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ANNUAL REPORT

MADE TO THE

URBAN SANITARY AUTHORITY

OF THE

CITY OF LEEDS,

FOR THE YEAR

1909,

AND PARTLY FOR 1910.

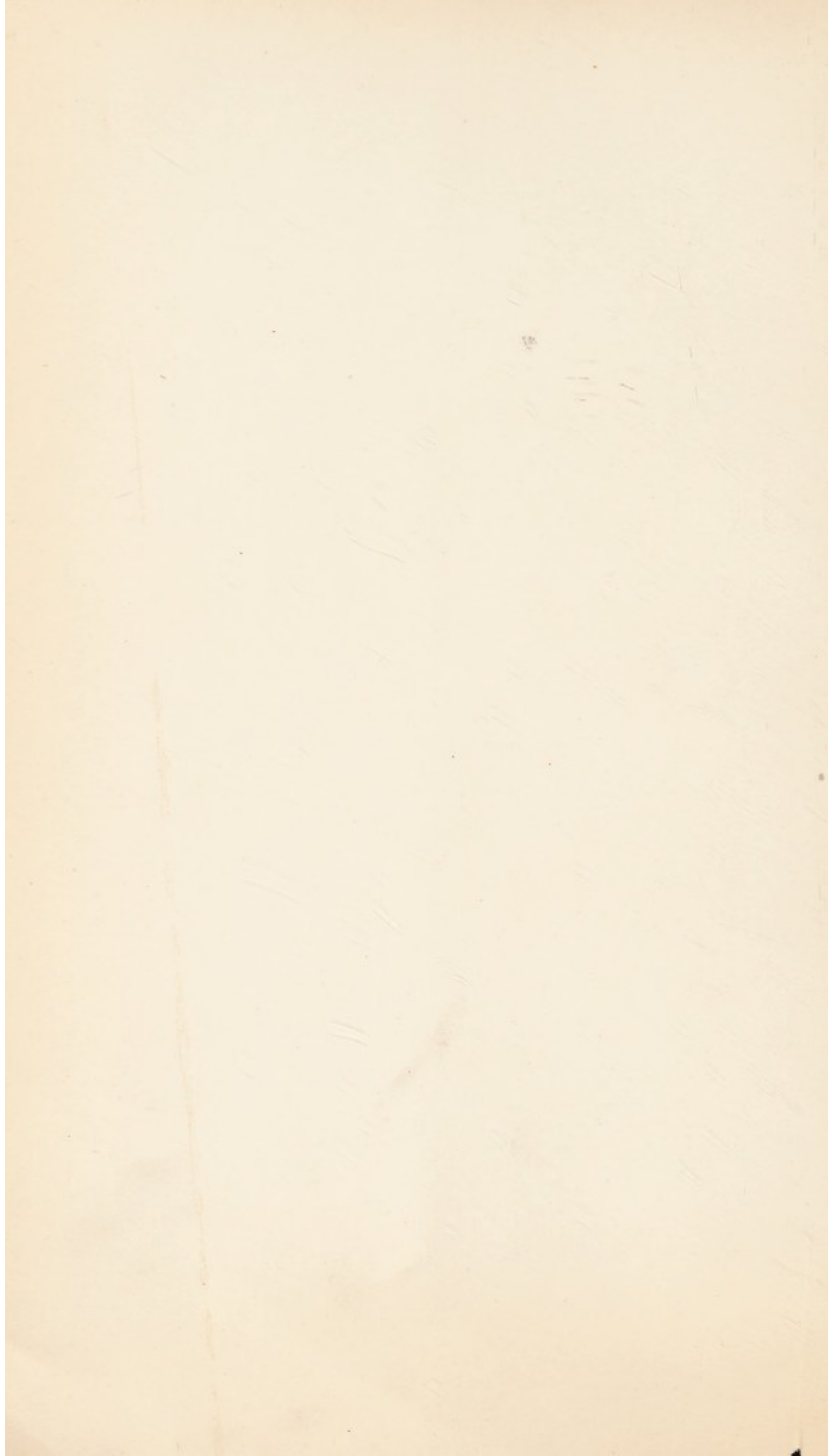
With Supplementary report for the Municipal year 1909-10.

BY

J. SPOTTISWOODE CAMERON,

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Medical Officer of Health to the City.



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The material asked for in the new Local Government tables will be found as follows:—

- I.—In table D, part 2.
- II.—In tables 21 a-k for districts and table D 2 for city.
- III.—Age groups in new table 18, pp. 78-9; localities in table B.
- IV.—Ages in table 17, pp. 76 and 77 (altered from old table 17 to include ages), including, however, all deaths in institutions; localities in table C, where institution deaths allocated, and in table A, part 2 b, where institution deaths are given separately for each district, and the district deaths with and without these allocated deaths given for age periods.
- V.—Infantile mortality, 5a p. 17, 5b p. 18, 5c p. 19.



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ANNUAL REPORT, 1909

(PRELIMINARY).

Mr. Chairman,

It has been usual to furnish the Sanitary Committee at an early meeting in January with a few tables dealing with the vital statistics of the previous year, and in the fuller report to deal more in detail with special matters. You have already had a statement as to the death rate for the year in Leeds and the eight other largest towns in the United Kingdom. Some further general tables are annexed, and I propose, as has been done in some previous years, to incorporate with these preliminary tables a few general remarks upon the health of the City in 1909, and to defer the fuller consideration of some important matters to a supplementary portion of the report.

Assuming that the Registrar-General is justified in estimating our population to the middle of 1909 at 484,012, including all deaths that are registered within the City itself, in our Fever Hospital outside our City boundary, and of Leeds persons in the Hunslet Workhouse, also in a neighbouring township,* our mortality during the year has been just under 14·21 per thousand. If, however, we leave out certain other deaths occurring in the General Infirmary, the Women and Children's Hospital, the Leeds, the Holbeck, and the Bramley Workhouses, which were those of persons admitted from outside our boundaries, but adding certain other deaths in institutions such as the Wakefield Asylum not within the City, of persons alleged to belong to Leeds, the rate is one of 14·06.†

* Omitting, however, from the Fever Hospital and the Hunslet Workhouse deaths of any inmates not belonging to the City.

† The figures from which the latter rate has been deduced are those in the three earlier quarterly reports and in the thirteen weekly reports received during the fourth quarter of 1909. The difference is not very great, and probably when the report for the fourth quarter and the annual summary are received from Somerset House, some correction of these figures may be necessary.

We are probably not very far out if we assume that the gross death rate in Leeds was 14·2, and the death rate after the allocation of institution deaths 14·1 per thousand per annum. It will be understood that in speaking of corrections in this sense, we are dealing only with the allocation or "settlement" of persons dying in public institutions, and the word "correction" should not be understood as referring to changes introduced by the Registrar-General into the crude death rate to allow for the varying age and sex distribution of the population. The following figures refer only to the gross death rates in Leeds, disregarding altogether the allocation of institution deaths as carried out by the Registrar-General. In comparing Leeds with Leeds, it is better on the whole to take the larger of the two rates.

Seven Zymotics.—During 1909 the "seven zymotic diseases" contributed only 0·81 deaths per thousand of the estimated population, as compared with 1·55 in 1908 and 2·21 in the ten years, 1899-1908, see table on p. 10.

The rate from measles was only half what it was in 1908, and very little more than a third of the rate in the decade 1899-1908.

From scarlet fever also the rate was slightly lower than in 1908, and less than a sixth of what it was in the decade.

On the other hand, the deaths from diphtheria and membranous croup have severally and together been slightly increased. The increase in the number of deaths, allowing for the growth of population, is equivalent to one of 0·03 per 1,000 of the population when the two diseases are taken together. Whilst, however, the death rate is 0·03 above that of 1908, the rate is below that of the decade, which for the two diseases was 0·28, or more than double that for 1909.

Whooping cough was also much less fatal in 1909, the rates to two decimal places being 0·17 and 0·29 in 1909 and 1908 respectively, whilst the rate for the decade had been 0·35, or quite double that of the year we are considering.

Typhus, typhoid and continued fever together caused 42 deaths in the 52 weeks of 1909, as against 25 in the 53 weeks of 1908. Allowing for the increase of population, the corresponding rates are 0·09 in 1909, 0·05 in 1908, and 0·13 in the decade. The difference between the death rate in 1909 and 1908 is equivalent to an increase of less than 0·04 in the later as compared with the earlier year.

Diarrhœa, the last of the seven zymotic diseases, caused only 0·23 deaths per thousand in 1909, as against 0·70 in 1908 and 0·86 in the decade. Enteritis, which is often associated with diarrhœa, but which is not counted as one of the seven diseases, had a rate of 0·17 in 1909, against 0·21 in 1908 and 0·24 in the decade.

The diminution in the zymotic rate has been chiefly due to a lessened fatality from measles and diarrhœa. Diphtheria with membranous croup, and the continued fevers have in each case caused a slightly increased rate as compared with that of 1908, but for both diseases the rate was considerably below that of the decade.

Other infectious diseases.—The death rates from puerperal fever and erysipelas are slightly above those in 1908, and together practically about the same as in the decade 1899-1908.

From consumption the number of deaths recorded in the 52 weeks of 1909 was 548, as against 621 in the 53 preceding weeks—the weekly average being 10·5 in 1909 as against 11·7 in 1908, and the mortality rates, allowing for the presumably increased population, 1·14 in 1909, as against 1·28 in 1908 and 1·32 in the decade. Tuberculous diseases, other than consumption, were credited with 274 deaths in the 52 weeks of 1909, as against 301 in the 53 weeks of the preceding year—the weekly average of deaths from these causes, disregarding the population, being 5·3 in 1909 and 5·7 in 1908. Grouped together, the tuberculous diseases, therefore, caused an average of 15·8 deaths per week in 1909 and 17·4 in 1908. Allowing for the increase of population,

TABLE 1.

Annual deaths per 1,000 of the estimated population.

	All causes.	Seven zymotics.†	Consumption.	Bronchitis, pneumonia, pleurisy.	Other lung diseases, without influenza.
Five years, 1885-89 ... (261 weeks)	21·16	2·78	1·70	3·93	0·27
*Five years, 1890-94 ... (261 weeks)	21·16	2·52	1·61	4·43	0·31
*Five years, 1895-99 ... (261 weeks)	19·77	2·74	1·47	3·54	0·22
Five years, 1900-04 ... (261 weeks)	18·36	2·48	1·36	3·18	0·19
Year 1905 (52 weeks)	15·65	1·60	1·23	2·76	0·16
Year 1906 (52 weeks)	16·03	2·23	1·23	2·46	0·16
Year 1907 (52 weeks)	15·42	1·29	1·29	2·81	0·16
Year 1908 (53 weeks)	15·49	1·55	1·28	2·75	0·15
Year 1909 (52 weeks)	14·21	0·80	1·14	2·68	0·19
1909 increase on 1908	...	...	...	...	0·04
„ decrease „ 1908	1·28	0·75	0·14	0·07	...
1909 increase on '85-9	...	...	...	...	...
„ decrease on '85-9	6·95	1·98	0·56	1·25	0·08

* Estimated upon the population calculated from the data of the recent census and those of 1881 and 1891.

† Exclusive of membranous croup which the Registrar-General did not include in the seven zymotics until 1894.

The rates in this table throughout are calculated on the deaths registered as occurring in the city and its hospitals without any deduction for the deaths within the city of persons not belonging to Leeds.

TABLE 2.

Shewing the death rates in the nine largest towns of the United Kingdom for the 52 weeks, and each of the thirteen week periods of 1909 (altered).

		First quarter of 1909.	Second quarter of 1909.	Third quarter of 1909.	Fourth quarter of 1909.	52 Weeks.
London	-	19'0	12'8	10'8	13'5	14'0
<i>Leeds</i>	-	17'4	13'3	11'9	13'7	14'1
Sheffield	-	20'0	14'8	12'8	12'7	15'1
Edinburgh	-	18'2	15'8	12'2	14'9	15'3
Birmingham	-	21'0	14'2	12'2	14'2	15'4
Glasgow	-	19'8	16'6	12'6	20'9	17'5
Manchester	-	22'2	17'9	14'4	17'2	17'9
Liverpool	-	23'2	18'0	16'3	18'6	19'0
Dublin	-	25'7	20'9	17'2	20'0	20'9

Rates for Edinburgh and Glasgow are for calendar quarter and year.

The above figures differ slightly from those given in the report as originally presented, the Registrar General having corrected the death rate of London from 14'2 to 14'0. There were also some slight alterations in other figures when the fourth quarter and the annual summary were printed, but none of the others affect the order of the towns.

these numbers are equivalent to a death rate from all diseases registered as tuberculous of 1.70 in 1909 and 1.90 in 1908, the rate for the decade having been 2.04.

Bronchitis, Pneumonia and Pleurisy.—There are three diseases commonly more or less associated—bronchitis, pneumonia and pleurisy. Bronchitis includes, of course, a large number of deaths in very young children, and these deaths are sometimes registered as bronchitis, sometimes as bronchopneumonia, in either case they are included under the first heading in this group. But if they are registered simply as pneumonia, they are included under the second heading of this group. In the same way a number of deaths of elderly persons are put down to bronchitis which might, perhaps, as correctly in some cases be classed as due to general decay—the symptoms called bronchitis indicating the mode of dying rather than the cause of death. There are, however, in addition, a certain number of deaths from the disease which the Germans call “croupous pneumonia” and which at various times has been known as “acute pneumonia,” “sthenic pneumonia,” and “lobar pneumonia.” Deaths properly classed under any of these three headings are probably due to a distinct febrile disease, running a definite course—as definite as the course of typhus or smallpox, and frequently more definite than that of the disease known as enteric or typhoid fever. Unfortunately, vagueness in certification prevents our being able to separate this zymotic fever in every case from other cases called simply pneumonia. Deaths simply certified as “pneumonia,” may have been due to this infective disease, or they may have been like the bronchitis of elderly people, due to a general tendency to decay, or they may have been due to simple extension to the lung cells of the disease known as bronchitis. The simple word “pneumonia” again might indeed be intended by the certifier to apply to the lobular pneumonia of childhood, to the hypostatic pneumonia of age, to the pneumonia following influenza, or to the real zymotic disease already mentioned. Meantime, it is convenient to keep

the group recommended by the Local Government Board and to include bronchitis, pneumonia and pleurisy under one heading. This group is credited in 1909 with a death rate of 2·68 per thousand of the estimated population, as against one of 2·75 in 1908 and 2·99 in the decade.

These figures, taken for what they are worth, indicate that in 1909 there were, in proportion to the estimated population, slightly fewer deaths from this group than in 1908, and appreciably fewer than in the decade. This is interesting, in view of the superstition that a wet season is apt to cause colds, and an increased mortality from chest diseases. Nineteen hundred-and-nine was emphatically a wet year, and yet the deaths from this group were appreciably less than in the ten preceding years.

All lung diseases.—On the other hand, there was a somewhat higher rate from the much smaller group classed as other lung diseases, and which includes such causes of death as asthma, emphysema, empyæma, pulmonary congestion, and other lung diseases somewhat indefinitely described. In 1909 the number of deaths ascribed to this nondescript group was 91, an average of 1·75 a week. In 1908 in 53 weeks the corresponding number had been 73, an average of 1·38 a week, raising the weekly average from all lung diseases to 26·6 in 1909, as compared with 26·5 the previous year, but when the increase of population is allowed for, the rate in 1909 becomes from all lung diseases, exclusive of influenza and consumption, 2·87, as against 2·90 in 1908 and 3·17 in the decade.

Even when we take these more or less chronic diseases into consideration, the wet year had a considerably lower death rate from lung diseases than the average of the much dryer years in the decade.

Death rate generally.—On the whole, therefore, it may be said, if we may adopt the Registrar-General's estimate of the population, that the year 1909, as indicated by the death rate, is distinctly the healthiest on our record, which goes back as far as

1865. This is in itself satisfactory, but it is more satisfactory when we take into account that the death rate for the five years of which it forms the last (15·36), is conspicuously below that of any five years in our record. Not only is the death rate for the five years lower than that of any five consecutive years in the period named, but it is a lower rate than obtained in any one of the five years from 1865 to 1904.

INFANTILE MORTALITY.

Calculated upon the number of births registered during the year, the mortality amongst children under the age of twelve months was at the rate of 123 per thousand born. This is again the lowest rate of infantile mortality that I have ever had to report to you. During the five years 1890-4, the lowest infantile mortality, reckoned in the same way, was 156, and the highest 206, the average being 176. During the five years 1895-9, the average rose to 181, the lowest having been 172, and the highest 190. In the following quinquennium, 1900-4, the lowest rate was 153, and the highest 188, the average being 172. During the five years of which 1909 was the last, the average infantile mortality has been 139, the rate in the individual years being—in 1905, 152; in 1906, again 152; in 1907, 131; in 1908, 138; and in 1909, 123. With the slight exception of the rise from 131 in 1907 to 138 in 1908, it will be noticed that the improvement has been an almost continuous one.

The influence of weather upon infantile mortality was dealt with somewhat fully in my annual report for 1904, and doubtless a considerable amount of the remarkable drop in infantile mortality last year has been due to the wet summer. But the fact that the improvement has been a steadily increasing one during the five years' period, makes us hope that sanitation has also had something to do with the lessening of the mortality amongst the newly-born. This matter will be referred to more in detail in the supplementary portion of the report.

COMPARATIVE MORTALITY.

In table 2 will be found a statement made up from figures published by the Registrar-General, showing the comparative

mortality of Leeds and the eight other largest towns in the United Kingdom for 1909, and each of its quarters. For the year it is subject to any alterations that may be called for when the revised annual summary is published.

Taking it, however, as it stands, Leeds has the lowest death rate of any of these nine towns. The difference between the rate of Leeds and that of London is so very small, that it is not improbable that when the corrected figures are published, the relative positions of these towns may be reversed, but no correction is likely to affect the position of Leeds with regard to the other towns on the list. Reference has already been made to the two kinds of corrections made by the Registrar-General. The correction that has just been mentioned is simply one due to the addition or subtraction of deaths of persons not belonging to the individual towns. A further correction has also been referred to, of the kind described in a recent article in the "Yorkshire Post," by which the mortality of England has been compared with that of various other countries. To do so it has been thought necessary to allow for the fact that some of these countries have a large proportion of persons at the more resisting ages, while others have a larger proportion of older persons whose death rate is necessarily higher. A similar correction for the death rate has been made out for each of the English towns, but it has not yet been published for Edinburgh, Glasgow, Dublin, so that I have not been able to alter table 2 accordingly. Corrections of this kind for the large English towns do not generally affect the relative order, although they may affect the individual rates. As a rule, when the correction is made the healthy towns appear more healthy and the unhealthy towns less healthy. It is probable, therefore, that any correction of this sort in table 2 will not materially affect the position of the towns as shown in order of death rate. Before the supplement of this report is issued, one may be able to speak more fully upon this subject.

J. SPOTTISWOODE CAMERON.

LEEDS, *February 10th, 1910.*

B

TABLE 2a.

Comparative mortality of nine largest towns in United Kingdom in periods of time.

1890-1893. Four years.	1894-1897. Four years.	1898-1901. Four years.	1902-1905. Four years.	1906-1909. Four years.
Edinburgh .. 20.2	London .. 18.6	London .. 18.7	London .. 16.0	London .. 14.4
London .. 20.9	Edinburgh .. 19.1	<i>Leeds</i> .. 19.4	<i>Leeds</i> .. 16.9	<i>Leeds</i> .. 15.1
Birmingham 21.3	<i>Leeds</i> .. 19.3	Edinburgh .. 19.5	Edinburgh .. 16.9	Edinburgh .. 15.6
<i>Leeds</i> .. 21.9	Sheffield .. 19.7	Birmingham 20.7	Sheffield .. 17.4	Birmingham 16.1
Sheffield .. 23.0	Birmingham 20.3	Sheffield .. 21.4	Birmingham 18.1	Sheffield .. 16.1
Glasgow .. 24.2	Glasgow .. 21.4	Glasgow .. 21.5	Glasgow .. 19.1	Glasgow .. 17.8
Dublin .. 26.1	Manchester .. 22.8	Manchester .. 23.2	Manchester .. 19.8	Manchester .. 18.4
Manchester .. 26.4	Liverpool .. 24.9	Liverpool .. 24.6	Liverpool .. 21.3	Liverpool .. 19.5
Liverpool .. 26.8	Dublin .. 26.6	Dublin .. 27.5	Dublin .. 23.0	Dublin .. 22.0

Leeds is the only one of the above extra-metropolitan districts in which the area has not been enlarged during the period embraced by the table. The method of enumerating the deaths in London was altered in 1903, certain deaths formerly assigned to London having since then been otherwise distributed, some of them to the five English towns given above.

