreasing the number of those unfortunates who are handicapped in life's struggle by diseased, unhealthy, or undeveloped bodies or minds, and who are continually joining the ranks of the pauper or the criminal classes.

We are,

Mr. Chairman and Gentlemen,

Your obedient Servants,

ROBERT A. LYSTER,

W. SISAM.

ANNUAL REPORT

*of the Medical Officer of Health to the Urban District Council
of Handsworth, Staffordshire, for the year 1908.*

PHYSICAL FEATURES OF THE DISTRICT.

The area of Handsworth is 3,665 acres according to the Ordnance Survey. From a health point of view its situation is an unusually good one, its height above the sea level varying from 570 feet (Holyhead Road) to 300 feet (Witton Road), whilst its subsoil consists mainly of sand and gravel.

The streets are kept in excellent condition and the sidewalks are mostly paved. The District is well supplied with gas and electricity. The water supply is abundant and of first-rate quality.

VITAL STATISTICS.

I.—POPULATION.

The population at the middle of the year is estimated to have been 70,518, giving a density of population of 19·25 per acre. The rateable value of the District in April, 1908, was £289,051 8s.

The rapidity with which the District has grown is shown by the following figures:—

Census 1871 ...	Pop. 14,947 ...	Houses 2,790 ...	Persons per house 5·36
„ 1881 ...	„ 22,896 ...	„ 4,801 ...	„ „ 4·77
„ 1891 ...	„ 32,756 ...	„ 6,771 ...	„ „ 4·837
„ 1901 ...	„ 52,921 ...	„ 11,060 ...	„ „ 4·785
Esti- mated 1908 ...	„ 70,518 ...	„ 15,609 ...	

It was estimated that 1,087 houses were void at the middle of the year.

The population in the several wards was assumed to be as follows :—

	Population.		Occupied Houses.		Void.		Acreage.
Birchfield	16,188	...	3,331	...	303	...	1,137
Heathfield	9,976	...	2,094	...	97	...	230
Murdock	13,171	...	2,650	...	181	...	333
Sandwell	18,057	...	3,756	...	310	...	1,560
Soho	13,126	...	2,691	...	196	...	402
	<u>70,518</u>		<u>14,522</u>		<u>1,087</u>		<u>3,662</u>

There are few manufactories in Handsworth, the largest factory (Kynoch's) being near the Aston boundary draws its employés mainly from Aston. There is no staple industry. According to the census of 1901, the chief occupations of the inhabitants come under the headings of metal and machinery, manufacture of jewellery, and commercial occupations.

II.—BIRTHS.

One thousand five hundred and seventy births were registered in the District during the year—799 males and 771 females. The birth-rate per 1,000 for the year was 22·2. The rate last year was 21·9. The average for the years 1891-1901 was 25·7. The birth-rate in England and Wales in 1908 was 26·5 while in the 76 large towns it was 27·0. The composition of the population of this District is such that the birth-rate should compare favourably with the average for the whole country instead of being 4·3 below, and 4·8 below the average for the 76 large towns. In order to prevent this continually decreasing birth-rate having an immediately serious effect upon the population of the country, it is necessary to devote further efforts to lessen the terrible annual sacrifice of life among infants.

The births were distributed in the various wards as follows :—Birchfield 397, Heathfield 152, Murdock 397, Sandwell 417, Soho 207. The birth-rates per thousand of the estimated population of the several wards were, therefore :—Birchfield 24·2, Heathfield 15·2, Murdock 30·1, Sandwell 23·09,

Soho 15·7. Compared with last year the number of births in Birchfield, Heathfield, Murdock, and Soho wards have increased, while in Sandwell ward there has been a decrease.

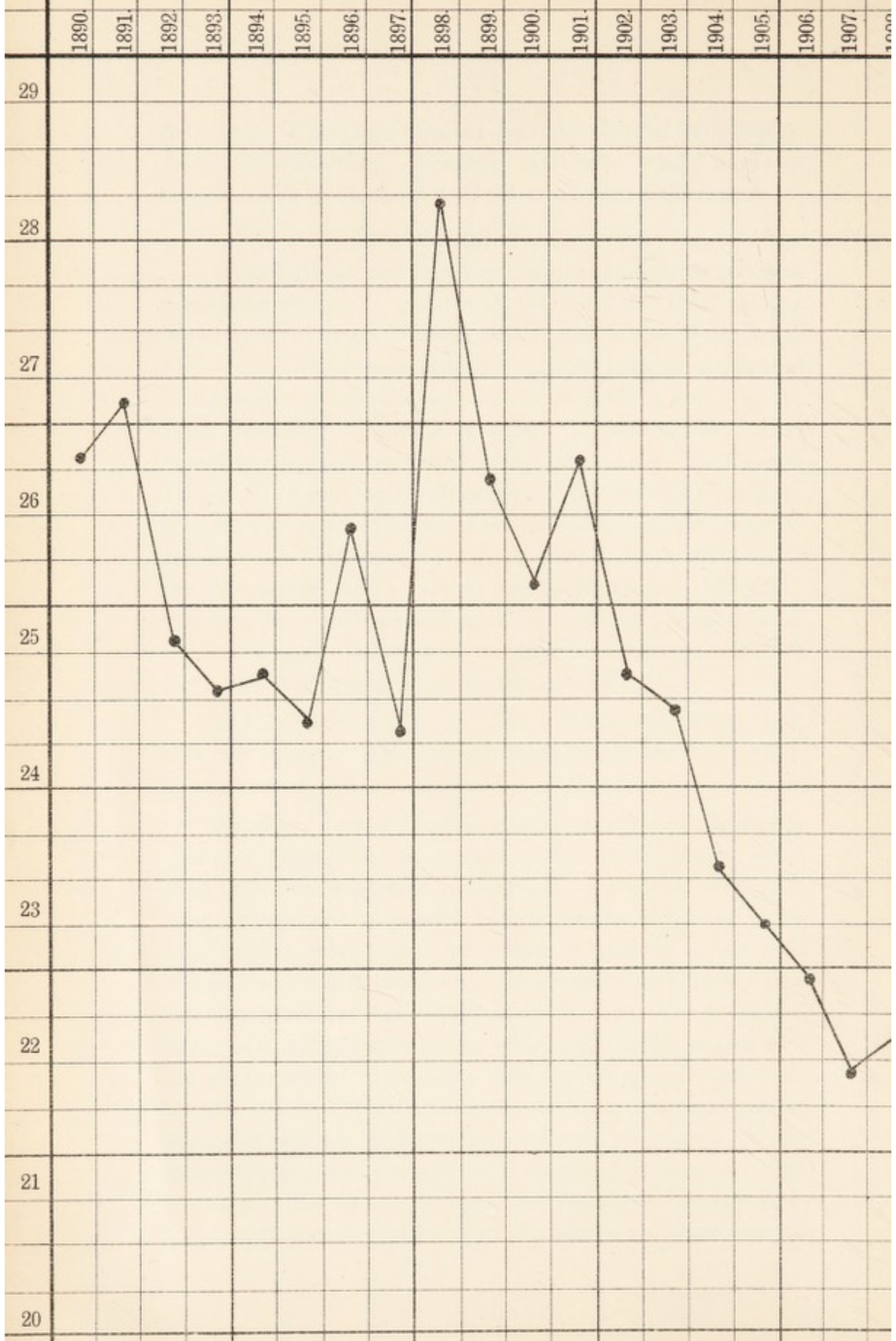
III.—DEATHS.

Seven hundred and sixty-three deaths of residents occurred during the year—375 males and 388 females. Of these 675 were registered in the District, 36 occurred in the West Bromwich Union Workhouse, 11 in the County Lunatic Asylum at Burntwood, 1 in the County Asylum at Stafford, and 3 in the West Bromwich Infectious Hospital. Thirty-five deaths occurred at Hospitals in Birmingham, viz. :—27 in the General Hospital, 1 in the Queen's Hospital, 1 in the Maternity Hospital, 3 in the Children's Hospital, 2 in the Homœopathic Hospital, and 1 in the Orthopœdic Hospital, while 1 death occurred in the City Asylum, and 1 "on the way to the General Hospital." Coroners' inquests were held in 34 cases, *i.e.*, in 4·4 per cent. of the total number. The cause of death was not certified in 10 cases, *i.e.*, in 1·3 per cent. of the whole number.

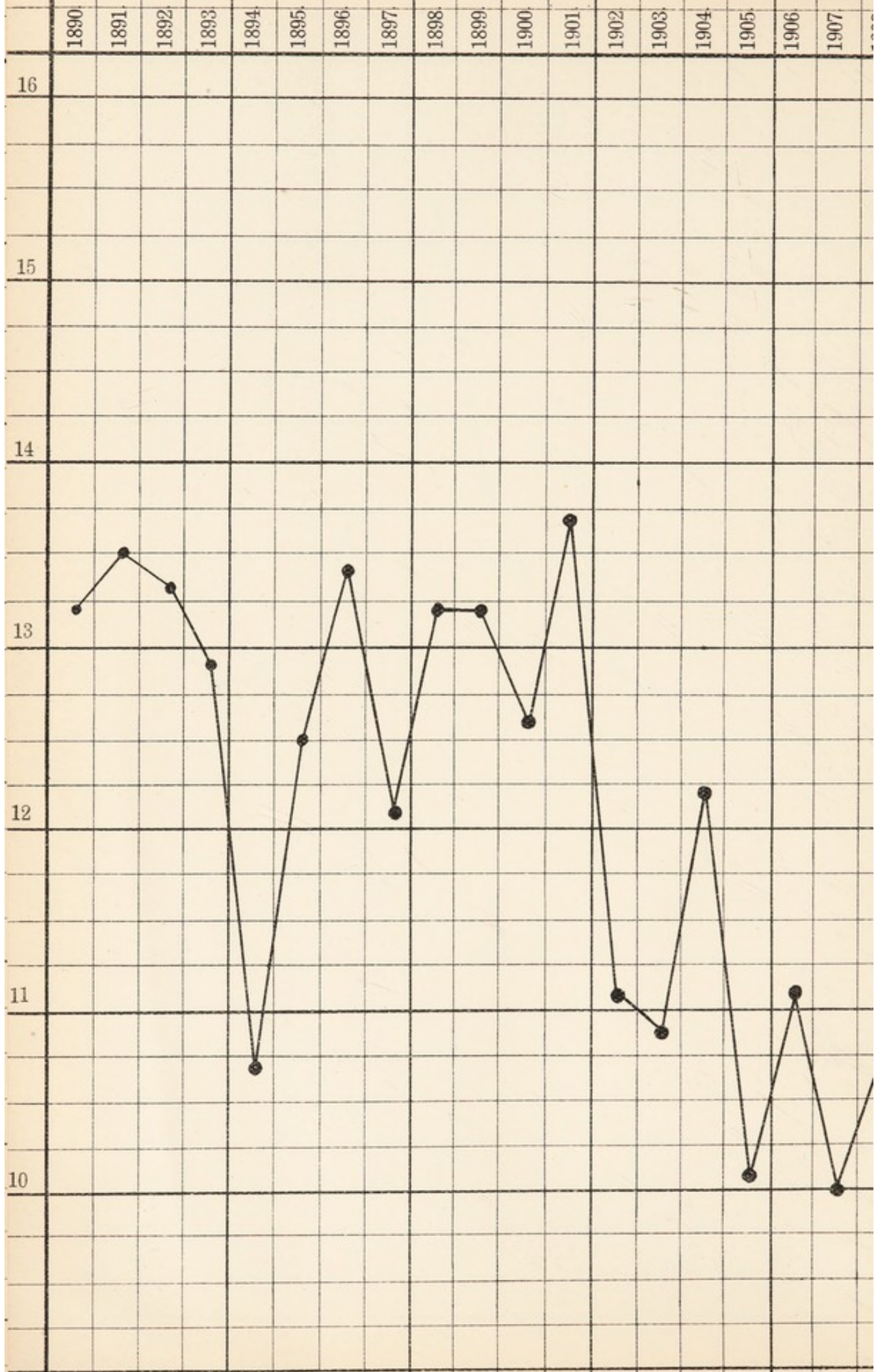
The death-rate was 10·8. The death-rate was 10·0 in 1907, and 11·1 in 1906. The average death-rate in the years 1897-1906 was 12·0.

Although 10·8 represents a very satisfactory death-rate when compared with the average of the whole country, yet it must be remembered that Handsworth, in common with most large aggregations of population, contains an excess of young adults and an unduly small proportion of persons at the most vulnerable ages, and therefore *ceteris paribus* should have a considerably lower death-rate rate than the average. The advantage, so far as mortality is concerned, which any district enjoys over the whole country by reason of the special age and sex composition of its population is capable of being expressed mathematically and an approximately accurate correction of the mortality rates can be made for purposes of comparison. On the basis of the census of 1901, the Factor for Correction, as it is called, for this District is 1·1003, and if the death-rate be

BIRTH RATE. CHART I.



DEATH RATE.—CHART II.



multiplied by this, the resultant figure represents the rate which would probably have been experienced had the age and sex composition been the same as that of the whole of England and Wales. When corrected in this manner, the death-rate of Handsworth for 1908 becomes increased to 11·8. As an offset to the favourable age composition of its population, there is some reason to believe that Handsworth, by its reputation for healthiness, attracts invalids from contiguous districts in sufficient numbers to appreciably affect the mortality returns.

The death-rate in 1908 in England and Wales was 14·7. In England and Wales, excluding the 218 towns, it was 14·7. In the 76 large English towns it was 14·9 and for the 142 smaller towns it was 14·0.

In Table A the birth-rate and death-rate for 1908 are compared with those of preceding years, while Charts 1 and 2 depict the fluctuations which the birth and death-rates have experienced since 1890.

TABLE A.

Years.	Population Yearly.	Births Yearly.	Birth-rate per 1,000 Yearly.	Deaths Yearly.	Death-rate per 1,000 Yearly.
10 Years 1871-80	18,722	611	32·7	280·5	15·2
10 Years 1881-90	27,610	175·4	28·2	359·5	13·2
10 Years 1891-1900	40,445	939·2	27·6	514·3	12·6
1901	53,000	1,403	26·4	724	13·7
1902	56,141	1,392	24·8	627	11·1
1903	59,000	1,451	24·6	642	10·9
1904	61,500	1,436	23·4	754	12·2
1905	65,249	1,483	23·0	661	10·13
1906	66,276	1,500	22·6	740	11·1
1907	69,122	1,516	21·9	693	10·0
1908	70,518	1,570	22·2	763	10·8

IV.—AGES AT DEATH.

Infantile Mortality.—The number of deaths at ages under one year was 142, giving a mortality per 1,000 births registered during the year of 90. With the exception of 1905 when it was 80 per 1,000 births, this is the lowest rate recorded for the District. In 1907 it was 100, and 120 in 1906. The average infantile mortality in the years 1891–1900 was 135. The corresponding figures for previous years are given in Table B, and in graphic form on Chart 3.

The infantile death-rate in England and Wales in 1908 was 121. In England and Wales, less the 218 towns, the infantile death-rate was 110. In the 76 large English towns it was 128. In the 142 smaller towns it was 124.

The deaths of infants occurred in the several wards as follows:—Birchfield 31, Heathfield 15, Murdock 44, Sandwell 31, Soho 21.

TABLE B.

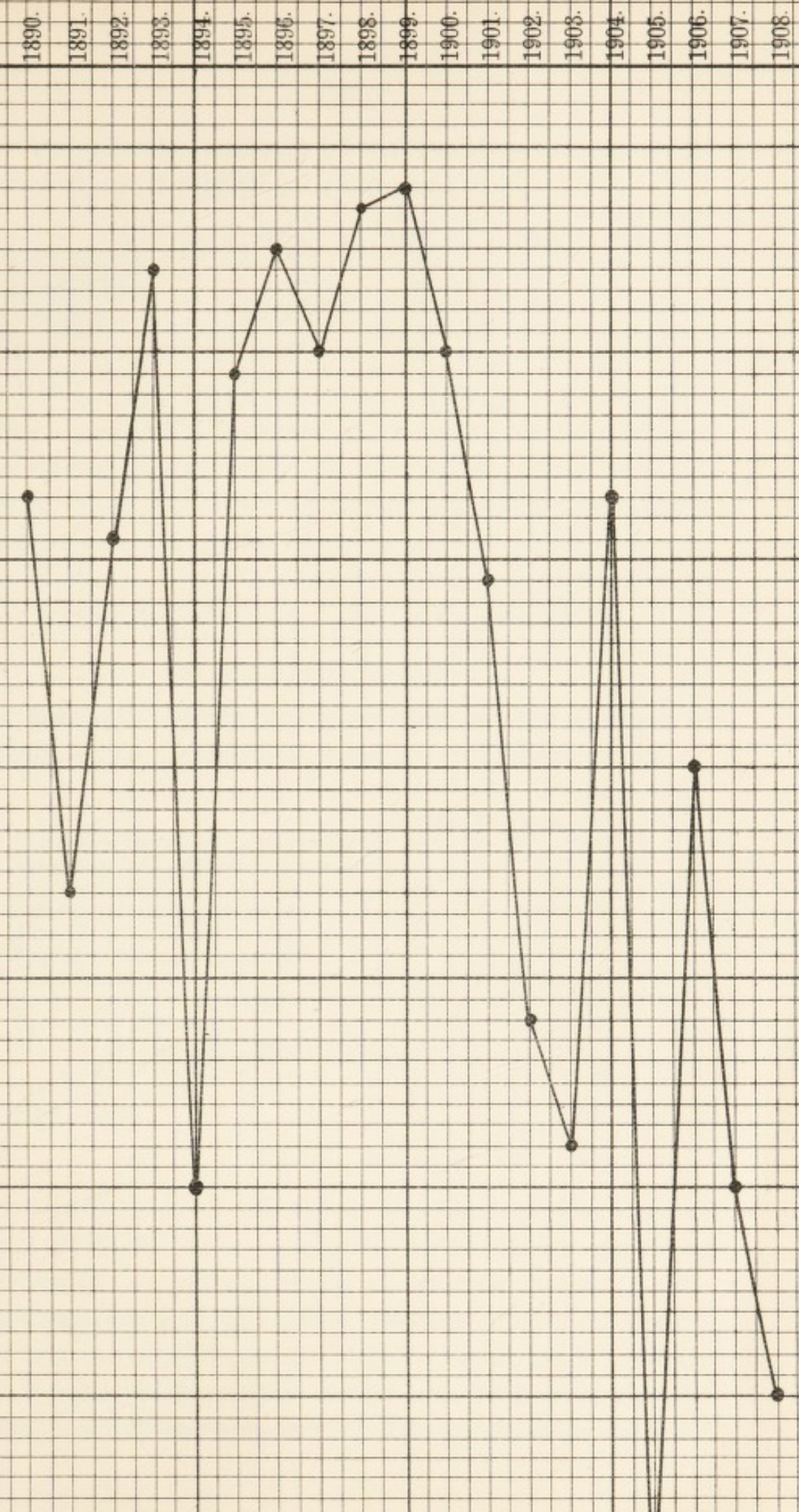
Years.	No. of Births Yearly.	Number of Deaths under one Year, Yearly.	Deaths per 1,000 Births Yearly.
10 Years 1871-80	611	73	119
10 Years 1881-90	775·4	94·1	120
10 Years 1891-1900	939·2	146·3	135
1901	1,403	183	129
1902	1,392	150	108
1903	1,451	148	102
1904	1,436	192	133
1905	1,483	119	80
1906	1,500	181	120
1907	1,516	153	100
1908	1,570	142	90

INFANTILE MORTALITY. CHART III.

Rate per
1,000 Births.

1890. 1891. 1892. 1893. 1894. 1895. 1896. 1897. 1898. 1899. 1900. 1901. 1902. 1903. 1904. 1905. 1906. 1907. 1908.

150
145
140
135
130
125
120
115
110
105
100
95
90
85
80



The infantile death-rates for the several wards may now be compared with the figures for 1897-1907.

| | 1908. | 1907. | 1906. | Average Yearly.
1897-1906. |
|---------------------|-------|-------|-------|-------------------------------|
| Birchfield Ward ... | 78 | 80 | 141 | 125 |
| Heathfield ,, ... | 98 | 93 | 151 | 116 |
| Murdock ,, ... | 110 | 109 | 130 | 152 |
| Sandwell ,, ... | 74 | 118 | 103 | 109 |
| Soho ,, ... | 101 | 92 | 77 | 104 |

Of the 142 infants who died, 45, or 31 per cent., died within a fortnight of birth, and 98, or 69 per cent., died before they reached 3 months old. At ages below 5 there were 206 deaths, 27 per cent. of the whole number; whilst at ages above 65, there were 251 deaths, nearly 33 per cent. of the whole; so that the deaths of children under 5 years and adults over 65 years account for nearly 60 per cent. of the total deaths.

V.—CAUSES OF DEATH.

Infantile Mortality, according to the Causes of Death.—The 142 deaths were due to the following causes:

| | Males. | Females. | Total 1908. | Total 1907. |
|---|--------|----------|-------------|-------------|
| 1. <i>Diarrhœa</i> , including gastro-enteritis | 12 | 9 | 21 | 12 |
| 2. <i>Diseases of Development</i> , premature birth, &c. ... | 19 | 19 | 38 | 55 |
| 3. <i>Debility, Atrophy, Inanition</i> ... | 10 | 7 | 17 | 16 |
| 4. <i>Diseases of Respiratory System</i> ... | 10 | 8 | 18 | 32 |
| 5. <i>Epidemic Diseases</i> (other than <i>Diarrhœa</i>) ... | 4 | 6 | 10 | 12 |
| 6. <i>Convulsions and Meningitis</i> ... | 4 | 6 | 10 | 13 |
| 7. <i>Tubercular Diseases</i> ... | 1 | 2 | 3 | 3 |
| 8. <i>Diseases of Digestive System</i> (other than Enteritis) ... | 5 | 1 | 6 | 0 |
| 9. <i>Suffocated in bed</i> ... | 3 | 0 | 3 | 4 |
| 10. Other causes ... | 12 | 4 | 16 | 6 |
| Totals ... | 80 | 62 | 142 | 153 |

Consideration of the causes of infantile deaths detailed above shows that it is possible to divide them roughly into preventable, non-preventable, and indeterminate classes. In the first category Nos. 1, 5, 7 and 9, giving a total of 37 deaths, may be unhesitatingly placed; while the deaths under heading No. 2 must be regarded as due to ante-natal influences and therefore not directly preventable. The remaining deaths under

headings Nos. 3, 4, 8 and 10 cannot be definitely allocated as they may result from a complication of factors, but it is certain that a considerable proportion is due to preventable causes. It will be seen that although our infantile mortality-rate compares favourably with that of many purely agricultural districts, and is 25 per cent. below that of England and Wales, the irreducible minimum is far from being reached.

Of the 142 infants, 45 having died within fourteen days after birth, in cases where death was due to prematurity or some congenital defect, enquiry was not made as to feeding. Of the remaining 97, 30 were fed at the breast, 63 were brought up by bottle, and 4 were both breast-fed and hand-fed. Of the 21 children who died of diarrhoeal diseases, only 2 were breast-fed.

On the important subject of the care and feeding of infants, a leaflet drawn up in simple language is given by the Registrar of the District to every person who registers the birth of a child. Copies may be obtained gratis at the office of the Sanitary Inspector at the Council House.

Figures showing the rate of infantile mortality are from time to time given to the public and are usually such as to produce considerable sensation for a time. About one-fourth of all the deaths are of children under one year. There are usually about 120,000 deaths in England and Wales every year among children under one year old; about 30,000 of these die during the first six weeks of life and another 30,000 during the following six weeks. In large towns the average rate is such that out of every thousand children that are born, between one and two hundred die before the end of the first year. The causes of this huge mortality are usually stated to be :—

(1) On the part of the mother :

- (a) Deficient food or more commonly improper food.
The small income is often wasted in buying food of small nutritive value.
- (b) Employment of the mothers in industries.
- (c) Alcohol.

(2) On the part of the child :

- (a) Improper feeding. It has been shown conclusively that bottle-fed children are about 30 times more liable to die than breast-fed children.
- (b) Neglect and dirt.
- (c) Indiscriminate use of drugs.

All these causes can be summed up in one word—Ignorance. For over 30 years compulsory education has been tried in this country without apparently increasing the intelligence of the parents or, to any great extent, the health of the offspring. The explanation is that we have lost sight of the essentials of education. Surely the most essential part of education should be a knowledge of the care of the body, the simple means of maintaining health, the avoidance of ill-health and disease, and the care of the children.

It is chiefly by improving educational methods and making people really interested in themselves and their children that improvement in infantile mortality can be brought about. Improvement in sanitary conditions in towns and the surroundings of people can never bring about more than a slight decrease in infantile mortality. It is often stated that people cannot be made temperate by Act of Parliament. It is much more true to say that people cannot be made healthy by Act of Parliament or by beneficial bye-laws of towns. Many people, put into sanitary houses, amid the best of surroundings, will live in a most disgusting way, and the health of infants reared by them is very little better than in the worst slum of a town.

The Notification of Births Act should in course of time prove a most valuable aid to Health Departments in their efforts to diminish the number of infantile deaths, in that it enables supervision to be exercised over infants during the earliest and most critical period of their existence.

The Act directs that the father of the child shall give notice of the birth in writing to the Medical Officer of Health of the district in which the child is born. This notice shall be

given by posting a letter or postcard addressed to the Medical Officer of Health within thirty-six hours after the birth. In default of the father of the child doing this the obligation falls upon any person in attendance upon the mother at the time of or within six hours after the birth. In the event of the other people failing to notify the obligation falls upon the medical practitioner in attendance upon the case.

The above notification of the birth is to the Medical Officer of Health, and is in addition to, and not in substitution for, the registration of the birth in the ordinary way. The births of still-born children have to be notified to the Medical Officer of Health under this Act.

The Act was adopted in Handsworth in May, 1908, and every effort, short of prosecution of defaulters, has since been made to ensure compliance with its requirements. All doctors, midwives, and monthly nurses known to practice in the District have been supplied with stamped and addressed notification forms which reduce the labour of notifying to a minimum. The returns of births *registered* in the District have been regularly compared with the lists of those *notified*, and, in cases of omission to notify, letters of enquiry and reminder have been despatched to the persons in default. Up to the end of the year 90 per cent. of the live-births had been duly notified, a fairly satisfactory result for the first seven months' working of the Act; and in addition 13 still-births, amounting to 1.4 per cent. of the total births, were reported. Still-births not being registrable, their notification cannot be checked by means of the Registrar's returns as in the case of live-births. It is to be regretted that the new Act did not go a step further and compel registration as well as notification of still-births, as for many reasons it is extremely important that accurate knowledge of their occurrence should be available.

From June, 1908, the District has been fortunate in possessing the voluntary services as Health Visitor of a lady qualified for the work both by training and experience. This

lady has visited the homes from which all births, unattended by doctors, were notified, and has given practical advice and assistance to the mothers when such was found to be needful. Up to the end of the year 286 infants were visited and re-visited, and advice on the following matters was given in 105 instances :—

- (1) The advantages of breast over bottle feeding.
- (2) The proper kind of bottle to use and the most suitable food.
- (3) The use of a cot for the baby instead of placing it in bed with its parents (risk of overlaying).
- (4) The necessity of seeking medical treatment in cases of purulent discharge from the baby's eyes.
- (5) The harmfulness of dummy teats, soothing syrups, &c.
- (6) The proper clothing for infants.
- (7) The advantages of personal cleanliness and of keeping the home clean.

The advice was generally gratefully received and faithfully followed, and it is probable that the results are in some measure reflected in the satisfactory infantile mortality figure for the year. There is little doubt that the practical teachings of sympathetic and tactful women, thoroughly trained in all that appertains to the care of infants, afford the most effectual means at present at our command of coping with maternal ignorance and neglect; and as the voluntary services of the lady who has carried on this work here will not be much longer available the permanent appointment of a Health Visitor for the District is greatly to be desired.*

It may be of interest to record that 62 per cent. of the births notified during 1908 were attended by medical practitioners.

* Since the above was written your Council has sanctioned the decision of the Health Committee to unite with the Education Committee in the appointment of a lady to the combined posts of Health Visitor and School Nurse.

Epidemic Diseases.—The seven chief Epidemic diseases caused 60 deaths, giving an Epidemic death-rate of $\cdot 85$.

The Epidemic death-rate in 1908 in England and Wales was 1·29, in England and Wales (less the 218 towns) it was $\cdot 99$, in the 76 great towns it was 1·59 and for the 142 smaller towns it was 1·26.

Table C on page 44 compares the number of deaths from each of the seven chief Epidemic diseases with the deaths of previous years.

In the following table the death-rate of each of the foregoing Epidemic diseases is compared with those of former years.

TABLE D.

| Diseases. | 1876-80. | 1881-85. | 1886-90. | 1891-95. | 1896-1900. | 1901. | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908. |
|-------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Smallpox ... | $\cdot 00$ | $\cdot 11$ | $\cdot 00$ | $\cdot 14$ | $\cdot 00$ | $\cdot 00$ | $\cdot 00$ | $\cdot 00$ | $\cdot 00$ | $\cdot 00$ | $\cdot 00$ | $\cdot 00$ | $\cdot 00$ |
| Scarlatina ... | $\cdot 57$ | $\cdot 33$ | $\cdot 09$ | $\cdot 08$ | $\cdot 10$ | $\cdot 15$ | $\cdot 14$ | $\cdot 22$ | $\cdot 08$ | $\cdot 04$ | $\cdot 07$ | $\cdot 03$ | $\cdot 14$ |
| Measles ... | $\cdot 11$ | $\cdot 24$ | $\cdot 18$ | $\cdot 16$ | $\cdot 21$ | $\cdot 23$ | $\cdot 18$ | $\cdot 14$ | $\cdot 05$ | $\cdot 12$ | $\cdot 04$ | $\cdot 26$ | $\cdot 01$ |
| Typhoid Fever ... | $\cdot 22$ | $\cdot 11$ | $\cdot 12$ | $\cdot 08$ | $\cdot 13$ | $\cdot 13$ | $\cdot 11$ | $\cdot 02$ | $\cdot 09$ | $\cdot 03$ | $\cdot 04$ | $\cdot 06$ | $\cdot 01$ |
| Diphtheria ... | $\cdot 14$ | $\cdot 10$ | $\cdot 15$ | $\cdot 09$ | $\cdot 19$ | $\cdot 17$ | $\cdot 14$ | $\cdot 07$ | $\cdot 23$ | $\cdot 06$ | $\cdot 03$ | $\cdot 17$ | $\cdot 16$ |
| Whooping Cough | $\cdot 27$ | $\cdot 32$ | $\cdot 33$ | $\cdot 23$ | $\cdot 27$ | $\cdot 23$ | $\cdot 28$ | $\cdot 07$ | $\cdot 36$ | $\cdot 06$ | $\cdot 46$ | $\cdot 16$ | $\cdot 27$ |
| Diarrhœa ... | $\cdot 66$ | $\cdot 51$ | $\cdot 44$ | $\cdot 37$ | $\cdot 88$ | $\cdot 66$ | $\cdot 07$ | $\cdot 34$ | $\cdot 50$ | $\cdot 30$ | $\cdot 78$ | $\cdot 07$ | $\cdot 24$ |

Again **Smallpox** does not appear as a cause of death.

Scarlatina caused 10 deaths. In 1907 there were 2 deaths.

SCARLET FEVER CASES.

| Year. | Estimated Population. | No. of Cases notified. | No. admitted to Hospital. | No. of Deaths in Hospital. | No. of Cases treated at home. | Deaths among these. |
|-------|-----------------------|------------------------|---------------------------|----------------------------|-------------------------------|---------------------|
| 1903 | 59,000 | 361 | 59 | 0 | 302 | 13 |
| 1904 | 61,500 | 256 | 114 | 1 | 142 | 4 |
| 1905 | 65,249 | 127 | 48 | 1 | 79 | 2 |
| 1906 | 66,276 | 234 | 73 | 3 | 161 | 2 |
| 1907 | 69,122 | 216 | 40 | 0 | 176 | 2 |
| 1908 | 70,518 | 420 | 95 | 3 | 325 | 7 |

Measles caused 1 death only as compared with 18 in 1907.

Whooping Cough by its complications was responsible for 19 deaths as against 12 last year.

Typhoid Fever caused 1 death this year as compared with 4 in 1907 and 3 in 1906.

Diphtheria caused 12 deaths as compared with 11 in 1907 and 2 in 1906.

Diarrhœa caused 17 deaths, made up as follows:—

| | | | | | |
|---------------------|-----|-----|-----|-----|----|
| Under 1 year | ... | ... | ... | ... | 13 |
| 1 and under 5 years | ... | ... | ... | ... | 4 |

To these should be added the 12 deaths from Enteritis, making a total under this head of 29. The deaths from Enteritis included cases at practically all the age periods.

Under the heading "Diarrhœa," including "Enteritis," "Gastro-Enteritis," and "Entero-Colitis," as being one and the same disease, the deaths for each year and the death-rates are given below:

| | 1893 | 1894 | 1895 | 1896 | 1897 | 1898 | 1899 | 1900 |
|------------|------|------|------|------|------|------|------|------|
| Deaths ... | 37 | 12 | 35 | 49 | 60 | 70 | 61 | 57 |
| Death-rate | 1.01 | 0.31 | 0.88 | 1.26 | 1.44 | 1.6 | 1.3 | 1.2 |
| | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 |
| Deaths ... | 54 | 12 | 35 | 46 | 30 | 66 | 26 | 29 |
| Death-rate | 1.02 | 0.21 | 0.6 | 0.74 | 0.46 | 0.99 | 0.37 | 0.41 |

The remarkable annual variations in the death-rate from Diarrhœal diseases are chiefly to be accounted for by the variations in the summer and autumn climatic conditions—hot and dry seasons coinciding with high mortality and *vice versa*.

The causation and prevention of this "preventable" disease cannot be too strongly or too often brought before your notice, seeing that the mortality from Diarrhœa is by many considered to be a test of the health of a district.

Although the proximate cause of the disease has not yet been identified with certainty, there is no doubt that it is bacterial in nature, and that it gains access to the body of its victims chiefly by means of the food which it contaminates.

The bacteria are now thought to be conveyed to food to some extent by means of dust, but largely through the agency of the common house fly. A mass of circumstantial evidence to this effect has gradually been accumulated against the latter, whose well-known habit of feeding impartially and often alternately on garbage and on human food had justly brought it under suspicion. It is probable that measures directed towards the extermination of the fly or, short of this, its banishment from dwellings would have a marked effect in reducing Diarrhœal mortality. The fly is most successfully attacked while in the larval stage in its breeding places which are principally manure heaps and the contents of middens, and these should be removed from the vicinity of dwellings as frequently as they accumulate.

All food, especially milk, should be protected from the raids of winged pests, and it is highly important that food should also be kept in as cool a place as possible. Multiplication of disease-producing bacteria is greatly favoured by warmth, and an originally small degree of contamination (of milk for example) is liable to assume highly dangerous proportions after a few hours' exposure to summer temperature. In the great bulk of the houses in this District the food pantry is in the closest connection with the warmest room in the house, namely, the cooking kitchen. Without any great addition to the cost of building, a suitable pantry could surely be provided, and it should be regarded as one of the most important public health duties of any sanitary authority to insist upon adequate provision of this kind in every new building. Plans should not be accepted unless they show a properly-placed and well-ventilated pantry for storing food.

The question of the disposal of horse manure has been discussed in previous reports, but it is necessary again to urge the adoption of a bye-law compelling the weekly removal of accumulations of this nature.

Another matter intimately associated with general sanitary conditions and surroundings is the erection of stables and small buildings in the District. The constant erection of stables and

small buildings is a serious evil and a source of nuisance and danger to the surrounding inhabitants.

Increased powers to insist upon adequate provision of well-ventilated pantries and storage for coal, as well as proper receptacles for ashes, in all new houses, are also advisable in the interests of the public health.

In regard to dust and its attendant evils, these would probably be mitigated by the application of tar-macadam (or by some similar process) to those roads which by reason of comparatively light traffic are most suitable for such treatment.

This process has been tried on several roads in the District and the results have been very satisfactory from the points of view of wear and tear and of immunity from dust.

The 17 infants who died of diseases classed as "Diarrhœa" were distributed over the several wards as follows:—Birchfield 2, Heathfield 0, Murdock 8, Sandwell 6, and Soho 1.

Enquiries showed that of these:—

| | | |
|---|--------|------------------|
| 2 were wholly breast fed | ... | = 11·8 per cent. |
| 6 were partially breast and partially
bottle fed | | = 35·3 " " |
| 9 were wholly bottle fed | ... | = 52·9 " " |

The influence of bottle feeding on the production of Infantile Diarrhœa is exerted in two directions: first, artificial feeding lowers the resistance to disease of the digestive organs, and secondly, unless the greatest care is taken in its production, storage and preparation, the food is liable to provide a vehicle for disease-producing germs. The latter is undoubtedly the more important factor.

Influenza.—This disease was registered as the primary cause of death in 24 cases, death being invariably due to some complication of the lungs, heart, or nervous system. With the exception of 2 in August, the fatal cases occurred in the first quarter of the year.

Tuberculous Diseases.—Sixty-six deaths were due to this class of diseases, as compared with 58 in 1907, 57 in 1906, 56 in 1905, and with 55 in 1904, 73 in 1903, 69 in 1902, 81 in 1901, 56 in 1900, 61 in 1899, and 44 in 1898.

The rate was 0·93 per 1,000 of the estimated population as against 0·83 in 1907, the latter being the lowest death-rate from Tubercle recorded in this District. There is no reason to think that the slight increase in the rate is other than fortuitous.

Fifty-three of the deaths were due to Tuberculosis of the Lungs or Phthisis.

In all cases of death from Tuberculous disease, disinfection of the bedding and premises is offered, and in the majority of instances the offer is accepted.

We now know that (1) Tubercular diseases are due to the growth in the body of a minute organism—the Tubercle bacillus. (2) That it is present in the sputum expectorated by persons suffering from phthisis, and is present in the spray produced by their cough. (3) That persons coming much into contact with phthisical sufferers are very liable themselves to become phthisical. The bacillus may be conveyed into the body through the medium of infected cow's milk, or more rarely by the flesh of animals affected with the disease, or by the matter expectorated or excreted by animals suffering from consumption. These organisms retain their vitality even when dried, so that they may be wafted about in the air, mixed with ordinary dust. In this way consumption may be acquired in dusty schools and workshops. Dirty and badly ventilated workshops play a most important part in the production and spread of these conditions. Fresh air and sunlight soon kill the germs. In addition to the presence of the micro-organism another factor is required for infection, and that is a certain state of receptivity of the body. This state of the body is brought about by insanitary conditions, insufficient food, or working in dusty atmospheres, and is prevented by living in an atmosphere supplied abundantly with pure fresh air and on an abundance of good wholesome food. To preserve the public health, therefore, our milk and meat supplies

should be beyond the reproach of tubercular infection, and as an additional precaution milk should be boiled and meat should be well cooked. Persons suffering from consumption should be cautioned against spitting in the street and in public vehicles, or, indeed, on any material which cannot be burnt or otherwise disinfected, and insanitary conditions should be remedied. When death occurs from any tubercular disease, the clothes, bedding, and rooms should be thoroughly disinfected.

The recent report of the Royal Commission upon Tuberculosis has directed the attention of the public once more to the causes of tuberculosis. It is now placed beyond all ordinary doubt that infection of human beings by tuberculous milk and meat is not only possible but probable. The public should therefore insist upon such measures being taken as are necessary to remove all suspicion from these important foods. It should be a matter of no insuperable difficulty to effectually stamp out bovine tuberculosis altogether, and once and for all to remove this grave danger of infection. The necessary procedure and expenditure would probably only be undertaken, however, in response to strong public feeling in the matter, so that it is desirable that all districts should join in making the usual representations to the Government.

While this is being done it will be a deplorable result of the Commission's report if, as a consequence, the amount of milk given to children is decreased. We have no hesitation in saying that very many more children die as the result of an insufficient supply of milk than from infection caused by tuberculous milk. Also a far greater number of people at all ages die from tuberculosis as a result of a deficient rather than an infected milk supply during infancy. Nevertheless, the stamping out of bovine tuberculosis presents itself as an undoubted means whereby the terrible death-roll due to tubercle may be considerably decreased. When this is accomplished it will be possible to duly appreciate other causes of the disease and to eventually eradicate it.

The Public Health (Tuberculosis) Regulations, 1908, which came into effect on January 1st, 1909, provide for the notification to Medical Officers of Health of cases of Pulmonary Tuberculosis (Phthisis) occurring among the inmates of Poor Law Institutions or amongst persons under the care of District Medical Officers, and for the taking of certain measures in such cases.

Although the order has reference to one class of the community only, it is the class amongst which the disease is most rife, and amongst which ignorance of its infective nature, and neglect to guard against its spread are most prevalent; the measures which the order enables to be taken should therefore have a marked effect in checking the disease. It is by many believed (and hoped) that these regulations are precursory to a system of general compulsory notification of Phthisis. Voluntary notification has now had an extended trial in many towns, and at the best the system has only been partially successful in bringing cases of the disease to the knowledge of the Sanitary Authority, while in some instances the results have been little better than farcical; and it is generally held that Compulsory Notification is the essential initial measure in grappling with the great Phthisis problem.

Cancer.—Sixty-seven deaths were due to Cancer and allied forms of malignant disease of various organs, the ages at death being as follows :—

| Age. | No. of Deaths. | Age. | No. of Deaths. |
|-------|----------------|-------|----------------|
| 0—30 | 0 | 60—65 | 17 |
| 30—35 | 2 | 65—70 | 9 |
| 35—40 | 0 | 70—75 | 7 |
| 40—45 | 4 | 75—80 | 3 |
| 45—50 | 9 | 80—85 | 2 |
| 50—55 | 6 | 85—90 | 1 |
| 55—60 | 7 | Total | 67 |

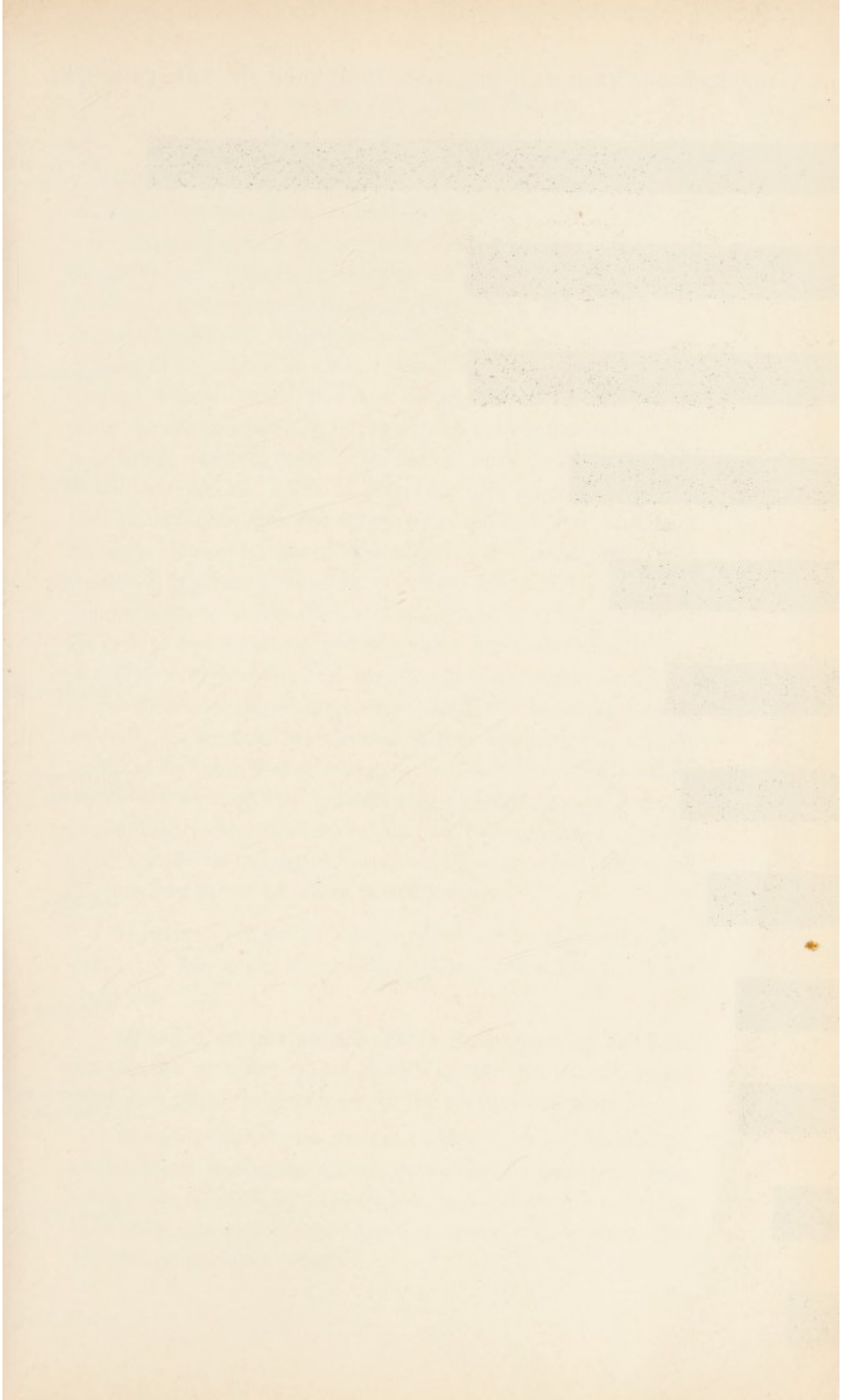
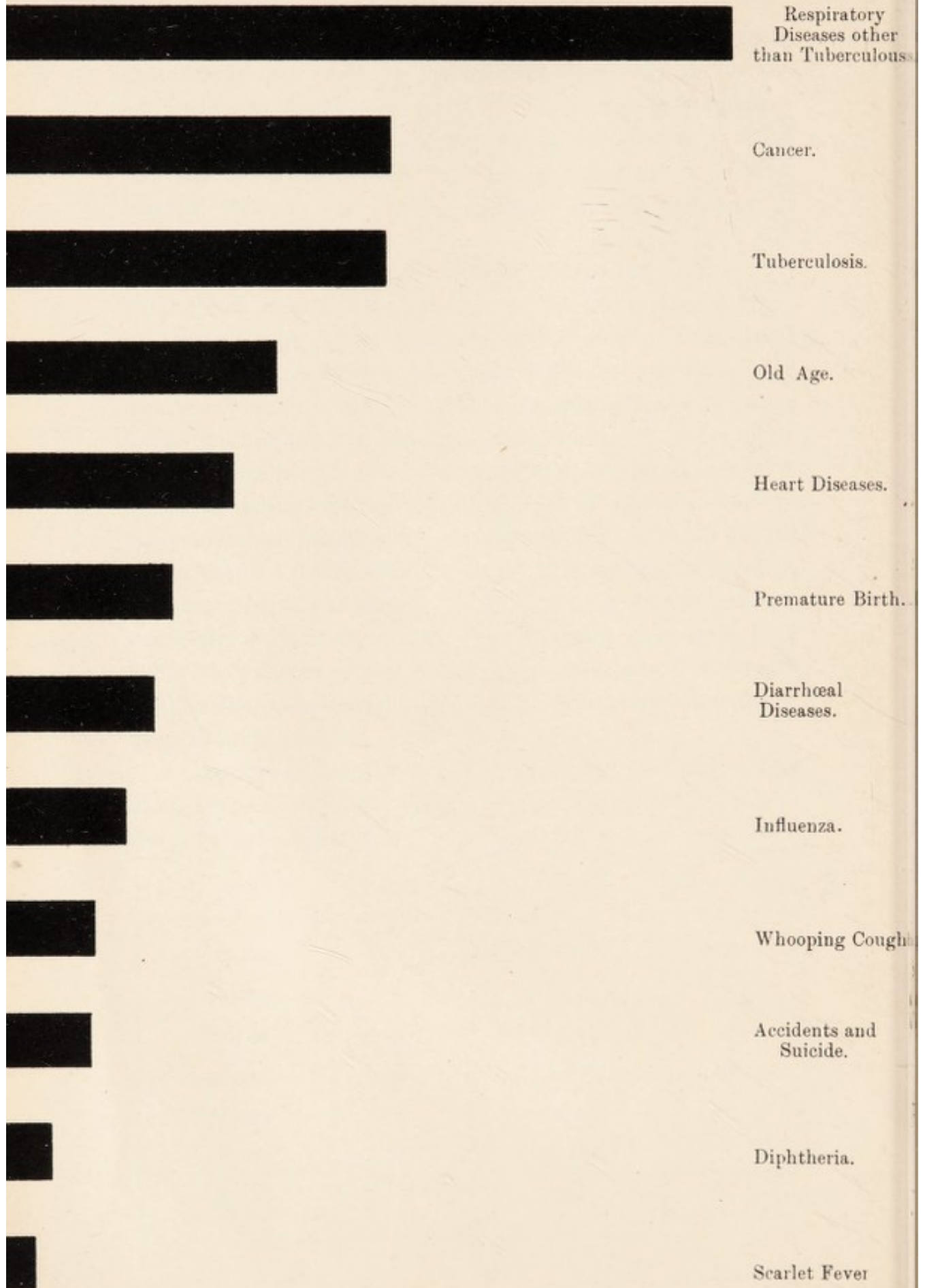


DIAGRAM SHOWING THE RELATIVE INCIDENCE OF THE PRINCIPAL
CAUSES OF DEATH.—CHART IV.