AGE MORTALITY.

Table 3 gives the number of registered births, the number of deaths registered at all ages and at certain groups of ages, for the City, for each quarter of the year and for the whole fifty-two weeks. These numbers may be considered as accurate.

The line, however, in this table giving the estimated population cannot be looked upon with quite the same confidence. The population at all ages, 484,012, is the estimate of the Registrar General, and is accepted as such. The figures which follow it for each different age group are calculated from it on the supposition that the numbers living at these ages bear the

TABLE 3.

Births and deaths registered in the City of Leeds in the four periods of 13 weeks ended respectively 3rd April, 3rd July, and 2nd October, 1909, and 1st January, 1910. Deaths in age groups.

1	2	MORTALITY FROM ALL CAUSES AT SUBJOINED AGES.						
		3	4	5	6	7	8	9
1909. Estimated population at these ages ...	Regis- tered Births.	At all Ages. 484,012	Under 1 Year. 12,678	1 and under 5. 43,596	5 and under 15. 99,226	15 and under 25. 97,413	25 and under 60. 203,595	60 and upwards. 27,504
I. Quarter	2,851	2,118	328	208	67	112	663	740
II. Quarter	2,826	1,623	334	151	68	95	483	492
III. Quarter	2,814	1,452	385	163	50	67	404	383
IV. Quarter	2,511	1,661	303	159	69	71	502	557
52 weeks. . .	11,002	6,854	1,350	681	254	345	2,052	2,172

same ratios to the whole population that the number enumerated at these several age periods at the census bore to the whole enumerated population of the City. As, however, the birth-rate has been steadily decreasing it is not improbable that, even assuming that the population at all ages is accurate, the numbers in columns 4 and 5 will be in excess of the real numbers, while in some of the later columns the figures printed may be below the actual population at those ages.

In table 4 the figures for each quarter and for the whole year are calculated upon these admittedly provisional populations. This matter, it may be remembered, was referred to in the report for 1906 at pages 11, 12, and 13. It is perhaps unnecessary

TABLE 4.

Birth and death rates in the City of Leeds in the four periods of 13 weeks ended respectively 3rd April, 3rd July and 2nd October, 1909, and 1st January, 1910. Death rates in age groups.

1	2	DEATHS PER ANNUM PER 1,000 LIVING.								
		3	4	5	6	7	8	9	10	11
1909.	Birth-rate.	At all Ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 60.	60 and upwds.	25 to 65	Over 65
I. Quarter	23·6	17·6	104	19·1	2·7	4·6	13·1	108·0	15·5	147·3
II. Quarter	23·4	13·5	106	13·9	2·8	3·9	9·5	71·8	11·2	96·7
III. Quarter	23·3	12·0	122	15·0	2·0	2·8	8·0	55·9	9·3	74·5
IV. Quarter	20·8	13·8	96	14·6	2·8	2·9	9·9	81·3	11·5	113·2
52 weeks . .	22·8	14·2	107	15·7	2·6	3·6	10·1	79·2	11·9	108·0

to do more than mention it here. The discrepancy at some of the ages in 1909 will probably be considerable, more considerable than that estimated for 1906. Had an age and sex census been taken in 1906 this discrepancy might have been very much diminished. Our calculations for 1906 involved a dead reckoning of $5\frac{1}{4}$ years, not only in regard to the whole population, but in regard to the proportions of that population living at different ages. Even if the whole population had been approximately correct the age populations given in table 3, as was shown at the time, were inaccurate. In 1909 the dead reckoning is one of $8\frac{1}{4}$ years and the errors, both in the whole population at all ages and of the numbers living at the several age-groups dealt with in the table are probably very considerable.*

Infant mortality.—About the mortality of infants there is less doubt if we restrict ourselves to the usual method of stating the ratio of the mortality to the number of births in the same period. The second line in table 5 gives this mortality as usually calculated. It is obviously not the real mortality of infants, it is the ratio between the births and the deaths of children under one, the latter figure being for convenience multiplied by a thousand.

It has been already mentioned that the rate of 123 thus calculated is the lowest we have ever recorded. If the population under one year of age in 1909 bore the same proportion to the total population as at the time of the census of 1901, and

*It was shown in the report for 1906 that if the age population were calculated in the same manner as the population at all ages, the rates given in table 4, column 4, for that year would require to be increased by 3·6 per cent., in column 5 by 3·2 per cent., and in column 6 by 3·8 per cent. The correction for this revised population for 1906 was only one of 0·9 per cent., in column 7, the printed figures being, however, practically unaltered. In column 8 the re-calculated population reduced the printed rate $3\frac{3}{4}$ per cent. and in column 9 by nearly 2 per cent.

The following table for 1909 shows how a similar re-calculation of the rate alters the population given in table 3 of the present report and consequently the rates in table 4.

Population as given in	All Ages.	Under One.	One to Five.	Five to Fifteen.	Fifteen to Twenty-five.	Twenty-five to Sixty.	Sixty and Upwards.
A, table 3 ...	484,012	12,678	43,596	99,226	97,416	203,595	27,504
B, revised ...	484,012	12,004	41,553	93,751	96,065	212,304	28,335
A ...	14·2	107	15·7	2·6	3·6	10·1	79·2
B ...	14·2	113	16·4	2·7	3·6	9·7	70·9

the population for the whole City be correctly estimated, the real death rate would be 107 not 123. This figure of 107 is obtained by dividing 1,350 deaths of children under one by the population of children at that age estimated by the method described and is quite an absurd one. The actual births registered were only 11,002, and if we suppose that half the deaths amongst infants in their first year occurred before the middle of the year,* the population at that age would be only 10,327, giving a rate of mortality per thousand of 131 instead of 107.

This figure regarded as a death-rate is probably more accurate than that of 123. The usual method of calculating the deaths as a ratio to births is evidently inaccurate. The birth population includes, of course, those already dead. Though the more correct death-rate is probably 131, the number 123 being calculated in the ordinary way, used in all towns, is the one we must adhere to, and so long as it is remembered that it is not a death-rate upon the population but a death-rate upon the births, the method is convenient.

Another method of estimating the death rate of infants under one is given in table 5 in the third line. It is a variant on the ordinary method, and is calculated upon the principle of taking an average of the births in the five quarters of which the particular quarter was the last. The rate for the year which is the mean of the rates for the quarters comes out at 117 instead of 123. This is due to the fact that the birth rate is decreasing each quarter, and that in estimating the mortality upon the average of five quarters, we get a lower mortality than if we estimate in each case on the births in the quarter under consideration. The method of taking the average of five quarters was introduced some years ago to get rid of the fallacy due to seasonal or temporary variations in the number of births, but when we commenced to use it we did not expect that the birth-rate was going to decline continuously.

* It will be seen later that, during the five years 1905-9, half the children who died in the first year of life died before they were three months old. (See p. 20).

TABLE 5.

Mortality in Children under one year of age, during the
52 weeks of 1909.

	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	YEAR.
Calculated per 1,000 of the population under 1, estimated to the middle of 1909, on the supposition that the whole population of the city was that estimated by the Registrar General, and that the number of children under one bore the same proportion to the population as at the 1901 census ...	104	106	122	96	107
Deaths under 1 per 1,000 births registered in same period	115	118	137	121	123
Deaths per 1,000 registered births, the latter instead of those for the same quarterly period being the average of the same and four preceding quarters. The rate for the year is the mean of the four quarterly rates	110	114	135	110	117
Average rate by last method for five preceding years ...	134	119	197	144	149
Average rate by second method for years 1886-90 (from table 71 1890 report)	158	147	223	171	175

Extended tables.—The usual tables dealing with this subject for the year 1909 have been prepared. No. 5a shows, in certain age periods, the mortality from different diseases or groups of diseases. The remarks made in previous reports as to the lines in italics do not require any alteration. In this table the deaths from the several diseases in children under the age of one week, between one week and two, and between three and four weeks, are given separately, and are collected together under the heading of "total under one month," a month being in this case a lunar month. The two following columns deal with the deaths of children stated to be one month but less than two months old, and two months but under three. The figures of these two groups are also collected under the heading "one and under three months," but in this case the one month is a lunar, but the three months are understood to be calendar months. The three following columns deal with the deaths of children aged between three and four, four and five, and five and six months, and these are collected under the heading "three and under six months." The three following columns deal similarly with three following months and are collected under the heading "six and under nine months." The same applies to the three last months under twelve. It is, of course, understood that these ages refer to the ages of the children at the time of death.

Altogether in the year, 1,339 deaths of children under the age of one year were recorded and certified, 4 uncertified deaths were also recorded. In addition to these, but not included in table 5a, 7 deaths, all certified, occurred in public institutions of children not born in Leeds, making 1,350 deaths registered in the fifty-two weeks. During the same period, 11,002 births were registered in the City, giving an infantile death rate per thousand born of 123 as previously said. Only the 1,343 deaths are included in table 5a, and in making deductions from these figures, the 93 births occurring in workhouses are omitted. Leaving out these 93 births in workhouses, but counting deaths

TABLE 5a.—Infantile Mortality during the year (52 weeks ended 1st January, 1910).
Deaths from stated causes in age periods of weeks and months under one year of age.

CAUSES OF DEATH.	1 week.	1-2 wks.	2-3 wks.	3-4 wks.	Total under one mth.	1-2 mths.	2-3 mths.	One and under three mths.	3-4 mths.	4-5 mths.	5-6 mths.	Three and under six mths.	6-7 mths.	7-8 mths.	8-9 mths.	Six and under nine mths.	9-10 mths.	10-11 mths.	11-12 mths.	Nine and under twelve mths.	Total deaths under one year.
All causes { Certified .. Uncertified ..	304 4	76 ..	57 ..	30 ..	467 4	128 ..	102 ..	230 ..	95 ..	76 ..	85 ..	256 ..	80 ..	70 ..	58 ..	208 ..	65 ..	56 ..	57 ..	178 ..	1,339 4
Common infectious diseases.
{ Small-pox
{ Chicken-pox
{ Measles
{ Scarlet fever
{ Diphtheria
{ Membr. croup
{ Other croup
{ Whooping cough
Diarrhoeal diseases.
{ Diarrhoea, all forms*
{ Enteritis (not tuberculous)
{ Gastritis
{ Gastric & gastro-intestinal catarrh
{ Gastro-enteritis
Wasting diseases.
{ Premature birth ..	176	23	17	4	220	13	8	21	1	..	..	3	1	..	..	1	..	..	..	..	245
{ Congenital defects ..	26	5	5	1	37	4	1	5	..	..	..	3	1	..	..	3	..	..	..	..	48
{ Injury at birth ..	21	1	..	..	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22
{ Want of breast milk	1
{ Inanition, malnutrition, privation ..	10	5	2	2	23	7	4	11	1	2	..	3	..	..	1	1	..	..	..	..	43
{ Atrophy	1	1	1	..	1	..	..	..	..	..	..	1	1	..	..	..	..	3
{ Debility ..	20	12	6	5	43	10	3	13	1	2	..	3	..	2	1	2	1	..	..	..	62
{ Marasmus ..	1	3	3	3	10	17	14	31	13	11	11	35	5	6	5	16	6	3	1	10	102
Tuberculous diseases.
{ Tuberculous meningitis
{ Tuberculous peritonitis
{ Tuberculous mesenterica
{ Hydrocephalus
{ Other tuberculous diseases
Erysipelas
Syphilis
Rickets
Meningitis (not tuberculous)
Convulsions
Bronchitis
Broncho-pneumonia
Laryngitis
Pneumonia
Suffocation, over-laying
Dentition
Other causes (exclusive of lines in italics)
TOTALS ..	303	76	57	30	471	128	102	230	95	76	85	256	80	70	58	208	65	56	57	178	1,343

* See note to table 17, p. 74, and text in Annual for 1906, p. 17.

TABLE 5b.—Infantile Mortality during the year (52 weeks ended 1st January, 1910).
Deaths from stated causes in each registration district, with rates per thousand births in the district.

CAUSES OF DEATH.	NORTH.		WEST.		SOUTH-EAST.		HUNSLET.		HOLBECK.		WORTLEY.		KIRKSTALL.		BRAMLEY.		CHAPEL-TOWN.		OSMOND-THORPE.		City death-rate under one year per 1,000 births.
	Deaths.	Rate per 1,000 births.	Deaths.	Rate per 1,000 births.	Deaths.	Rate per 1,000 births.	Deaths.	Rate per 1,000 births.	Deaths.	Rate per 1,000 births.	Deaths.	Rate per 1,000 births.	Deaths.	Rate per 1,000 births.	Deaths.	Rate per 1,000 births.	Deaths.	Rate per 1,000 births.	Deaths.	Rate per 1,000 births.	
Common infectious diseases.	0.9	..	0.5	..	..	..	..	..	..	..	..	..	..	..	..	..
	1	1.8	..	1	..	..	..	..	..	..	..	..	..	..	..	..	0.2
	2	1.4	1	0.5	2	1.8	3	1.6	3	3.0	1	0.7	3	3.2	..	..	1	1.1	..	..	1.5

	0.5	..	..	..	..	..	..	..	..	..	1	1.1	..	0.3
Common infectious diseases.

Common infectious diseases.	8	5.8	3	1.6	4	3.5	12	6.4	3	3.0	4	3.0	4	4.2	..	..	3	3.2	..	..	3.8

Diarrhoeal diseases.

Diarrhoeal diseases.	12	8.7	12	6.4	13	11.5	27	14.5	7	7.0	8	5.0	2	2.1	1	2.5	1	1.1	..	..	7.6

	5	3.6	9	4.8	2	1.8	1	0.5	2	2.0	4	3.0	2	2.1	..	..	1	1.1	..	..	2.4
	3	3.2	..	..	0.8

Diarrhoeal diseases.	1	0.7	1	0.5	2	1.8	..	..	1	1.0	..	..	1	1.1	..	..	..	..	..	..	0.6

	7	5.1	1	0.5	8	7.1	9	4.8	1	1.0	6	4.5	1	1.1	..	..	1	1.1	..	..	3.1

Wasting diseases.

Wasting diseases.	20	14.5	47	25.1	28	24.7	43	23.1	23	23.0	38	28.3	14	14.8	14	34.6	18	18.9	..	..	22.5

Wasting diseases.	1	0.7	4	2.1	3	2.7	9	4.8	5	5.0	16	11.9	3	3.2	..	..	2	2.1	..	..	3.9

Tuberculous diseases.

Tuberculous diseases.	2	1.4	3	1.6	2	1.8	1	0.5	2	2.0	..	..	2	2.1	..	..	1	1.1	..	..	1.2

Tuberculous diseases.	1	0.7	5	2.7	5	4.4	4	2.1	2	2.0	2	1.5	1	1.1	1	2.5	2	2.1	..	..	2.1

Erysipelas.

Erysipelas.

Erysipelas.
			

in workhouses as belonging to the district in which they occurred, these corrections (93 births and 7 deaths omitted) do not materially alter the death rate of children under one. If we ignore them, that is, count all the births registered in Leeds and all the deaths under one registered in Leeds, the rate is 122·7. If we make the alterations stated, which we do in order to compare, in tables 5b and 5c, the different parts of the town one with another, the death rate is 123·1, both of these figures being counted in our ordinary way as 123. The rate as already mentioned is very much lower than in any previous year.

Infantile mortality, 1905-9.—It has been already shown that the infantile mortality during the five years, 1905-9, is the lowest on our record. During these five years, at the suggestion of

TABLE 5c.—1909.

Infant mortality during the year (52 weeks ended January 1st, 1910).

Excess or otherwise, compared with rate in whole city, of district rates at certain age periods.

District.	Births in year.	Under 1 week.	Under 1 month.	1 and under 3 months.	3 and under 6 months.	6 and under 9 months.	9 and under 12 months.	Year.
North	1,381	- 35·8 %	- 28·0 %	+ 16·6 %	+ 35·7 %	+ 13·6 %	+ 73·0 %	+ 11·8 %
West	1,871	+ 19·5 %	+ 19·9 %	- 11·4 %	- 15·7 %	- 7·9 %	- 21·5 %	- 1·9 %
South-East	1,132	+ 6·4 %	+ 4·4 %	+ 17·1 %	+ 39·1 %	+ 38·7 %	+ 46·6 %	+ 24·1 %
Hunslet	1,861	+ 1·1 %	+ 3·2 %	+ 17·1 %	+ 5·1 %	+ 20·9 %	+ 12·3 %	+ 10·0 %
Holbeck	1,002	+ 13·1 %	+ 10·9 %	- 24·2 %	- 6·4 %	+ 4·7 %	- 26·4 %	- 4·3 %
Wortley	1,345	+ 16·0 %	+ 11·8 %	+ 37·4 %	+ 4·3 %	- 18·3 %	- 22·7 %	+ 5·7 %
Kirkstall	944	- 32·3 %	- 38·7 %	- 44·5 %	- 0·9 %	- 11·5 %	- 35·0 %	- 27·7 %
Bramley	405	+ 48·9 %	+ 20·1 %	- 53·1 %	- 57·9 %	- 9·4 %	- 39·3 %	- 19·7 %
Chapelton	952	- 18·1 %	- 7·6 %	- 15·2 %	- 50·6 %	- 56·0 %	- 28·8 %	- 27·5 %
Osmondthorpe	16	...	...	...	...	...	...	...
City death rates per 1,000 births registered ...	10,909*	28·2	43·2	21·1	23·5	19·1	16·3	123·1

* Exclusive of 93 births in workhouses.

the Local Government Board, a special table has been compiled (table 5a) as already mentioned. It has been thought convenient, as the year at present under consideration (1909) is the last of the five, to prepare for these five years a table similar to table 5a, but dealing only with the figures in heavy type in those tables. During these years, 8,180 certified deaths have been registered, and 29 that were not certified, making 8,209 dealt with in the new table (table 5x). Of these 8,209 deaths, 2,605 were those of children less than four weeks old, that is 31·7 per cent. Of the remainder, 1,503 deaths were those of infants more than four weeks but less than three months old, that is 18·3 per cent. The total deaths under three months were, therefore, 50 per cent. of the whole infantile mortality. In other words, nearly a third of the deaths of children under one year occurred in the first four weeks of life, and just a little more than half in the first three months.

In the next age period of 3 months, including the deaths of children more than 3 and less than 6 months old, there were 1,650, or 20·1 per cent., just practically one-fifth. At the age of 6 but under 9 months there were 1,354, or 16½ per cent. of the total deaths of children under 1 year, while at the age of 9 months to 12 the deaths fell to 1,097, or 13·4 per cent. This matter was referred to in the report for 1906, when it was shown (page 18) that in the 2 years 1905 and 1906, 31·6 and 29·0 per cent. respectively of all the deaths under one occurred in the first 4 weeks of life, while 18·6 and 18·0 per cent. of the infantile deaths respectively, in 1905 and 1906 occurred between the 4th and 13th weeks of their lives. Between the ages of 3 and 6 months in 1905, the proportion was 20·1, as in the 5 years, and 21·4 in 1906. Between the ages of 6 and 9 months, whilst in the five years the proportion was 16·5 of all the deaths under one, in 1905 and 1906, the proportion was 16·4 in the former and 16·5 in the latter year. In the last 3 months of the child's first year in 1905, 13·4 per cent. and in 1906, 15·0 per cent. of all the deaths under one occurred, whilst as we have just seen the proportion like that in 1905

TABLE 5x.