The death-rate is 0·95 compared with 0·86 in 1907, the average of the preceding 10 years being 0·68. The gradual upward tendency which the mortality from this class of disease shows in this District is common to the whole country. A portion of the increase is apparent only, being due partially to improved methods of diagnosis which have had the effect of causing to be classed as Cancer many deaths from diseases of internal organs which formerly would have been ascribed to other causes, and partially to the altered age composition of the population, resulting from diminished birth and death-rates, which have had the effect of increasing the proportion of persons at the higher ages who are the most susceptible to malignant disease. However, when due allowance is made for these causes of apparent increase, it is evident that a real increase in the mortality from this disease is taking place. This is a matter for serious consideration, and it is most deplorable that proper disinfection of bedding and rooms, which is invariably offered in this District in those cases where death has occurred, is often refused; for although our present limited knowledge of Cancer points to its being non-infective, yet in view of the deadly nature of the disease and our ignorance of its etiology, no ordinary precautionary measures can be held to be superfluous. Moreover, Cancer is frequently complicated with septic processes, the infective nature of which is well-known.

Injuries.—Eighteen deaths were due to violence. The death-rate was 0·25, the average of the preceding ten years being 0·3.

Ward Comparisons.—Table E on page 45 gives the comparative statistics of the health of the five wards during 1902 to 1908, and the average for the six previous years.

Murdock Ward again has the highest birth-rate, death-rate, and epidemic death-rate, as well as the highest death-rate from tuberculous diseases, and the highest rate of infantile mortality. Heathfield has the lowest birth-rate, being a little more than half that of Murdock Ward.

MEASURES TAKEN TO PREVENT THE SPREAD OF INFECTIOUS DISEASE.

Measles is not a notifiable disease in Handsworth. The School Attendance Officers, however, notify the Medical Officer of the existence of cases of Measles.

NOTIFICATION OF INFECTIOUS DISEASE.

In June, 1883, the Handsworth Local Board instituted a voluntary system of Notification of Infectious Disease whereby medical practitioners notifying a case of Scarlatina, Diphtheria, Enteric Fever, or Small Pox, received a fee of half-a-crown for each case notified. This arrangement continued in force until the adoption of the Infectious Disease (Notification) Act, which came into force on the first day of March, 1890. The notifications received in the years 1885-1908 are given in Table F on page 48.

In the following table the cases notified in each quarter of the year 1908 are given:—

TABLE G.

| | Smallpox. | Scarlatina. | Diphtheria. | Membranous
Croup. | Typhus
Fever. | Typhoid
Fever. | Continued
Fever. | Relapsing
Fever. | Puerperal
Fever. | Cholera. | Erysipelas. | Total. |
|-------------|-----------|-------------|-------------|----------------------|------------------|-------------------|---------------------|---------------------|---------------------|----------|-------------|--------|
| 1st Quarter | ... | 50 | 19 | ... | ... | 2 | ... | ... | ... | ... | 7 | 78 |
| 2nd ,, | ... | 59 | 18 | ... | ... | 4 | ... | ... | ... | ... | 9 | 90 |
| 3rd ,, | ... | 111 | 18 | ... | ... | 1 | ... | ... | ... | ... | 16 | 146 |
| 4th ,, | ... | 200 | 40 | ... | ... | 6 | ... | ... | ... | ... | 10 | 256 |
| Totals | ... | 420 | 95 | ... | ... | 13 | ... | ... | ... | ... | 42 | 570 |

Since the Infectious Disease (Notification) Act came into force, the number of cases notified of each disease per 1,000 of the population, that is to say the attack-rates, are given for each year in Table H on page 49.

Ten of the cases of **Scarlatina** notified in 1908 died; the fatality was therefore 2·38 per hundred cases.

The fatality in 1907 was 0·92 per cent.; in 1906, 2·13; in 1905, 2·35; in 1904, 1·1; in 1903, 3·3; in 1902, 2·2; in 1901, 3·8; in 1899, 1·3; in 1898, 1·1; in 1897, 1·8; and in 1896, 0·6.

Of the cases of **Diphtheria and Membranous Croup** notified in 1908, 12 died; the fatality was 12·6 per cent.; in 1907 it was 14·4; in 1906, 4; in 1905, 12; in 1904, 23·7; in 1903, 8·7; in 1902, 13·8; in 1901, 18; in 1898, 6·4; in 1897, 13; and in 1896, 24·6.

General Procedure.—As soon as possible after notification of an infectious disease is obtained, the infected premises are visited and examined, and any sanitary defects are noted. An enquiry is made as to the population residing on the premises, their food supply, water supply, laundress, the schools attended, the means of isolation available, and the origin of the infection. These particulars are registered by the Sanitary Inspector. After the patients have been removed to the Hospital, or have recovered at home, the infected rooms are disinfected with formaldehyde, and the infected bedding and clothes disinfected again at the disinfecting station. In the meantime notice has been given to the schools attended of the existence of infectious disease in the infected houses, so that children residing at these houses may be kept away from school until all danger of spreading disease is past. The attention of the owners of the houses is called to any sanitary defect in the usual way. The premises are further visited from time to time as deemed necessary. During the past year 1,367 visits were thus paid, 363 notices were sent to schools, and 319 notices to the Education Committee, 485 houses, or parts of houses, and 3 elementary schools were disinfected with formaldehyde by Lingner's apparatus, and 95 houses, or parts of houses, were stripped or limewashed, 413 lots of bedding, &c., comprising 2,084 articles, were disinfected by the disinfection apparatus at Handsworth, and 113 articles destroyed. During the year all

the disinfection has been done at your own disinfecting station at Queen's Head Road. The number of stovings was 311. In addition to the above, 796 cases of infectious disease in connection with the Elementary Schools of the District were visited and reported upon.

PROCEDURE IN SPECIAL CASES.

Smallpox.—Provision is made for the isolation of cases in the Smallpox Hospital of the West Bromwich Corporation. No case was notified in 1908.

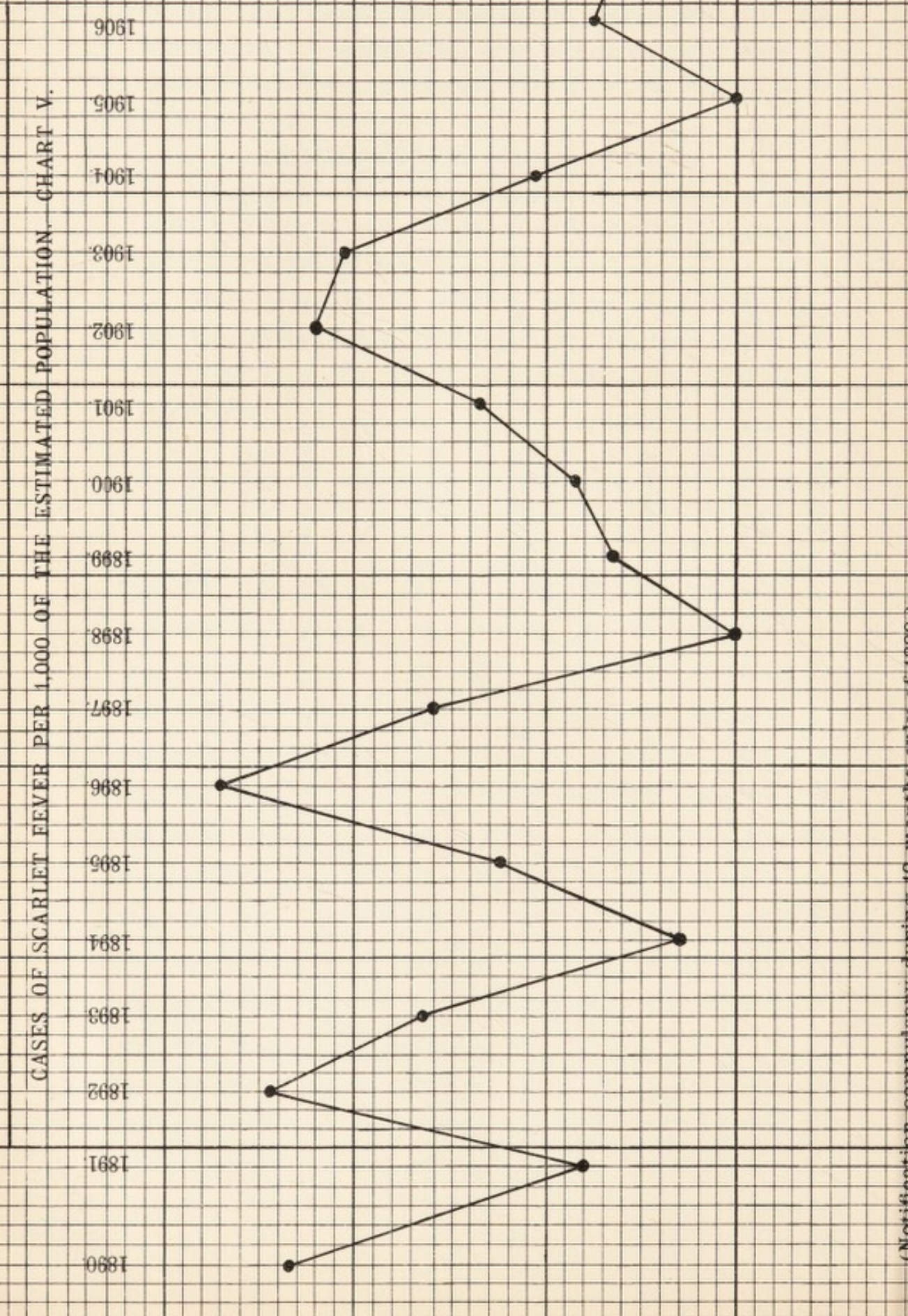
Vaccination.—The following returns are furnished by the Vaccination Officer, and relate to the whole parish of Handsworth for the years ending June 30th, 1894-1908, respectively:—

| | Births Registered | Successfully Vaccinated | Insusceptible | Had Smallpox | Died Unvaccinated | Postponed | Removed to other District—traced | Removed—unknown | Defaulters | Re-vaccinated | Percentage of Defaulters to Births | Conscientious Objectors |
|------|-------------------|-------------------------|---------------|--------------|-------------------|-----------|----------------------------------|-----------------|------------|---------------|------------------------------------|-------------------------|
| 1894 | 976 | 716 | 12 | 0 | 77 | 42 | 18 | 68 | 43 | 361 | 4·4 | ... |
| 1895 | 1072 | 684 | 13 | 0 | 83 | 57 | 4 | 10 | 221 | 18 | 20·6 | ... |
| 1896 | 1046 | 561 | 7 | 0 | 97 | 47 | 0 | 0 | 339 | (?) | 32·4 | ... |
| 1897 | 1138 | 569 | 4 | 0 | 101 | 61 | 0 | 0 | 403 | (?) | 35·4 | ... |
| 1898 | 1189 | 497 | 6 | 0 | 106 | 46 | 0 | 0 | 524 | (?) | 44·1 | 10 |
| 1899 | 1327 | 672 | 14 | 0 | 145 | 64 | 39 | 100 | 278 | (?) | 20·9 | 15 |
| 1900 | 1368 | 775 | 7 | 0 | 145 | 71 | 26 | 92 | 248 | (?) | 18·1 | 4 |
| 1901 | 1410 | 878 | 3 | 0 | 147 | 61 | 13 | 198 | 94 | 11 | 6·7 | 16 |
| 1902 | 1410 | 1032 | 4 | 0 | 147 | 71 | 22 | 112 | 12 | 552 | 0·9 | 10 |
| 1903 | 1532 | 1213 | 7 | 0 | 121 | 56 | 40 | 66 | 17 | 59 | 1·1 | 12 |
| 1904 | 1514 | 1215 | 4 | 0 | 145 | 49 | 20 | 64 | 4 | 68 | 0·3 | 13 |
| 1905 | 1569 | 1285 | 8 | 0 | 123 | 50 | 30 | 48 | ... | 4 | ... | 17 |
| 1906 | 1563 | 1282 | 8 | 0 | 124 | 41 | 33 | 47 | 5 | 4 | 0·3 | 23 |
| 1907 | 1582 | 1279 | 8 | 0 | 125 | 42 | 28 | 60 | 5 | 4 | 0·3 | 35 |
| 1908 | 1568 | 1198 | 15 | 0 | 123 | 42 | 39 | 61 | 0 | 2 | 0 | 90 |

CASES OF SCARLET FEVER PER 1,000 OF THE ESTIMATED POPULATION. CHART V.

1890
1891
1892
1893
1894
1895
1896
1897
1898
1899
1900
1901
1902
1903
1904
1905
1906
1907
1908

8
7
6
5
4
3
2
1



Division of Statistics, Bureau of Census, U.S. Department of Commerce

Scarlatina.—The last quarter of the year was marked by an epidemic of Scarlet Fever which in point of actual number of cases exceeded any that had previously occurred in the District; though the attack-rate per 1,000 of the population was less than that of several former epidemics.

Chart 5 shows the attack-rate for each year since notification of Scarlet Fever became compulsory, and also illustrates the tendency of epidemics of the disease to recur in cycles or waves—the summit of the wave being usually reached every fifth or sixth year.

In 1908 the disease was on the whole of an extremely mild type; indeed its mildness was to a large extent responsible for its wide and rapid spread, the nature of the illness being overlooked in many instances, and its victims being allowed to mix with their fellows as usual. In a small proportion of cases the disease assumed a more virulent type.

During investigation of the notified cases, many sanitary defects, chiefly of a trivial nature, were detected in the homes, but no connection could be traced between these and the incidence or severity of Scarlatina. Neither was there reason to suspect the milk supply in any instance, and so far as could be ascertained personal infection was the chief if not the sole factor in the spread of the disease.

Provision is made for the isolation of Scarlatina at the West Bromwich Infectious Hospital. In October, 1906, the Health Committee expressed the wish that removal to hospital should be resorted to only in specially urgent cases, and that isolation at home should be carried out wherever practicable. In accordance with this wish only 95 cases out of the 420 notified were admitted to hospital during 1908. Decision as to removal was chiefly based upon the number and ages of the susceptible individuals in the households attacked, and the character and situation of the rooms available for isolation.

The cases occurred in 294 houses.

| | | | | | | | | |
|----|-----|-----------|---|-------|----------|----|---|--------|
| In | 1 | instance | 6 | cases | occurred | in | 1 | house. |
| „ | 3 | instances | 5 | „ | „ | „ | „ | „ |
| „ | 4 | „ | 4 | „ | „ | „ | „ | „ |
| „ | 19 | „ | 3 | „ | „ | „ | „ | „ |
| „ | 59 | „ | 2 | „ | „ | „ | „ | „ |
| „ | 208 | „ | 1 | case | „ | „ | „ | „ |

The primary cases, *i.e.* first cases in a family, numbered 294, and of these 227 were kept at home, and 67 removed to hospital. In the households of the 227 primary cases treated at home, the number of inmates per room (bedrooms and living rooms) averaged 0·88; the number of persons under 14 years old who had not had the disease averaged 1·09 per case, and the number over 14 who had not had the disease averaged 2·11 per case.

In the homes of the 67 primary cases removed to hospital the inmates per room averaged 1·31; the susceptible persons under 14 averaged 2·37, and those over 14 2·80 per case.

From the cases treated at home 39 secondary cases arose; and in the homes from which cases had been removed to hospital 17 secondary cases occurred within a few days after removal of the primary cases and presumably infected by the latter prior to removal. Five "return cases" occurred at intervals of from 4 to 15 days after discharge of a patient from hospital.

These figures are given for what they are worth; there is no intention of using them to institute comparisons between home and hospital treatment; for, generally speaking, the hospital patients come from poor and crowded homes, while the cases treated at home are much more favourably situated so far as prevention of spread of infection is concerned, consequently the two classes do not admit of comparison. In many cases of removal to hospital much of the value of isolation in preventing further spread of the disease is destroyed by the ignorance and carelessness of parents. It is a very common

occurrence to find the Scarlet Fever patient awaiting removal to hospital in a downstairs living room and surrounded by the rest of the family.

The position of Handsworth with no isolation hospital under local control, is an unusual one for a district of such a size and with so large a population. The arrangement with the West Bromwich Corporation has hitherto worked very satisfactorily ; but should serious epidemics of Scarlet Fever in West Bromwich and Handsworth happen to coincide,—a far from remote contingency,—the accommodation would be inadequate. In this connection the rapid growth of the District should be borne in mind, also the fact that this growth is chiefly confined to the class of people most prone to suffer from infectious diseases and least able to deal with them in their own homes.

Scarlet Fever and Schools.—Although no less than 202 of the 294 primary cases occurred in school children, schools did not play so prominent a part in the dissemination of infection as this fact would appear to indicate. These cases were distributed among 30 different public and private schools ; in only four of which was the incidence in particular classes or departments so marked as to point to contraction of the disease in school. The schools in question were frequently visited by the Medical Officer, and 9 children in various stages of the disease were at different times found in school. In all but two of these the presence of a rash had been overlooked by the parents, and the constitutional symptoms had been so slight as to give rise to no suspicion. These children were immediately excluded and disinfection of the affected schools was carried out. During the epidemic, all absentees from school who were reported by the teachers or attendance officers to be affected with suspicious symptoms, and who were unattended by doctors, were visited by the Medical Officer, and in this way 23 further unrecognised cases were found which otherwise would probably have been allowed to return to school as soon as the acute symptoms had abated.

Diphtheria and Membranous Croup.—No provision is made for the isolation of these cases. In June last, application was made to the Birmingham Corporation to admit Handsworth cases into their infectious hospital at Lodge Road, but the Corporation did not see their way to assent to such arrangement.

The segregation and nursing of Diphtheria cases can rarely be satisfactorily carried out in the homes of the poor, and the adoption of some arrangement in this District by means of which the most urgent cases can receive hospital treatment is strongly recommended.

Cases are admitted into the General and Children's Hospitals, Birmingham, but only when the operation of tracheotomy is indicated.

During the year 1 case was treated at the Children's Hospital.

The 95 cases of Diphtheria occurred in 84 houses.

In 2 instances a house had 4 cases.

„ 2 „ „ 3 „

„ 1 instance „ 2 „

„ 79 instances „ 1 case.

Of the 84 houses, no complaint could be made of the condition of 61; in 3 cases poultry were kept under somewhat insanitary conditions; in 13 cases defects were found in sinks, drains, w.c.s, etc.; in 1 case there was an accumulation of refuse on adjoining property; 1 house was damp, and 2 others were dirty; complaints of offensive smell arising from the road drains were made in 2 cases, and of smell from the River Tame in 1 case. Immediate steps were taken to remedy all insanitary conditions found, though in no case was there reason to think that the relationship which they bore to the disease was anything more than that of a predisposing factor.

No bacteriological examination was made in 37 cases. Positive results were reported in 52 cases, and negative results were given in 6 cases. In 125 suspected, but not notified cases, examinations were made, with negative results, and in 31 cases with positive results.

On August 1st, 1906, the Health Committee decided to supply antitoxin to medical men for treatment of local cases of diphtheria. This represents a most important step, and a still further decrease in the death-rate may be expected if this treatment is generally adopted.

It is now universally recognised that the value of antitoxin treatment is inversely proportionate to the length of time which elapses between the onset of the disease and the administration of the remedy. It is desirable, therefore, that the public should sufficiently appreciate this fact to request this form of treatment. It is gratifying to be able to report that the prejudice that used to exist, through ignorance, appears to be rapidly dying away.

Typhoid (Enteric) Fever.—The 13 cases occurred in 12 separate houses. One house had 2 cases.

Three of the cases were treated at the General Hospital and 1 at the Queen's Hospital, Birmingham.

Widal's reaction is reported as having been tried in 1 notified case with a positive result, and in 2 suspected, but not notified cases, with negative results.

In 11 cases no sanitary defects were found on the premises, while in the remaining 2 the defects were of a trivial nature. All the houses were supplied with water-closets connected with the sewers.

There was no undue incidence of the disease in any particular locality, and excepting for the two cases which occurred in the same family (the latter of which was undoubtedly infected from the former), no connection between the cases could be traced, and there was no indication of a common cause. In one instance raw oysters had been freely partaken

of during the three weeks preceding the onset of illness, and in another case mussels picked up by the patient in a tidal estuary which receives large volumes of sewage, were the undoubted cause of the disease. In the remaining cases the origin of infection could not be traced.

When a case of Typhoid Fever occurs in a house having a privy-midden the midden is at once thoroughly cleaned out, and its floor and walls are dredged with strong disinfectant powder. At the same time an iron pail, with tight-fitting lid, is left at the house to receive the stools and urine. These are mixed with Izal peat, which is supplied with the pails. The pails are collected as required, and their contents burnt in the Destructor.

Puerperal Fever.—No case of this eminently preventable disease was reported during 1908.

Erysipelas.—The 42 cases of Erysipelas occurred in 42 houses. No special sanitary defects were noticeable in the houses. Three deaths occurred.

Plague was added to the list of notifiable diseases by an order of the Local Government Board, dated the 19th of September, 1900.

GENERAL SANITARY MATTERS.

Refuse and Sewage Disposal.—The privy-middens and dry ash-pits are emptied and cleansed by the District Council.

Movable receptacles for ashes are being gradually substituted for the middens, when privy-middens are converted, and are also provided in all newly-built houses. There are now about 540 privy-middens.

The sewers are in connection with the outfall sewers of the Birmingham Tame and Rea District Drainage Board.

During the year the construction of the Sewage Pumping Station at Witton was completed. This will enable a large

tract of low-lying land to be sewered, which at present is largely dependent upon privy-middens, dumb-wells and neighbouring water-courses for its excrement and refuse disposal.

Ashbins.—These are systematically emptied every 14 days. There are about 7,300 ashbins in use in the District. The ordinary sized bin is rarely full in 14 days except at some of the larger houses, where bulky vegetable refuse is put into the bin. The average collection gives 140 bins to 4 loads, showing that the average bin is far from full.

Ashpits are emptied every 8 weeks. About 3,500 are emptied each month. After this interval it is rare to find even the smaller ashpits more than two-thirds full. The removal of the refuse from these is by hand in special wooden baskets. None of the material is thrown upon the road, and the men have instructions to sweep up the premises and leave all tidy.

The refuse collected from ashpits and ashbins is taken to the destructor and dealt with there. About 13,500 tons of refuse were collected during 1908. In addition, 100 tons of trade refuse were dealt with.

Middens.—These are emptied on application only. Some periodic removal has been attempted, but the occupiers object to be troubled in the night. About 130 are emptied every month, the material being taken by neighbouring farmers. Disinfectant powder is scattered in and round the midden and on soiled portions of ground. The middens now number about 540 and are rapidly decreasing.

Water Supply.—The District is supplied by the Birmingham Corporation Water Department.

This water is liable to have plumbo-solvent action, but no clinical or chemical evidence as to its contamination by lead has been obtained during the year.

A few wells still exist.

House-to-House Inspection.—During the year a house-to-house inspection has been made in the following roads and streets, viz.:—Leonard Road, Gordon Road, Birchfield Road (part of), Salisbury Road, Mayfield Road, Lozells Road, and Hatfield Road.

This area embraces much of the smaller house property and some of the larger house property in Heathfield Ward.

In this way 400 houses were inspected, and many dangerous conditions were discovered and remedied. The following is a summary of the results of the inspection:—

| | | | |
|---|-----|--|----|
| Privies | 16 | Defective Traps and Drains | 2 |
| Ashpits, Dry... .. | 268 | Ashbins | 47 |
| Ashpits, Covered | 257 | Waste-water Flush Closets | — |
| Ashpits, Uncovered | 22 | Lip-traps on Drains | 34 |
| Ashpits over 20 square feet
in area | 22 | Bell-traps on Drains | 1 |
| Wet Ashpits... .. | 3 | Houses supplied with Well-
Water | — |
| Outdoor Water-closets | 374 | Number of Wells | — |
| Indoor Water-closets | 106 | Back to back Houses | — |
| Ventilation Pipe under 3in. | — | | |

OTHER SANITARY WORK.

During the year, 8,769 inspections and observations were made for the discovery and abatement of nuisances within the District, 2,440 informal notices were sent out for the abatement of nuisances, and were in 2,386 cases followed by the abatement of the nuisances, leaving 54 on the books at the end of the year. This shows an increase in the year of 37 inspections, &c., 287 notices, and of 310 nuisances abated, as compared with the figures of 1907.

Final notices to the number of 233 were sent out.

Six summonses were taken out during the year. Five were withdrawn on the necessary work being done and on payment of the costs, £2 9s. 6d., and in 1 case a fine of 10/- with 8/6 costs was inflicted, the whole of the other work being executed in a satisfactory manner without recourse to legal proceedings.

In 114 cases privies were converted into water-closets, and 188 deep wet ashpits filled up after notice had been served on the owners, in addition to many which were converted without notice on the suggestion of the Inspector; an increase of 80 as compared with the year 1907.

Slaughter-houses.—The 12 slaughter-houses in the District have been inspected on 151 occasions. In 20 cases notices were served to abate nuisances.

In 3 cases the drains were taken up and properly relaid; the floors in 4 cases were also re-paved, the bricks being set in cement, and offensive accumulations removed in 12 cases. In 1 case the slaughter-house was enlarged, and new fasting pens built. No seizure of diseased meat was made, but one tuberculous carcase—that of a bullock—was voluntarily surrendered and cremated at the Destructor.

Food and Drugs.—The Sale of Food and Drugs Acts are administered by the Staffordshire County Council. Three consignments of unsound fish, amounting to 4 cwt. in all, were voluntarily surrendered to the Handsworth Health Department and were destroyed.

Bakehouses.—The 42 bakehouses registered in the District were inspected on 167 occasions, and in 37 cases notices to cleanse and limewash and to abate nuisances were served.

Four bakehouses are at present void, and 2 bakehouses have been rearranged and improved. The ventilation of 2 bakehouses was also improved, and 1 new bakery built.

Houses Let in Lodgings.—Of these there are practically none in the District and no Bye-Laws respecting them have been framed.

Offensive Trades.—No offensive trades are established in the District.

Schools.—All the public elementary schools were visited during the year. No grave sanitary defects were found. All the schools are supplied with Birmingham Corporation water.

Pollution of Rivers and Streams.—The brook which forms the southern boundary of Albion Road is polluted by drainage from the adjoining houses, and measures are now being taken by the Public Works Committee to secure the construction of a sewer to receive this drainage. The pollution of the Hockley Brook is also receiving the consideration of the Public Works Committee.

THE MILK SUPPLY.

Cowsheds.—During 1908 there were 10 cowsheds in occupation in the District. The largest number of cows kept was 201, the average number being 193. In 6 sheds the cubic space for each cow is from 825 cubic feet to 993 cubic feet. In 4 sheds the cubic space is a little under 800 cubic feet. From the smaller sheds the cows are turned out daily (once or twice a day) during the winter months. In the summer time all the cows are out day and night except for a few hours for milking.

In most of the sheds good ventilation will be possible when the owners are sufficiently advanced to realise that the stopping-up of ventilators is certainly against their own interests.

The water supply is obtained from springs, wells, and pools, and in most cases appears to be abundant. The quality is at present unknown, but it is proposed to determine this at an early date.

Imported Milk.—From 500 to 600 gallons of milk per day are brought into the District from the country to railway stations, G.W.R. and L. & N.W.R. (Perry Parr) stations. An extraordinary lack of care is obvious. The churns are left on station platforms without being locked or fastened securely in any way. There are thus presented all kinds of possibilities in the way of pollution. The milk churns appear to be sent back without being washed.

A very large quantity of milk is fetched into the District by local purveyors from dealers in Birmingham and from farmers in the country districts near Handsworth. Some of the milk dealers and farmers personally bring milk into the District for distribution. In these cases the churns are frequently left at street corners and other places. Here again the lids of the churns are not locked or securely fastened. In this way it is obvious that dangerous pollution is still more easily possible.

No special tests for Tubercle Bacilli in milk were carried out.

Cowsheds and Dairies.—The premises of 15 registered cowkeepers have been inspected on 101 occasions, and in 13 cases notices to abate nuisances were served.

In 2 cases the sheds have been properly ventilated, paved, and drained, and the drains in 2 cases have been relaid, properly trapped, and ventilated, and in 9 cases offensive accumulations were removed.

The premises of the 245 milkshops and dairies on the register were inspected on 281 occasions, and found in a satisfactory state, with the exception of 6 where it was necessary to thoroughly cleanse and repair the premises.

During the year 5 cowsheds have been void.

Workrooms and Workshops.—The 221 workrooms and workshops registered in the District were visited on 319 occasions. Notices to cleanse and limewash were served in 37 cases, and notices to abate nuisances were given in 30 cases. In 4 cases privies were converted into water-closets, in 2 cases separate accommodation for the sexes was provided, and in 4 cases further closet accommodation was provided; in 11 cases drains were opened, repaired, and properly trapped; in 4 cases the ventilation was improved, and in 7 cases floors were drained. There are 9 "domestic workshops" in the District, in which are carried on the following trades:—4 dressmakers, 3 laundries, 1 tailor, and 1 picture-frame maker.

Scavenging.—The Superintendent of the Cleansing Department reports that 1,273 applications for cleansing ashpits have been received, and that 39,200 dry ashpits and 1,550 privy-middens were emptied and cleansed during the year. 188,258 ashbins were also emptied.

Housing Accommodation.—There is ample housing accommodation for working people who are prepared to pay a weekly rental of from 5/6 to 7/6, inclusive of rates ; but there are comparatively few houses at less than the former figure. Generally speaking, the working class dwellings, though not built very substantially, are of good type. The defects in design most commonly met with are the result of over-economy of space, and consist of steep, unlighted stairs, the absence of an upstairs passage—the bedrooms opening out of one another, an arrangement which is not conducive to decency and which renders satisfactory home isolation of infectious disease impossible—and inadequate pantry accommodation. The Building Bye-Laws in force in the District demand a minimum open space at the rear of buildings of 200 square feet, free from any erection and a minimum distance across such space varying between 15 feet in the case of single-storied houses and 25 feet for three-storied houses.

The supervision of the erection of new houses is undertaken by the Surveyor's Department.

No action was taken under the Housing of the Working Classes Act during the year. Thirty-three houses were considered to be unfit for habitation, and were demolished by the owner, who preferred taking this course rather than acceding to the requirements of the statutory notices served upon him by the Health Department.

Surveyor's Report respecting new buildings, &c.,

For the Year 1908.

During the year ending December 31st, 1908, 158 Plans were submitted, of which 139, representing 624 houses, 48 alterations and additions, 1 elementary school, 1 secondary school, 1 laundry, and 1 addition to a factory were approved.

No action was taken in regard to 10 Plans.

The number of houses passed for occupation was 553.

No prosecution has been instituted during the year.

Fifty-two houses in Alexandra Road are standing incomplete.

During the previous year 182 Plans were submitted, of which 132, representing 452 houses, 69 alterations and additions, 1 new church, 1 new bakery, and 9 additions to factories were approved.

No action was taken with regard to 20 Plans.

The number of houses passed for occupation was 467.

TABLE C.
Table showing the number of deaths from each of the seven chief epidemic diseases.

| Diseases. | 1871-5. | 1876-80. | 1881-85. | 1886-90. | 1891-95. | 1896-1900. | 1901. | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908. |
|----------------------------------|---------|----------|----------|----------|----------|------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Population | 16,735 | 20,710 | 25,148 | 30,073 | 36,350 | 44,540 | 53,000 | 56,141 | 59,000 | 61,500 | 65,249 | 66,276 | 69,122 | 70,518 |
| Smallpox ... | 5.0 | 0.0 | 3.0 | 0.0 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Scarlatina ... | 9.0 | 12.0 | 8.2 | 3.0 | 3.6 | 4.4 | 8 | 8 | 13 | 5 | 3 | 5 | 2 | 10 |
| Measles ... | 1.0 | 2.4 | 6.2 | 5.6 | 6.2 | 9.6 | 12 | 10 | 8 | 3 | 8 | 3 | 18 | 1 |
| Typhoid Fever | 7.6 | 4.6 | 2.8 | 3.8 | 3.0 | 5.6 | 7 | 6 | 1 | 6 | 2 | 3 | 4 | 1 |
| Diphtheria ... | 3.8 | 3.0 | 2.6 | 4.6 | 3.6 | 8.4 | 9 | 8 | 4 | 14 | 4 | 2 | 11 | 12 |
| Whooping Cough | 3.8 | 5.6 | 8.2 | 10.2 | 9.4 | 1.2 | 12 | 16 | 4 | 22 | 4 | 31 | 12 | 19 |
| Diarrhoea ... | 10.4 | 12.8 | 13.0 | 13.4 | 14.0 | 39.2 | 35 | 4 | 20 | 31 | 20 | 60 | 5 | 17 |
| Totals ... | 40.6 | 40.4 | 44.0 | 40.6 | 40.4 | 68.4 | 83 | 52 | 50 | 81 | 41 | 104 | 52 | 60 |
| Mortality per }
1,000 } | 2.4 | 1.9 | 1.7 | 1.35 | 1.1 | 1.8 | 1.6 | 0.92 | 0.85 | 1.3 | 0.63 | 1.5 | 0.75 | 0.87 |
| Per cent. of }
total deaths } | 15.2 | 13.8 | 12.5 | 11.07 | 8.0 | 13.8 | 11.4 | 8.3 | 7.7 | 10.7 | 6.3 | 14.0 | 7.5 | 7.8 |

TABLE E.

Birth-rates, death-rates, infantile mortality, and death-rates from certain groups of diseases in the various wards of Handsworth for each of the years 1902-8 with average of previous six years.

| BIRCHFIELD WARD. | Average
6 years,
1896-1901. | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908. |
|-------------------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Birth-rate | 27·4 | 28·2 | 25·4 | 26·07 | 22·8 | 24·4 | 23·9 | 24·2 |
| Death-rate | 13·0 | 8·9 | 10·0 | 12·02 | 9·4 | 11·8 | 8·9 | 10·06 |
| Infantile mortality ... | 143 | 95 | 92 | 128 | 70 | 141 | 80 | 78 |
| Death-rates from— | | | | | | | | |
| All Epidemic diseases | 2·0 | 0·7 | 1·13 | 1·8 | 0·9 | 1·9 | 1·08 | 0·98 |
| Tuberculous diseases | 1·0 | 1·1 | 1·13 | 0·77 | 0·98 | 0·8 | 0·70 | 0·74 |
| Lung diseases ... | 2·1 | 1·3 | 0·73 | 1·94 | 1·3 | 1·3 | 1·14 | 1·66 |
| Heart diseases ... | 1·1 | 0·9 | 0·81 | 1·01 | 1·3 | 0·7 | 1·21 | 0·55 |
| Cancer | 0·4 | 0·7 | 0·73 | 0·31 | 0·56 | 1·2 | 0·83 | 1·05 |
| Injuries | 0·3 | 0·2 | 0·24 | 0·46 | 0·34 | 0·2 | 0·32 | 0·30 |
| All other causes ... | 5·5 | 3·9 | 5·20 | 5·12 | 4·5 | 5·6 | 3·63 | 4·78 |

| HEATHFIELD WARD. | Average
6 years,
1896-1901. | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908. |
|-------------------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Birth-rate | 20·9 | 18·5 | 15·6 | 15·8 | 17·7 | 15·8 | 15·2 | 15·2 |
| Death-rate | 11·1 | 11·0 | 9·71 | 9·5 | 9·1 | 11·8 | 11·2 | 11·4 |
| Infantile mortality ... | 131 | 102 | 98 | 111 | 77 | 151 | 93 | 98 |
| Death-rates from— | | | | | | | | |
| All Epidemic diseases | 1·6 | 0·6 | 0·82 | 0·61 | 0·64 | 0·93 | 0·83 | 0·30 |
| Tuberculous diseases | 0·9 | 0·7 | 0·92 | 0·41 | 0·36 | 1·35 | 1·32 | 1·00 |
| Lung diseases ... | 1·4 | 1·2 | 1·74 | 0·61 | 0·52 | 1·97 | 1·42 | 2·20 |
| Heart diseases ... | 1·1 | 2·2 | 0·51 | 1·23 | 0·82 | 0·93 | 1·42 | 1·00 |
| Cancer | 1·1 | 0·8 | 0·71 | 0·92 | 0·75 | 1·25 | 1·11 | 1·30 |
| Injuries | 0·2 | 0·1 | 0·31 | 0·31 | 0·33 | 0·1 | 0·10 | 0·20 |
| All other causes ... | 5·0 | 5·1 | 4·70 | 4·70 | 5·57 | 5·3 | 5·07 | 5·40 |

| MURDOCK WARD. | Average
6 years,
1896-1901. | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908. |
|-------------------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Birth-rate | 34·6 | 30·5 | 30·6 | 29·0 | 27·4 | 27·7 | 28·9 | 30·1 |
| Death-rate | 16·0 | 13·9 | 13·8 | 16·3 | 12·9 | 13·0 | 12·4 | 13·9 |
| Infantile mortality ... | 172 | 122 | 145 | 181 | 102 | 130 | 109 | 110 |
| Death-rates from— | | | | | | | | |
| All Epidemic diseases | 2·7 | 1·5 | 1·33 | 2·25 | 1·5 | 2·76 | 1·30 | 1·59 |
| Tuberculous diseases | 1·3 | 2·2 | 1·7 | 1·33 | 1·4 | 0·92 | 1·38 | 1·21 |
| Lung diseases | 2·6 | 2·0 | 2·2 | 2·91 | 2·0 | 1·61 | 1·92 | 2·50 |
| Heart diseases | 1·1 | 1·3 | 1·06 | 1·33 | 1·4 | 0·76 | 1·23 | 0·75 |
| Cancer | 0·5 | 0·4 | 0·78 | 0·58 | 0·7 | 0·61 | 0·38 | 1·13 |
| Injuries | 0·6 | 0·3 | 1·0 | 0·33 | 0·33 | 0·23 | 0·38 | 0·37 |
| All other causes ... | 7·0 | 6·0 | 5·76 | 5·75 | 5·53 | 6·1 | 5·84 | 6·35 |

| SANDWELL WARD. | Average
6 years,
1896-1901. | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908. |
|-------------------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Birth-rate | 27·7 | 26·1 | 30·5 | 25·2 | 25·6 | 25·6 | 24·2 | 23·09 |
| Death-rate | 12·2 | 10·9 | 11·03 | 11·58 | 9·5 | 10·6 | 9·6 | 8·8 |
| Infantile mortality ... | 119 | 104 | 84 | 129 | 67 | 103 | 118 | 74 |
| Death-rates from— | | | | | | | | |
| All Epidemic diseases | 1·9 | 1·2 | 0·86 | 1·82 | 0·69 | 2·35 | 0·62 | 0·66 |
| Tuberculous diseases | 1·1 | 1·3 | 1·14 | 0·91 | 0·67 | 0·54 | 0·50 | 0·83 |
| Lung diseases | 1·4 | 2·2 | 1·57 | 2·08 | 1·67 | 0·9 | 1·57 | 1·16 |
| Heart diseases | 0·9 | 0·5 | 1·14 | 1·43 | 0·89 | 0·84 | 0·90 | 0·27 |
| Cancer | 0·4 | 0·7 | 0·5 | 0·39 | 0·3 | 0·84 | 1·12 | 0·71 |
| Injuries | 0·6 | 0·1 | 0·3 | 0·26 | 0·49 | 0·3 | 0·45 | 0·27 |
| All other causes ... | 5·2 | 4·9 | 5·44 | 3·8 | 3·98 | 4·9 | 4·44 | 4·90 |

| SOHO WARD. | Average
6 years,
1896-1901. | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908. |
|-------------------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Birth-rate | 18·8 | 19·0 | 18·4 | 18·3 | 18·0 | 15·9 | 14·3 | 15·7 |
| Death rate | 11·7 | 10·9 | 9·8 | 11·53 | 9·4 | 8·6 | 8·5 | 10·8 |
| Infantile mortality ... | 123 | 104 | 89 | 89 | 96 | 77 | 92 | 101 |
| Death-rates from— | | | | | | | | |
| All Epidemic diseases | 1·5 | 1·3 | 0·77 | 1·90 | 0·81 | 0·82 | 0·94 | 0·60 |
| Tuberculous diseases | 1·0 | 0·6 | 1·03 | 0·95 | 0·81 | 0·9 | 0·54 | 0·99 |
| Lung diseases ... | 1·5 | 2·1 | 1·1 | 1·21 | 1·1 | 1·06 | 1·09 | 2·13 |
| Heart diseases ... | 1·1 | 0·6 | 0·94 | 1·73 | 1·1 | 0·41 | 0·87 | 0·53 |
| Cancer | 0·7 | 0·6 | 0·34 | 0·78 | 1·06 | 0·33 | 0·87 | 0·68 |
| Injuries | 0·2 | 0·4 | 0·5 | 0·26 | 0·3 | 0·33 | 0·31 | 0·07 |
| All other causes ... | 5·2 | 5·1 | 5·0 | 4·25 | 4·5 | 4·8 | 3·90 | 5·80 |

TABLE F.—*Notifications of Infectious Diseases.*

| Year | Voluntary. | | | | | | | | | | Compulsory from March 1st, 1890. | | | | | | | | | | | | | |
|---------------------|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 1885 | 1886 | 1887 | 1888 | 1889 | 1890 | 1891 | 1892 | 1893 | 1894 | 1895 | 1896 | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 |
| Population | 27,300 | 28,000 | 28,800 | 29,500 | 30,300 | 31,000 | 33,100 | 34,650 | 36,500 | 38,000 | 39,500 | 40,600 | 41,600 | 43,500 | 47,000 | 50,000 | 53,000 | 56,141 | 59,000 | 61,500 | 65,249 | 66,276 | 69,122 | 70,518 |
| Smallpox | 3 | ... | ... | ... | ... | ... | ... | 1 | 42 | 106 | 7 | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... |
| Scarlatina | 24 | 20 | 34 | 52 | 221 | 208 | 120 | 239 | 196 | 101 | 179 | 304 | 216 | 88 | 155 | 185 | 251 | 361 | 256 | 127 | 234 | 216 | 420 | 420 |
| Diphtheria | 3 | 13 | 30 | a few | 9 | 50 | 19 | 20 | 15 | 19 | 28 | 98 | 46 | 29 | 50 | 50 | 59 | 55 | 55 | 55 | 32 | 57 | 76 | 95 |
| Membranous
Croup | ... | ... | ... | ... | ... | ... | 2 | ... | 1 | ... | 3 | 3 | 2 | 2 | 1 | ... | 1 | 3 | 4 | 4 | 1 | 2 | 2 | ... |
| Typhus Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhoid " | 8 | 19 | 15 | 4 | 12 | 20 | 21 | 5 | 10 | 19 | 27 | 25 | 25 | 31 | 48 | 36 | 28 | 24 | 20 | 19 | 10 | 11 | 20 | 13 |
| Continued " | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 2 | ... | ... | ... | ... | 1 | 1 | ... |
| Relapsing " | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Puerperal " | ... | ... | ... | ... | ... | 1 | ... | ... | 2 | 4 | 4 | 2 | 2 | 4 | 4 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 2 | ... |
| Cholera | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Erysipelas | ... | ... | ... | ... | ... | 8 | 8 | 22 | 20 | 27 | 23 | 36 | 15 | 24 | 31 | 23 | 32 | 20 | 32 | 38 | 37 | 43 | 50 | 42 |
| Plague | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| *Chickenpox | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 78 | 248 | 103 | ... | ... | ... | ... |
| Totals | 38 | 52 | 79 | 56 | 242 | 287 | 170 | 287 | 286 | 276 | 271 | 468 | 307 | 178 | 289 | 297 | 376 | 544 | 711 | 477 | 208 | 350 | 367 | 570 |

Chicken Pox was added to the "Notifiable Diseases" in this District during the period June 1st, 1902—June 1st, 1904.

TABLE H.
Showing number of cases of disease notified per 1,000 of the population.

| Disease. | Average
5 years
1891-5. | 1896. | 1897. | 1898. | 1899. | 1900. | 1901. | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908. |
|-------------------------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Smallpox | 0·83 | ... | ... | ... | ... | ... | ... | ... | 0·02 | 0·01 | ... | ... | ... | ... |
| Scarlatina | 4·57 | 7·48 | 5·19 | 2·02 | 3·30 | 3·70 | 4·73 | 6·42 | 6·12 | 4·16 | 1·99 | 3·53 | 3·13 | 5·95 |
| Diphtheria | 0·53 | 2·41 | 1·13 | 0·67 | 1·06 | 1·00 | 1·11 | 0·98 | 0·73 | 0·89 | 0·49 | 0·86 | 1·10 | 1·34 |
| Membranous Croup | 0·03 | 0·07 | 0·04 | 0·04 | 0·02 | ... | 0·02 | 0·05 | 0·05 | 0·06 | 0·01 | 0·03 | 0·03 | ... |
| Typhus Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhoid ,, | 0·44 | 0·61 | 0·60 | 0·71 | 1·02 | 0·72 | 0·53 | 0·42 | 0·34 | 0·31 | 0·15 | 0·16 | 0·29 | 0·18 |
| Continued ,, | ... | ... | 0·02 | ... | ... | ... | 0·04 | ... | ... | ... | ... | 0·01 | 0·01 | ... |
| Relapsing ,, | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Puerperal ,, | 0·05 | 0·05 | 0·04 | 0·09 | 0·09 | 0·06 | 0·06 | 0·05 | 0·05 | 0·01 | 0·01 | 0·03 | 0·03 | ... |
| Cholera | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Erysipelas | 0·54 | 0·89 | 0·36 | 0·88 | 0·66 | 0·46 | 0·60 | 0·35 | 0·54 | 0·62 | 0·55 | 0·64 | 0·73 | 0·59 |
| Chickenpox | ... | ... | ... | ... | ... | ... | ... | 1·38 | 4·06 | 1·67 | ... | ... | ... | ... |
| Totals | 7·00 | 11·52 | 7·38 | 4·41 | 6·15 | 5·94 | 7·09 | 9·65 | 11·91 | 7·73 | 3·18 | 5·26 | 5·32 | 8·06 |

TABLE J.—PERSONS.
DEATHS OF HANDSWORTH RESIDENTS IN SIX AGE-GROUPS, CLASSIFIED ACCORDING TO THE CAUSES OF DEATHS.

| CAUSE OF DEATH. | GROUPS OF YEARS. | | | | | | | Total. |
|--|------------------|-----|------|-------|-------|--------------|-----|--------|
| | 0-1 | 1-5 | 5-15 | 15-25 | 25-65 | 65 and over. | | |
| Smallpox ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Measles ... | ... | ... | ... | ... | ... | ... | ... | 10 |
| Scarlet Fever ... | ... | 6 | 3 | ... | 1 | ... | ... | 10 |
| Typhus Fever ... | ... | ... | ... | ... | ... | ... | ... | 24 |
| Epidemic Influenza ... | ... | 1 | ... | ... | 11 | 12 | ... | 19 |
| Whooping Cough ... | 10 | 9 | ... | ... | ... | ... | ... | 12 |
| Diphtheria, Membranous Croup ... | ... | 3 | 9 | ... | ... | ... | ... | 1 |
| Enteric Fever ... | ... | ... | 1 | ... | ... | ... | ... | ... |
| Asiatic Cholera... .. | ... | ... | ... | ... | ... | ... | ... | ... |
| Diarrhea, Dysentery .. | 10 | 3 | ... | ... | ... | ... | ... | 13 |
| Epidemic or Zymotic Enteritis ... | 3 | 1 | ... | ... | ... | ... | ... | 4 |
| Epidemic Cerebro-Spinal Meningitis ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Hydrophobia ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Glanders, Farcy ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Tetanus ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Anthrax, Splenic Fever ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Cowpox, Accidents of Vaccination ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Syphilis ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Gonorrhœa ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Phagedæna, Hospital Gangrene ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Total carried forward | 23 | 24 | 13 | ... | 12 | 12 | ... | 84 |

TABLE J.—PERSONS.—Continued.