Infantile Mortality during the five years 1905-9.

Deaths from stated causes in age periods
under one year of age.

CAUSES OF DEATH.				Under four weeks.	One and under three months.	Three and under six months.	Six and under nine months.	Nine and under twelve months.	Total under one year.
All causes	{ Certified	...	...	2,584	1,502	1,649	1,352	1,093	8,180
	{ Uncertified	...	...	21	1	1	2	4	29
Common infectious diseases.	{ Small-pox	...	...	1	...	...	...	...	1
	{ Chicken-pox	...	...	...	1	...	3	3	7
	{ Measles	...	...	...	7	8	51	73	139
	{ Scarlet fever	...	...	...	...	1	3	2	6
	{ Diphtheria	...	...	...	2	...	4	10	16
	{ Membranous croup	...	...	...	...	...	...	...	...
	{ Other croup	...	...	...	...	1	1	2	4
	{ Whooping cough	...	...	8	51	54	85	66	264
Diarrhoeal diseases.	{ Diarrhoea, all forms	...	...	39	235	408	280	171	1,133
	{ Enteritis (not tuberculous)	...	...	21	45	55	35	19	175
	{ Gastritis	...	...	9	16	13	3	2	43
	{ Gastric and gastro-intestinal catarrh	...	...	3	15	14	7	6	45
	{ Gastro-enteritis	...	...	13	35	61	23	18	150
Wasting diseases.	{ Premature birth	...	...	1,106	98	15	1	1	1,221
	{ Congenital defects	...	...	247	57	16	10	1	331
	{ Injury at birth	...	...	80	...	...	...	...	80
	{ Want of breast milk	...	...	3	4	2	...	...	9
	{ Inanition, malnutrition, priva- tion	...	...	196	61	31	12	6	306
	{ Atrophy	...	...	2	10	5	4	4	25
	{ Debility	...	...	236	69	29	7	5	346
	{ Marasmus	...	...	83	190	159	84	51	567
Tuberculous diseases.	{ Tuberculous meningitis	...	...	1	4	18	18	20	61
	{ Tuberculous peritonitis	...	...	...	4	14	10	9	37
	{ Tabes mesenterica	...	...	7	39	60	26	20	152
	{ Hydrocephalus	...	...	4	2	6	6	2	20
	{ Other tuberculous diseases	...	...	3	16	37	29	32	117
Erysipelas				4	5	...	2	1	12
Syphilis				31	33	28	8	2	102
Rickets				2	7	10	14	21	54
Meningitis (not tuberculous)				4	15	42	32	25	118
Convulsions				253	144	91	47	35	570
Bronchitis				50	138	165	152	127	632
Broncho-pneumonia				15	70	133	180	171	569
Laryngitis				...	3	1	4	2	10
Pneumonia				5	18	35	61	56	175
Suffocation, over-laying				30	27	17	7	3	84
Dentition				...	4	42	75	83	204
Other causes (exclusive of lines in italics)				149	78	79	70	48	424
TOTALS				2,605	1,503	1,650	1,354	1,097	8,209

Table of mortality amongst children under 1 year of age per 1,000 births in each of the five years, 1905-9, and in the whole period, with the percentage of the whole death rate at certain age periods.

	1905.	1906.	1907.	1908.	1909.	Five Years.
Death rate per 1,000 births	152·1	152·3	131·4	138·6	123·1	139·9
Percentage of above—						
Under 1 week ...	17·6	16·5	18·8	18·9	22·9	18·7
Over 1 and under 2 weeks	5·1	4·2	4·0	5·3	5·7	4·8
2 and under 3 weeks...	4·8	4·9	4·4	5·1	4·2	4·7
3 and under 4 weeks...	4·1	3·5	4·3	3·1	2·2	3·5
All under 4 weeks ...	31·6	29·0	31·5	32·4	35·1	31·7
4 to 13 weeks ...	18·6	18·0	18·9	18·7	17·1	18·3
3 to 6 months ...	20·1	21·4	20·2	19·4	19·1	20·1
6 to 9 months ...	16·4	16·5	16·5	17·5	15·5	16·5
9 to 12 months ...	13·4	15·0	12·9	12·0	13·3	13·4
Under 12 months ...	100·1	99·9	100·0	100·0	100·1	100·0

was 13·4 in the 5 years. It will be convenient perhaps to put these figures for each of the 5 years, and for the whole period in the form of a table, somewhat similar to the one on page 18, in the Annual Report for 1906; for convenience the deaths under one year, per 1,000 births, are also given.

It will be noticed at once that the years 1905 and 1906 had the highest infantile death rate of the five, 1909 the lowest, while in 1908 the rate was slightly higher than in 1907. In the year we are considering (1909), while the death rate as a whole was, as just said, the lowest, the percentage of children under one year of age who died in the first 4 weeks of life was the highest—higher than in any other year of the five, and

considerably higher than the average of the five years. Taking the next period of nine weeks, the percentage of children at this age in the year of lowest infantile death rate (1909) was lower than in any of the other 4 years, and 1.2 below the average of the five. At the age period, from 3 to 6 months, in 1909, the percentage was again the lowest of any of the five years, although not very much lower than the percentage in 1908. At the 6 to 9 months' age period, the average percentage for the five years was 16.5, the percentage in 1909 was 15.5, nearly one per cent. below that of any of the other four years. In the fourth period (9 to 12 months), the average percentage for the five years was 13.4. It was the same in 1905. It was considerably lower, however, in 1908, the year in which the rate had slightly increased. The rate in 1909, in this case, comes third in the list, 1905 having a slightly larger, and 1906 an appreciably larger percentage of the total infantile mortality at this particular age period.

The meaning of these figures seems obvious. The saving of infant life during the three later years of the five has been most marked amongst children who have survived the first month. The age period at which the lessening of the rate was least marked, manifested therefore an increased proportion of the total infant mortality. But it will be asked, has the actual mortality rate in infants of less than a month old increased? During the five years, 44.4 deaths per 1,000 children born occurred in these earlier four weeks of life. How do the corresponding numbers for the individual years compare? This is best seen by referring to table 5y, prepared for this purpose.

In this table (5y) it will be noticed that the mortality per thousand born amongst the children who died within the first 4 weeks of life averaged 44.4. It was highest in 1905, 48.0, next highest 45.0 in 1908. It was nearest to the average in 1906, 44.2. It was lowest in 1907, 41.3, whilst in 1909, the year with the lowest infantile death rate, the rate in children under 4 weeks was second lowest of the 5 years, 43.2.

TABLE 5y.

Deaths per 1,000 born amongst children dying in first 4 weeks of life.

	1905.	1906.	1907.	1908.	1909.	Five Years.
1st week	26·7	25·2	24·7	26·3	28·2	26·2
2nd week	7·8	6·3	5·3	7·3	7·0	6·7
3rd week	7·3	7·5	5·8	7·1	5·2	6·6
4th week	6·2	5·2	5·6	4·3	2·8	4·9
	48·0	44·2	41·3	45·0	43·2	44·4

If, however, we examine the several weeks of life given in table 5y, it will be noticed that in every case the first week of life contributed the greatest part of the mortality. The total deaths in the first week of life during the 5 years corresponding to a rate of 26·2 per thousand children born during the same period. The year, with the lowest rate in this week, was 1907, when it was 24·7. Then came 1906, 25·2; 1908, 26·3; 1905, 26·7—whilst the year with the lowest infantile mortality of all the five, 1909, had actually the highest death rate amongst children under one week, 28·2. It is probable—in fact it had been predicted—that this apparent increase in death rate amongst newly born children in 1909 would result from the action of our department in regard to the certification of still births.

Certification of still births, a cause of apparent increase in death rate.—Since the enforcement of the Midwives Act of 1902, it has been the duty of every certificated midwife to report to us every case of still birth in her practice (Rule 20 (1) (c)). Where a medical practitioner is not in attendance, enquiry has been made into every case of this kind. It seemed to us that in bygone days a certain elasticity had been given by midwives to the term “still birth,” and we had to enforce in its converse direction the opinion of the Central Midwives’ Board, that “a child is deemed to be still born, when after being completely born it has not breathed or shown any sign

of life." Accordingly we have insisted that a child which had shown signs of life after birth was a live born child.

It had been the practice at the cemeteries to receive certificates from midwives that a child was still born often without any enquiry. The cemetery authorities, however, and the coroner, as well as ourselves were all suspicious that a certain amount of irregularity existed. On one occasion, at our request the Coroner ordered an exhumation and an inquest upon the body of an infant alleged to have been still born, and gradually we have succeeded in making the midwives understand that the bodies of so called still born children are not to be so easily disposed of. Naturally, the consequence has been that a certain number of children, who although born alive would have been regarded as still born and buried without registration, have had to be registered, and it is probable that the apparent increase in the number of deaths in 1909 in the first week of life is to a considerable extent due to these additions to both the birth and death register.

Mortality of infants in districts, 1909—In 5b (p. 18) the same groups of diseases are taken as in 5a, but the deaths under one in the several districts are collected, and a rate is calculated for each death cause for each district upon the number of births occurring in that district.

When we deal with table 5b we find, allowing for the corrections mentioned on page 16 and 19, that the death rate in districts varied from 152·8 in South-East Leeds, to 89·0 in Kirkstall and 89·3 in Chapeltown. The infantile death rate in South-East Leeds for the ten years 1895-1904 was 220 per 1,000 births. In 1905 it was 203, in 1906 it fell to 188, in the following year to 176, rose in 1908 to 203, but fell in 1909 to 153, the lowest rate in that district I have ever had to report to you. During the last five years the infant mortality in South-East Leeds has been 185, which although higher than most districts, is by far the lowest death rate in this district for any similar period to which I have access.

TABLE 52.

Infantile Mortality during the five years 1905-9.

Deaths from stated causes in each registration district, with rates per thousand births in the district.

CAUSES OF DEATH.	NORTH.		WEST.		SOUTH-EAST.		HUNSLET.		HOLBECK.		WORTLEY.		KIRKSTALL.		BRAMLEY.		CHAPEL-TOWN.		OSMOND-THORPE.		City death-rate under one year per 1,000 births.
	Deaths.	Rate per 1,000 births.	Deaths.	Rate per 1,000 births.	Deaths.	Rate per 1,000 births.	Deaths.	Rate per 1,000 births.	Deaths.	Rate per 1,000 births.	Deaths.	Rate per 1,000 births.	Deaths.	Rate per 1,000 births.	Deaths.	Rate per 1,000 births.	Deaths.	Rate per 1,000 births.	Deaths.	Rate per 1,000 births.	
Common infectious diseases.																					
Small-pox ..	1	0.1	1	0.1	2	0.3	1	0.1	1	0.1	20	2.6	1	0.1	6	0.7	1	0.1	1	0.1	0.0
Chicken-pox ..	1	0.1	8	0.8	17	2.8	27	2.6	15	2.9	20	2.6	9	1.8	6	1.2	6	1.2	1	0.1	2.4
Measles ..	20	2.5	15	1.6	1	0.2	2	0.2	2	0.4	1	0.1	1	0.1	1	0.1	1	0.1	1	0.1	0.3
Scarlet fever ..	4	0.5	4	0.4	1	0.2	5	0.5	2	0.4	1	0.1	1	0.1	1	0.1	1	0.1	1	0.1	0.1
Diphtheria ..	4	0.5	4	0.4	1	0.2	2	0.2	2	0.4	1	0.1	1	0.1	1	0.1	1	0.1	1	0.1	0.1
Membr. group ..	4	0.5	4	0.4	1	0.2	2	0.2	2	0.4	1	0.1	1	0.1	1	0.1	1	0.1	1	0.1	0.1
Other group ..	4	0.5	4	0.4	1	0.2	2	0.2	2	0.4	1	0.1	1	0.1	1	0.1	1	0.1	1	0.1	0.1
Whooping cough ..	37	4.6	28	3.0	30	5.0	53	5.2	31	6.0	34	4.5	28	5.7	7	3.1	16	3.2	1	0.1	4.5
Diarrhoeal diseases.																					
Diarrhoea, all forms ..	230	28.8	144	15.3	174	28.8	280	27.5	102	19.8	121	16.0	34	6.9	13	5.7	34	6.7	1	0.1	10.3
Enteritis (not tuberculous) ..	25	3.1	43	4.6	20	3.3	27	2.6	18	3.5	12	1.6	12	2.4	4	1.8	13	2.6	1	0.1	3.0
Gastritis ..	7	0.9	14	1.4	3	0.5	3	0.3	2	0.4	2	0.3	2	0.4	2	0.9	8	1.6	1	0.1	0.7
Gastric & gastro-intestinal catarrh ..	6	0.8	3	0.3	13	2.2	8	0.8	4	0.7	5	0.7	3	0.6	1	0.4	2	0.4	1	0.1	0.8
Gastro-enteritis ..	36	4.5	28	3.0	17	2.8	24	2.4	11	2.1	17	2.2	3	1.6	2	0.9	7	1.4	1	0.1	2.6
Diarrhoeal diseases.																					
Premature birth ..	134	16.8	205	21.7	133	22.0	225	22.1	118	22.9	181	23.9	90	18.3	51	22.5	83	16.4	1	0.1	20.8
Congenital defects ..	30	3.8	73	7.7	35	5.8	56	5.5	32	6.2	39	5.1	24	4.9	9	4.0	31	6.1	2	0.2	5.6
Injury at birth ..	9	1.1	20	2.1	12	2.0	8	0.8	11	2.1	7	0.9	5	1.0	2	0.9	6	1.2	1	0.1	1.4
Want of breast milk ..	3	0.4	..	..	1	0.2	..	..	..	..	..	..	4	0.8	1	0.4	..	..	..	..	0.2
Immunition, malnutrition, privation ..	28	3.5	27	2.9	44	7.3	56	5.5	36	7.0	70	10.4	13	2.6	9	4.0	14	2.8	..	..	5.2
Atrophy ..	66	8.3	57	6.0	50	8.3	58	5.7	23	4.5	34	4.5	22	4.5	..	..	35	6.9	1	0.1	5.9
Debility ..	114	14.3	104	11.0	97	16.1	98	9.6	44	8.5	40	5.3	26	5.3	14	6.2	30	5.9	..	..	0.7
Marasmus ..	5	0.6	16	1.7	4	0.7	17	1.7	7	1.4	4	0.5	5	1.0	1	0.4	2	0.4	..	..	1.0
Tuberculous diseases.																					
Tuberculosis meningitis ..	5	0.6	6	0.6	5	0.8	6	0.6	1	0.2	8	1.1	3	0.6	1	0.4	2	0.4	..	..	0.6
Tuberculosis peritonitis ..	5	0.6	15	1.6	20	3.3	52	5.1	12	2.3	41	5.4	5	1.0	..	..	3	0.6	..	..	0.6
Tuberculosis mesenterica ..	4	0.5	5	0.5	2	0.3	6	0.6	..	..	3	0.4	1	0.2	1	0.4	..	..	..	..	0.3
Hydrocephalus ..	15	1.9	24	2.5	10	1.7	15	1.5	21	4.1	14	1.8	10	2.0	2	0.9	6	1.2	..	..	2.0
Other tuberculous diseases ..	2	0.3	1	0.1	1	0.2	4	0.4	1	0.2	2	0.3	..	..	..	..	1	0.2	..	..	0.2
Erysipelas ..	23	2.9	27	2.9	17	2.8	13	1.3	3	0.6	7	0.9	6	1.2	1	0.4	5	1.0	..	..	1.7
Syphilis ..	7	0.9	16	1.7	3	0.5	7	0.7	5	1.0	3	0.4	3	0.6	5	1.0	5	1.0	..	..	0.9
Rickets ..	18	2.3	12	1.3	11	1.8	23	2.3	13	2.5	13	1.7	12	2.4	10	4.4	6	1.2	..	..	2.0
Meningitis (not called tuberculous) ..	102	12.8	98	10.3	77	12.8	106	10.4	39	7.6	70	9.2	35	7.1	14	6.2	39	7.7	..	..	9.7
Convulsions ..	101	12.6	68	7.2	130	21.5	117	11.5	39	7.6	88	11.6	31	6.3	23	10.2	35	6.9	..	..	10.8
Bronchitis ..	114	14.3	74	7.8	103	17.1	70	7.7	60	12.8	55	7.3	29	5.9	10	7.1	33	6.5	..	..	0.7
Broncho-pneumonia ..	1	0.1	..	..	..	..	2	0.2	2	0.4	2	0.3	1	0.2	1	0.4	1	0.2	..	..	0.2
Laryngitis ..	23	2.9	32	3.4	15	2.5	64	6.8	18	3.5	5	0.7	5	1.0	3	1.3	5	1.0	..	..	3.0
Pneumonia ..	14	1.8	12	1.3	12	2.0	11	1.1	4	0.8	11	1.5	14	2.9	1	0.4	5	1.0	..	..	1.4
Suffocation, over-laying ..	20	2.5	35	3.7	27	4.5	40	3.9	20	3.9	33	4.4	9	1.8	7	3.1	13	2.6	..	..	3.5
Dentition ..	51	6.4	73	7.7	20	4.8	71	7.0	41	8.0	75	9.0	34	6.9	18	8.0	32	6.3	..	..	7.2
Other causes (exclusive of lines in italics) ..	1,258	157.5	1,280	135.5	1,118	185.2	1,598	154.8	741	143.9	1,040	137.2	483	98.5	225	99.4	480	94.6	6	127.7	139.9
TOTALS ..	7,989		9,429		6,038		10,194		5,150		7,579		4,906		2,263		5,076		47		58,671
Births, exclusive of those in public institutions ..	7,989		9,429		6,038		10,194		5,150		7,579		4,906		2,263		5,076		47		58,671

Infant mortality in districts, 1905-1909.—In table Z. the infantile mortality in each district from each group of causes has been separated for the five years, 1905-1909.

The total infantile mortality for these five years stood highest (185·2) in S.E. Leeds, although as already said, this rate was much lower than in any period of five years to the records of which we have access. The rate for the five years (185) as compared with that of the previous ten (220) is an improvement of 16 per cent., though, as we shall presently see, that improvement is exceeded in some of the other districts.

During these five years, Chapeltown had again the lowest death rate (94·6) of any of the districts. In the ten years preceding these five, the death rate in this district was at the rate of 120 per thousand. It was 111 in 1905, 85 in 1906, again 85 in 1907, it rose to 101 in 1908, and last year (1909) it was 89. The fall in the five years as compared with the ten preceding them was one of 21 per cent.

Next lowest to Chapeltown was Kirkstall, 98·5. The death rate for the ten years 1895-1904 was 139. In 1905 it was 119, in 1906, 99, in 1907, 81, in 1908, 100, and last year 84. The average being as already pointed out much lower than that of the previous ten years. The diminution is therefore for the last five years as compared with the previous ten, one of 29 per cent.

Next lowest to Kirkstall was Bramley, 99·4. The death rate for the ten years 1895-1904 was 146. In 1905 it was 102, in 1906, 95, in 1907, 127, in 1908, 76, and last year 99. The diminution is therefore for the last five years as compared with the previous ten, one of 32 per cent.

In Osmondthorpe, a very small district, the average for the ten years 1895-1904 was 195 deaths under one per thousand children born. In the five years 1905-1909 it was 128, a fall of 67 deaths per thousand, equivalent to an improvement, if it

could be kept up, of 34 per cent. This is the highest improvement in any district. The numbers dealt with are, however, very small.

Calculated in the same way, Bramley and Kirkstall shewed as already said, improvements of 32 and 29 per cent. respectively. In West Leeds there was an apparent improvement of 24 per cent.; in Holbeck of 23 per cent.; in Wortley of 22 per cent.; in Chapeltown, as already said, of 21 per cent.; in Hunslet of 17 per cent., and in South-East Leeds of 16 per cent.