| CAUSE OF DEATH. | GROUPS OF YEARS. | | | | | | | Total. |
|--|------------------|-----|------|-------|-------|--------------|-----|--------|
| | 0-1 | 1-5 | 5-15 | 15-25 | 25-65 | 65 and over. | | |
| Brought forward | 23 | 24 | 13 | ... | 12 | 12 | 84 | |
| Erysipelas | 1 | ... | ... | ... | 1 | 1 | 3 | |
| Puerperal Fever | ... | ... | ... | ... | ... | ... | ... | |
| Pyæmia, Septicæmia | ... | ... | 2 | ... | 1 | ... | 3 | |
| Septic, Ulcerative or Infective Endocarditis | ... | ... | ... | ... | 1 | ... | 1 | |
| Other allied Diseases | ... | ... | ... | ... | ... | ... | ... | |
| Malarial Fever | ... | ... | ... | ... | ... | ... | ... | |
| Rheumatic Fever | ... | ... | 1 | ... | 1 | ... | 2 | |
| Rheumatism of the Heart | ... | ... | ... | ... | ... | ... | ... | |
| Tuberculosis of Brain or Meninges, Acute Hydrocephalus | 2 | 3 | 2 | ... | ... | ... | 7 | |
| Tuberculosis of Larynx | ... | ... | ... | ... | ... | ... | ... | |
| Tuberculosis of Lungs, Phthisis, Phthisis Pulmonalis | ... | 2 | 1 | 6 | 40 | 4 | 53 | |
| Tuberculosis of Intestines, Tabes Mesenterica | 1 | 2 | 1 | ... | ... | ... | 4 | |
| General Tuberculosis, Tubercular Disease of undefined position | ... | 1 | 1 | ... | ... | ... | 2 | |
| Other forms of Tuberculosis, Scrofula | ... | ... | ... | ... | ... | ... | ... | |
| Other Infective Diseases | ... | ... | ... | ... | ... | ... | ... | |
| Thrush | ... | ... | ... | ... | ... | ... | ... | |
| Actinomycosis | ... | ... | ... | ... | ... | ... | ... | |
| Hydatid Diseases | ... | ... | ... | ... | ... | ... | ... | |
| Scurvy | ... | ... | ... | ... | ... | ... | ... | |
| Total carried forward | 27 | 32 | 21 | 6 | 56 | 17 | 159 | |

TABLE J.—PERSONS.—Continued.

| CAUSE OF DEATH. | GROUPS OF YEARS. | | | | | | | Total. |
|---------------------------------------|------------------|-----|------|-------|-------|--------------|-----|--------|
| | 0-1 | 1-5 | 5-15 | 15-25 | 25-65 | 65 and over. | | |
| Brought forward | 27 | 32 | 21 | 6 | 56 | 17 | 159 | |
| Other Diseases due to Altered Food | ... | ... | ... | ... | ... | ... | ... | |
| Acute Alcoholism, Delirium Tremens | ... | ... | ... | ... | ... | ... | ... | |
| Chronic Alcoholism | ... | ... | ... | ... | 1 | ... | 1 | |
| Chronic Industrial Poisoning | ... | ... | ... | ... | ... | ... | ... | |
| Other Chronic Poisonings | ... | ... | ... | ... | ... | ... | ... | |
| Osteo-arthritis, Rheumatoid Arthritis | ... | ... | ... | ... | 1 | ... | 1 | |
| Gout | ... | ... | ... | ... | ... | ... | ... | |
| Cancer | ... | ... | ... | ... | 45 | 22 | 67 | |
| Diabetes Mellitus | ... | ... | ... | ... | 5 | 6 | 11 | |
| Purpura Hæmorrhagica | ... | ... | ... | ... | ... | ... | ... | |
| Hæmophilia | ... | ... | ... | ... | ... | ... | ... | |
| Anæmia, Leucocythæmia | ... | ... | ... | ... | 3 | ... | 3 | |
| Lymphadenoma, Hodgkin's Disease | ... | ... | ... | ... | 1 | ... | 1 | |
| Premature Birth | 31 | ... | ... | ... | ... | ... | 31 | |
| Injury at Birth | 1 | ... | ... | ... | ... | ... | 1 | |
| Debility at Birth | ... | ... | ... | ... | ... | ... | ... | |
| Atelectasis | 1 | ... | ... | ... | ... | ... | 1 | |
| Congenital Defects | 7 | ... | ... | ... | ... | ... | 7 | |
| Want of Breast Milk | ... | ... | ... | ... | ... | ... | ... | |
| Atrophy, Debility, Marasmus | 16 | 6 | ... | ... | ... | ... | 22 | |
| Total carried forward | 83 | 38 | 21 | 6 | 112 | 45 | 305 | |

TABLE J.—PERSONS.—Continued.

| CAUSE OF DEATH. | GROUPS OF YEARS. | | | | | | | Total. |
|-------------------------------------|------------------|-----|------|-------|-------|--------------|-----|--------|
| | 0-1 | 1-5 | 5-15 | 15-25 | 25-65 | 65 and over. | | |
| Brought forward | 83 | 38 | 21 | 6 | 112 | 45 | 305 | |
| Dentition | ... | ... | ... | ... | ... | ... | ... | |
| Want of attention at birth | 1 | ... | ... | ... | ... | ... | 1 | |
| Rickets | 1 | 3 | ... | ... | ... | ... | 4 | |
| Old Age, Senile Decay | ... | ... | ... | ... | ... | 48 | 48 | |
| Convulsions | 10 | 1 | ... | ... | ... | ... | 11 | |
| Meningitis | ... | 4 | 3 | ... | ... | ... | 7 | |
| Encephalitis | ... | ... | ... | ... | ... | ... | ... | |
| Apoplexy | ... | ... | ... | ... | ... | ... | ... | |
| Softening of Brain | ... | ... | ... | ... | 5 | 10 | 15 | |
| Hemiplegia, Brain Paralysis | ... | ... | ... | ... | 1 | 1 | 2 | |
| General Paralysis of Insane | ... | ... | ... | ... | 1 | 1 | 2 | |
| Other Forms of Insanity | ... | ... | ... | ... | 2 | ... | 2 | |
| Chorea | ... | ... | ... | ... | 1 | 3 | 4 | |
| Cerebral Tumour | ... | ... | ... | ... | ... | ... | ... | |
| Epilepsy | ... | ... | ... | ... | 1 | ... | 1 | |
| Laryngismus, Stridulus | ... | ... | 1 | ... | 3 | 1 | 5 | |
| Locomotor Ataxy | ... | ... | ... | ... | ... | ... | ... | |
| Paraplegia, Diseases of Spinal Cord | ... | ... | ... | ... | 2 | ... | 2 | |
| Diabetes Insipidas | ... | ... | ... | ... | ... | 1 | 1 | |
| Peripheral Neuritis | ... | ... | ... | ... | ... | 1 | 1 | |
| Total carried forward | 95 | 46 | 25 | 6 | 129 | 111 | 412 | |

TABLE J.—PERSONS.—Continued.

| CAUSE OF DEATH. | GROUPS OF YEARS. | | | | | | Total. |
|---|------------------|-----|------|-------|-------|--------------|--------|
| | 0-1 | 1-5 | 5-15 | 15-25 | 25-65 | 65 and over. | |
| Brought forward | 95 | 46 | 25 | 6 | 129 | 111 | 412 |
| Other and ill-defined Diseases of Brain or Nervous System | 1 | ... | ... | ... | 1 | ... | 2 |
| Otitis, Otorrhoea | ... | 1 | ... | ... | ... | ... | 1 |
| Diseases of Nose, Epistaxis | ... | ... | ... | ... | ... | ... | ... |
| Diseases of Eye, Ophthalmia | ... | ... | ... | ... | ... | ... | ... |
| Pericarditis | ... | ... | ... | ... | 1 | ... | 1 |
| Endocarditis, Valvular Diseases of the Heart | ... | ... | 2 | 1 | 10 | 8 | 21 |
| Angina Pectoris | ... | ... | ... | ... | 1 | 1 | 2 |
| Aneurism | ... | ... | ... | ... | 1 | ... | 1 |
| Senile Gangrene | ... | ... | ... | ... | 1 | 3 | 4 |
| Embolism, Thrombosis | ... | ... | ... | ... | 1 | 2 | 3 |
| Phlebitis | ... | ... | ... | ... | ... | ... | ... |
| Varicose Veins | ... | ... | ... | ... | ... | ... | ... |
| Fatty Degeneration of Heart | ... | ... | ... | ... | 4 | 2 | 6 |
| Dilatation of Heart | ... | ... | ... | ... | ... | 1 | 1 |
| Heart Disease not otherwise specified | 1 | ... | ... | ... | 13 | 6 | 20 |
| Heart Failure, Syncope | ... | ... | ... | ... | 5 | 1 | 6 |
| Cerebral Hæmorrhage | ... | ... | ... | ... | 14 | 16 | 30 |
| Arterial Sclerosis | ... | ... | ... | ... | 1 | 1 | 2 |
| Laryngitis | ... | 1 | ... | ... | 1 | ... | 2 |
| Croup | ... | ... | ... | ... | ... | ... | ... |
| Total carried forward | 97 | 48 | 27 | 7 | 183 | 152 | 514 |

TABLE J. — PERSONS. — Continued.

| CAUSE OF DEATH. | GROUPS OF YEARS. | | | | | | | Total. |
|--|------------------|-----|------|-------|-------|--------------|-----|--------|
| | 0-1 | 1-5 | 5-15 | 15-25 | 25-65 | 65 and over. | | |
| Brought forward | 97 | 48 | 27 | 7 | 183 | 152 | 514 | |
| Other Diseases of Larynx and Trachea | ... | ... | ... | ... | ... | ... | ... | |
| Acute Bronchitis | 5 | 2 | ... | ... | 4 | 9 | 20 | |
| Chronic Bronchitis | ... | ... | ... | ... | 9 | 36 | 45 | |
| Lobar, Croupous, Acute, Pleuro-Pneumonia | ... | ... | ... | ... | ... | 2 | 2 | |
| Lobular, Catarrhal, Broncho-Pneumonia | 8 | 7 | ... | ... | 4 | 8 | 27 | |
| Pneumonia, form not stated | 5 | 4 | ... | 2 | 9 | 6 | 26 | |
| Emphysema, Asthma | ... | ... | ... | ... | 1 | 2 | 3 | |
| Pleurisy | ... | ... | ... | ... | 1 | 1 | 2 | |
| Other and ill-defined Diseases of Respiratory System | ... | ... | ... | ... | 4 | 2 | 6 | |
| Diseases of Mouth and Annæa | 2 | ... | ... | ... | ... | ... | 2 | |
| Diseases of Pharynx | ... | ... | ... | ... | ... | ... | ... | |
| Diseases of Oesophagus | ... | ... | ... | ... | ... | ... | ... | |
| Ulcer of Stomach and Duodenum | ... | ... | ... | 1 | ... | ... | 4 | |
| Other Diseases of Stomach | 5 | ... | ... | ... | 3 | 3 | 11 | |
| Enteritis | 8 | 2 | ... | ... | 1 | 1 | 12 | |
| Appendicitis | ... | ... | 4 | ... | 1 | ... | 5 | |
| Obstruction of Intestine | ... | ... | ... | ... | 7 | 6 | 13 | |
| Other Diseases of Intestine | ... | ... | ... | ... | ... | ... | ... | |
| Cirrhosis of Liver | ... | ... | ... | ... | 6 | ... | 6 | |
| Other Diseases of Liver | ... | ... | ... | ... | 2 | 1 | 3 | |
| Total carried forward | 130 | 63 | 31 | 10 | 237 | 231 | 702 | |

TABLE J.—PERSONS.—Continued.

| CAUSE OF DEATH. | GROUPS OF YEARS. | | | | | | | Total. |
|--|------------------|-----|------|-------|-------|--------------|-----|--------|
| | 0-1 | 1-5 | 5-15 | 15-25 | 25-65 | 65 and over. | | |
| Brought forward | 130 | 63 | 31 | 10 | 237 | 231 | 702 | |
| Peritonitis | ... | ... | ... | ... | 2 | ... | 2 | |
| Other and ill-defined Diseases of Digestive System | 1 | ... | ... | ... | ... | ... | 1 | |
| Diseases of Lymphatic System and Ductless Glands | ... | ... | ... | ... | 1 | ... | 1 | |
| Acute Nephritis | ... | ... | ... | ... | ... | 2 | 2 | |
| Bright's Disease | ... | ... | 1 | ... | 7 | 4 | 12 | |
| Calculus | 1 | ... | ... | ... | ... | ... | 1 | |
| Diseases of Bladder and Prostate | ... | ... | ... | ... | ... | 5 | 5 | |
| Other and ill-defined Diseases of Urinary System | ... | ... | ... | ... | ... | ... | ... | |
| Diseases of Testis and Penis | ... | ... | ... | ... | ... | ... | ... | |
| Diseases of Ovaries | ... | ... | ... | ... | ... | ... | ... | |
| Diseases of Uterus and Appendages | ... | ... | ... | ... | 1 | ... | 1 | |
| Diseases of Vagina and External Genital Organs | ... | ... | ... | ... | 1 | ... | 1 | |
| Diseases of the Breast... .. | ... | ... | ... | ... | ... | ... | ... | |
| Abortion, Miscarriage... .. | ... | ... | ... | ... | ... | ... | ... | |
| Puerperal Mania | ... | ... | ... | ... | ... | ... | ... | |
| Puerperal Convulsions | ... | ... | ... | ... | ... | ... | ... | |
| Placenta Previa, Flooding, Accidental Hoemorrhage | ... | ... | ... | ... | ... | ... | ... | |
| Puerperal Thrombosis... .. | ... | ... | ... | ... | 1 | ... | 1 | |
| Other and ill-defined Accidents and Diseases of Preg-
nancy and Childbirth | ... | ... | ... | ... | ... | ... | ... | |
| Total carried forward | 132 | 63 | 32 | 10 | 250 | 242 | 729 | |

TABLE J.—PERSONS.—Continued.

| CAUSE OF DEATH. | GROUPS OF YEARS. | | | | | | | Total. |
|---|------------------|-----|------|-------|-------|--------------|-----|--------|
| | 0-1 | 1-5 | 5-15 | 15-25 | 25-65 | 65 and over. | | |
| Brought forward | 132 | 63 | 32 | 10 | 250 | 242 | 729 | |
| Arthritis, Ostitis, Periostitis | ... | ... | ... | ... | ... | 1 | 1 | |
| Other and ill-defined Diseases of Osseous System | ... | ... | ... | ... | ... | 1 | 1 | |
| Ulcer, Bedsore | ... | ... | ... | ... | ... | ... | ... | |
| Eczema | ... | ... | ... | ... | ... | ... | ... | |
| Pemphigus | 1 | ... | ... | ... | ... | ... | 1 | |
| Other and ill-defined Diseases of the Integumentary System | 1 | ... | ... | ... | ... | ... | 1 | |
| BY ACCIDENT OR NEGLIGENCE: | | | | | | | | |
| In Mines and Quarries | ... | ... | ... | ... | ... | ... | ... | |
| In Vehicular Traffic | ... | ... | 1 | ... | ... | ... | 1 | |
| On Railways | ... | ... | ... | ... | ... | ... | ... | |
| On Ships, Boats and Docks, excluding Drowning | ... | ... | ... | ... | ... | ... | ... | |
| In Building Operations | ... | ... | ... | ... | ... | ... | ... | |
| By Machinery | ... | ... | ... | ... | ... | ... | ... | |
| By Weapons and Implements | ... | ... | ... | ... | ... | ... | ... | |
| Burns and Scalds | ... | 1 | 4 | ... | ... | ... | 5 | |
| Poisons, Poisonous Vapours | ... | ... | ... | ... | ... | ... | ... | |
| Surgical Narcosis | ... | ... | ... | ... | ... | ... | ... | |
| Effects of Electric Shock | ... | ... | ... | ... | ... | ... | ... | |
| Corrosion by Chemicals | ... | ... | ... | ... | ... | ... | ... | |
| Total carried forward | 134 | 64 | 37 | 10 | 250 | 244 | 739 | |

TABLE J.—PERSONS.—Continued.

| CAUSE OF DEATH. | GROUPS OF YEARS. | | | | | | | Total. |
|--|------------------|-----|------|-------|-------|--------------|-----|--------|
| | 0-1 | 1-5 | 5-15 | 15-25 | 25-65 | 65 and over. | | |
| Brought forward | 134 | 64 | 37 | 10 | 250 | 244 | 739 | |
| Drowning | ... | ... | ... | ... | ... | ... | ... | |
| Suffocation, overlaid in bed | 3 | ... | ... | ... | ... | ... | 3 | |
| Suffocation, otherwise | ... | ... | ... | ... | 1 | ... | 1 | |
| Falls not specified | ... | ... | ... | ... | 2 | 1 | 3 | |
| Weather Agencies | ... | ... | ... | ... | ... | ... | ... | |
| Otherwise and not stated | 1 | ... | ... | ... | ... | ... | 1 | |
| SUICIDES, ALL FORMS: | ... | ... | ... | ... | ... | ... | ... | |
| By Poison | ... | ... | ... | ... | 2 | ... | 2 | |
| By Asphyxia | ... | ... | ... | ... | ... | ... | ... | |
| By Hanging and Strangulation | ... | ... | ... | ... | ... | ... | ... | |
| By Drowning | ... | ... | ... | ... | ... | ... | ... | |
| By Shooting | ... | ... | ... | 1 | ... | ... | 1 | |
| By Cut or Stab | ... | ... | ... | ... | 1 | ... | 1 | |
| By Precipitation from Elevated Places | ... | ... | ... | ... | ... | ... | ... | |
| By Crushing | ... | ... | ... | ... | ... | ... | ... | |
| By other and unspecified methods | ... | ... | ... | ... | ... | ... | ... | |
| Execution | ... | ... | ... | ... | ... | ... | ... | |
| Sudden Death (cause not ascertained) | ... | ... | ... | ... | ... | ... | ... | |
| Other ill-defined and not Specified Causes | ... | ... | ... | ... | 2 | ... | 2 | |
| UNCERTIFIED | 4 | ... | ... | ... | ... | 6 | 10 | |
| TOTALS | 142 | 64 | 37 | 11 | 258 | 251 | 763 | |

SUMMARY OF TABLES.

Showing mortality and rates at different ages, and from different classes of disease in 1908 compared with 1907 and the average rates for the ten years 1897-1906.

| | Totals.
1908. | Rates per 1,000. | | |
|----------------------------------|------------------|------------------|-------|------------|
| | | 1908. | 1907. | 1897-1906. |
| Deaths | 763 | 10·8 | 10·0 | 12·0 |
| Deaths under one year | 142 | ... | ... | ... |
| Over one and under five | 64 | ... | ... | ... |
| Over sixty-five | 251 | ... | ... | ... |
| All Zymotic Diseases | 60 | 0·85 | 0·94 | 1·71 |
| Tubercular Diseases | 66 | 0·93 | 0·84 | 1·07 |
| Diseases of Lungs | 131 | 1·85 | 1·44 | 1·75 |
| Heart Diseases | 41 | 0·58 | 1·1 | 1·10 |
| Cancer, Malignant Disease | 67 | 0·95 | 0·86 | 0·68 |
| Injuries | 18 | 0·25 | 0·33 | 0·33 |
| From all other causes | 380 | 5·38 | 4·52 | 5·31 |

SUMMARY OF SANITARY WORK

done in the Inspector of Nuisances Department during the year 1908.

| | | Number of | | Abatement Notices. | | Nuisances Abated after Notices by | |
|-----------------------------|-----------------------------------|------------------------------------|----------------|------------------------|----------------------|-----------------------------------|------------|
| | | Inspections and Observations made. | Defects found. | Informal by Inspector. | Formal by Authority. | Inspector. | Authority. |
| Dwelling-houses and Schools | Foul Conditions ... | 401 | 120 | 120 | 12 | 106 | 9 |
| | Structural Defects ... | 832 | 365 | 365 | 15 | 348 | 13 |
| | Over-crowding ... | 43 | 13 | 13 | 1 | 10 | 1 |
| | Unfit for Habitation ... | 61 | 38 | 38 | ... | 38 | ... |
| | Lodging-houses ... | ... | ... | ... | ... | ... | ... |
| | Dairies and Milkshops ... | 281 | 6 | 6 | ... | 6 | ... |
| | Cowsheds ... | 101 | 13 | 13 | ... | 13 | ... |
| | Bakehouses ... | 167 | 37 | 37 | ... | 37 | ... |
| | Slaughter-houses ... | 151 | 20 | 20 | ... | 20 | ... |
| | Canal Boats ... | ... | ... | ... | ... | ... | ... |
| | Ashpits and Privies ... | 1965 | 305 | 305 | 53 | 249 | 43 |
| | Deposits of Refuse and Manure ... | 393 | 141 | 141 | 14 | 125 | 14 |
| House Drainage | Water-closets ... | 1375 | 488 | 488 | 50 | 430 | 49 |
| | Defective Traps ... | 431 | 118 | 118 | 13 | 104 | 13 |
| | No Disconnection ... | 161 | 38 | 38 | 7 | 31 | 7 |
| | Other Faults ... | 1696 | 514 | 514 | 36 | 473 | 35 |
| | Water Supply ... | 83 | 17 | 17 | 1 | 16 | 1 |
| | Pigsties ... | ... | ... | ... | ... | ... | ... |
| | Animals improperly kept ... | 201 | 51 | 51 | 12 | 35 | 12 |
| | Offensive Trades ... | ... | ... | ... | ... | ... | ... |
| | Smoke Nuisances ... | 37 | 6 | 6 | 2 | 4 | ... |
| | Other Nuisances .. | 390 | 150 | 150 | 17 | 129 | 15 |
| Totals ... | | 8769 | 2440 | 2440 | 233 | 2174 | 212 |

| | |
|--|-----|
| Seizures of Unwholesome Food ... | ... |
| Samples of Food taken for Analysis ... | ... |
| „ „ found Adulterated ... | ... |
| „ of Water taken for Analysis ... | ... |
| „ „ Condemned as Unfit for Use | ... |

PRECAUTIONS AGAINST INFECTIOUS DISEASE.

| | |
|--|------|
| Lots of Infected Bedding Stoved or Destroyed | 2197 |
| Houses Disinfected after Infectious Disease ... | 485 |
| Schools ditto ditto ... | 3 |
| Prosecutions for not Notifying Existence of Infectious Disease | |
| Convictions ditto ditto | |
| Prosecution for Exposure of Infected Persons or Things | |
| Convictions ditto ditto | |

*Signed, ALBERT HODGES, Assoc. San. Inst.,
Inspector of Nuisances.*

TABLE I.—Vital Statistics of Whole District during 1908 and Previous Years.

| YEAR. | Population estimated to Middle of each Year. | | BIRTHS. | | TOTAL DEATHS REGISTERED IN THE DISTRICT. | | | | NETT DEATHS AT ALL AGES BELONGING TO THE DISTRICT. | | | | |
|-------------------------------|--|---|---------|--------|--|-----------------------------------|--------------|--------|--|--|---|---------|--------|
| | 1 | 2 | Number. | Rate * | Under 1 Year of Age. | | At all Ages. | | Total Deaths in Public Institutions in the District. | Deaths of Non-residents registered in Public Institutions in the District. | Deaths of Residents in Public Institutions beyond the District. | Number. | Rate.* |
| | | | | | Number. | Rate per 1,000 Births registered. | Number. | Rate.* | | | | | |
| 1898. | 43,500 | 3 | 1,231 | 28.3 | 181 | 147 | 535 | 12.3 | ... | 46 | 581 | 13.2 | |
| 1899. | 47,000 | 3 | 1,236 | 26.3 | 183 | 148 | 583 | 12.4 | ... | 40 | 623 | 13.2 | |
| 1900. | 50,000 | 3 | 1,275 | 25.5 | 179 | 140 | 586 | 11.7 | ... | 46 | 632 | 12.6 | |
| 1901. | 53,000 | 3 | 1,402 | 26.4 | 183 | 129 | 671 | 12.7 | ... | 57 | 728 | 13.7 | |
| 1902. | 56,141 | 3 | 1,392 | 24.8 | 150 | 108 | 563 | 10.2 | ... | 63 | 626 | 11.1 | |
| 1903. | 59,000 | 3 | 1,451 | 24.6 | 148 | 102 | 576 | 9.8 | ... | 66 | 642 | 10.8 | |
| 1904. | 61,500 | 3 | 1,436 | 23.4 | 192 | 133 | 670 | 10.9 | ... | 84 | 754 | 12.2 | |
| 1905. | 65,249 | 3 | 1,483 | 23.0 | 119 | 80 | 583 | 9.0 | 1 | 75 | 657 | 10.1 | |
| 1906. | 66,276 | 3 | 1,500 | 22.6 | 181 | 120 | 663 | 10.0 | ... | 77 | 740 | 11.1 | |
| 1907. | 69,122 | 3 | 1,516 | 21.9 | 153 | 100 | 626 | 9.0 | ... | 67 | 693 | 10.0 | |
| Averages for years 1898-1907. | 57,078 | 3 | 1,392 | 24.6 | 166 | 120 | 605 | 10.8 | 1 | 1 | 667 | 11.8 | |
| 1908. | 70,518 | 3 | 1,570 | 22.2 | 142 | 90 | 675 | 9.5 | 0 | 0 | 763 | 10.8 | |

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

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

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

The "Public Institutions" to be taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses and lunatic asylums. The chief of these are:—The Workhouse and Infirmary, West Bromwich; Infectious Hospital, West Bromwich; Staffordshire County Asylum, Barntwood; and various Birmingham Hospitals. There are no "Public Institutions" of the kind within the District.

Total population at all ages, 52,921; Number of inhabited houses, 11,060; Average number of persons per house, 4.785.—At Census of 1901. Area of District in acres (exclusive of area covered by water), 3,665.

TABLE II.
Vital Statistics of Separate Localities in 1908 and previous years.

| Year | BIRCHFIELD WARD | | | | HEATHFIELD WARD | | | | MURDOCK WARD | | | | SANDWELL WARD | | | | SOHO WARD | | | |
|---------------------------------|---|-------------------|--------------------|---------------------|---|-------------------|--------------------|---------------------|---|-------------------|--------------------|---------------------|---|-------------------|--------------------|---------------------|---|-------------------|--------------------|------------------------|
| | Population estimated to middle of each year | Births registered | Deaths at all ages | Deaths under 1 year | Population estimated to middle of each year | Births registered | Deaths at all ages | Deaths under 1 year | Population estimated to middle of each year | Births registered | Deaths at all ages | Deaths under 1 year | Population estimated to middle of each year | Births registered | Deaths at all ages | Deaths under 1 year | Population estimated to middle of each year | Births registered | Deaths at all ages | Deaths under 1 year |
| 1898 | 9,270 | 277 | 113 | 40 | 8,019 | 184 | 84 | 21 | 9,588 | 358 | 152 | 66 | 8,098 | 249 | 112 | 36 | 8,525 | 163 | 101 | 17 |
| 1899 | 10,154 | 302 | 130 | 40 | 8,554 | 158 | 90 | 18 | 10,406 | 376 | 184 | 69 | 9,122 | 241 | 115 | 37 | 8,764 | 159 | 104 | 18 |
| 1900 | 10,480 | 293 | 136 | 44 | 9,034 | 178 | 91 | 26 | 10,994 | 380 | 177 | 58 | 10,145 | 263 | 120 | 28 | 9,347 | 161 | 105 | 23 |
| 1901 | 10,897 | 302 | 152 | 41 | 9,230 | 182 | 110 | 24 | 11,409 | 394 | 197 | 69 | 11,421 | 316 | 135 | 32 | 10,043 | 209 | 125 | 17 |
| 1902 | 11,555 | 326 | 103 | 31 | 9,506 | 176 | 105 | 18 | 11,514 | 352 | 161 | 45 | 12,809 | 336 | 141 | 35 | 10,667 | 202 | 116 | 21 |
| 1903 | 12,302 | 312 | 123 | 29 | 9,793 | 153 | 95 | 15 | 11,283 | 345 | 156 | 50 | 13,966 | 427 | 154 | 36 | 11,656 | 214 | 114 | 19 |
| 1904 | 12,886 | 336 | 155 | 43 | 9,720 | 153 | 93 | 17 | 11,996 | 348 | 195 | 64 | 15,368 | 387 | 178 | 51 | 11,530 | 212 | 133 | 19 |
| 1905 | 14,408 | 329 | 136 | 22 | 9,575 | 168 | 87 | 12 | 12,818 | 352 | 165 | 36 | 16,199 | 415 | 154 | 28 | 12,249 | 219 | 115 | 21 |
| 1906 | 14,776 | 360 | 175 | 51 | 9,614 | 152 | 114 | 23 | 13,032 | 369 | 169 | 48 | 16,605 | 425 | 177 | 44 | 12,249 | 194 | 105 | 15 |
| 1907 | 15,696 | 375 | 140 | 30 | 9,864 | 150 | 110 | 14 | 12,987 | 376 | 162 | 41 | 17,788 | 432 | 174 | 51 | 12,787 | 183 | 107 | 17 |
| Averages of years, 1898 to 1907 | 12,242 | 321 | 136 | 37 | 9,290 | 165 | 97 | 18 | 11,602 | 365 | 171 | 54 | 13,152 | 349 | 146 | 37 | 10,781 | 191 | 112 | 18 |
| 1908 | 16,188 | 397 | 163 | 31 | 9,976 | 152 | 114 | 15 | 13,171 | 397 | 184 | 44 | 18,057 | 417 | 159 | 31 | 13,126 | 207 | 143 | 21 |
| | | | | | | | | | | | | | | | | | | | | Deaths not distributed |

Notes.—Deaths of residents occurring in public institutions beyond the District are included in sub-columns *c* of this Table, and those of non-residents registered in public institutions in the District excluded. (See note on Table I. as to meaning of terms "resident" and "non-resident.") Deaths of residents occurring in public institutions, whether within or without the District, are allotted to the respective localities according to the addresses of the deceased.

TABLE III.
Cases of Infectious Disease notified during the year 1908.

| NOTIFIABLE DISEASE. | CASES NOTIFIED IN WHOLE DISTRICT. | | | | | | | TOTAL CASES NOTIFIED IN EACH LOCALITY. | | | | | NO. OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY. | | | | | Total cases removed to Hospital. |
|---|-----------------------------------|---------|--------|---------|----------|----------|----------------|--|-------------|----------|-----------|-------|--|-------------|----------|-----------|-------|----------------------------------|
| | At all Ages. | Under 1 | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 65 | 65 and upwards | Birchfield. | Heathfield. | Murdock. | Sandwell. | Soho. | Birchfield. | Heathfield. | Murdock. | Sandwell. | Soho. | |
| | | | | | | | | | | | | | | | | | | |
| Smallpox | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Cholera | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Diphtheria (including Membranous Croup) | 95 | ... | 22 | 56 | 8 | 9 | ... | 22 | 9 | 22 | 34 | 8 | ... | ... | ... | ... | ... | |
| Erysipelas | 42 | 1 | ... | 2 | 5 | 28 | 6 | 15 | 6 | 7 | 12 | 2 | ... | ... | ... | ... | ... | |
| Scarlet Fever | 420 | 4 | 98 | 285 | 23 | 10 | ... | 50 | 15 | 170 | 131 | 54 | 9 | 1 | 49 | 24 | 12 | |
| Typhus Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| Enteric Fever | 13 | ... | 1 | 4 | 3 | 5 | ... | 3 | 1 | 4 | 1 | 4 | ... | ... | ... | ... | ... | |
| Relapsing Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| Continued Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| Puerperal Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| Plague | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| Totals | 570 | 5 | 121 | 347 | 39 | 52 | 6 | 90 | 31 | 203 | 178 | 68 | 9 | 1 | 49 | 24 | 12 | 95 |

Isolation Hospital—West Bromwich Borough Infectious Hospital. Total available beds, 70.
Number of Diseases that can be concurrently treated, 1.

TABLE IV.

Causes of, and Ages at, Death during year 1908.

| CAUSES OF DEATH. | DEATHS IN OR BELONGING TO WHOLE DISTRICT AT SUBJOINED AGES. | | | | | | | DEATHS IN OR BELONGING TO LOCALITIES (AT ALL AGES). | | | | | Deaths in Public Institutions 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 upwards. | WARDS. | | | | | | |
| | | | | | | | | Birch-field. | Heath-field. | Mur-dock. | Sand-well. | Soho. | | |
| Smallpox | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Measles | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... |
| Scarlet Fever | 10 | ... | 6 | 3 | ... | 1 | ... | 1 | 1 | 5 | 1 | 2 | ... | ... |
| Whooping-cough | 19 | 10 | 9 | ... | ... | ... | ... | 8 | ... | 7 | 1 | 3 | ... | ... |
| Diphtheria (including Membranous Croup) | 12 | ... | 3 | 9 | ... | ... | ... | 4 | 2 | 1 | 3 | 2 | ... | ... |
| Croup | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Fever { Typhus }
{ Enteric }
{ Other con'd } | 1 | ... | ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... |
| Epidemic Influenza | 24 | ... | 1 | ... | ... | 11 | 12 | 7 | 1 | 4 | 6 | 6 | ... | ... |
| Cholera | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Plague | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Diarrhœa | 17 | 13 | 4 | ... | ... | ... | ... | 2 | ... | 8 | 6 | 1 | ... | ... |
| Enteritis | 12 | 8 | 2 | ... | ... | 1 | 1 | ... | 1 | 6 | 4 | 1 | ... | ... |
| Puerperal Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Erysipelas | 3 | 1 | ... | ... | ... | 1 | 1 | 2 | ... | 1 | ... | ... | ... | ... |
| Phthisis (Pulmonary)
Tuberculosis) | 53 | ... | 2 | 1 | 6 | 40 | 4 | 8 | 10 | 13 | 14 | 8 | ... | ... |
| Other Tuberculous Diseases | 13 | 3 | 6 | 4 | ... | ... | ... | 4 | ... | 3 | 1 | 5 | ... | ... |
| Cancer, Malignant Disease | 67 | ... | ... | ... | ... | 45 | 22 | 17 | 13 | 15 | 13 | 9 | ... | ... |
| Bronchitis | 65 | 5 | 2 | ... | ... | 13 | 45 | 11 | 11 | 19 | 11 | 13 | ... | ... |
| Pneumonia | 55 | 13 | 11 | ... | 2 | 13 | 16 | 14 | 8 | 11 | 9 | 13 | ... | ... |
| Pleurisy | 2 | ... | ... | ... | ... | 1 | 1 | 1 | ... | 1 | ... | ... | ... | ... |
| Other Diseases of Respiratory Organs | 9 | ... | ... | ... | ... | 5 | 4 | 1 | 3 | 2 | 1 | 2 | ... | ... |
| Alcoholism | 7 | ... | ... | ... | ... | 7 | ... | 3 | ... | 1 | 3 | ... | ... | ... |
| Cirrhosis of Liver | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Venereal Diseases | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Premature Birth | 31 | 31 | ... | ... | ... | ... | ... | 3 | 4 | 16 | 5 | 3 | ... | ... |
| Diseases and Accidents of Parturition | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... |
| Heart Diseases | 41 | 1 | ... | 2 | 1 | 23 | 14 | 9 | 10 | 10 | 5 | 7 | ... | ... |
| Accidents | 14 | 4 | 1 | 5 | ... | 3 | 1 | 5 | 1 | 4 | 4 | ... | ... | ... |
| Suicides | 4 | ... | ... | ... | 1 | 3 | ... | ... | 1 | 1 | 1 | 1 | ... | ... |
| Senile Decay | 48 | ... | ... | ... | ... | 48 | ... | 6 | 9 | 10 | 13 | 10 | ... | ... |
| All other causes | 254 | 53 | 16 | 12 | 1 | 90 | 82 | 56 | 39 | 46 | 56 | 57 | ... | ... |
| All causes | 763 | 142 | 64 | 37 | 11 | 258 | 251 | 163 | 114 | 184 | 159 | 143 | ... | ... |

TABLE V.—INFANTILE MORTALITY DURING THE YEAR 1908.
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. |
|------------------------------|--|------------|------------|------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|------------------------------|
| | 36 | 7 | 14 | 7 | 64 | 18 | 12 | 4 | 7 | 7 | 2 | 7 | 7 | 4 | 3 | 3 | 138 |
| All Causes. | { Certified | ... | ... | ... | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 |
| | { Uncertified | 2 | ... | ... | 62 | 17 | 11 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 134 |
| Common Infectious Diseases. | { Small-pox | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | { Chicken-pox | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | { Measles | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | { Scarlet Fever | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | { Diphtheria (including Membranous Croup) }
Whooping Cough | ... | ... | ... | 2 | 2 | 2 | ... | 1 | ... | ... | 1 | 1 | ... | 2 | 1 | 1 |
| Diarrhoeal Diseases. | { Diarrhoea, all forms | ... | ... | ... | ... | 4 | ... | ... | 1 | 1 | 2 | 1 | 2 | 1 | ... | ... | 13 |
| | { Enteritis (Muco-enteritis, Gastro-enteritis) } | ... | ... | ... | ... | 2 | 3 | ... | ... | ... | ... | 1 | 1 | ... | 1 | ... | 8 |
| | { Gastritis, Gastro-intestinal Catarrh } | 1 | ... | 1 | ... | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 |
| Wasting Diseases. | { Premature Birth | 19 | 5 | 3 | 1 | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 31 |
| | { Congenital Defects | 3 | ... | 4 | ... | 7 | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | 9 |
| | { Injury at Birth | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| | { Want of Breast-milk, Starvation } | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | { Atrophy, Debility, Marasmus } | 7 | ... | 2 | 1 | 10 | 1 | 1 | 1 | 2 | ... | ... | 1 | ... | ... | ... | 16 |
| Total carried forward | 31 | 5 | 11 | 4 | 51 | 12 | 6 | 1 | 2 | 3 | 2 | 4 | 5 | 3 | 2 | 1 | 92 |

TABLE V.—INFANTILE MORTALITY DURING THE YEAR 1908.—Continued.

| 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. |
|--------------------------------|-----------------|------------|------------|------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|------------------------------|
| | Brought forward | 31 | 5 | 11 | 4 | 51 | 12 | 6 | 1 | 2 | 3 | 2 | 4 | 5 | 3 | 2 | 1 |
| Tuberculous Diseases. | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | 1 | ... | ... | ... | ... | 2 |
| { Tuberculous Meningitis | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| { Tuberculous Peritonitis : | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| { Tabes Mesenterica) | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| { Other Tuberculous Diseases | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| { Erysipelas | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| { Syphilis | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| { Rickets | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| { Meningitis (not Tuberculous) | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| { Convulsions | 1 | 1 | 3 | 1 | 6 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | ... | ... | ... | ... | 10 |
| { Bronchitis | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| { Laryngitis | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| { Pneumonia | ... | ... | ... | 1 | 1 | 3 | 2 | ... | 1 | 1 | ... | 1 | ... | 1 | 1 | 2 | 13 |
| { Suffocation, overlying | ... | ... | ... | 1 | 1 | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 3 |
| { Other Causes | 6 | ... | ... | ... | 6 | 2 | 4 | ... | 1 | ... | ... | ... | 1 | ... | ... | ... | 14 |
| Total | 38 | 7 | 14 | 7 | 66 | 19 | 13 | 4 | 7 | 7 | 2 | 7 | 7 | 4 | 3 | 3 | 142 |

District (or sub-division) of Handsworth (Staffs.). Population (estimated to middle of 1908), 70,518.

Births in the year:—Legitimate, 1,546; Illegitimate, 24.

Deaths in the year of Legitimate Infants, 136; Illegitimate Infants, 6 Deaths from all Causes at all Ages, 763.

TABLE VI.

PARTICULARS AS TO ACTIONS TAKEN UNDER FACTORY AND
WORKSHOPS ACT, 1901.1. *Number of Workshops on Register at end of 1908.*

| | | | | |
|----------------------|-----|-----|-------|-----|
| Miscellaneous trades | ... | ... | ... | 221 |
| Workshop Bakehouses | ... | ... | ... | 42 |
| | | | Total | 263 |

2. *Inspections made.*

| | | | | |
|-----------------------|-----|-----|-----|-----|
| Number of Inspections | ... | ... | ... | 319 |
| Written Notices sent | ... | ... | ... | 88 |
| Prosecutions | ... | ... | ... | 0 |

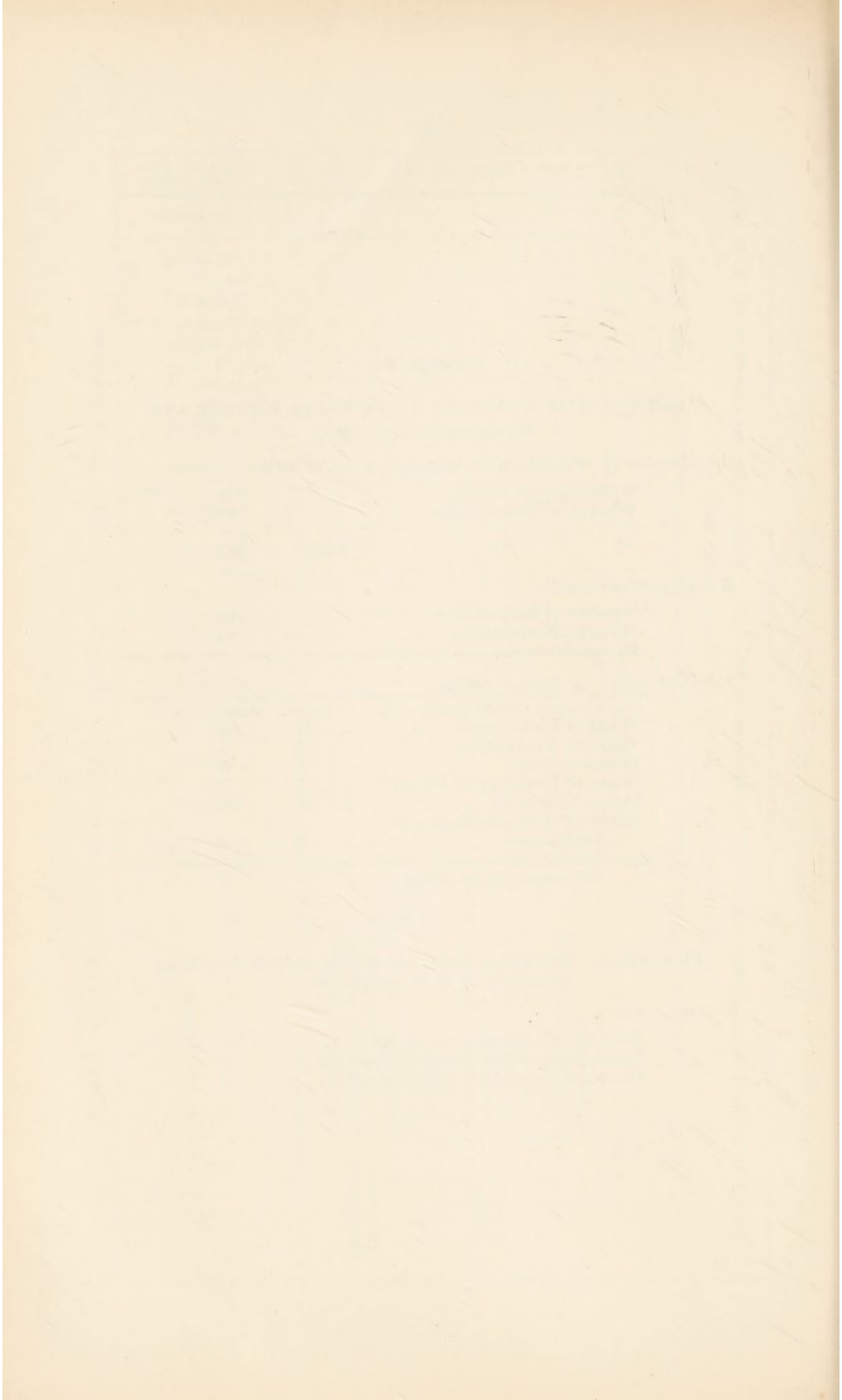
3. *Particulars of Defects found.*

| Nuisances under Public Health Acts. | Found. | Remedied. |
|-------------------------------------|--------|-----------|
| Want of Cleanliness | 37 | 35 |
| Want of Ventilation | 4 | 4 |
| Overcrowding | 0 | 0 |
| Want of Drainage of Floors | 7 | 7 |
| Other Nuisances | 30 | 25 |
| Sanitary Accommodation :— | | |
| Insufficient | 4 | 4 |
| Unsuitable | 4 | 4 |
| Not separate for sexes | 2 | 2 |
| Totals | 88 | 81 |

Five matters remediable under the Public Health Acts were referred by H.M. Inspector.

4. *Out-workers.*

| | | | |
|--------------------------------------|-----|-----|----|
| Number of Out-workers on list | ... | ... | 52 |
| Inspections of Out-workers' Premises | ... | ... | 74 |
| Premises Unwholesome or Infectious | ... | ... | 3 |



HANDSWORTH
URBAN DISTRICT.

REPORT

ON THE

Medical Inspection of School Children under
the Education (Administrative Provisions)
Act, 1907,

FOR THE

Year ended December 31st, 1908,

BY

W. SISAM,
M.D., B.Sc., D.P.H.,
School Medical Officer.

TO THE
EDUCATION COMMITTEE OF THE URBAN
DISTRICT OF HANDSWORTH.

MR. CHAIRMAN, MRS. RABONE AND GENTLEMEN,

I beg to submit to you my first Annual Report upon Medical Inspection, under the Education (Administrative Provisions) Act, 1907, of the school children in this District.

When I took over the duties of School Medical Officer, on September 15th last, the organisation and equipment of the scheme of inspection were complete in every detail. My predecessor, Dr. Lyster, had also instructed the teachers in the assistance which they were asked to render, and, at the same time, had succeeded in evoking an enthusiasm for the work which up to the present has shown no sign of waning. It is largely owing to the thoroughness of its inception that I am now able to record an entire absence of friction in the working of the scheme.

The chief lesson to be learned from the results of medical inspection, here and elsewhere, is that disease and physical defects, for the most part capable of prevention or of amelioration, exist among school children to a far greater extent than had generally been realised; and the question of securing medical treatment for those children whose parents are unable or unwilling to provide it, is the chief problem which calls for solution.

It has not yet been possible to form any estimate of the number of serious cases in this District which are allowed to remain untreated in spite of advice and warning, but there is some reason for the belief that they constitute but a small proportion of the whole. Though they may be relatively small

in number, these neglected children are nevertheless of great importance from both the educational and social aspects, for in school they are frequently backward, and a hindrance to the progress of their fellows, while in after life they are too apt to fall into the ranks of the unemployable. On these, as well as on humanitarian grounds, no effort should be spared in dealing with this class.

Your recent decision to appoint a school nurse, part of whose duty it will be to visit negligent parents and to reiterate the advice given on inspection, represents an important advance in this direction. Some organized means of assisting parents who, through poverty, are unable to obtain private medical aid for their children is still required, and this want could probably be partially filled by the formation of a voluntary agency to act as a link between deserving cases and subscribers to the medical charities.

I wish to acknowledge invaluable help from the teachers and the Secretary and staff of the Education Department.

I am,

Mr. Chairman, Mrs. Rabone and Gentlemen,

Your obedient Servant,

W. SISAM.

Handsworth Education Committee.

ANNUAL REPORT

of the School Medical Officer for the year 1908.

In March, 1908, your Committee, acting upon a report from a Sub-Committee appointed to consider the best method of carrying out the requirements of the clauses relating to Medical Inspection of School Children of the Education (Administrative Provisions) Act, 1907, decided to appoint the Medical Officer of Health to the additional post of School Medical Officer, thus effectually securing that co-relation of the School Medical Service with the Public Health Service, which is so strongly urged by the Board of Education, and the desirability of which can scarcely be open to question. The Report expressed the opinion "that the Sub-Committee considers the Medical Officer of Health of the District the only proper supervisor of this new work, and that to attempt to dissociate the offices of the control of the general sanitary work of the District and that of the elementary schools would cause endless friction and greater expense."

Your Committee further decided that the children to be inspected during the year 1908 should be :—

- (a.) Infants newly admitted since January 1st, 1908, and
- (b.) Children expected to leave within a year of the date of inspection.

The first few months after the appointment of the School Medical Officer were chiefly occupied in organising the work and obtaining the necessary equipment, so that routine inspection was not brought into full swing until after the summer holidays.

The Medical Officer fully concurred with the opinion expressed in the Board of Education's Memorandum No. 576, that "In whatever way the system be organised, its success will depend, immediately and ultimately, upon the cordial sympathy and assistance of the teachers," and at his suggestion, assistant teachers in each school department other than Infants'* were nominated to help in the work of inspection—selection being based upon special aptitude and liking for the work. Your Committee decided to grant these teachers an honorarium of 25/- per 100 children examined, with a maximum annual payment of £5 to any one teacher. The principal duties allotted to them were to weigh and measure, to carry out preliminary sight testing, to collect information as to the home conditions of the children and the infectious diseases from which they had suffered, to note the cleanliness of the children and the condition of their clothing, and also to assist at the actual medical inspection.