The improvement in North Leeds is only one of 9 per cent. This district, however, probably suffers from the fact that in the rate for the ten years, the births in the Workhouse Hospital have been taken into account. In the rate for the five they have been excluded. Consequently the rate of 158 is calculated upon a proportionately smaller number of births in those five years,—considerably smaller than had the Workhouse births been included. If the births and deaths in the Workhouse be included as in the ten years, 1895-1904, the death rate is 150·4, instead of 157·5, and the decrease of mortality from 174 to 150 is equivalent to 14 per cent. Even when this correction is made, the North district still shows the smallest diminution in the infant mortality.

Comparison of district mortalities.—The marked decrease of infant mortality during the past five years has been observed in other towns as well as in Leeds. From the preceding paragraph it will be seen that it has been very unequally distributed in different parts of the town, the fall having been specially well marked in Osmondthorpe 34, Bramley 32, Kirkstall 29, West Leeds 24, and Holbeck 23 per cent.

Disregarding Osmondthorpe, which is a district with a very small population, Bramley and Kirkstall, the two districts with the greatest improvement, were also, next to Chapeltown, the two districts with the lowest infant death rate in the decade

1895-1904. These three districts in the five years just passed had, all three, rates below 100. They were the only three which had. In the ten years 1895-1904 they all three had rates under 150, and they were the only three which had so low a death rate in those years. The improvement in Chapeltown was, however, only one of 21 per cent., about the average of the whole City. That district had the lowest death rate in the quinquennium, as well as the lowest in the decade.

The districts with the highest infant death rate in the five years were North, 158 (or corrected, 150), South-East Leeds, 185, Hunslet, 155, all with rates above 150. The proportionate diminution was respectively 9 (corrected, 14), 16 and 17 per cent.—in all three cases considerably less than the average improvement of the town, which was one of over 20 per cent.

The three remaining districts, West Leeds, Holbeck and Wortley, all showed a decrease in infant mortality greater than the average of the town. Two of them, West Leeds and Holbeck, had rates in the ten years of 180 and 188 respectively, whilst that of the City was 176. The rate in Wortley was the same as that in the City. In 1905-9 the rate in West Leeds was 4 per thousand below that of the City, in Holbeck 4 per thousand above, and in Wortley 3 per thousand below—the percentage improvement being in all three cases above the average of that of the City as a whole.

It is a little disappointing to find that the South-East district, though it had diminished its infantile death rate by 35 per thousand, had only decreased its rate of mortality by 16 per cent., notwithstanding the special efforts made to deal with that district. It is as has been frequently remarked the most difficult district to deal with. It is also the district that has shown the least tendency to diminish its birth rate.

The relation of infant mortality to birth rate.—It is a familiar axiom the higher the birth rate the greater the infantile mortality. At the close of an intercensal period the birth

rate, calculated as it is upon the estimated population, may err greatly even in large towns, and the correctness of such error may be very largely increased in small districts.

There were three districts, North, South-East and Hunslet in which the diminution of the death rate calculated upon the births was less than the average of the City. Comparing that of the decade 1895-1904 with that of the five years 1905-9, these three districts had respectively a drop in the birth rate of 22.2, 1.7 and 20.7 per cent.—the average drop in the birth rate in the City being 17.1 per cent. in the five years as compared with the previous ten.

There were three districts in which the infantile death rate of the last five years was under 100, Kirkstall, Bramley and Chapeltown. In these, the diminution in the infantile death rate in these five as compared with the ten years had been 29, 32 and 21 per cent. The diminution in the birth rate in these three in the same order was 24.0, 13.7 and 10.3 per cent.

The three districts, West, Holbeck and Wortley, had each a diminution in the infantile mortality a little above the average of the City. The diminutions in their estimated birth rates were 13.0, 14.8 and 22.9 per cent. respectively.

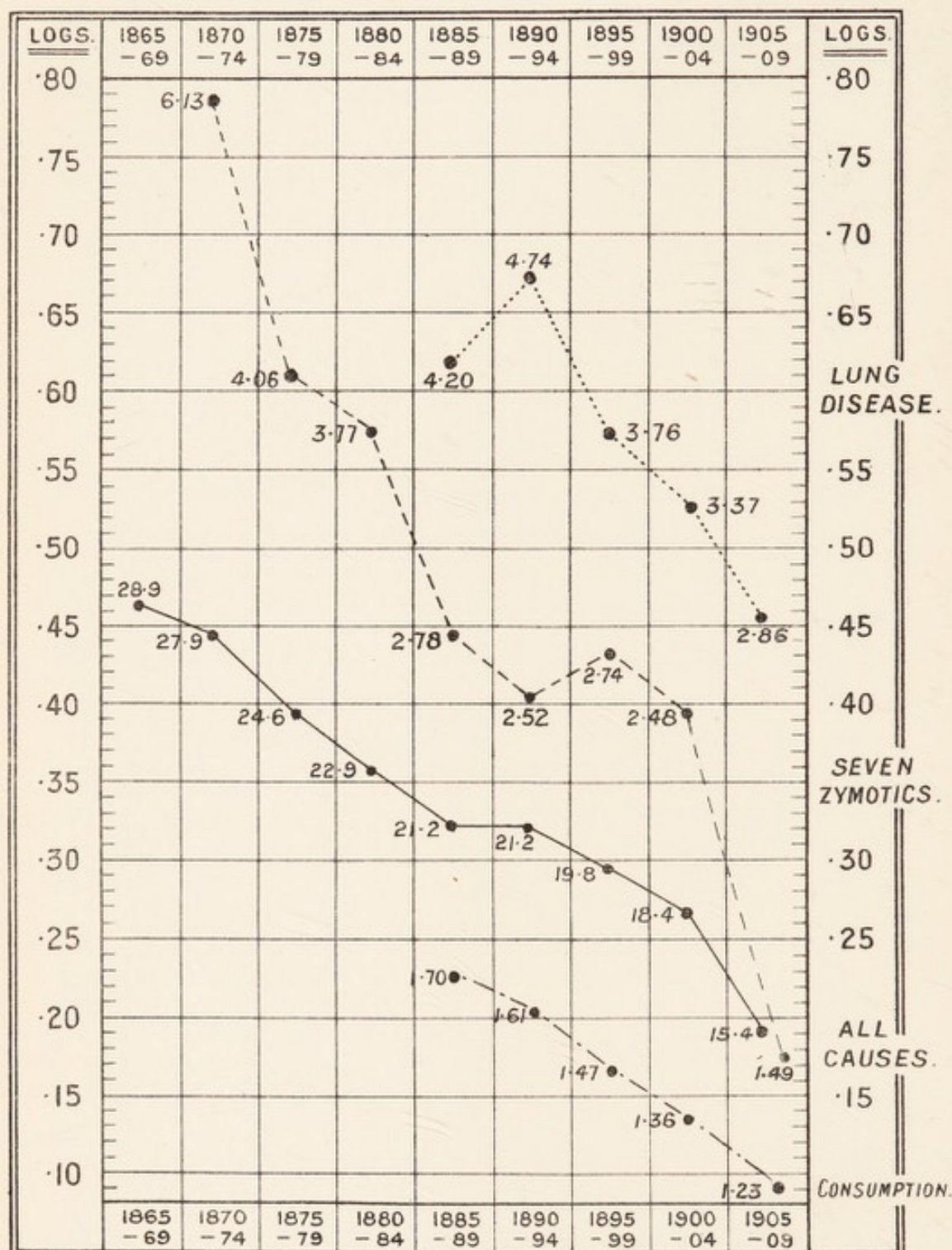
The remaining district, Osmondthorpe, had a calculated increase of 36.7 per cent. in its birth rate. Its mortality had shown the higher drop of any of the ten districts.

It is evident that much stress cannot be laid upon these particular calculations, and we must wait until the next census before we draw any conclusions.

District mortality under one week.—Table 5c states for 1909 the percentage by which each district exceeded, or otherwise, the mortality of the whole City at each age group. We have not made out a special table for the whole five years, but it might be interesting to state here that in the North district the mortality in the first week of life per 1,000 births, averaged in the five years 12 per cent. less than that

QUINQUENNIAL DEATH RATES.

Logarithmic curves.



The figures down the sides of the chart are the two first figures of the mantissal portions of the logarithms of the death rates. The characteristic of the logs: for the rates in Curves 1, 2 and 4 is in every case 0. For Curve 3, it is 1. Curve 1 represents the death rate from lung diseases other than consumption. Curve 2 from the seven zymotic diseases, Curve 3, the general death rate from all causes, and Curve 4, that from consumption. The figures in the body of the chart, show the actual rates per 1,000 of the population.

of the whole City. In West Leeds the average percentage was 11 above that of the City. In South-East Leeds the deaths in the first week exceeded those in the City by 18 per cent. in the five years (1905-9).

In Hunslet the average was very nearly that of the City, the figures being just over 1 per cent. below the City rate, whilst Holbeck had a rate of mortality during the first week of life six per cent. below the average of the City. The Wortley rate on the other hand, was slightly under 3 per cent. above the average of the City, and Kirkstall nearly 10 per cent. below. Bramley was 5 per cent. above and Chapeltown 12 per cent. below. Osmondthorpe we omit, partly on account of the smallness of the district and the difficulty of arriving at an average.

It will be noticed that South-East Leeds had in the first week of life the highest death rate per 1,000 births. This is the district to which the special energies of our women inspectors have been directed now for several years, and the saving of life by their efforts has been apparently greatest amongst the children who survived the first week of life. The Committee are aware that our information as to births in this district is obtained from the Registrar, and is on an average seven weeks old before it reaches us. We cannot, therefore, use as much influence during the early days after birth as if the information were sent us within twenty-four hours of that event. This is a matter on which, perhaps, in another report I may have something more to say.

SPECIAL DISEASES.

It is not proposed to deal in great detail in this report with special diseases. The general prevalence of zymotic disease has been already referred to in the report proper and details will be found in the tables later. There is, however, one disease on which it is proposed to say something and that is:—

TUBERCULOSIS.

As usual, we deal with tuberculosis as the first and most important of the special diseases. This has been done in every annual report presented to you since I came to Leeds.

TABLE 6.
Mortality from tuberculosis, 1909.

1909.	Tuberculosis, general and undefined.	Phthisis.	Hydro- cephalus.	Tuberculous meningitis.	Tuberculous peritonitis.	Tabes mesenterica.	Scrofula.	TOTAL.
I. Quarter	20	171	4	13	5	10	...	223
II. do. ...	33	143	3	18	13	9	...	219
III. do. ...	25	108	1	22	13	17	...	186
IV. do. ...	27	126	3	16	6	16	...	194
Year (52 weeks)...	105	548	11	69	37	52	...	822
Annual death- rate, 52 weeks of 1909 ...	0·22	1·14	0·02	0·14	0·08	0·11	...	1·70

In the fifty-two weeks, making up the year 1909, 822 deaths were ascribed to tuberculosis and of these 548 were due to what is ordinarily called "consumption." The 822 is the smallest total from tuberculosis of any year on which I have had to report to you with the exception of 1892, when the deaths registered from these causes were 809. The year in each case was one of fifty-two weeks, but as the population was increasing, the death rate calculated upon the estimated number of persons living was equivalent to 1·70 in 1909 and 2·16 in 1892. The latter

TABLE 6 a.

Shewing deaths from each of certain groups of tuberculous diseases in the 52 or 53 week periods of the years 1890-1909, and the populations of those years estimated from the changing ratios of the 1881-91, and 1891-1901 intercensal periods.

YEAR.	Population by interpolation.	General or undefined.	Phthisis.	Hydrocephalus.	Tuberculous meningitis.	Tuberculous peritonitis.	Tabes mesenterica.	Scrofula.	TOTAL.
1890*	363,018	92	612	20	92	14	92	6	928
1891	369,034	84	657	18	72	25	102	9	967
1892	375,081	84	530	14	65	14	93	9	809
1893	381,157	99	648	17	67	32	86	12	961
1894	387,259	79	576	9	72	18	61	13	828
1895	393,387	114	611	16	77	15	90	2	925
1896*	399,535	66	613	15	74	22	73	10	873
1897	405,716	102	589	14	91	36	99	2	933
1898	411,895	96	576	17	73	26	98	3	889
1899	418,101	86	596	9	102	33	80	1	907
1900	424,322	101	605	12	94	48	87	1	948
1901	430,555	107	605	7	75	46	136	...	976
1902*	436,800	109	584	4	100	36	80	3	916
1903	443,052	100	562	8	106	37	82	1	896
1904	449,311	137	626	8	88	43	93	...	995
1905	455,573	106	558	10	85	39	48	...	846
1906	461,837	113	570	10	82	43	58	3	879
1907	468,101	95	605	13	82	35	24	...	854
1908*	474,361	115	621	13	71	60	42	...	922
1909	480,616	105	548	11	69	37	52	...	822

* 1890, 1896, 1902, and 1908 were 53 week years, the others 52.

TABLE 6 b.

Shewing deaths from different forms of tuberculosis since 1890 per 1,000 of the population.

YEAR.	General or undefined.	Phthisis.	Hydrocephalus.	Tuberculous meningitis.	Tuberculous peritonitis.	Tuberculous mesenterica.	Scrofula.	TOTAL.
1890*	'25	1'66	'05	'25	'04	'25	'02	2'52
1891	'23	1'79	'05	'20	'07	'28	'02	2'63
1892	'22	1'42	'04	'17	'04	'25	'02	2'16
1893	'26	1'71	'04	'18	'08	'23	'03	2'53
1894	'20	1'49	'02	'19	'05	'16	'03	2'15
1895	'29	1'56	'04	'20	'04	'23	'01	2'36
1891 } 1895 }	'24	1'59	'04	'19	'05	'23	'02	2'37
1896*	'16	1'51	'04	'18	'05	'18	'02	2'15
1897	'25	1'46	'03	'23	'09	'24	'00	2'31
1898	'23	1'40	'04	'18	'06	'24	'01	2'17
1899	'21	1'43	'02	'24	'08	'19	'00	2'18
1900	'24	1'43	'03	'22	'11	'21	'00	2'24
1896 } 1900 }	'22	1'45	'03	'21	'08	'21	'01	2'21
1901	'25	1'41	'02	'17	'11	'32	...	2'27
1902*	'25	1'31	'01	'23	'08	'18	'01	2'06
1903	'23	1'27	'02	'24	'08	'19	'00	2'03
1904	'31	1'40	'02	'20	'10	'21	...	2'22
1905	'23	1'23	'02	'19	'09	'11	...	1'86
1901 } 1905 }	'25	1'32	'02	'20	'09	'20	'00	2'09
1906	'24	1'23	'02	'18	'09	'13	'01	1'90
1907	'20	1'29	'03	'17	'07	'05	...	1'82
1908*	'24	1'28	'03	'15	'12	'09	...	1'90
1909	'24	1'14	'02	'14	'08	'11	...	1'70

* 1890, 1896, 1902, and 1908 were 53 week years, the others 52. The death rates in each case are calculated on a year containing 52'17747 weeks. The rates for 1909 are calculated on a population of 484,012 in this table, as in the report generally, if calculated upon the interpolation population given in table 6a the total death rate from the whole group becomes 1'72 instead of 1'70.

figure is pretty nearly accurate, having been calculated with the aid of the figures for the 1891 and 1901 censuses. The figure for 1909 has the disadvantages already pointed out. (See also last part of note to table 6 b.)

In 1892 the 809 deaths from tuberculosis included 530 from consumption and 279 from other tuberculous diseases. The 822 deaths last year included 548 from consumption and 274 from other tuberculous diseases. The 548 deaths from consumption last year were equivalent to a rate of 1.14 per thousand of the estimated population, whilst the 530 in 1892 gave a rate of 1.42 per thousand. The deaths from tuberculous diseases other than consumption were 0.56 per thousand in 1909 and 0.74 in 1902.

Instead, however, of taking a single year, if we compute the death rate on the Registrar General's population for the four years, 1906-9, we find it comes to 1.83 from all forms of tuberculosis and 1.24 from consumption, the difference (0.59) being due to tuberculous diseases other than consumption. If we compare these figures with those for the five years immediately preceding, the rate from the whole group is 2.09, that from consumption only, 1.32. Compared with the preceding quinquennium, 1896-1900, the figures are respectively 2.21 and 1.45, whilst for the five years 1891-95, all tuberculous diseases caused 2.37, consumption alone, 1.59. The year 1890 has been kept by itself, but the corresponding figures were 2.52 from the whole group and 1.66 from phthisis alone.

Though these figures are contained or implied in table 6 b, they may be conveniently separated here. The figures following the death rate show both for consumption and other tuberculous diseases the proportion which the death rates in the later periods bear to those for 1890 taken as 100.

TABLE 6 c.

Table showing deaths from phthisis at all and at certain ages, and death rates at all ages in the intercepts of the wards and townships of Leeds in the year 1909 (52 weeks).

				AGE.			TOTAL.	Deaths per 1,000.
				-25.	25-50.	50+.		
HOLBECK ...	Holbeck ...	...	...	8	16	2	26	0.78
	West Hunslet ...	...	...	5	2	1	8	2.08
HUNSLET ...	West Hunslet ...	...	...	11	12	4	27	0.90
	East Hunslet ...	...	...	11	22	6	39	0.97
	South ...	...	...	2	10	1	13	1.40
SOUTH-EAST LEEDS	South ...	} 0.82 {	...	1	1	2	0.50	
	Central ...		1	1	2	2.23		
	East ...		16	27	8	51	1.68	
OSMONDTHORPE	East ...	} 1.04 {	...	...	...	...	...
CHAPELTOWN... (part of)	North-East ...		6	5	1	12	1.07	
	North } Chap. + All. } Pottern'tn }	1	1	1	3	0.53		
		7	11	4	22	0.87		
NORTH LEEDS	North ...	...	...	3	13	4	20	1.11
	North-East...	...	...	8	21	9	38	1.72
	Central ...	} 1.13 {	3	10	8	21	1.14	
	Central in West ...		...	...	...	...	...
WORTLEY ...	New Wortley ...	...	...	8	16	4	28	1.53
	{ Armley ...	} 0.67 {	7	12	4	23	0.66	
	{ Wortley ...		3	3	1	7	0.71	
	Farnley ...		...	1	...	1	0.20	
BRAMLEY ...	Bramley ...	...	...	4	10	3	17	0.87
KIRKSTALL ..	Kirkstall ...	} 0.93 {	5	1	...	6	1.30	
	Burley ...		9	19	7	35	1.08	
	Headingley ...		1	3	3	7	0.48	
CHAPELTOWN... (part of)	Headingley ...	} 1.65 {	1	2	...	3	2.10	
	North-West ...		...	...	...	...	...
	Brunswick ...		1	3	1	5	1.49	
WEST ...	Brunswick ...	...	...	10	14	5	29	1.47
	North-West ...	...	...	10	16	9	35	0.98
	Mill Hill ...	...	...	2	9	4	15	2.29
	West ...	...	...	13	24	8	45	1.92
CITY ...	...	...	...	156	285	99	540	1.12
	Outsiders ...	...	...	2	5	1	8	...

West Hunslet in Holbeck more probably 1.11, and North-East in Chapeltown 0.85.

Mortality from consumption and other tuberculous diseases.

	CONSUMPTION.		OTHER TUBERCULOUS DISEASES.	
	Death rate.	Proportionate figure.	Death rate.	Proportionate figure.
1890 (year)	1·66	100	0·86	100
Five years, 1891-1895	1·59	96	·78	91
„ 1896-1900	1·45	87	·76	88
„ 1901-1905	1·32	80	·77	90
Four years, 1906-1909	1·24	75	·59	69

The figures in the last line are provisional. If, instead of the population as estimated by the Registrar-General printed in table D, part 2, in the Appendix, they had been calculated on the population given in the second column of table 6a, they would have stood in order 1·24, 75%, ·60, 70%, the difference being negligible.