At first sight the teacher's share appears to be unduly heavy, but in practice it is found that the work may be spread over a considerable period, and may be so arranged as to involve comparatively little expenditure of time or interference with ordinary school work. Hitherto, no complaint that it has been found burdensome has been received—indeed the uniformly excellent manner in which it has been performed is evidence to the contrary, and is also indicative of keen personal interest on the part of the teachers concerned. Even if it were practicable to relieve the teaching staff of the whole of these duties, it is obvious that medical inspection would lose much of its value, for they serve to bring the teachers into closer touch with the physical aspect of their charges, and to emphasize the relationship existing between health and educational progress. Moreover, much of the information sought can only be supplied with accuracy by those who have opportunities of keeping the children under constant observation.

* The system of payment has since been extended to Infants' departments.

SCHEME OF MEDICAL INSPECTION.

The schedule of medical examination issued by the Board of Education is followed in the main ; the chief departures being the omission from the record card of the heading "Standard and Regularity of Attendance" and the addition of records of Chest Measurements and Number of Vaccination Marks. The latter are recorded merely for the purpose of ascertaining the extent and distribution of inflammable material in the event of an outbreak of smallpox, and no action of any kind is taken in regard to unvaccinated children.

Chest measurements, as at present taken, (that is, above the underclothing,) are not of much anthropometric value, but they serve to draw attention to the children with deficient chest expansion, and these are encouraged to persevere with physical and respiratory exercises.

The following is a copy of the card used for recording the results of inspection :—

HANDSWORTH SCHOOL CARD.

| NAME | SCHOOL | | | | | | VAC. MKS. | |
|------------------------------|----------------------|-----|-----|-----|-----|-----|--------------------|--|
| ADDRESS | BORN | | | | | | | |
| DATE EXAMINED | ... | ... | ... | ... | ... | ... | MEASLES ... | |
| AGE | ... | ... | ... | ... | ... | ... | WHOOPING COUGH ... | |
| NUTRITION | Good, Medium, Bad | | | | | | CHICKEN POX ... | |
| HEIGHT | ... | ... | ... | ... | ... | ... | DIPHTHERIA ... | |
| WEIGHT | ... | ... | ... | ... | ... | ... | SCARLET FEVER ... | |
| CHEST | (Inspiration ...) | | | | | | MUMPS ... | |
| MEASUREMENT | (Expiration ..) | | | | | | CONDITIONS. | |
| CLEANLINESS | (Body ...) | | | | | | DEFORMITY | ... |
| | (Head ...) | | | | | | PARALYSIS | ... |
| Clean, Medium, Dirty, Vermin | (Quantity ...) | | | | | | RICKETS | ... |
| CLOTHING | (Cleanliness ...) | | | | | | TUBERCLE | {
GLANDULAR
PULMONARY
OSSEOUS |
| | (Boots ...) | | | | | | SKIN DISEASE | |
| SIGHT | ... | ... | ... | ... | ... | ... | HEART DISEASE | ... |
| TEETH | (Total ...) | | | | | | LUNG DISEASE | ... |
| | (Decayed ...) | | | | | | ANEMIA | ... |
| FATHER'S OCCUPATION | (Bedrooms ...) | | | | | | EPILEPSY | ... |
| HOUSE | (Living Rooms ...) | | | | | | CHOREA | ... |
| PERSONS IN HOUSE | (Over 14 ...) | | | | | | ... | ... |
| | (Under 14 ...) | | | | | | ... | ... |

OBSERVATIONS BY MEDICAL OFFICER.

| DATE OF EXAMINATION. | | |
|--|--------------------|--|
| NOSE
AND
THROAT | { Articulation ... | |
| | { Breathing ... | |
| | { Snoring ... | |
| | { Tonsils ... | |
| | { Adenoids... | |
| EARS | { Glands ... | |
| | { Hearing ... | |
| EYES | { Discharge ... | |
| | { Squint ... | |
| | { Lids ... | |
| VISION | { Conjunct. ... | |
| | { Near ... | |
| MENTAL CAPACITY
Normal, Backward, Defective | { Distant ... | |
| | | |
| NOTICES ISSUED | ... | |

When filled in, the cards are arranged according to sexes and ages, and also alphabetically, in boxes provided for the purpose, and kept in the schools.

In addition to the ordinary examination cards, "Exceptional Case Cards" of a distinctive colour (red) are used for children in whom the more serious defects, necessitating occasional re-examination, are found ; and these cards are kept in the front of the box in order that they may be readily accessible, and that the children to whom they relate shall not be lost sight of, but shall receive attention during subsequent visits to the school.

HANDSWORTH EDUCATION COMMITTEE.

SUPPLEMENTARY FORM FOR USE IN EXCEPTIONAL CASES.

NAME

DATE OF BIRTH

ADDRESS

SCHOOL

PERSONAL HISTORY (previous illnesses, etc.)

FAMILY MEDICAL HISTORY

| Date of Inspection. | Condition requiring attention. | School Medical Officers advice. |
|---------------------|--------------------------------|---------------------------------|
| | | |

| Date. | Particulars of action taken. | Result. |
|-------|------------------------------|---------|
| | | |

The results of inspection are copied from the cards on to "Summary Sheets" which are kept by the Medical Officer as permanent records, and to which reference can readily be made.

PARENTS AND INSPECTION.

On receipt of notice of intended inspection, which is usually despatched at least a week in advance, the Head Teacher of the school proceeds to notify the parents concerned of the time of inspection, and to invite their attendance.

The parents of 58 per cent. of the infants and of 20 per cent. of the older children examined during 1908 availed themselves of the opportunity to be present.

On the whole, the parents have been quick to appreciate the objects of medical inspection, and no active opposition has been met with; but in some four or five instances, a sort of passive resistance, taking the form of absenting the children from school on the day of inspection, has been encountered. There is reason to think that in these cases objection was chiefly due to a misconception of the nature and extent of the examination. On the other hand, several letters asking to be informed of the Medical Officer's opinion of their children have been received from mothers who found themselves unable to be present.

In the cases of diseased, defective, or neglected children, the attention of the parents is drawn to the conditions found, and submission to medical or other remedial treatment is urged. If the parents are present at the inspection, this advice is given verbally, otherwise it is sent in the form of a letter. The latter method of communication is somewhat unsatisfactory, for in the case of poorly-educated persons, it is no easy matter so to word the messages as to avoid creating unnecessary alarm and at the same time to impress upon the parents the importance of attending to the conditions found, and the difficulty is not lessened by the fact that frequently an endeavour has to be

made to translate into simple language, technical terms which do not possess apt and homely synonyms. For these reasons alone, the attendance of the parents is desirable.

In the worst cases, the Medical Officer visits the homes for the purpose of judging of the influences to which the children are subjected, and also of supplementing written advice by personal interviews, but it is obviously impossible for him to deal with all the cases in which home visiting is desirable. The appointment of a School Nurse would enable much more of this work, probably the most valuable branch of medical inspection, to be performed.*

SCHOOLS INSPECTED.

The District of Handsworth contains 12 Elementary Schools with a total number of 8,800 scholars on the roll.

Up to December 31st, 1908, inspection of four schools with a total on the registers of 3,842 was completed, *i.e.* all children newly admitted since January 1st, 1908, and all who were expected to leave within a year of the date of inspection had been dealt with. These numbered 1,139—811 of the former class and 328 of the latter—and inspection was completed in 45 visits, each occupying one school session. In addition, 188 children were examined in three other school departments, but as the inspection of these departments was not completed by the end of the year, they are not included in this report.

The time spent in actual medical inspection averaged about five minutes per child ; but this does not take into account the subsequent examination of referred cases, many of which were visited at their homes.

The schools were:—Westminster Road, Grove Lane, Boulton Road, and Wattville Road.

* Since this was written, your Committee has decided to unite with the Health Committee in the appointment of a lady to the combined posts of Health Visitor and School Nurse.

FACILITIES FOR INSPECTION.

In six of the eight departments dealt with, the teachers' private room was kindly placed at the disposal of the Medical Officer for inspection purposes. This answered admirably, for, being cut off from the main school by corridors in each case, no disturbance was occasioned and no interference with the ordinary school work of any but the scholars actually examined. In the two remaining departments—both infants'—class rooms were used for the purpose and some interference with school work occurred by reason of the disturbance caused by children entering and leaving the examination room, which in each case opened directly off the central hall.

SANITATION.

Ventilation and Warming.—Wattville Road, Westminster Road, and Grove Lane Schools are heated and ventilated on the Plenum system. In the first named, difficulty has been experienced during cold weather in bringing the Senior and Infants' Departments, which are served by a single installation, up to the desired temperature, while the ventilation in these departments is not entirely satisfactory. The boiler and fans appear to be inadequate for the cubic capacity of the rooms. The matter has been reported to your Sites and Buildings Sub-Committee, and is receiving their attention. In the other two schools, the system is working satisfactorily. Boulton Road School is ventilated naturally, by means of hopper windows and extraction cowl. Heating is by low pressure hot-water pipes. Both ventilation and heating are satisfactory.

Lighting.—In several of the Boulton Road class rooms, the heavy mullions of the windows interfere with lighting, and lighter framework should be substituted. The other three schools are properly lighted.

Sanitary Conveniences.—Excepting for some insufficiency of accommodation in the Boys' Department and structural defects in the Infants' Department at Boulton Road Schools,

these are sufficient in number, of good type, and kept in good condition.

Washing and Drinking Arrangements.—The public supply is laid on to all the schools, and a sufficient number of wash-basins is provided in every department.

Cloakroom Accommodation.—In the boys' and girls' cloak-rooms at Grove Lane and Wattville Road Schools the number of pegs is inadequate. In all the schools, the pegs are a sufficient distance apart, but have the usual arrangement in tiers which entails overlapping of garments. In the mixed departments of Grove Lane and Boulton Road Schools each child keeps to his or her own peg, which is either numbered or labelled with the name; in all the other departments the pegs are used indiscriminately, a practice which is liable to foster the spread of pediculosis and ringworm, and should be avoided where practicable.

No special arrangements for drying cloaks and boots exist in any of the schools. In the Infants' departments, the fire in the "babies' class room" is made use of for this purpose, but only a small number of garments can be thus dealt with.

Cleanliness of Schoolrooms and Cloakrooms.—On all occasions when visited, the schools were found to be clean.

Playgrounds.—All the playgrounds are asphalted, the surfaces are in good condition generally, and the drainage satisfactory.

HEIGHT AND WEIGHT OF CHILDREN.

Weighing and measuring has not been confined to the children medically inspected, but has been extended, as far as practicable, to all in the schools.

The following table shows the average height and weight, at different ages and for each sex, of 3,211 children attending six of the largest schools in the District; while the standards set

up in 1885 by the Anthropological Committee of the British Association are inserted for purposes of comparison. The most striking feature of this table is the fact that while the average height of the Handsworth children at any age is very little, if any, below the standard, the average weight falls short by a considerable amount. It is necessary to point out however that the standards are based upon comparatively small numbers and will probably have to be modified when more extensive data are available.

TABLE A.—MALES.

| Age | HANDSWORTH SCHOOL CHILDREN. | | | STANDARDS OF ANTHROPOLOGICAL SOCIETY. | |
|----------|-----------------------------|-------------------|----------------|---------------------------------------|----------------|
| | No. Children Examined. | Height in inches. | Weight in lbs. | Height in inches. | Weight in lbs. |
| 4 | 81 | 39·2 | 35·69 | — | — |
| 5 | 314 | 41·06 | 38·7 | 41·03 | 39·9 |
| 6 | 255 | 43·42 | 41·87 | 44·00 | 44·4 |
| 7 | 258 | 45·42 | 45·77 | 45·97 | 49·7 |
| 8 | 221 | 47·15 | 49·06 | 47·05 | 54·9 |
| 9 | 156 | 49·09 | 52·68 | 49·70 | 60·4 |
| 10 | 94 | 51·17 | 59·28 | 51·84 | 67·5 |
| 11 | 89 | 52·78 | 62·86 | 53·50 | 72·0 |
| 12 | 96 | 54·56 | 68·92 | 54·99 | 76·7 |
| 13 | 136 | 56·33 | 74·1 | 56·91 | 82·6 |
| 14 | 15 | 58·35 | 77·03 | 59·33 | 92·0 |
| FEMALES. | | | | | |
| 4 | 50 | 39·08 | 35·14 | — | — |
| 5 | 250 | 40·75 | 37·11 | 40·55 | 39·2 |
| 6 | 185 | 42·78 | 40·58 | 42·88 | 41·7 |
| 7 | 236 | 44·62 | 43·73 | 44·45 | 47·5 |
| 8 | 189 | 47·06 | 48·17 | 46·60 | 52·1 |
| 9 | 171 | 48·54 | 51·33 | 48·73 | 55·5 |
| 10 | 102 | 50·72 | 55·66 | 51·05 | 62·0 |
| 11 | 94 | 53·04 | 63·25 | 53·10 | 68·1 |
| 12 | 87 | 55·68 | 71·4 | 55·66 | 76·4 |
| 13 | 121 | 58·11 | 77·28 | 57·77 | 87·2 |
| 14 | 11 | 60·63 | 88·53 | 59·80 | 96·7 |

NOTE.—Children whose age is given as 4 were in all cases at least $4\frac{1}{2}$, as that is the minimum age for admission in this District.

The following table shows the foregoing averages converted into metric weights and measures, to the nearest quarter of a kilogramme and centimetre respectively.

TABLE A 1.—MALES.

| Age. | HANDSWORTH SCHOOL CHILDREN. | | | STANDARDS OF ANTHROPOLOGICAL SOCIETY. | |
|----------|-----------------------------|------------------------|----------------------|---------------------------------------|----------------------|
| | No. of Children Examined. | Height in centimetres. | Weight in kilograms. | Height in centimetres. | Weight in kilograms. |
| 4 | 81 | 99·5 | 16·0 | — | — |
| 5 | 314 | 104·5 | 17·5 | 104·25 | 18 |
| 6 | 255 | 110·5 | 18·75 | 112 | 20·25 |
| 7 | 258 | 115 | 20·75 | 117 | 22·5 |
| 8 | 221 | 120 | 22·25 | 119·5 | 25 |
| 9 | 156 | 124·5 | 23·75 | 126 | 27·5 |
| 10 | 94 | 130 | 26·75 | 131 | 30·75 |
| 11 | 89 | 134 | 28·5 | 136 | 32·5 |
| 12 | 96 | 138·75 | 31·25 | 140 | 34·75 |
| 13 | 136 | 143 | 33·5 | 145 | 37·5 |
| 14 | 15 | 148 | 35·0 | 151 | 41·75 |
| FEMALES. | | | | | |
| 4 | 50 | 99 | 16·0 | — | — |
| 5 | 250 | 103·5 | 17·0 | 103 | 17·75 |
| 6 | 185 | 109 | 18·25 | 109 | 18·75 |
| 7 | 236 | 113·5 | 19·75 | 113 | 21·5 |
| 8 | 189 | 119·5 | 21·75 | 118 | 23·5 |
| 9 | 171 | 123·5 | 23·25 | 124 | 25 |
| 10 | 102 | 129 | 25·0 | 130 | 28 |
| 11 | 94 | 135 | 28·75 | 135 | 30·75 |
| 12 | 87 | 141 | 32·25 | 141 | 34·75 |
| 13 | 121 | 147·75 | 35·0 | 147 | 39·5 |
| 14 | 11 | 154 | 40·25 | 152 | 44·5 |

TABLE B.
The following Table shows the average Heights and Weights for each of the four schools in which medical inspection was completed.
BOYS.

| Age. | WATTVILLE STREET. | | | GROVE LANE. | | | WESTMINSTER ROAD. | | | BOULTON ROAD. | | |
|------|-------------------|---------------------------|------------------------|---------------|---------------------------|------------------------|-------------------|---------------------------|------------------------|---------------|---------------------------|------------------------|
| | No. Examined. | Average Height in inches. | Average Weight in lbs. | No. Examined. | Average Height in inches. | Average Weight in lbs. | No. Examined. | Average Height in inches. | Average Weight in lbs. | No. Examined. | Average Height in inches. | Average Weight in lbs. |
| 4 | 35 | 39.58 | 36.34 | 8 | 39.4 | 34.91 | 9 | 40 | 36.55 | 17 | 38.11 | 34.01 |
| 5 | 119 | 40.9 | 38.66 | 51 | 41.8 | 39.25 | 35 | 41.28 | 38.02 | 35 | 40.68 | 38.12 |
| 6 | 3 | 44 | 44.91 | 75 | 43.89 | 42.68 | 56 | 43.9 | 41.75 | 39 | 43.61 | 42.08 |
| 7 | 51 | 46.25 | 47.75 | 9 | 46.66 | 49.3 | 39 | 46.18 | 45.9 | 44 | 44.64 | 43.64 |
| 8 | 32 | 46.39 | 48.92 | — | — | — | 58 | 47.54 | 48.84 | 50 | 46.98 | 48.91 |
| 9 | 17 | 48.6 | 54.33 | — | — | — | 49 | 50.02 | 51.39 | 41 | 49.4 | 54.29 |
| 10 | 8 | 50.56 | 57.84 | — | — | — | 38 | 51.61 | 58.05 | 33 | 51.1 | 58.82 |
| 11 | 6 | 52.12 | 61.95 | — | — | — | 38 | 53.41 | 64.26 | 38 | 52.83 | 62.61 |
| 12 | 24 | 54.84 | 67.88 | — | — | — | 30 | 54.4 | 66.83 | 42 | 54.51 | 71.02 |
| 13 | 77 | 56.3 | 74.61 | — | — | — | 27 | 66.4 | 73.46 | 29 | 56.66 | 74.25 |
| 14 | 6 | 58.2 | 79.25 | — | — | — | 5 | 58.42 | 70.95 | 3 | 57.96 | 82.9 |

GIRLS.

| | | | | | | | | | | | | |
|----|----|-------|-------|----|-------|-------|----|-------|-------|----|-------|-------|
| 4 | 17 | 39.16 | 34.36 | 9 | 40.23 | 37.36 | 6 | 40.68 | 37.5 | 16 | 37.64 | 34.15 |
| 5 | 91 | 40.7 | 36.9 | 28 | 40.88 | 37.1 | 41 | 40.96 | 37.09 | 39 | 40.94 | 37.45 |
| 6 | — | — | — | 56 | 43.76 | 41.83 | 31 | 42.62 | 39.91 | 47 | 41.86 | 39.44 |
| 7 | 39 | 45.35 | 44.82 | 21 | 44.94 | 44.23 | 58 | 44.71 | 43.85 | 9 | 43.66 | 41.61 |
| 8 | 29 | 47.06 | 48.93 | — | — | — | 54 | 47.1 | 47.9 | 33 | 47.42 | 48.35 |
| 9 | 18 | 47.79 | 50.14 | — | — | — | 47 | 49.09 | 51.11 | 45 | 49.02 | 53.23 |
| 10 | 8 | 51.53 | 57.43 | — | — | — | 37 | 51.11 | 55.78 | 39 | 50.72 | 55.61 |
| 11 | 8 | 51.96 | 63.06 | — | — | — | 46 | 53.94 | 63.23 | 34 | 52.32 | 64.15 |
| 12 | 21 | 56.71 | 74.11 | — | — | — | 28 | 55.2 | 68.64 | 34 | 55.8 | 73.02 |
| 13 | 58 | 57.33 | 78.02 | — | — | — | 24 | 61.68 | 76.64 | 39 | 57.08 | 76.59 |
| 14 | 7 | 61.03 | 89.89 | — | — | — | 2 | 61.37 | 89.25 | 1 | 59.75 | 79.62 |

Tables "C" and "D" show the principal diseases and defects found on inspection, classified according to age and sex.

TABLE C.—DISEASES AND DEFECTS CLASSIFIED ACCORDING TO AGE AND SEX.

| Age of children ... | 4 | | 5 | | 6 | | 7 | | 12 | | 13 | | 14 | | All ages. | |
|---|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-----------|---------|
| | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. |
| Sex ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Total number examined | 13 | 17 | 232 | 162 | 163 | 159 | 31 | 34 | 4 | 5 | 166 | 147 | 1 | 5 | 610 | 529 |
| Number accompanied by parents | 8 | 13 | 130 | 107 | 95 | 77 | 18 | 23 | ... | ... | 34 | 33 | ... | 1 | 285 | 254 |
| No disease or defects found | 2 | 3 | 17 | 13 | 11 | 4 | ... | 1 | ... | 1 | 13 | 7 | ... | ... | 43 | 29 |
| No disease or defect found other than decayed teeth | 3 | 2 | 57 | 41 | 47 | 32 | 7 | 11 | 2 | 1 | 30 | 42 | 1 | 3 | 147 | 132 |
| Badly nourished... | 1 | 3 | 43 | 30 | 22 | 28 | 10 | 6 | ... | ... | 36 | 27 | ... | 2 | 112 | 96 |
| Very badly nourished | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | 3 | 1 | ... | ... | 4 | 2 |
| Body dirty | 1 | ... | 18 | 11 | 10 | 14 | 5 | 8 | 1 | ... | 12 | 14 | ... | ... | 47 | 47 |
| Head verminous... | ... | 1 | 10 | 40 | 7 | 26 | 2 | 8 | ... | ... | 16 | 49 | ... | ... | 35 | 124 |
| Clothing insufficient | ... | ... | 12 | 2 | 3 | 5 | 1 | ... | ... | ... | 7 | 10 | ... | ... | 23 | 17 |
| Clothing dirty | 1 | ... | 25 | 14 | 15 | 16 | 7 | 9 | ... | ... | 15 | 17 | ... | ... | 63 | 56 |
| Boots defective | ... | ... | 36 | 10 | 11 | 10 | 8 | 5 | ... | ... | 27 | 14 | ... | ... | 82 | 39 |
| Decayed teeth, four or less | 5 | 6 | 104 | 83 | 72 | 83 | 15 | 22 | 3 | 4 | 106 | 101 | ... | 3 | 305 | 302 |
| Do. more than four | 3 | 3 | 66 | 45 | 56 | 56 | 16 | 9 | 1 | ... | 31 | 32 | 1 | 2 | 174 | 147 |
| Septic condition of mouth | ... | ... | 1 | 1 | 1 | 1 | ... | 1 | ... | ... | 1 | ... | ... | ... | 3 | 3 |
| Enlarged tonsils without pronounced adenoids | 4 | 4 | 62 | 39 | 52 | 40 | 9 | 9 | 1 | 1 | 23 | 16 | ... | ... | 151 | 109 |
| Enlarged tonsils with adenoids | 2 | ... | 14 | 9 | 7 | 8 | 2 | ... | ... | ... | 3 | 5 | ... | ... | 28 | 22 |
| Adenoids alone | ... | ... | 4 | 1 | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 6 | 1 |
| Tonsils and adenoids previously operated upon | ... | ... | 4 | 2 | 3 | 8 | ... | ... | ... | ... | 5 | ... | ... | ... | 12 | 10 |
| Enlarged submaxillary and cervical glands | 1 | ... | 33 | 11 | 27 | 13 | 3 | 3 | ... | 1 | 6 | 6 | ... | 1 | 70 | 35 |
| External eye disease | ... | ... | 3 | 6 | 3 | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 6 | 8 |
| Number of children tested for visual defects | 1 | ... | 20 | 23 | 107 | 120 | 30 | 29 | 4 | 5 | 163 | 147 | 1 | 5 | 326 | 329 |
| Number visually defective (vision 6/12 or less Snellen's types) | ... | ... | 2 | 1 | 13 | 14 | 5 | 5 | 1 | ... | 15 | 15 | ... | ... | 36 | 35 |

TABLE C.—DISEASES AND DEFECTS CLASSIFIED ACCORDING TO AGE AND SEX.—Continued.

| Age of children ... | 4 | | 5 | | 6 | | 7 | | 12 | | 13 | | 14 | | All ages. | |
|---|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-----------|---------|
| | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. |
| Sex ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Squint ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Discharge from ear ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Hearing markedly defective ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Defective articulation (exclusive of infantile defects) ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Very backward ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Mentally defective ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Heart functionally disordered, no evidence of organic disease ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Organic disease of heart ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Lung disease (non-tuberculous) ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Diseases of nervous system ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Tuberculosis of lung ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Do. glands ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Do. bones ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Rickets ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Pigeon chest (non-ricketty type) ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Spinal curvature ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Other deformity ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Non-contagious skin disease ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Ringworm ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Other contagious skin disease ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Infectious disease ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Excluded from school as physically unfit ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Excluded from school on account of contagious or infectious disease ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Advice given to parents ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | 2 | 1 | 1 | 1 | 1 | 3 | 9 | 7 | 3 | 1 | 53 | 36 | 1 | 1 | 2 | 5 |
| | 179 | 162 | 70 | 65 | 41 | 51 | 41 | 36 | 8 | 1 | 179 | 162 | 1 | 1 | 179 | 162 |