It will be seen, therefore, there has been a steady decrease in the death rate from tuberculosis, slightly accentuated during the last four years. A reference to the chart opposite page 31 illustrates this. That chart, however, deals only with consumption, and the five year periods are not quite the same as those just enumerated. The numbers dealt with in that chart are as follows :—

				Proportionate Number.
Five years, 1885-89, death rate from consumption, 1·70				100
„ 1890-94	„	„	„	1·61 95
„ 1895-99	„	„	„	1·47 86
„ 1900-04	„	„	„	1·36 80
„ 1905-09	„	„	„	1·23 72

In the chart, however, where the numbers just stated are given, their distance in vertical measurement is indicated by the logarithms of the numbers given and not by the numbers themselves. The proportionate decrease in mortality will be also seen by examining the proportions the death rate in the later periods bear to the rate for 1885-9 taken as 100.

TABLE 6 d.

Table showing deaths from phthisis at all and at certain ages, and death rates at all ages in the intercepts of the wards and townships of Leeds in the five years 1905-1909.

		AGE.			TOTAL.	Deaths per 1,000.
		-25.	25-50.	50+.		
HOLBECK ...	Holbeck ...	64	89	24	177	1.11
	West Hunslet ...	14	19	7	40	2.11
HUNSLET ...	West Hunslet ...	51	71	18	140	0.96
	East Hunslet ...	53	83	32	168	0.87
	South ...	11	35	10	56	1.18
SOUTH-EAST LEEDS	South ...	7	25	16	48	2.26
	Central ...	4	15	11	30	5.90
	East ...	71	130	53	254	1.70
OSMONDTHORPE	East ...	1	1	...	2	1.15
CHAPELTOWN... (part of)	North-East ...	23	47	9	79	1.57
	North } Chap. + All.	5	12	2	19	0.70
	North } Pottern'tn	25	48	18	91	0.78
NORTH LEEDS	North ...	37	63	23	123	1.38
	North-East ...	48	115	57	220	1.97
	Central ...	23	85	56	164	1.76
	Central in West ...	...	3	...	3	3.05
WORTLEY ...	New Wortley ...	40	55	15	110	1.19
	{ Armley ...	45	66	20	131	0.79
	{ Wortley ...	11	22	11	44	0.92
	Farnley ...	6	5	5	16	0.66
BRAMLEY ...	Bramley ...	32	57	20	109	1.15
KIRKSTALL ...	Kirkstall ...	9	11	5	25	1.11
	Burley ...	42	87	31	160	1.04
	Headingley ...	8	24	6	38	0.54
CHAPELTOWN... (part of)	Headingley ...	1	6	2	9	1.30
	North-West ...	...	...	...	...	...
	Brunswick ...	3	11	2	16	1.00
WEST ...	Brunswick ...	35	68	28	131	1.31
	North-West ...	54	88	44	186	1.07
	Mill Hill ...	17	34	12	63	1.84
	West ...	53	104	66	223	1.89
CITY ...	... ..	793	1479	603	2875	1.22
	Outsiders ...	9	16	2	27	...

The rates are calculated on populations estimated by the Registrar General's method described at p. 88 of the Annual for 1904.

Probably those for West Hunslet in Holbeck, for Osmondthorpe and for North-East in Chapeltown, are more nearly 1.19, 0.75 and 1.21 respectively.

Tuberculous diseases not phthisis.—There is considerable difference of opinion amongst medical men as to the exact differentiation of some of the "other tuberculous diseases," and there has been a tendency on the whole of late years to accumulate larger numbers of them under the undefined group which was intended in table No. 6 at first to deal only with generalized tuberculosis. This tendency would tend slightly to diminish the number of deaths from consumption in proportion to the whole group, but in tabulating it has been our habit to put under the head of consumption all diseases where the lungs were principally affected. If, for instance, the cause of death is certified as due to "general tuberculosis of the lungs," it is put down to group "phthisis" not to group "general and undefined." It will be noticed that the death rate from *tabes mesenterica* has somewhat steadily diminished whilst the group, "*scrofula*," has almost entirely died out. On the other hand the group headed tuberculous peritonitis has been slightly on the increase, whereas hydrocephalus and tubercular meningitis together have slightly decreased.

Phthisis mortality in intercepts.—In table 6c the deaths are given in the age groups "under 25," "25 to 50," and "50 upwards" for the intercepts of wards and townships, and in table 6d similar figures have been collected for the five years 1905-9, and the total deaths in each of these intercepts have been given. As the population in each case is uncertain the value of such figures is at present very little. For the time being we have given in the last column a provisional death-rate per thousand of the population. To these particular rates one cannot assign very much importance. At the present time they vary, it will be seen in table 6d for the quinquennium, from 0.54 in Headingley and 0.66 in Farnley, to 5.90 in the portion of the Central Ward south of Lowerhead Row, and the East part of Kirkgate.

Whilst we have allowed a considerable amount for the increase of the population of Headingley and Farnley, it is possible we may have over estimated that increase. On the

other hand, we may have more than sufficiently allowed for the decrease of population taking place in the portion of the Central Ward in S.E. Leeds.

The dead reckoning.—In Farnley, the deaths in 1890-1894 from consumption were 15, and the rate, which was probably fairly accurate, calculated after the 1901 census, from the result of that census and the two preceding it, was estimated as 0·82. In the next five years there were 23 deaths, and although the population was increasing, this was equivalent on the population estimated from the same data after the 1901 census to a rate of 1·13, an increase in the death-rate of 39 per cent. In the following five years, 1900-1904, Farnley deaths were 21, and as the population was supposed to be going on increasing, a population calculated after the method adopted by the Registrar General would give a death-rate in Farnley of 0·94. On the hypothesis that the population of Farnley has increased, by arithmetical progression at the rate of increase prevailing in the inter-censal period, 1891-1901, and that the population so increased had then to be multiplied by the Registrar General's factor, the death rate in the five years 1905-1909 would be as already stated, one of 0·66. The deaths in the period were 16. The numbers, however, are far too small for any very great value to be attached to the death rate even if the population could be fairly accurately estimated.

In the portion of Central Ward in the South-East Leeds, the deaths in the five years 1890-1894 were 14. In the following quinquennium they were 31. In 1900-1904 they were 35; whereas in the lustrum 1905-1909 they were 30. For reasons given in the report for 1899, it was thought better to group the portion of the South Ward in South-East Leeds (that is the portion of the sub-district on the south side of the river) with the adjacent portion of the Central Ward. The estimated death rate for this combined district in 1890-1894 was 2·30 rising to 2·72 in 1895-1899 an increase of 19 per cent. In 1900-1904, with 99 deaths, the rate was estimated at 3·21, and

in 1905-1909 at 2.96. These figures are a little larger than those in Farnley, and the population on which they are calculated is also a little larger, but it has been estimated in regard to this portion of the South-East district that the population has been steadily declining, and the populations on which these rates have been estimated during the present century have been obtained by diminishing the population by arithmetical progression at the rate at which it had diminished between 1891 and 1901, and again multiplying the result by the Registrar General's factor. These two figures show how very little regard can, in the meantime, be paid to the rates in these smaller districts, but the actual numbers which are not affected by this uncertainty are registered, and we leave them on record in order that when the census is taken next year the rates may be re-calculated with more accuracy.

Want of an "intermediate" census.—Had we had an inter-censal enumeration in 1906 the rates might have been of some value. In three of the intercepts given in table 6 d, the results have been so unexpected in this table and that for previous years, that they have been re-calculated. For instance, in the portion of West Hunslet in the Holbeck registration area which comprises the greater part of Beeston, the death rate from phthisis in table 6 d is 2.11. From the enumeration of the inhabited houses in this portion of the district which is rapidly increasing, I am inclined to estimate it at 1.19 for the five years.

When the death-rates for 1890-1894 and 1895-1899 were re-calculated after the 1901 census, the rates for this small area came out at 1.17 and 0.85 a diminution of 28 per cent. Calculating the increase of this portion of West Hunslet by the method of the Registrar General for the years 1900-1904, the rate came out at 0.88 and was not probably very greatly in error. An increase from rates of 1.17, 0.85, 0.88 to one of 2.11 seems exceedingly improbable along with a steady decrease in the total death rate of the borough from phthisis. Accordingly, we have on two or three occasions within the last

Deaths from Phthisis and cases reported voluntarily
1902-1909.

YEAR.	DEATHS FROM PHTHISIS.	CASES REPORTED.
1902*	584	452
1903	562	586
1904	626	631
1905	558	555
1906	570	720
1907	605	563
1908*	621	592
1909†	548	934

* 53 week years, others 52.

† Includes compulsory notification of Poor Law cases. Duplicate notifications as far as possible left out.

TABLE 7.

Deaths from lung diseases, grouped according to nature of disease, and under age groups used for phthisis in certain tables.

1909.	-25.	25-50.	50 +	TOTALS.
Phthisis	158	290	100	548
Bronchitis	175	54	425	655
Broncho-pneumonia	237	10	41	288
Pneumonia and pleuro-pneumonia	106	111	113	330
Pleurisy	1	5	12	18
Other lung diseases	31	13	47	91
Totals	709	483	738	1,930

five years, estimated the number of houses, and from this estimate we are inclined to revise the estimate for 1905-1909 in the manner already spoken of.

Notification of phthisis.—It will be noticed in the table on page 42 that there has been a sudden increase in the number of cases of phthisis reported. This is due, as will be seen from the note to that table, to the new compulsory notification by the Officers of the Poor Law. It is difficult to say whether any great advantage has accrued to us from this compulsory reporting of these cases by relieving officers and the district medical officers. It has certainly increased our work, though the reporting of new addresses has been of service to us. Most of the cases reported however by the Poor Law Officers are advanced ones. Many have of course been already reported to us privately, and others by the Society for Prevention of Tuberculosis. Those reported from the Poor Law are naturally those which least can be done to cure, and it is to be hoped that the time is coming when a more general notification of early cases will be brought about. We have as far as possible only tabulated first notifications.

The Association for Prevention and Cure of Tuberculosis.—The Corporation continue to subscribe to the funds of this Society under the powers given them in the 131st section of the Public Health Act, 1875. The Society treated 125 patients at Gateforth in 1909, as against 84 the previous year, and the average number of days spent by patients in the sanatorium was 83 as against 89. This is essentially a curative hospital, but it is obvious that numbers are insignificant as compared with some 900 fresh cases reported during the course of the year.

Fortunately the curative treatment at Gateforth is supplemented by the treatment of a still larger number of cases at Armley House, within the City itself. The numbers were 207 last year, against 174 the previous one, and the average number of days spent in hospital 73 against 75. From this hospital

52 slighter cases were transferred to Gateforth, and are included in the 125 treated there. There were 37 deaths amongst the advanced cases as against 20 the previous year at Armley. Thus 280 cases, not all of Leeds persons, were admitted for treatment on account of phthisis. This is without taking into account any cases sent to the General Infirmary for that purpose, but the number is far smaller than the requirements of the town demand.

A valuable addition to the work of the Society consisted in the appointment of a nurse to visit the homes of the patients whose names are on the books of the Association.

Other preventive work in the town.—In the same way a certain amount of good has been done by the visits of the almoner employed by the medical charities, but if much work is to be accomplished of a specially preventative kind, an increased number of our own inspectors will be necessary.

Since the introduction of notification it has been our practice to require the several ward inspectors to visit the houses at which cases of consumption have been reported. This matter was referred to in my report for 1905, and a copy of the instructions issued to the inspectors in visiting these houses printed on page 36 of that report. It has not been necessary to make any great alterations in those instructions, which were issued originally in 1901, but it has been felt desirable to consider the question of appointing one of our more able inspectors to devote his whole time to the visiting of these houses and their inmates, and this experiment is being tried at the present time. It means, however, taking a man away from ordinary ward inspection, which is already sufficiently behind.

Examination of milk supply since 1899.—A great effort is being made to lessen the amount of tuberculous milk sold in Leeds. In 1899 we commenced the examination of all the cattle in all the cow-sheds in the City for the purpose of detecting such of them as were suffering from tubercle of the udder. In that year we obtained special powers to deal with tuberculous

milk. These, however, were less than we asked for, owing to the opposition of the West Riding County Council. In 1901 we obtained the full model clauses.

At first our endeavour was to deal chiefly with our own dairies by a veterinary examination of the cattle. This has been continued and made more thorough. In the report for 1908 a good deal was said about the difficulties of this examination. As even our model clauses did not enable us to visit farms outside Leeds simply on the ground that they supplied milk within the City, we have had with regard to this outside milk to rely chiefly on biological examinations of samples after it reached the town.

Inspection of cows, 1909.—During 1909 (table VIII a) the veterinary assistant to the Medical Officer of Health made 549 visits to cowsheds within the City, and examined 7,093 cows. Of these 549 visits, 26 were made for the examination of special cows already examined, and usually only of one cow. Six others were made for the purpose of testing cattle with tuberculin. Deducting these 32 special visits, and the 86 cows examined at them, the ordinary domiciliary visits are reduced to 517, and the cattle examined to 7,007. In most cases the same cowshed was visited something like four times in the year. These 7,007 examinations of cows not previously suspected revealed 25 cases of udder disease. Of these, 6 were cases apparently of non-tuberculous mastitis, two of them, however, having been revisited. Six others were cases where Mr. Dixon had no hesitation in saying that the udder condition was of a tuberculous nature, while in 13 cases the udder was suspiciously so. In 5 of the 13 the diagnosis of tubercle was confirmed on subsequent inspection. In 4 cases the udder disease cleared up, while in 4 others the animal was removed between our inspector's visits, and no sufficient opportunity afforded of further verifying the preliminary diagnosis. The remaining case, inspected on the 5th January, where the udder was found tuberculous, was

one that had been seen on the 24th December last year, and suspected at that time of being tuberculous. The examination on January 5th confirmed the opinion that the udder was tuberculous. Regarding the four cases that were removed between our inspector's visits as positively tuberculous, there were, therefore, 15 out of the 25 new cases of udder disease which must be regarded as tuberculous. This, calculated upon the 7,007 routine examinations of cows not yet suspected, suggests that tubercle of the udder existed in just over 0·2 per cent. of the cows examined. Four other cows were found to be tuberculous, although the udder was not obviously affected.

Tubercle in milk from outside farms.—Our examination of cattle at outside farms was in nearly every case due to the fact that we had already detected tubercle in the milk supply. Samples to the number of 165 were obtained from 106 different milk farmers, 100 outside and six inside the City. Of these 165, 134 might be looked upon as "original samples," that is samples taken as part of a systematic investigation, and not because we already suspected tubercle in that milk supply; 29 were control samples, chiefly cases where we had previously found tubercle at the farm and were anxious to know if the infected cattle had been got rid of; whilst two were special samples taken from individual cows, also of the nature of a control.

Of the 134 original samples, 22 were declared tuberculous, 109 not tuberculous, while the examination in three was incomplete. The 22 original samples in which the result was positive came from 18 different farms, 1 within, 17 outside, the City. The 17 farms from which the 21 contaminated samples were obtained represent 17 per cent. of the outside farms whose milk was sampled. Visits to the number of 106 were paid to outside farms from which tuberculous milk came. Four farms were visited on account of information already given in the 1908 table, and 24 on account of information contained in table VIII b. in the present report, 28 farms in all. At these farms 677 cows were examined, but as some of them were examined more

than once the examinations totalled up to 1,790. Thirteen of the cows examined were found to be tuberculous as to the udder, one was doubtfully so, and three others had advanced tuberculosis not obviously affecting the udder. Twelve cows were tested with tuberculin.

This subject is so important that though the tables giving details (VIII a. and VIII b.) are contained amongst those relating to administration, it has been thought better in the present instance, as the matter essentially concerns tuberculosis, to refer to it somewhat in detail in the text of the supplementary portions of the report.

BIOLOGICAL EXAMINATION FOR TUBERCLE.

As was done last year an asterisk has been put against each examination in table VIII b. where the milk was taken from a single cow.

On January 2nd, 1909, in this way a specimen was taken from a cow of a farmer at Yeadon supplying milk to a retailer (No. 581) in Leeds. The circumstances were as follows:—On November 3rd, 1908, one of our inspectors had taken a specimen of milk, from the can of the farmer, at the Midland Station, Leeds, at 3.50 in the afternoon. The sample was taken on the arrival of the can, which bore the farmer's name, was numbered 20, and contained about 11 gallons. The specimen was put into a previously sterilized bottle, placed in a tin surrounded by ice and sent to the medical school. On the 31st December, 1908, we had a written message from the medical school that the milk was tuberculous.

Mr. Dixon visited the farm on the 2nd January, 1909, examined 12 cows, found 11 healthy as to the udder, but recommended isolation of a roan cow with a split fore teat and enlargement of both hind quarters. A specimen of milk from this cow was taken in a sterilized bottle, placed in ice and

afterwards sent to the medical school on January 6th. On the 18th, Mr. Dixon again examined this cow and pronounced the udder tuberculous. On the 13th of March, we heard from the medical school that the sample sent on the 6th of January did not give evidence of tubercle in either guinea pig. The question naturally arises whether the delay in sending the milk from the 2nd to the 6th might have had anything to do with the fact that the result of the test was negative. January 2nd, 1909, was a Saturday, and a sample could not have been sent to the school before the 4th. We have not been able to account for the two further days' delay. As this farmer gave up business no further sample was taken, and as the cow had been disposed of, we had no opportunity of confirming the diagnosis. About the correctness of this, however, there seems to be no doubt. Mr. Dixon distinctly remembers the condition of the cow, and he was accompanied by Dr. Carnes on the occasion of the visit on the 18th January.

On the 13th January (table VIII b.) specimens of milk were taken from two cans belonging to a farmer at Shadwell. The samples were taken in each case at the retailer's house. That from retailer No. 630 from an $8\frac{1}{2}$ gallon can at four in the afternoon, and that from retailer No. 258 from a can containing 15 gallons, a little later the same afternoon. In both these cases the result was negative. The reason that these samples were taken was because, on the 10th November, 1908, two specimens of milk from the same farmer had been obtained at the houses of retailers No. 258 and No. 576, the one from a fifteen, the other from a $4\frac{1}{2}$ gallons can. In both cases the cans were the farmer's cans, not the retailers'. The specimens were taken within a quarter of an hour of one another, put into sterilized bottles, placed in ice, and sent to the Medical School the following day. In both cases the result was positive. This laboratory report was received in writing on December 31st, 1908. Owing, however, to a telephonic communication from the School, Mr. Dixon had

the previous day visited the farm and examined 25 cows. He found a blue roan cow, which had calved about the 23rd of December, about one week before her full time, suffering from metritis, and although her udder was apparently sound, he suspected that the animal was infected with tuberculosis. He ascertained also, that subsequently to the date of the taking of the samples on November the 3rd, three cows had been sold from the herd as "fat." On the 4th January he visited the farm and again examined the affected cow, which had in the meantime, at his direction, been isolated. The control samples obtained on delivery to the retailers on the 13th of January, 1909 (see Table VIII b.), were taken to ascertain that there was no tubercle producing cow still in the herd. Before the result was known, however, on the 14th, Mr. Dixon ascertained from the farmer that the cow isolated on December 30th had died, and on the 15th he found the whole of the remaining herd apparently healthy. The two specimens from the cans containing respectively $8\frac{1}{2}$ and 15 gallons presumably were fair specimens of all the milk being distributed by that farmer from his 25 cows.

These samples were from detected farms. A specimen of milk from a Leeds milk farm was obtained on the 14th January, 1909, in the cowshed itself, at 4.15 in the afternoon from a can containing the milk of ten cows. It was received in a sterilized bottle, which was placed in ice at once, and sent to the Medical School on the 15th. This was also a control sample from a farm from which tuberculous milk had been sent to Leeds. The circumstances were as follows:—A sample of milk had been taken from the same farmer's churn in a street at Kirkstall Hill at 4.30 p.m. on October 21st, 1908. The churn contained about 11 gallons and belonged to a Leeds farmer in the Headingley district (see table VIII b Annual Report, 1908). On the 31st of December, it was reported "tuberculous," and on the 2nd January the farm was visited by Mr. Dixon, who examined the whole herd consisting of 12 cows (table VIIa present report).