TABLE D.—DISEASES AND DEFECTS CLASSIFIED AS IN TABLE E. AND EXPRESSED AS PERCENTAGES.

| Age of children ... | 4 | | 5 | | 6 | | 7 | | 12 | | 13 | | 14 | | All ages. | |
|---|-------------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-----------|---------|
| | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. |
| Sex ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Total number examined | 13 | 17 | 232 | 162 | 163 | 159 | 31 | 34 | 4 | 5 | 166 | 147 | 1 | 5 | 610 | 529 |
| PERCENTAGES. | | | | | | | | | | | | | | | | |
| Accompanied by parents | 61.5 | 76.4 | 56.0 | 66.0 | 58.2 | 48.4 | 58.0 | 67.6 | ... | ... | 20.4 | 22.4 | ... | 20 | 46.7 | 48.0 |
| No disease or defects found | 15.3 | 17.6 | 7.3 | 7.8 | 6.7 | 2.5 | ... | 2.9 | ... | 20 | 7.8 | 4.7 | ... | ... | 7.0 | 5.4 |
| No disease or defect found other than decayed teeth | 23.0 | 11.7 | 24.5 | 25.0 | 28.8 | 20.1 | 22.5 | 32.3 | 50 | 20 | 18.0 | 28.5 | 100 | 60 | 24.0 | 24.9 |
| Badly nourished... | 7.6 | 17.6 | 18.5 | 18.5 | 13.4 | 17.6 | 32.2 | 17.6 | ... | ... | 21.6 | 18.3 | ... | 40 | 18.3 | 18.1 |
| Very badly nourished | ... | ... | ... | 0.6 | 0.6 | ... | ... | ... | ... | ... | 1.8 | 3.6 | ... | ... | 0.6 | 0.3 |
| Body dirty | 7.6 | ... | 7.7 | 6.7 | 6.1 | 8.0 | 16.1 | 23.5 | 25 | ... | 7.2 | 9.5 | ... | ... | 7.6 | 8.8 |
| Head verminous... | ... | 5.8 | 4.3 | 24.7 | 4.2 | 16.3 | 6.4 | 23.5 | ... | ... | 9.6 | 33.0 | ... | ... | 5.7 | 23.4 |
| Clothing insufficient | ... | ... | 5.1 | 1.2 | 1.8 | 3.1 | 3.2 | ... | ... | ... | 4.2 | 6.8 | ... | ... | 3.7 | 3.2 |
| Clothing dirty | 7.6 | ... | 10.7 | 8.4 | 9.2 | 10.6 | 22.5 | 86.4 | ... | ... | 9.0 | 11.5 | ... | ... | 10.3 | 10.5 |
| Boots defective | ... | ... | 15.5 | 6.1 | 6.7 | 6.2 | 25.8 | 14.0 | ... | ... | 16.2 | 9.5 | ... | ... | 13.4 | 7.3 |
| Decayed teeth, four or less | 38.4 | 35.2 | 44.8 | 51.2 | 44.1 | 52.2 | 48.3 | 64.7 | 75 | 80 | 63.8 | 68.7 | ... | 60 | 50.0 | 57.0 |
| Do. more than four | 23.0 | 17.6 | 28.4 | 27.7 | 34.3 | 35.2 | 51.7 | 26.4 | 25 | ... | 18.6 | 21.7 | 100 | 40 | 28.5 | 27.7 |
| Septic condition of mouth | ... | ... | 0.4 | 0.6 | 0.6 | 0.6 | ... | 2.9 | ... | ... | 0.6 | ... | ... | ... | 0.4 | 0.5 |
| Enlarged tonsils without pronounced adenoids | 30.7 | 23.5 | 26.7 | 24.1 | 31.9 | 25.1 | 29.0 | 26.4 | 25 | 20 | 13.8 | 10.8 | ... | ... | 24.7 | 20.6 |
| Enlarged tonsils with adenoids | 15.3 | ... | 6.0 | 5.5 | 4.2 | 5.0 | 6.4 | ... | ... | ... | 1.8 | 3.4 | ... | ... | 4.5 | 4.1 |
| Adenoids alone | ... | ... | 1.7 | 0.6 | 0.6 | ... | ... | ... | ... | ... | 0.6 | ... | ... | ... | 0.9 | 0.1 |
| Tonsils and adenoids previously operated upon | ... | ... | 1.7 | 1.2 | 1.8 | 5.0 | ... | ... | ... | ... | 3.0 | ... | ... | ... | 1.9 | 1.8 |
| Enlarged submaxillary and cervical glands | 7.6 | ... | 14.2 | 6.7 | 16.5 | 8.1 | 9.6 | 8.8 | ... | 20 | 3.6 | 4.0 | ... | 20 | 11.4 | 6.5 |
| External eye disease | ... | ... | 1.2 | 3.0 | 1.8 | ... | ... | 5.8 | ... | ... | ... | ... | ... | ... | 0.9 | 1.5 |
| Visually defective (vision 6/12 or less) | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Snellen's types | Not tested. | 10.0 | 4.3 | 11.6 | 12.1 | 11.6 | 16.6 | 17.2 | 25.0 | ... | 9.1 | 10.2 | ... | ... | 10.8 | 10.6 |

TABLE D.—DISEASES AND DEFECTS CLASSIFIED AS IN TABLE E, AND EXPRESSED AS PERCENTAGES.—Continued.

| Age of children ... | 4 | | 5 | | 6 | | 7 | | 12 | | 13 | | 14 | | All ages. | |
|---|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-----------|---------|
| | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. |
| Sex ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| PERCENTAGES. | | | | | | | | | | | | | | | | |
| Squint ... | ... | ... | 1.7 | ... | 1.8 | 1.8 | ... | ... | ... | ... | ... | 0.6 | ... | ... | 1.1 | 0.7 |
| Discharge from ear ... | ... | ... | 2.5 | 1.2 | 0.6 | 0.6 | ... | ... | ... | ... | ... | 0.6 | ... | ... | 1.1 | 0.7 |
| Hearing markedly defective ... | ... | ... | 1.7 | 0.6 | 2.4 | 3.7 | ... | 2.9 | ... | 20 | ... | 1.3 | ... | ... | 1.3 | 2.2 |
| Defective articulation (exclusive of infantile defects) ... | ... | ... | 3.8 | 1.8 | 3.6 | ... | 6.4 | 5.8 | ... | ... | ... | 1.8 | ... | ... | 3.1 | 0.9 |
| Very backward ... | ... | ... | ... | ... | 0.6 | ... | ... | ... | ... | ... | ... | 0.6 | ... | ... | 0.3 | ... |
| Mentally defective ... | ... | ... | ... | ... | ... | ... | ... | 2.9 | ... | ... | ... | 0.6 | ... | ... | 0.1 | 0.1 |
| Heart functionally disordered, no evidence of organic disease ... | ... | 11.7 | 2.5 | 3.8 | 1.8 | 3.7 | ... | 2.9 | ... | ... | ... | 3.0 | ... | ... | 2.2 | 3.3 |
| Organic disease of heart ... | ... | ... | 1.2 | 0.6 | 0.6 | 1.2 | ... | ... | ... | ... | ... | 2.4 | ... | ... | 1.3 | 0.9 |
| Lung disease (non-tuberculous) ... | 7.6 | ... | 3.4 | 1.8 | 3.6 | 1.8 | ... | ... | ... | ... | ... | 0.6 | ... | ... | 2.4 | 1.3 |
| Disease of nervous system ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0.6 | ... | ... | 0.1 | ... |
| Tuberculosis of Lung ... | ... | ... | 0.4 | ... | ... | ... | ... | ... | ... | ... | ... | 0.6 | ... | ... | 0.3 | ... |
| Do. Glands ... | ... | ... | ... | 1.2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0.3 |
| Do. Bones ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0.1 |
| Rickets ... | ... | ... | 0.4 | 1.8 | 1.2 | 0.6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0.7 |
| Pigeon chest (non-ricketty type) ... | ... | ... | 2.1 | 0.6 | 1.8 | 0.6 | 6.4 | ... | ... | ... | ... | 2.4 | ... | ... | 2.2 | 0.3 |
| Spinal curvature ... | ... | ... | ... | 0.6 | ... | 2.5 | ... | ... | ... | ... | ... | 0.6 | ... | ... | 0.1 | 1.6 |
| Other deformity ... | ... | ... | 0.4 | 1.2 | 0.6 | 1.2 | 3.2 | 2.9 | ... | ... | ... | 0.6 | ... | ... | 0.3 | 0.3 |
| Non-contagious skin disease ... | ... | ... | ... | ... | ... | 1.8 | ... | ... | ... | ... | ... | 1.2 | ... | ... | 0.6 | 0.9 |
| Ringworm ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0.5 |
| Other contagious skin disease ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Infectious disease ... | ... | 5.8 | 0.4 | 0.6 | 0.6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0.3 | 0.3 |
| Excluded from school as physically unfit ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0.3 | ... |
| Excluded from school on account of contagious or infectious disease ... | ... | 5.8 | 0.4 | 0.6 | 0.6 | 1.8 | ... | ... | ... | ... | ... | ... | ... | ... | 0.3 | 0.9 |

NUTRITION.

It will be seen that of the 1,139 children inspected, nutrition was found to be defective in 208 and in 6 very defective. It must not be inferred from this that nearly one-fifth of the children in the school were insufficiently fed. The majority of the 214 were well clothed and bore other evidence of being well cared for, and defective nutrition appeared to be more often the result of some inherent fault of metabolism than of poverty or neglect.

VERMINOUS HEADS.

Comparison between the figures in the table for boys (5·7 per cent.) and those for girls (23·4 per cent.) is strong evidence in favour of short hair. It will be noticed that the heads of one-third of the girls aged 13 were infested. Only some half-dozen of these, however, showed gross neglect, and the comparative smallness of this number is chiefly to be accounted for by the system of dealing with these cases (to be described later), which was instituted a year or so before the 1907 Act was put into force. Several teachers have testified to the marked improvement in the cleanliness of the children which has resulted from Medical Inspection.

CLOTHING.

The total of 40 children insufficiently clad must be regarded as an under-estimate, for, in about half the cases examined, the observations were made during the warm weather when somewhat scanty clothing was allowed to pass muster, and it is probable that in some few cases this clothing would not be suitably augmented at the onset of the cold season. Over-clothing, especially among the girls, was frequently met with in the winter, and in a few cases of "weakness of the chest" an astonishing amount of tight and heavy clothing was worn, the effect of which would be to hamper respiratory movements and to increase rather than diminish the liability to disease.

BOOTS.

Ten per cent. of the children wore more or less defective boots. It is perhaps hardly out of place to mention here that the teachers in the poorer schools subscribe to and collect for boot funds. In one of the four schools something like a hundred pairs of boots were distributed in 1908.

TEETH.

Of 811 infants, only 167 possessed a sound set of teeth. Of 328 children, aged 12 to 14, 44 had sound teeth. In the case of the infants the decayed teeth belonged of course to the temporary set, and only where productive of pain or the nidus of septic processes was treatment urged.

Under the age of 7 years extraction is inadvisable unless the carious teeth are causing decided disturbance to health, for premature loss of the temporary teeth has an injurious effect upon the future development of the jaw and permanent teeth. Much good results from "dressing" or "filling," but parents will rarely go to this trouble and expense for teeth which will shortly be shed.

In the older children, however, it is the permanent teeth which are affected, and their preservation is of great importance.

Parents of elementary school children are apt to regard dental caries as an inevitable physiological process to be accepted with resignation, and conservative dentistry is practically unknown to them. Among the children examined only two "filled" teeth were observed, while hundreds were seen in an early stage of decay and capable of being preserved by timely treatment.

Apart from cases where conservative dentistry was indicated, there were many examples of foul stumps liable to produce a harmful effect on the general health and therefore requiring extraction.

There is, nowadays, a tendency among members of the medical and dental professions to ascribe a great variety of ill effects, including grave constitutional diseases, to carious teeth; and while it is possible that the evil influences of the latter are

exaggerated, there is no doubt that at the least they are frequently the cause of minor ailments of a distressing nature.

The systematic examination and treatment of the teeth of school children would be of very great benefit from both the health and educational points of view; but the expenditure which a thorough system involves will be prohibitive to most educational authorities until further substantial assistance from the National Exchequer is forthcoming.

TONSILS AND ADENOIDS.

It is now a thoroughly established fact that obstruction to nasal breathing brought about by redundant adenoid tissue in the throat and naso-pharynx is frequently productive of profound impairment of health and mental activity; and the improvement to health, intellect, and temper resulting from removal of the obstruction by simple operative measures is, in most cases, very marked. It is therefore gratifying to note that the majority of parents who were advised to submit their children to surgical treatment for this condition expressed their willingness to do so. No systematic attempt has yet been made to ascertain in how many of the cases this advice has been followed, but 6 of the 37 children are known to have been since operated upon. It will also be seen from Table "C" that 22 children had had their overgrown tonsils and adenoids excised previously to inspection. These facts seem to justify the inference that many of the parents in this District have learned to realise the importance of treating this condition and the ill effects which neglect may entail.

VISION.

In cases of serious visual defect and in cases where the defect, though slight in degree, was accompanied with symptoms of eyestrain, the parents were urged to obtain expert advice. Sixty-three of the cases were followed up after an interval of in no instance less than two months, and it was found that 11 had been supplied with glasses since inspection, the parents of 4 were endeavouring to obtain hospital notes, and for the remainder nothing had been done.

With the great demand on the resources of Eye Hospitals, resulting from Medical Inspection, and the consequent scarcity of subscribers' tickets, considerable difficulty has been experienced in obtaining treatment for the children whose parents are unable to afford specialists' fees. Visual defects are so serious a bar to progress in school and so heavy a handicap in after life, that it is hoped that some means of treatment will be placed within the reach of all affected children.

FUNCTIONALLY DISORDERED HEART.

Under this somewhat unscientific heading are classed cases of marked cardiac arrhythmia unassociated with signs of organic disease, and probably of toxic origin. In a few instances a history suggestive of antecedent Diphtheria was obtained, but to the remainder no definite cause could be assigned.

ORGANIC HEART DISEASE.

Of the 13 cases, 1 was congenital, the others all well marked cases of acquired valvular disease perfectly compensated at the time of examination. There was no occasion to exclude any of these children from school. Appropriate advice was given to parents and teachers.

TUBERCULOSIS.

The figures relating to Tuberculosis are the most gratifying feature of the report. It is of course possible that cases were overlooked, but all care was taken to guard against this, the lungs of every child being examined and especial attention given to any child whose appearance or history suggested Tuberculous disease.

In both the cases of Pulmonary Tuberculosis found, the disease was in an early stage. The children were excluded from school for an initial period of six months, the homes were visited by the Medical Officer, and the parents urged to seek medical treatment, which they did in each case.

RICKETS.

Of the 10 cases noted, only 1 showed marked deformity. In the others, the relics of the disease consisted merely of bony enlargements without distortion.

The comparative rarity of Rickets is another gratifying feature.

PIGEON CHEST AND SPINAL CURVATURE.

The type of pigeon chest associated with obstruction to respiration is here classified separately. It will be seen that it was found to be six times more common in boys than in girls, while on the other hand, lateral spinal curvature was ten times more common in girls.

RINGWORM.

The number of cases of Ringworm found during routine inspection does not fairly represent the prevalence of the disease; for what may be termed the auxiliary school medical inspection (to be described later) had already weeded out the worst cases.

INFECTIOUS DISEASE.

These comprised 2 cases of Chicken Pox and 2 of Diphtheritic throat, which were immediately excluded from school.

EXCEPTIONAL CASES.

Exceptional case cards were used for the following, in order that they should be kept under observation and re-examined from time to time:—

| | | | | |
|--|-----|-----|-----|----------|
| Enlarged Tonsils and Adenoids, causing marked obstruction to breathing | ... | ... | ... | 5 cases. |
| Heart Disease | ... | ... | ... | 4 " |
| Middle Ear Disease | ... | ... | ... | 1 " |
| Hydrocephalus | ... | ... | ... | 1 " |
| Facial Paralysis and Deafness | ... | ... | ... | 1 " |
| Pallor and Emaciation, no definite physical signs | ... | ... | ... | 7 " |
| High degree of Shortsight | ... | ... | ... | 4 " |
| Septic condition of Mouth | ... | ... | ... | 3 " |

ADVICE TO PARENTS.

Advice was given for the following diseases and defects :—

| | | | | | |
|---|-----|-----|-----|-----|------------|
| Tonsils and Adenoids | ... | ... | ... | ... | 101 cases. |
| Bad Teeth | ... | ... | ... | ... | 101 „ |
| Defective Vision | ... | ... | ... | ... | 61 „ |
| Ophthalmia | ... | ... | ... | ... | 5 „ |
| Bronchitis | ... | ... | ... | ... | 4 „ |
| Middle Ear Disease | ... | ... | ... | ... | 5 „ |
| Spinal Curvature | ... | ... | ... | ... | 9 „ |
| Disease or Functional Disorder of Heart | ... | ... | ... | ... | 18 „ |
| Pulmonary Tuberculosis | ... | ... | ... | ... | 2 „ |
| Contagious Skin Disease | ... | ... | ... | ... | 3 „ |
| Infectious Disease | ... | ... | ... | ... | 4 „ |
| Pediculosis | ... | ... | ... | ... | 17 „ |
| Dirty or defective Clothing | ... | ... | ... | ... | 11 „ |

In addition to the above, the parents of two boys who were employed out of school in the performance of heavy work, which was an overtax upon their strength, were interviewed and persuaded to allow their sons to give up this work.

RESULTS OF ADVICE.

Excepting in the case of eye defects, as previously recorded, no statistics respecting the efforts made by parents to act upon the advice given have yet been collected, but the manner in which the advice has generally been received encourages the belief that it will be followed in a considerable proportion of cases. At the best, however, there will always be a residue in which selfishness, apathy, or fatalism prevails over the sense of parental obligation, and it is hoped that some means of dealing with this class will be found. The appointment of a school nurse to visit the homes and endeavour to bring these parents to a realisation of their duty would undoubtedly assist in the solution of the difficulty. Co-operation with voluntary agencies interested in the welfare of children would also be of great service.

Means of dealing with bad cases of neglect is afforded by the Children Act, which comes into force on April 1st, 1909. Under this Act, proceedings may be taken against the parents or guardians of a child, who, by failing to provide medical aid for that child cause unnecessary suffering or injury to its health, and very heavy penalties may be inflicted.

Many of the parents are in a position to have their children treated privately, and are encouraged to do so, and those who are not so well situated can usually avail themselves of the Birmingham hospitals and dispensaries which are easily accessible from any part of this District. It is true that at the present time these institutions are greatly overtaxed—especially the Eye, and Ear and Throat Hospitals—as a consequence of medical inspection, and tickets are difficult to obtain, but no doubt means will eventually be found to meet the increased demand. The Handsworth teachers have frequently been instrumental in procuring hospital notes for urgent cases.

AUXILIARY SCHOOL MEDICAL SERVICE.

A system of medical inspection of school children, instituted in 1906, has been continued as an auxiliary to routine inspection under the 1907 Act, and it will be seen that it serves to fill many of the gaps left by the latter system. Briefly the scheme is as follows :—

- (1) Teachers are supplied with cards which are used to acquaint the Medical Officer of the fact that certain children are at school who appear to require examination at once. The Medical Officer then visits the school as soon as possible and decides what is to be done.
- (2) On the occasion of these visits of the Medical Officer to the schools there are usually considerable numbers of other children who are considered by the teachers to require medical examination.

- (3) In cases where children are found to be in need of medical attention the parents are informed of the fact and urged to obtain the same.
- (4) Another form of card is supplied to the teachers upon which they may immediately notify the Medical Officer of the fact that they have sent home from school any child whom they suspect to be suffering from any infectious or contagious disease or condition. These children are inspected and appropriate instructions given.
- (5) The Attendance Officers report to the Medical Officer all cases of suspicious illness that are brought to their notice. These cases are examined as quickly as possible, and either instructed to return to school or are excluded from school for a time.
- (6) In cases of school absentees, not medically attended, and suffering from ringworm, pediculosis, impetigo, or other contagious conditions which do not involve constitutional illness, the parents are requested to bring the children to the Council House to see the Medical Officer, who re-examines them from time to time and decides as to fitness to resume attendance, and also recommends simple domestic treatment.

While medical inspection under the Education (Administrative Provisions) Act is principally concerned with certain age-groups, and with diseases and defects of a more or less permanent nature and the examinations are of necessity conducted at long intervals, the scheme detailed above includes all school children irrespective of age, and deals with diseases of an acute or temporary character as well as more chronic ailments, and the examinations are made whenever occasion arises and not at stated intervals.

The following figures show the nature and extent of the work done in this direction during the months of September, October, November, and December, 1908 :—

501 children were examined during 33 special visits to the various schools, paid chiefly for the purpose of detecting infectious or contagious disease.

205 children were seen at home during the same period, 265 visits being paid to them.

179 children were seen at the Council House, 434 attendances being necessitated.

During the same period it was found necessary to exclude 216 children from school for various terms, principally on account of communicable disease. This number does not include children kept away for notifiable infectious disease, for these are dealt with by the Health Department.

The campaign against pediculosis has met with considerable success, and the standard of cleanliness has been markedly raised in the schools. It is the practice of the teachers in the first instance to send messages to the parents of badly neglected children directing attention to the conditions found, and urging greater cleanliness. If this has not the desired effect, the children are excluded from school and the parents directed to bring them to see the Medical Officer. The Medical Officer advises appropriate treatment, and re-examines the cases in a few days, when as a rule a great improvement is found and resumption of attendance is permitted. In one case of gross neglect, it was considered advisable to invoke the aid of the N.S.P.C.C., with the result that prosecution and conviction followed.

In dealing with dirty and verminous children the hands of Education Authorities will be greatly strengthened by the Children Act of 1908, which comes into force on April 1st, 1909. This Act provides that a Local Education Authority may

direct their Medical Officer or any person provided with the authority of the latter to examine in any public elementary school the person and clothing of any child attending the school, and in the case of a child found to be infested with vermin or in a filthy condition the Education Authority may give notice in writing to the parent or guardian requiring him to properly cleanse the child and its clothing within 24 hours after receipt of the notice. In default of compliance with the requirements of the notice the Medical Officer or some person empowered by him may remove the child from school and cause it and its clothing to be properly cleansed. If the child is allowed again to get into a filthy state the parent or guardian may be proceeded against and mulcted in a sum not exceeding ten shillings.

The treatment of cases of Scalp Ringworm is unsatisfactory. Parents as a rule are reluctant to place them under medical care, and prefer to rely upon domestic or proprietary remedies. In any case progress is very tedious and cure rarely takes place under six months, which period is more than doubled in the worst instances. The disease is the cause of considerable loss of attendance in Handsworth, and it is hoped that it will be possible to make arrangements in the near future for the application to these cases of X-Rays treatment, the most rapid and certain cure at present known.

The more serious infectious diseases affecting school children are appropriately considered in conjunction with the general Public Health Work of the District and are dealt with elsewhere in this report (see pp. 28-36).

On no occasion during the year was school closure considered necessary.

BLIND AND DEAF CHILDREN.

Two blind and 5 deaf children from this District are now receiving instruction in special institutions; and 2 blind children are awaiting vacancies.

MENTALLY DEFECTIVE CHILDREN.

The question of the best method of dealing with these cases is under the consideration of your School Attendance Sub-Committee. At the present time only 1 feeble-minded child is being educated in a special school—Sandwell Hall. The cases remaining in the schools are receiving specially arranged instruction, consisting largely of manual work, and this instruction is individualised as far as possible.

PHYSICAL AND BREATHING EXERCISES.

In all the schools these are conducted in accordance with the model scheme of the Board of Education. It is impossible at present to estimate the results, but they cannot fail to be beneficial.

MEDICAL EXAMINATION OF TEACHERS.

During the year 22 teachers were examined by the Medical Officer.

EDUCATION (PROVISION OF MEALS) ACT, 1906.

The sanction of the Board of Education to the adoption of this Act from January 12th, 1909, was applied for and obtained.

Through the generosity of Councillor Sanders and the Rev. Dr. Burn, arrangements were made to supply all necessitous school children with breakfasts during the Christmas holidays.