Eleven appeared healthy but one had a slight induration of the right hind quarter. She was in "poor condition" and had a calf. Mr. Dixon regarded the udder as in an early stage of tuberculous mastitis. The farmer promised to isolate the cow and destroy her milk. A specimen of the milk were therefore taken from the farmer's can containing the milk of 10 cows, all then remaining in the shed, to ascertain whether the milk being sold was free from tubercle. On the 18th of January, Mr. Dixon again visited the farm and found the diseased cow gone, and was unable to ascertain what had become of her.

The following seven specimens in Table VIII b are what we call "original samples." Two were from farms in Horton-in-Ribblesdale. They were from two separate churns and from different farmers supplying the same retailer. One of these was pronounced "not tuberculous." In the other case the test was incomplete. This matter will be referred to later.

The original sample from West Marton was from a farmer's churn, and was obtained at the Midland Station, and there was no evidence that it was tuberculous.

The two specimens bracketed from Elslack were from two churns belonging to one farmer. They were taken at the Midland Station on delivery to the same retailer. The two bracketed specimens from Thornton were similarly taken at the same station from two churns belonging to one farmer on delivery to one customer.

The second specimen from Ribblesdale had yielded an incomplete result. The milk was regarded at the time as dirty, so two fresh control specimens of the same farmer's milk were obtained on delivery at the station on February 2nd, and a third specimen from the other Horton farmer supplying the same retailer, No. 306. None of these three control specimens gave evidence of tubercle, but both specimens from the farmer whose milk had yielded the incomplete result in the specimen taken on the 19th of January, produced abscesses

in guinea pigs injected. The milk was evidently unwholesome, although not distinctly tuberculous. On receiving information as to these results, Mr. Dixon visited three farms in Horton-in-Ribblesdale on April 22nd, and reported that he found 45 cows apparently healthy as regards their udders, but that the cattle at all three farms were in a filthy condition, probably accounting for the mortality amongst the guinea pigs.

Four samples sent on the 9th of February are what we call "original samples;" the two from Goldsborough (bracketed) being from the same farm. The two specimens from Leeds were taken, the one from the can of a retailer (No. 592), the other from the farmer's own can on delivery to retailer No. 6. These are, therefore, also original samples and from one farmer. The reason for taking two specimens was to cover the whole milk supply of that farm. The two specimens taken on February 17th from cans from Rylston and Benningborough were also original specimens. The two specimens (bracketed) from Seacroft on February 23rd are original specimens taken from the cans of the same farmer upon delivery to two different retailers, the object being again to test the whole milk supplied by this farmer. The remaining specimen of this date was also an original sample, as was the specimen from Horsforth taken the following day.

The two specimens marked Wakefield, taken on March 3rd, might be regarded as "control samples." They were obtained at the Leeds G. N. Station from the milk sent from an estate near Wakefield, but outside that city. A succession of tuberculous specimens had been obtained from this farm in 1908. On June 17th of that year, two specimens obtained at the G. N. Station, Leeds, from the farmer's own churns on delivery to dairy 421*, were both found to be tuberculous, the one being reported in writing on the 1st August, the other on

* The retailer 421 is the Provincial Dairies Co. who have several places of business and several numbers in our dairy list. They received generally the number 422 in the report for 1909.

the 6th. Information had, however, been communicated to us by telephone before the earlier official certificate was received, and on July 29th, 1908, in consequence of information received the previous day, Mr. Dixon and Mr. Walker had visited the farm. They had found 22 cows, 21 in apparently good condition, the remaining cow—a large roan standing fifth on the right hand side on entry—in poor condition. On examining her udder Mr. Dixon found the left hind quarter indurated, extensively enlarged and he certified the cow as suffering from “tubercular disease of the udder.” A specimen of this cow’s milk was obtained on the same day (29th), sent to the school and subsequently pronounced to be tuberculous. The manager of the farm agreed to isolate the cow. On the next day, July 30th, 1908, we took two specimens of milk, one from each of two cans, at the railway station from the same farm. These were afterwards pronounced free from tubercle. Two further specimens were taken from single cows on September 14th, 1908, they also showed no evidence of tubercle. The two fresh specimens on March 3rd, 1909, were from the same farm taken at the station in the same way and again with a negative result. It was a matter of no little satisfaction to find the milk from this large farm at length apparently free from tubercle.

The following specimens, Tadcaster and Elslack, are “original samples.” The two from Rawdon (bracketed) taken on March 10th from milk supplied to different milk retailers by the same farmer were also “original,” result negative.

None of these four samples gave evidence of tubercle. The Tadcaster specimen was from a can containing 19 gallons. A previous examination of this farmer’s milk was made on October 17th, 1908, from a 10 gallon can, also with a negative result. The Elslack milk had also been sampled, but only from one can, on November 4th, 1908, with a like negative result. The milk from the Rawdon farmer, supplying retailers

561 and 174 was from cans containing 12 and 4 gallons respectively. The same farmer's milk had been sampled April 1st, August 26th, and September 9th, 1908, from cans delivered to retailers Nos. 15, 174 (11 gallons), and 513, also with negative result.

The other samples taken the same day from Horsforth and Rawdon are from two different farmers supplying two different retailers, both were "original samples," and both tuberculous. Two specimens from Horsforth and Rawdon supplied by different farmers to different vendors were also "original samples," and both tuberculous. A fifth tuberculous sample was from Tong. The man retailed within the City. The condition of these five contaminated milk supplies was reported to us from the school on the 15th of April.

The Horsforth farm, supplying retailer 517 was visited on April 6th, previous information having been received by telephone from the school. At this farm there were 15 cows, only one of which could be regarded as suspicious, but even she gave no evidence at that time of tubercle of the udder. At my request Mr. Dixon re-visited on the 14th, and suggested to the farmer the desirability of testing with tuberculin. This he promised to consider, but afterwards refused to allow. On the 14th there was still no evidence of tubercle in the udders of any of the cows. About four weeks afterwards (May 10th), Mr. Dixon examined 16 cows at this farm, two had been added since his visit in April. The red cow which he regarded as probably tuberculous in April was still at the farm but sold, her general condition was no better than before, but the condition of her udder was still more suggestive of tubercle than at either previous inspection, and Mr. Dixon had very little doubt that she was the cow who had contributed the tubercle bacilli to the specimen of milk taken from the can supplied to retailer No. 517 on the 10th March. In the meantime, however, on April 21st, we had taken another control specimen

of this milk on the premises of retailer No. 517, but from the farmer's own can when his own man was in actual charge. This was after the suspected cow had become dry. This specimen gave a negative result, leading us to suppose that after this cow had been removed from the herd the farmer's milk was free from tubercle.

The other tuberculous specimen taken on March 10th came from Rawdon. The milk had been taken from the farmer's can in a street off Kirkstall Road on the 10th March, the can containing about eleven gallons. April 15th, result reported positive. On the 17th April Mr. Dixon visited this farm, examined 10 cows, and found a waster, a dark blue roan, with indurated udder. He arranged for the isolation of the cow, and destruction of her milk, and gave the official certificate that the animal was suffering from "tubercular disease of the udder." The diagnosis was confirmed by the post-mortem.

A specimen of this farmer's milk had been previously examined on September 9th, 1908, with a negative result. On that occasion, also, only one specimen seems to have been taken, but as there were only 10 cows, the farmer's can might in an afternoon contain the whole of the milk from the herd.

The Horsforth farm supplying the milk on March 16th to retailer 118, reported as tuberculous, on April 15th, was visited by Mr. Dixon on the 17th—30 cows were examined, one found to be affected by tuberculous udder and another by chronic suppurative mastitis, probably simple. Orders were given to isolate the tuberculous cow, and on revisiting on May 10th, there was every reason to suppose this had been properly done.

The Rawdon farm supplying milkman 198, was also visited on April 17th. Four cows were in poor condition and dirty, one apparently suffering from tuberculosis, not, however, palpable in the udder. A sample was taken on the same

date (17th April) from this cow and pronounced later to be "not tuberculous." The cow was seen again on the 10th of May, and on the 2nd of June was growing progressively worse. On the 25th of June she had gone nobody knows where. The milk on April 17th was the mixed milk from all four teats. The animal was clearly tuberculous, but the udder was not palpably affected.

As Mr. Dixon, however, points out, it is quite possible that this cow might have been giving tuberculous milk on the 16th of March, although the milk on the 17th of April, taken directly from the animal herself, gave no evidence of the presence of the tubercle bacillus. It will be remembered that in the third interim report of the present Tuberculosis Commission it was shown that tuberculous cows, free from evident tubercle of the udder were capable of giving milk at one time free from, and at another containing the tubercle bacillus (Cd. 4,483, pp. 9, 10, cow B.).

On March the 17th a specimen of milk from a farmer living at Tong, and himself retailing the milk in Wortley and Armley, within the City, was taken from his own can in a street off Whingate Road at 9.25 in the morning, put into a sterilized bottle, which was placed in ice, and was sent the same forenoon to the medical school. On the 15th of April we received a written certificate that tubercle had been produced by the milk and tubercle bacilli found. The following day the farm was visited. There were 19 cows, 18 apparently healthy, and one, a dark roan, which had been dry for a week or two, awaiting a third calf, was apparently suffering from tuberculosis generally, her udder was diseased and probably tuberculous. Although this cow was dry she had been in milk on the 16th of March, when the sample was taken. Since that day the owner had sold one cow, and dried off another, and had added a newly calved cow to his herd. The opinion come to by Mr. Dixon from the circumstances was that this dark roan cow was the culprit. We

accordingly communicated with the medical officer of health for Bradford—Tong is now in that city—asking him to send his own staff to deal with the matter. On the 21st of April, however, we took a control sample at Silver Royd Hill, Leeds, from the farmer's can, when in his own cart, and in charge at the time of his son. Although the farmer had promised to isolate the dark roan and destroy her milk, the sample from Silver Royd Hill was reported to us (June 3rd) as containing the tuberculous infection. Meantime the Bradford authority had visited the farm, confirmed our opinion as to the dark roan cow which it was alleged was being kept isolated. They tuberculinized the whole herd and took milk samples from three cows. On receiving the information that our control sample was also contaminated we visited again on the 8th June. At that time there were sixteen cows in the shed, and one in the field, dry. Ten in the shed and the one in the field had reacted to the tuberculin injected by the Bradford authorities. Their veterinary surgeon met Mr. Dixon on that occasion, and the two agreed to isolate another cow, a large roan with an induration of one quarter of the udder, one of the reactors. A specimen of milk had already been taken by the Bradford veterinary surgeon, but we have not yet heard with what result. The cow which Mr. Dixon had separated on the 16th April had meanwhile been sold to a dealer, and we *lost all trace of her*. We visited again on June 22nd to see that the isolation promised was being kept up, saw the fifteen cows left in the shed, all of which appeared healthy. The large roan cow last separated was in much the same condition as on the previous visit, and *was being milked*. The red cow in the field had in the meantime calved, but her udder appeared healthy.

The other sample taken on March the 17th was also an original sample. It was obtained from the retailer's can, in the street, at 10.30 in the morning. We ascertained that the retailer's can had been filled from the Gargrave farmer's own

can at the railway station, and that no other milk but the Gargrave milk was in the can. The reaction in this case was negative.

On the 23rd March original samples from a Guiseley farmer, and from a Clapham farmer, and from one at Elslack, were taken at the Midland Station, and no tubercle was found.

On the 23rd March, at the North Eastern Station, at 4.20 in the afternoon, a sample was taken from the churn of a farmer from Pool. The churn contained $6\frac{1}{2}$ gallons. The sample was put in ice, and sent the following day to the medical school. On the 15th of April this specimen was reported to us as "tuberculous." Mr. Dixon visited on the 17th April and found the general condition of the cows good, and none of them obviously tuberculous. No cow was said to have been disposed of since the taking of the specimen, but two newly calved cows had been added to the herd. Of the fifteen cows in the herd examined, all were apparently healthy, none of them exhibited any sign of tubercle of the udder. One, however, had a slight induration of one quarter of the udder, said to be due to injury, which explanation Mr. Dixon was inclined to accept. On the 20th of April we took a control sample of the milk from this farm at the North Eastern Station, from the farmer's own can, in his own presence. This control sample was reported free from tubercle. We were, therefore, at a loss to account for the tubercle in the specimen of milk taken on March 23rd from the farmer's own can at the North Eastern Station. It is of course, however, not impossible that some previously tuberculous cow may have defiled the mistal before March 23rd. At Mr. Dixon's further visit on the 10th May he found no reason to suspect any particular cow then remaining in the herd.

The next three specimens were taken on March 30th from the farmers' own cans at Armley Midland Station. One was an original sample from a farm at Bingley. It was not certified as tuberculous. Specimens from this farm had been taken

previously with the same result. On this occasion, however, circumstances induced Mr. Dixon to visit this farm, which he did on the 4th of June, and then he found 38 cows, of which one had a suspicious condition of the udder. The cow was tested with tuberculin, re-acted, and on a further examination Mr. Dixon had no hesitation in certifying that the udder was tuberculous.

The two other samples taken on March 30th at the Midland Station, Armley, were consigned to a Leeds dealer (453) by a farmer at Carlton. One of the samples proved tuberculous, the other not. They were both received at the school on April 1st. On the 7th May we received a telephonic message about the tuberculous specimen, and Mr. Dixon visited on the 8th. He examined 23 cows, 21 apparently healthy, 2 had indurated udders, but these he regarded as cases of chronic suppurative mastitis. As this examination was made when the cows' bags were full of milk, Mr. Dixon re-visited the farm on the 10th, and examined the same cows after milking with exactly the same result. He also learnt that since the sample was taken on the 30th of March, five cows had been sold "dry," and three newly calved had been added to the herd. On the 11th of May, two further specimens, controls, were taken at Armley Midland Station from the same farmer, consigned to the same retailer, one of them proved tuberculous, the other not. We heard of the tuberculous one on the 29th June, but the written report did not reach us until the 3rd of August. Mr. Dixon, however, had visited the farm on June 2nd before hearing the result of the May controls, and again on the 25th, and on the latter occasion arranged for the isolation of a cow with a suspicious udder, and when we had the telephone message on the 29th that one of the milk specimens, taken on May 11th, contained tubercle, he persuaded the farmer to allow him to tuberculin the cow. She re-acted, but as the udder was still not very clearly tuberculous, the animal was isolated. She was seen again on

the 12th July, when he had no difficulty in pronouncing that she had a tuberculous udder. Meanwhile, a further control had been taken at the farm on the 29th June, of a mixed milk. This also proved to be tuberculous. On July 27th, having heard of the positive result of the mixed milk taken on June 29th, Mr. Dixon again visited this farm and found the roan cow satisfactorily isolated. The 23 cows in the herd were apparently healthy. On the 10th of August he visited again, and found 20 cows all apparently healthy, the roan cow already mentioned "dry." On the 18th August a mixed sample was taken at the farm, which gave a negative result.

The four samples in the table taken on April 17th, 20th, and 21st were controls, and have been already referred to. On April 26th two specimens of milk were taken at a farm in Halton supplying milk to the Fever Hospital, one from a can containing the milk of eight cows, the other from a can containing all the milk of six cows. The two were considered to represent the whole of the milk from the farm. The result was negative.

On April 27th two samples were taken both from Horsforth farmers, and in both cases from the farmers' own cans. In both cases the result was negative.

On May 4th three specimens were taken from three cans in the same cart coming from one farm in process of transmission to the same dealer. All three were tuberculous. On the 3rd of June we heard by telephone the result as to two of these samples, and accordingly on the 5th Mr. Dixon visited the farm, which is just beyond the boundary of the borough. He found 46 cows, 45 apparently healthy. The other was a small short-horn with advanced tuberculosis, obviously affecting the udder. She was removed to the knacker's yard the same night, slaughtered the next morning, and the diagnosis amply confirmed. On the 29th June a further message was received that the third sample had also given a positive re-action, tubercle

bacilli had also been found. Mr. Dixon again visited on the 30th June, and found all the cows apparently healthy. He made several other visits, but always with the same result.

This case is rather interesting. In the first place we heard by message on the 3rd June that samples Nos. 51 and 53 were tuberculous, and on the 29th that sample No. 52 was also tuberculous. On the 3rd June the result in regard to 51 was confirmed in writing, and on August 3rd the results in regard to 52 and 53. It seems as if the delayed information about sample 52 indicated a retardation in the action of the tuberculous poison. We are inclined to account for this on the hypothesis that a larger quantity of milk from the tuberculous cow got into the cans from which the specimens Nos. 51 and 53 were taken, and if we had relied upon the result in sample 52 we should not have heard of the tuberculous condition of this cow for nearly a month later than we did. In the second place the mode of treating the milk enabled that of one cow to affect all the milk from this farm.

Two days later, May 6th, two specimens of milk from another farmer, just outside the boundary, were taken from two different cans consigned by one farmer to two different dealers. The specimen sent to dealer 374, was taken at 6.15 p.m. from the farmer's own can containing $9\frac{1}{2}$ gallons, before delivery to the retailer, and the specimen of the milk sent to No. 46 was taken at another place from another can containing 10 gallons belonging to the same farmer. These two cans did not contain the whole of this farmer's milk, and although in both cases the laboratory result was negative, it does not follow that the whole of the milk from this farm was free from tubercle.

The control samples from Carlton taken on May 11th have been already mentioned. On the same day two samples were taken from the cans of a farmer at Eccup, himself in charge of the cart. The results were negative. The two specimens, however, would not necessarily sample the whole of the man's milk.

On May 18th, at the North-Eastern Station, Leeds, an original specimen was taken from a can consigned by a farmer from Spofforth. The result was negative. The same day, at the same Station, a specimen was taken from a can consigned from Nidd Bridge, and the result was also negative. On the 18th also, two original samples were taken from two cans belonging to one farmer from the same cart in a street in Leeds at the time of delivery to retailer 537.

On the 26th, a specimen of milk was taken from the can of another Pool farmer, consigned from Pool to Holbeck for retailer No. 50, and at the same time on arrival of the same train, a specimen from another can from a Huby farmer, put on the rail at Weeton Station. On the same day also in the morning, a specimen of milk was obtained from a Bramhope farmer's can as it was being poured into the retailer's can, and in the same way a specimen from a Horsforth farmer as the milk was being poured into that of retailer No. 74. All these four specimens gave negative results.

On June 8th, two specimens from two cans belonging to one farmer were taken on delivery to the same retailer, No. 123. The result also was negative. On the same day the milk of a farmer at Alwoodly, just on the border of Leeds, was sampled from the retailer's can shortly after its arrival in Leeds. The result here was also negative.

On the 15th June, a sample was taken from a Bramhope farmer's can, in the street, before delivery to retailer No. 432. On the same day, a Leeds farmer's milk was sampled in Leeds at the place of delivery, but after the milk had been transferred to the retailer's can. The result was also negative, and the same day a third specimen was taken from a can consigned by a farmer at Denton. The sample was taken at the Midland Station, Leeds, where it had come from Ben Rhydding. All these specimens since and including May 11th, except the two from Carlton, were "original samples."

On the 22nd June, a specimen was taken of the milk from one of the farmers at Ribblesdale, whose supply had excited our interest before; it had proved fatal to guinea pigs. Although the specimen in question was not regarded as tuberculous it caused a local abscess in one of the guinea pigs.

The next two specimens are of the mixed milks of three farmers. Both were from the cans brought from Barnoldswick into Leeds, and both gave negative results.

On June 29th, a control sample from Carlton, as already said, proved tuberculous. The same day a Rawdon specimen was taken from a retailer's can. It did not prove to be tuberculous. The Leeds specimen on the same day was taken from the farmer's cart before delivery to the retailer. The result was also negative, and on June 30th, the milk from a Guiseley farmer, taken from a retailer's can, also gave a negative result.

On July 7th specimens from Grassington and Pool were taken in Leeds at the Midland Station, the first immediately after being put into the dealer's can, the other from the farmer's own can. The result in both cases proved negative. The second Pool sample that day was taken at North Eastern Station. It was not an original specimen. It was from the same farm as the specimen taken on March the 23rd, which was tuberculous, and April 20th, which was negative. It may be regarded as a control specimen. The result was also negative.

The next two specimens were taken on the 8th and 14th, both at the Midland Station. They were both original specimens and both negative.

On July 14th, also at the Midland Station, a specimen of milk was taken from the can of the farmer at Denton, whose milk had been already sampled with a negative result on June 15th. In this case, however, the result was positive. We had a telephone message on the 19th of August. The farm was visited

on the 21st Mr. Dixon found six "dry" cows and 27 in milk. He examined the udders of all, found the six dry cows, and 25 of the others, apparently healthy. Two others he suspected to have tuberculosis of the udder. They were at once isolated and the milk destroyed. On the 27th he re-visited with the Medical Officer of Health of the district. The same cows were examined with the same result, and a new cow, which appeared healthy. Arrangement was made to test the two suspected cows with tuberculin. This was done on the 1st and 2nd of September. Both cows re-acted; one was then certified to have a tuberculous udder. Both were "dry." On the 20th of September these two cows were seen by Mr. Dixon in Denton Park, separated entirely from the herd. At a further visit in November he found all the cows in the milk herd apparently healthy. On November 10th control samples were taken from the same farm consigned to two different dealers with negative results. This farmer gave us every help. He was anxious to eliminate tubercle from his supply.

On July 15th a sample from a Burnsall farmer was taken in North Street, Leeds, from a retailer's can: result negative.

On July 28th the milk of a Leeds cowkeeper and retailer was taken at his own house and proved tuberculous. A telephone message was received on August 21st to the effect that the milk was tuberculous. On the 12th of August, however, Mr. Dixon had in his ordinary routine visited this cowshed and condemned a cow as having a tuberculous udder. On the 27th of August he made a *post mortem* of the same cow and found miliary tuberculosis in both lungs, and old standing pulmonary tuberculosis. Several nodules were present throughout the udder, particularly in the right hind quarter,—the quarter in which the disease was diagnosed during life. As will be seen from table VIII a. this farm had been visited and seven cows examined on the 18th of March, but at that time none showed palpable evidence of tuberculous udder disease.

The next four samples were original samples, the results all negative.

The next sample, the first of two from Horsforth taken on August 18th, was from the farmer's own can, standing in the passage of the retailer's premises before it had been emptied, and containing six gallons. This specimen was received as usual in a sterilized bottle, but in this case, contrary to instructions, not put into ice. It was forwarded, however, the same day to the Medical School. On September 6th it was reported in writing that the guinea pigs had died prematurely. Possibly the milk contained poisonous bacilli other than tuberculous, acting more quickly than the latter. The result of the investigations has, therefore, been entered as "incomplete."

On the same day, August 18th, another sample of milk from another Horsforth farmer was obtained from the farmer's own can in the street opposite the retailer's premises and taken to the Medical School, but again not in ice, at 11.30 the same day. On October 12th it was reported to us that the result was negative. On the same day, August 18th, another sample was taken from Carlton, from the farmer already mentioned. This was regarded as a control sample. The result was also negative.

The three next samples from Seacroft may be regarded as original. They were from one farmer but from different cans. One of these was in process of transmission to retailer No. 48, another to retailer 510. The milk from the third can was being retailed in York Road by the farmer himself. The quantities in the three cans which were all sampled in the farmer's cart at Harehills Road, were 6, 10, and 7 gallons respectively. These samples were put into ice at once and sent to the School, with negative results.

The sample from Whinmoor in course of delivery to retailer 293 was taken from the farmer's cart about ten minutes

before the three last mentioned, in the same street. On the 7th of October we had a telephone message that this specimen was tuberculous. A written report was received on the 12th. On the 9th of October Mr. Dixon visited and examined 36 cows, all apparently healthy. Four others had been sold between the taking of the sample on the 25th of August and Mr. Dixon's visit on the 9th of October. On the 22nd of October Mr. Dixon revisited the farm, again examined the same cows but found no evidence of tubercle of the udder in any of them. On the 18th of November Mr. Dixon again visited with the same result. In the meantime, on the 2nd of November, three further samples of this man's milk were taken from three distinct cans, on delivery to three distinct dealers. The three samples were all taken from the farmer's cart, at the place of earliest delivery on the afternoon of November 2nd, the bottles placed in ice, and sent the following morning to the Medical School. The result in each of the three cases, which were of course controls, was negative. Although, therefore, we had not found the inculpat cow, we had pretty strong evidence, first from the examination of the herd on the dates given, and second from sampling on November 2nd all the three cans of this farmer, containing respectively $18\frac{1}{2}$, $8\frac{1}{2}$, and 12 gallons, and probably accounting for the whole of the afternoon's milk from the 36 cows, that the milk, then being distributed, was free from tubercle. The probability is that the offending cow may have been one of the four disposed of between the 25th August and the 9th of October.

The next four samples were also "original" ones. The last-named, from Ben Rhydding, taken on September 1st, was reported to us on October 7th by telephone as "tuberculous," and a written report was received on the 12th. On October 8th Mr. Dixon visited the farm and found 34 cows in milk, one of which he suspected to have tuberculosis of the udder. The cow was ordered to be isolated and her milk destroyed. Another

had been sold since the sample was taken. On the 20th October the farm was re-visited, the cattle re-examined, and the diagnosis of the roan cow confirmed, and an official certificate given accordingly. On November 2nd Mr. Dixon re-visited, found the roan cow effectively isolated, the others without any evidence of tubercle of the udder. It was not thought necessary to take any control sample.

On September the 7th, three specimens were collected from Apperley Bridge. They were all taken from the farmers' cans at the Leeds Station. The first was from one farmer from a can consigned to retailer No. 412, and containing 9 gallons. The second and third were from a farmer in the Yeadon Council's district, and consigned to two separate dealers, 302 and 150. All three samples when taken were placed in sterilized bottles and put in ice. The two from the same farmer were taken from cans containing respectively 14 and 11 gallons. On October 9th we received information by telephone, that the sample from the can consigned to retailer 302 was tuberculous. This information was confirmed by letter on October 12th. It was not until December 21st that we heard in writing that the other sample from the same farmer, taken the same day, was also tuberculous. In the meantime, however, on the 10th of October, Mr. Dixon had visited the farm and examined 53 cows, 50 apparently healthy. One had been already isolated by the farmer himself, and was considered by Mr. Dixon as having advanced tuberculosis, though not apparently affecting the udder. The second cow had an induration of one quarter of the udder, suspected to be tuberculous. The third cow, a light roan, had an enlargement of both hind quarters, which was regarded as tuberculous. On October 20th my veterinary assistant re-visited, met the Medical Officer of Health of the District and the Sanitary Inspector of the County. There were 55 cows all apparently healthy. All the three cows formerly suspected were

re-examined, and the light roan cow with the suspected udder was certified as having tuberculosis of that organ. At this time all three suspected animals were being efficiently isolated. The farm was visited again on November 2nd, when Mr. Dixon found 53 cows apparently healthy as to their udders. The red and white cow with advanced tuberculosis had been moved to another farm where it was said there were no milk cows. The other two with diseased udders, one certified and one suspected, had been sold, no trace of them could be obtained. The farmer applied for compensation, which the Committee would probably have readily granted during the time that there was some doubt as to the condition of the animals, but were advised that the compensation should be absolutely refused as no satisfactory information had been given as to the whereabouts of two of the animals with indurated udders. The farmer had not notified us of the condition of the udders of his cows.

On September the 8th, a farmer at Rawdon had his milk sampled from the retailer's can in the street. This can had not been in the retailer's premises at all since the farmer's milk was transferred to it, and contained only a pint or so at the bottom of the can. The sample was placed in ice. On the 7th October we received a message by telephone that the sample was tuberculous. A written report followed on the 12th. Meanwhile, on October 8th, Mr. Dixon visited the farm with Mr. Walker and the sanitary inspector of the district (Rawdon), found 20 cows, one with a suspicious udder, ordered that she should be isolated and her milk destroyed. Informed that since the sample was taken two cows had been sold, one a "bad doer, and in poor condition." On October 20th, Mr. Dixon revisited, and concluded that the udder of the roan cow isolated since October 8th was not tuberculous. He inclined to the view that the waster, described by the farmer, was the cause of the tubercle in the milk. The farmer in this

case was compensated for loss of milk from the suspected cow to the extent of 24s., but on the 22nd of February of the present year two control samples were taken, one of which proved tuberculous. In this case also on visiting it was found that a cow had been slaughtered at the farm, and we had reason to suppose that she was tuberculous.

On September 14th an original specimen was taken from a farmer's can at the retailer's dairy and sent in ice to the school. The sample came from Horsforth. On the 21st of December the result was returned as "Tuberculous." On the 18th of November, however, we had received information by telephone that the specimen was tuberculous. Mr. Dixon visited on the 21st, found 26 cows in milk, and one dry; one of the former had a tuberculous udder. This cow was ordered to be isolated, and her milk destroyed. On the 6th of December, at another visit, the diseased cow was found to be satisfactorily isolated and the other cattle apparently healthy. On Mr. Dixon's first visit on November 21st, he certified the cow as suffering from disease of the udder, and warned the cow-keeper of his responsibility in this matter. On the 7th of December a letter was sent by the Medical Officer of Health confirming the warning. This cow-keeper applied for compensation, but it was explained that he had not notified the existence of the tubercular udder in the cow, but had left it to us to find it out by examination of the milk, that he had been breaking the law by sending the milk of that cow into the market. Under these circumstances compensation was not recommended.

The same day (Sept. 14th) a sample was taken from a can in the cart of another Rawdon farmer, and on the 17th November it was telephoned to us that it was found to be tuberculous. On the 21st Mr. Dixon visited what we supposed was the farm from which the milk had come, and found 13 cows all apparently healthy. He learned that 4 or 5 cows

had been sold since the sample was taken. He visited again on the 6th December, with the same result. It was accordingly resolved to sample again the milk taken from the same cart, when it was ascertained that the milk in this cart came from more than one farm. Accordingly, on the 14th of December samples were taken from three different cans, and one of the three was returned as tuberculous. The difficulty was to ascertain from which farm the infected sample came. The two farms belonging to the brothers whose names were on the cart were again visited several times, on each occasion with a negative result, and then the fact that a third farmer was allowed to send milk on this cart was ascertained. It was not, however, until the beginning of the present year that we heard that this third farmer was sending milk in the same cart into Leeds. A sample of this farmer's milk delivered to No. 274, had been taken on June 29th and found free from tubercle. It was not known on December 14th, when the control samples were taken from the Rawdon farmers' cart that this third farmer was sending milk into Leeds, but two specimens of his milk were again taken on the 22nd February of the present year, and both found to be tuberculous. A telephone message was received on the 17th March, 1910, from the Medical School, and on the 18th Mr. Dixon visited, and found one of 14 cows with a suspicious udder. He isolated her. On April 15th she was seen again, and certified as suffering from tubercular disease of the udder.

It is interesting in this case to inquire why we were informed on the 17th March of tubercle in the one specimen taken on February 22nd, but heard nothing about the other specimen until the 26th April. At his visits, Mr. Dixon learned that the milk from the blue roan cow which he ordered to be isolated on the 18th March, 1910, had been usually put into a large can, from which, when the milking was completed, the contents of the smaller cans were taken. The specimen of this milk which gave the first result was taken from the

11 gallon can, the specimen in which the result was retarded from a $2\frac{1}{2}$ gallon can. The probability was that the milk from the affected cow was put into the bottom of the large can and the $2\frac{1}{2}$ gallon can was filled from the large can after other milk had been added. Naturally, the upper part of the milk would go into the smaller can somewhat mixed with the milk first put in, but the larger quantity of this infected cow's milk would be in the larger can.

The following three samples from Bramhope and Horsforth (September 14th) and from Otley (September 21st) were original, and the results negative. The next one from Cookridge was from a farm from which a sample had been taken on July 28th with a negative result. The examination was unsatisfactory, the milk produced abscess in a guinea pig. A sample has been taken since, but at the time of writing this report the result of the test has not been received. Two samples were taken, both with negative results, from the milk supplied by the Pool farmer, from which the negative result had been obtained in milk supplied by the same farmer to the same retailer on May 26th (see earlier). Two specimens from Old Bramhope, from different farmers to different retailers, were taken on the 28th, both gave negative results.

On the same day (September 28th) a specimen from a farmer at Alwoodley Gates was taken from his own can in Harrogate Road. On the 18th November we learnt that it was tuberculous. On the 21st November Mr. Dixon visited and examined 20 cows, all young, all apparently healthy, but he learnt that a black cow had been sent to the knacker's yard four or five weeks before our visit, but after the taking of the sample on September 28th.

The sample taken on the 29th from another farmer at Alwoodley was not proved to be tuberculous. The two Bingley samples (October 6th) were taken from a farmer whose farm we had visited in June, and at which we had condemned a tuberculous cow (p. 58). They are really control samples and both

negative. They were taken from the farmer's cans at the Holbeck Station, containing the one 14 and the other 12 gallons. These 26 gallons would not contain all the morning's milk of 38 cows. This farmer sends some milk to a son in Leeds, who distributes, as well as to retailer, but the son's milk is sent to the Armley Station, that of retailer 605 to the Holbeck Station, so our examination of these two specimens is not of the whole milk from the farm. It will be remembered that the sample of this Bingley farmer's milk consigned to retailer 605 on March 30th gave a negative result, but on June 2nd we found a cow in his herd suffering from tubercle of the udder.

The Wigton samples of October 6th were from one farmer and sent to one retailer. The following, Otley, Bramhope, Oakworth and Guiseley, taken on 12th and 13th, were all original samples, and the result in each case negative. The following three Guiseley samples on October 19th were from three farmers and all negative. The Apperley Bridge, Bolton Abbey and Ripley Valley samples were also original and negative. The three following samples were controls and have been already mentioned. The Oxenhope sample, also negative, was an original sample. The Grassington and Settle samples on the 9th of November are from separate farmers, original samples, and both negative. The two samples from Denton were from one farmer and were controls. They have been already mentioned. The sample from Gargrave was from the same farmer from whom the sample was taken on September 1st with a negative result, but as this was a new and independent enquiry, we regard it as an original sample. The Grassington and both Middleton samples were all three original and negative. The first Middleton sample was taken from a farmer amongst whose cows some two years before we had a good deal of trouble.

Both samples from Newsam Green (Nov. 23rd), though from the same farmer and from cans sent to different retailers,

were both tuberculous. They were reported so by telephone on the 16th December. Mr. Dixon visited the next day and found one cow, out of 35, with a suspicious udder. He isolated her and condemned her milk. She was seen again on the 21st and 29th, and on the last date he did not hesitate to certify that the udder was tubercular. We had previous cases at this farm a few years ago, before the present tenant came into occupation.

The two Knostrop samples sent by one farmer to the same dealer gave also a negative result. The Colton, Leeds, Halton and Roundhay samples were all negative, all original, and all from separate farmers.

Of the two Leeds samples secured on December 7th, one was reported tuberculous and the other not tuberculous. They were taken from the same farmer's cans in the same cart in Meanwood Road. The farmer himself retailed, and the samples were taken purposely to ascertain whether or not he was mixing with the rest of his supply the milk from a cow which he had promised to isolate. The result of the test was telephoned to us on the 15th February, 1910. By that time, however, the farmer had given up the farm and destroyed the cow. We had had an opportunity of verifying Mr. Dixon's diagnosis at the knacker's yard, and we were not sorry to find that this man had given up the business, and we do not want to see him any more. The cow referred to is mentioned in Table VIII a. under date November 18th, November 22nd, and December 8th, under No. 17 Headingley.

The next three specimens from Bramhope, Thorner and Drighlington, passing over the three Rawdon samples (controls) already referred to, were originals and negative. The Horsforth sample was from the same farmer whose milk was examined on the 18th August, and the experiment entered as incomplete. The later sample might, therefore, be regarded as a control of the former and incomplete experiment.

TABLE 12.

Showing cases of Scarlet Fever heard of in Leeds during the twenty years, 1890-1909, with the numbers admitted to the city fever hospital and the deaths in the city and in hospital; showing also for biennial periods the relations to the population of the deaths in the city, and the admissions to hospital.

	Cases. †		Deaths.		Per 1,000 living (Annual rates).	
	Heard of.	Admitted to hospital.	City.	Hospital.	Deaths in city.	Cases in hospital.
1890	337	133	103	23	} 0·23	0·39
1891	328	152	66	18		
1892	812	440	74	19	} 0·14	0·83
1893	316	188	31	6		
1894*	967	453	52	18	} 0·13	1·21
1895	874	493	52	29		
1896	1,216	441	72	20	} 0·21	1·26
1897	1,791	576	95	27		
1898	2,002	532	121	25	} 0·22	1·43
1899	1,620	649	64	21		
1900	1,745	722	52	21	} 0·16	2·07
1901	2,280	1,038	82	39		
1902	1,962	1,041	56	23	} 0·19	2·37
1903	2,465	1,063	109	36		
1904	1,295	850	59	34	} 0·11	1·74
1905	935	720	39	30		
1906	1,029	796	33	25	} 0·09	1·76
1907	1,012	846	54	47		
1908	658	524	14	11	} 0·03	1·57
1909	1177	996	12	12		

* Notification became compulsory in May, 1894.

† "Cases heard of" does not include one fatal in the third quarter of 1894 (included, however, in the 52 deaths), of which we had no information till we received the Registrar's returns. Similarly one death in 1895, another in 1896, two in 1897, one in 1900, one in 1901, one in 1903, and two in 1906, are included in the death column, but not in that of cases heard of. Before May, 1894, there were, of course, many such.

TABLE 12 a.

Showing deaths from Scarlet Fever in Leeds during four periods of ten years each.

Periods.	Deaths.	Deaths per 1,000.*	Fall per cent. on rate of preceding period.
Ten years 1870-79 ...	3,090	1'09	...
Ten years 1880-89 ...	2,255	0'68	38
Ten years 1890-99 ...	725	0'19	72
Ten years 1900-09 ...	506	0'11	42

* The rate 1'09 is probably somewhat lower than the real rate for the period. It is calculated on an over-estimated population, and should probably be 1'11. As, however, the recent populations are mere estimates, the figure has been allowed to stand. The deaths are in each line those given by the Registrar General, which differ slightly in recent years from our own returns. The rates are recalculated from results of last census, as explained at pp. 69-71 of the Annual Report for 1902, where this matter was discussed.

TABLE 12 b.

Cases of scarlet fever reported in each quarter since 1894.

YEAR.	I. QUARTER.		II. QUARTER.		III. QUARTER.		IV. QUARTER.		YEAR TOTAL.	
	Heard of.	Hospit- alled.	Heard of.	Hospit- alled.	Heard of.	Hospit- alled.	Heard of.	Hospit- alled.	Heard of.	Hospit- alled.
1895	145	77	115	70	296	177	318	169	874	493
1896*	167	88	144	75	373†	137	532	141	1,216	441
1897	399	176	307	139	473	138	612	123	1,791	576
1898	580	109	521	145	491	123	410	155	2,002	532
1899	387	151	352	169	411	197	470	132	1,620	649
1900	340	122	337	145	389	204	679	251	1,745	722
1901	471	248	538	255	598	272	673	263	2,280	1,038
1902*	442	223	431	227	465	279	624†	312	1,962	1,041
1903	634	252	716	256	612	285	503	270	2,465	1,063
1904	323	220	300	197	320	188	352	245	1,295	850
1905	284	217	195	148	199	153	257	202	935	720
1906	201	148	241	176	312	259	275	213	1,029	796
1907	214	176	246	201	285	236	267	233	1,012	846
1908*	223	186	192	153	128†	97	115	88	658	524
1909	166	131	210	184	296	272	505	409	1,177	996
Averages of 15 years	332	168	323	169	377	201	439	214	1,471	752

* 53 week years, the others 52. † 14 week quarters, the others 13.

TABLE 13.

Deaths in Leeds during twenty years 1890-1909 certified from diphtheria, membranous croup, "croup," and laryngitis with death rates.

YEAR.	Population.	Diph- theria.	Mem- branous Croup.	"Croup."	Laryn- gitis, &c.	TOTALS.	
						Deaths.	Rate per 1,000 living.
1890*	363,018	24	—	32	26	82	0·22
1891	369,034	16	2	29	23	70	0·19
1892	375,081	29	1	48	35	113	0·30
1893	381,157	59	7	63	58	187	0·49
1894	387,259	60	15	52	41	168	0·44
1895	393,387	39	30	16	16	101	0·26
1896*	399,535	39	11	24	20	94	0·23
1897	405,716	51	23	17	24	115	0·28
1898	411,895	203	26	23	19	271	0·66
1899	418,101	299	36	14	24	373	0·90
1900	424,322	235	21	6	17	279	0·66
1901	430,575	163	12	18	14	207	0·48
1902*	437,036	82	14	6	15	117	0·26
1903	443,559	61	4	11	10	86	0·19
1904	450,142	40	10	10	17	77	0·17
1905	456,787	38	6	6	8	58	0·13
1906	463,495	76	8	5	17	106	0·23
1907	470,268	66	3	3	10	82	0·17
1908*	477,107	49	1	2	4	56	0·12
1909	484,012	61	4	5	10	80	0·17

* 53 week years, the others 52.

Population 1890 to 1900 by interpolation from data of three censuses. Since 1901 by Registrar-General's method of estimation.

COMMON ZYMOTIC DISEASES.

Scarlet fever.—Table 12 shows cases of scarlet fever heard of and admitted to hospital since 1890, with deaths in the City and hospital, and death and admission rates upon the population of the City. While the death rate in the City as a whole has been diminishing the proportion of cases sent to hospital has been increasing.

Table 12a shows the deaths and death rates in decades from 1870 to 1909.

Table 12b shows the cases notified to us in each quarter of the year since 1894, also the numbers admitted to hospital. Before the extension of the hospital many of the cases sent in could not be admitted immediately on receipt of notification for want of room; much of the advantage of isolation was therefore lost.

Diphtheria.—The deaths in Leeds from diphtheria, croup and laryngitis each year since 1890 are shown in table 13, and the death rate from the group in each year. In the first ten years the death rate averaged 0·40, in the second ten years 0·25.

Diarrhœa.—The death rate of 0·23 from diarrhœa is the smallest recorded during the last twenty years.

NOTE TO TABLE 17.

Table 17 contains the deaths at all ages and under certain age groups required in the first eight columns of the Local Government table IV. The information as to localities asked for in that table will be found in table A, where deaths in public institutions have been separated, and in table C, where deaths of Leeds persons in those institutions have been referred to the districts to which they belonged. In the notes to the Local Government table for 1906, the request is made that in regard to the deaths of children under one, the heading diarrhœa should be made to include the whole group of diarrhœal diseases given in their table V., and printed in this report at p. 17 and numbered table 5a. As to do so would interfere with the comparison of table 17 with the same table in previous years, this has not been done. To make table 17 correspond in this respect with table 5a, and thus satisfy the requirements of the note (e) on the Local Government Board's table, it would be necessary to add in column 3 under the headings "diarrhœa" and "enteritis" 9 deaths from gastritis and 3 from gastric catarrh. These deaths are included in our table 5a in the third and fourth lines of the second disease group. The other deaths in that group in the table are included in table 17, column 3, under diarrhœa or enteritis, making, with the addition of the 12 deaths, the total deaths amongst infants under one from the diarrhœal group in both tables 158. These 12 deaths are included under "other causes" in table 17 as printed, and under "diseases of the stomach," &c., in table C.

TABLE 17.

Causes of, and ages at, death during year (52 weeks) 1909.

CAUSES OF DEATH.	DEATHS IN WHOLE DISTRICT AT SUBJOINED AGES.							DEATHS IN SEVERAL QUARTERLY PERIODS (AT ALL AGES).				DEATHS PER 1,000 FOR YEAR.
	All ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	I.	II.	III.	IV.	
Small-pox...	...	...	...	...	...	...	...	...	...	...	...	...
Measles ...	78	16	59	3	...	...	...	25	13	21	19	0'16
Scarlet fever ...	12	...	5	6	...	1	...	4	2	3	3	0'02
Whooping-cough...	83	41	40	2	...	...	...	24	23	22	14	0'17
Diphtheria and membranous croup	65	3	35	22	1	4	...	27	15	11	12	0'13
Croup ...	5	...	4	1	...	...	...	...	3	...	2	0'01
Fever {	...	...	...	...	...	...	...	...	...	...	...	...

Typhus ...	2	...	...	...	...	2	...	...	2	...	...	0'00
Enteric ...	40	...	...	6	12	22	...	14	7	6	13	0'08
Other continued ...	...	...	...	...	...	...	...	...	...	...	...	...
Epidemic influenza ...	104	2	3	1	5	56	37	67	14	3	20	0'22
Cholera (English) ...	...	...	...	...	...	...	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea ...	110	86	15	...	...	5	4	9	6	72	23	0'23
Enteritis and gastro enteritis ...	80	60	12	2	1	4	1	17	13	28	22	0'17
Puerperal fever ...	19	...	...	...	6	13	...	5	8	2	4	0'04
Erysipelas ...	13	2	...	...	...	9	2	6	3	2	2	0'03
Other septic diseases ...	12	2	...	...	2	7	1	4	4	3	1	0'02
Phthisis ...	548	2	9	20	127	370	20	171	143	108	126	1'14
Other tubercular diseases ...	274	78	85	44	26	39	2	52	76	78	68	0'57
Cancer, malignant disease ...	449	...	...	...	1	310	138	110	99	119	121	0'93
Bronchitis ...	655	115	57	2	2	211	268	289	123	75	168	1'36
Broncho-pneumonia ...	288	112	115	8	2	29	22	94	83	54	57	0'60
Pneumonia and pleuro-pneu. ...	330	26	37	12	31	170	54	120	80	46	84	0'68
Pleurisy ...	18	...	...	1	...	15	2	4	8	2	4	0'04
Other diseases of respiratory organs ...	91	6	14	6	5	32	28	31	22	15	23	0'19
Alcoholism ...	...	...	...	...	...	...	...	...	...	...	...	...
Cirrhosis of liver ...	47	1	...	...	...	37	9	13	13	11	10	0'10
Venereal diseases ...	24	20	2	...	...	2	...	8	6	1	9	0'05
Premature birth ...	245	245	...	...	...	...	...	59	71	68	47	0'51
Diseases and accidents of parturition ...	46	17	...	...	6	23	...	13	11	13	9	0'10
Heart diseases ...	676	2	1	26	39	396	212	200	169	136	171	1'40
Accidents ...	213	25	36	26	14	70	42	65	46	38	64	0'44
Suicides ...	43	...	...	...	5	32	6	15	11	9	8	0'09
All other causes ...	2284	489	152	66	60	691	826	672	549	506	557	4'73
All causes ...	6854	1350	681	254	345	2550	1674	2118	1623	1452	1661	14'21

The deaths of outsiders in the workhouses within the city, which are excluded from the Registrar-General's figures, are included in this table. The diseases from which they died will be found enumerated in table C. As to diarrhoea and enteritis see note.

TABLE 18—*continued.*

Cases of infectious diseases notified during the year 1909.

Cases notified in whole district.

Notifiable disease.	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	65 up-wds.
Small-pox. I.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
II.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
III.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
IV.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera. I.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
II.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
III.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
IV.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria. I.	13	12	5	3	2	1	2	3	41	..	4	1	..	..	..	5
II.	20	17	13	12	4	5	3	1	75	..	..	..	..	..	..	..
III.	14	11	10	13	3	2	..	3	56	..	..	..	..	..	..	..
IV.	20	16	10	2	2	1	1	..	52	..	..	..	..	..	..	..
Totals ..	67	56	38	30	11	9	6	7	224	..	4	1	..	..	..	5
Memb Croup. I.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
II.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
III.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
IV.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas. I.	9	8	9	16	7	12	10	5	76	5	3	1	3	..	..	12
II.	5	6	3	11	10	2	6	6	49	1	3	4	1	..	..	9
III.	3	11	4	9	8	1	12	3	51	5	1	1	..	..	..	7
IV.	6	6	4	8	16	9	7	3	59	5	4	2	..	..	..	11
Totals ..	23	31	20	44	41	24	35	17	235	16	11	8	4	..	..	39
Scarlet fever. I.	4	1	..	..	..	..	..	..	5	..	..	..	..	..	..	..
II.	6	4	2	..	1	..	..	..	13	..	..	..	..	..	..	..
III.	5	1	1	..	..	..	..	..	7	..	..	..	..	..	..	..
IV.	7	1	2	..	2	..	..	..	12	..	..	..	..	..	..	..
Totals ..	22	7	5	..	3	..	..	..	37	..	..	..	..	..	..	..
Typhus fever. I.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
II.	..	..	1	1	1	..	1	1	5	..	..	..	..	..	..	..
III.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
IV.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals ..	..	..	1	1	1	..	1	1	5	..	..	..	..	..	..	..
Enteric fever I.	4	4	5	4	1	1	..	1	20	..	..	..	..	..	..	..
II.	7	3	2	1	..	2	..	1	17	..	..	..	..	..	..	..
III.	7	7	5	3	2	..	1	..	25	..	..	..	..	..	..	..
IV.	8	2	11	4	1	1	1	1	29	..	..	..	..	..	..	..
Totals ..	26	16	23	12	4	4	3	3	91	..	..	..	..	..	..	..
Relapsing fever. I.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
II.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
III.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
IV.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued fever. I.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
II.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
III.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
IV.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal fever. I.	3	1	..	..	..	..	..	..	4	..	..	..	..	..	..	..
II.	1	2	..	1	..	..	..	..	4	..	..	..	..	..	..	..
III.	3	3	..	..	..	..	..	..	6	..	..	..	..	..	..	..
IV.	2	1	1	1	..	..	..	..	5	..	..	..	..	..	..	..
Totals ..	9	7	1	2	..	..	..	..	19	..	..	..	..	..	..	..
Plague. I.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
II.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
III.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
IV.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

TABLE 19.

Table shewing deaths in the four quarters of 1909, for each Municipal Ward, with the estimated population and the death-rate of the ward for the Year.

MUNICIPAL WARDS.	Population, estimated to middle of 1909.	First quarter, 1909.	Second quarter, 1909.	Third quarter, 1909.	Fourth quarter, 1909.	Fifty- two weeks.	Death- rate.
Central	19,510	69	51	60	49	229	11·78
North	49,240	194	140	120	124	578	11·78
North-East	33,421	180	123	117	147	567	17·02
East	30,800	197	137	142	161	637	20·75
South	13,345	73	80	65	55	273	20·53
East Hunslet ...	40,465	137	121	119	127	504	12·50
West Hunslet ...	34,090	155	120	92	110	477	14·04
Holbeck	33,372	161	102	90	106	459	13·80
Mill Hill	6,577	29	26	16	28	99	15·10
West	23,504	121	107	89	105	422	18·02
North-West... ..	35,759	141	112	82	109	444	12·46
Brunswick	23,212	96	70	58	78	302	13·05
New Wortley ...	18,341	76	64	62	58	260	14·22
Armley & Wortley	44,735	149	140	96	133	518	11·62
Bramley	24,570	110	69	76	90	345	14·09
Headingley	53,071	178	112	121	135	546	10·32
Outsiders ... ..	...	52	49	47	46	194	..
Totals	484,012	2,118	1,623	1,452	1,661	6,854	14·21

The rates are calculated on populations estimated by the Registrar General's method, described at p. 88 of the Annual for 1904.

TABLE 20.

Shewing the number of deaths from certain specific causes and groups of causes in the 52 weeks of 1909 in the Sub-Registration Districts in the City of Leeds. All deaths in public institutions within the City of persons belonging to the City have been referred to the Sub-District to which they belonged.

	Small-pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	"Fever."	Diarrhoea.	All seven.	CROUP.		Phthisis.	Influenza and diseases of the air-passages other than consumption.	All causes.
									Membranous.	Other non-spasmodic.			
Leeds, North	...	4	3	10	17	8	15	57	...	...	79	223	869
„ West	...	10	3	14	5	9	16	57	...	...	124	251	1230
„ South-E.	...	12	1	2	8	5	17	45	...	2	55	205	752
Hunslet	...	21	1	12	21	8	32	95	2	...	79	230	1073
Holbeck	...	16	...	3	7	2	11	39	...	1	34	123	544
Wortley	...	6	2	6	9	3	11	37	...	1	59	164	845
Kirkstall	...	8	1	4	9	1	4	27	...	1	48	110	525
Bramley	3	1	2	2	8	2	...	17	54	278
Chapelton	...	1	1	6	6	4	2	20	...	...	45	109	534
Osmondthorpe	3	10
City of Leeds	...	78	12	60	83	42	110	385	4	5	540	1472	6660

One death from diphtheria, 8 deaths from phthisis, 14 from influenza and diseases of the air-passages other than consumption, and 171 deaths from other causes, occurred in the City of persons not belonging to Leeds; on the other hand 146 deaths occurred during the year of Leeds persons in West Riding Asylums and other public institutions, outside the City. Of these, 1 death was from whooping cough, 1 from "fever," 1 from diarrhoea, 14 were from phthisis, 8 from the lung groups, and 121 from other causes not given in table.

TABLE 21.

Shewing the mortality of the Sub-Districts stated in deaths per 1,000 of the population as estimated to the middle of 1909.

	Small-pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	"Fever."	Diarrhoea.	All seven.	CROUP.		Phthisis.	Influenza and diseases of the air-passages, other than consumption.	All causes.
									Membranous.	Other non-spasmodic.			
Leeds, North	...	0·07	0·05	0·17	0·29	0·14	0·26	0·97	...	...	1·35	3·81	14·85
„ West	...	0·12	0·04	0·16	0·06	0·11	0·19	0·67	...	...	1·45	2·94	14·39
„ S. E.	...	0·34	0·03	0·06	0·23	0·14	0·48	1·28	...	0·06	1·56	5·82	21·33
Hunslet	...	0·26	0·01	0·15	0·26	0·10	0·40	1·19	0·03	...	0·99	2·89	13·47
Holbeck	...	0·43	...	0·08	0·19	0·05	0·30	1·05	..	0·03	0·91	3·31	14·63
Wortley	...	0·09	0·03	0·09	0·13	0·04	0·16	0·55	...	0·01	0·87	2·42	12·45
Kirkstall	...	0·16	0·02	0·08	0·17	0·02	0·08	0·52	...	0·02	0·93	2·14	10·20
Bramley	0·15	0·05	0·10	0·10	0·41	0·10	...	0·87	2·77	14·27
Chapelton	...	0·02	0·02	0·13	0·13	0·08	0·04	0·42	...	...	0·96	2·31	11·34
Osmondthrp	8·88	29·60
City of Leeds	...	0·16	0·02	0·12	0·17	0·09	0·23	0·80	0·01	0·01	1·12	3·05	13·81

One death from diphtheria, 8 deaths from phthisis, 14 from influenza and diseases of the air-passages other than consumption, and 171 deaths from other causes not mentioned in the table, occurred in the City of persons not belonging to Leeds.

For provisional populations used see table A. The value of individual rates is exceedingly small. See text pp. 13, 39-41, &c.

TABLE 21a.
NORTH LEEDS.

Shewing for each year from 1890 to 1909 inclusive the births registered, the birth rate per thousand per annum, the deaths at all ages, and the death rate per thousand living, the deaths under one year of age and the ratio to the thousand births in the same period. Shewing also the average in these respects of the ten years previous to 1909.

YEAR.	Population estimated to middle of each year.	Births registered.	Birth rate per 1,000 per annum.	Deaths at all ages.	Death rate per 1,000 per annum.	Deaths under one year.	Death rate under one year per 1,000 births registered.
1890*	60,436	2,345	38·2	1,495	24·4	387	165
1891	60,563	2,401	39·8	1,619	26·8	464	193
1892	60,564	2,405	39·8	1,355	22·4	422	175
1893	60,526	2,300	38·1	1,544	25·6	491	213
1894	60,456	2,310	38·3	1,273	21·1	398	172
1895	60,331	2,343	39·0	1,381	23·0	431	184
1896*	60,176	2,318	37·9	1,298	21·2	410	177
1897	59,997	2,338	39·1	1,436	24·0	456	195
1898	59,925	2,261	37·9	1,307	21·9	392	173
1899	59,658	2,234	37·6	1,260	21·2	356	159
1900	59,475	2,147	36·2	1,290	21·8	353	164
1901	59,257	2,096	35·5	1,324	22·4	394	188
1902*	59,166	2,100	34·9	1,161	19·3	325	155
1903	59,082	2,057	34·9	1,090	18·5	319	155
1904	59,004	1,875	31·9	1,149	19·5	356	190
1905	58,932	1,870	31·8	1,040	17·7	303	162
1906	58,866	1,758	30·0	1,010	17·2	281	160
1907	58,806	1,623	27·7	946	16·1	235	145
1908*	58,752	1,651	27·7	990	16·6	249	151
Average of years 1899 to 1908 ..	59,100	1,941	32·8	1,126	19·0	317	163
1909	58,704	1,461	25·0	869	14·9	190	130

* The years 1890, 1896, 1902, 1908, were 53 week years, all the others 52.

Births in workhouses have been ascribed to the districts in which they occurred. The deaths in workhouses and other public institutions have been transferred to the districts to which the patients belonged, those from outside the City having been entirely omitted. Deaths of Leeds people dying outside the City have not been added, as our information was generally insufficient to fix the district to which they should be referred. Information about such is to be found in table D, part 2. For the method of obtaining the populations see Annual 1906, page 109, and the annual report for 1901.

[Tables 21a to 21k contain the information asked for by the Local Government Board in their table II.]

TABLE 21 b.
WEST LEEDS.

Shewing for each year from 1890 to 1909 inclusive the births registered, the birth rate per thousand per annum, the deaths at all ages, and the death rate per thousand living, the deaths under one year of age and the ratio to the thousand births in the same period. Shewing also the average in these respects of the ten years previous to 1909.

YEAR.	Population estimated to middle of each year.	Births registered.	Birth rate per 1,000 per annum.	Deaths at all ages.	Death rate per 1,000 per annum.	Deaths under one year.	Death rate under one year per 1,000 births registered.
1890*	82,907	2,394	28·4	1,774	21·1	389	162
1891	83,558	2,417	29·0	1,726	20·7	445	184
1892	83,898	2,321	27·8	1,573	18·8	408	176
1893	84,157	2,270	27·1	1,735	20·7	453	200
1894	84,371	2,261	26·9	1,385	16·5	327	145
1895	84,519	2,166	25·7	1,675	19·9	436	201
1896*	84,545	2,253	26·2	1,534	17·9	387	172
1897	84,519	2,180	25·9	1,620	19·2	427	196
1898	84,415	2,339	27·8	1,683	20·0	439	188
1899	84,499	2,085	24·8	1,548	18·4	378	181
1900	84,455	2,214	26·3	1,662	19·7	427	193
1901	84,374	2,145	25·5	1,631	19·4	398	186
1902*	84,517	2,186	25·5	1,455	16·9	347	159
1903	84,670	1,994	23·6	1,332	15·8	304	152
1904	84,832	1,921	22·7	1,473	17·4	334	174
1905	85,005	1,905	22·5	1,290	15·2	285	150
1906	85,186	1,869	22·0	1,388	16·4	302	162
1907	85,376	1,809	21·3	1,328	15·6	220	122
1908*	85,576	1,975	22·7	1,312	15·1	247	125
Average of years 1899 to 1908 ..	84,849	2,010	23·7	1,442	17·0	324	161
1909	85,785	1,871	21·9	1,230	14·4	226	121

* The years 1890, 1896, 1902, 1908, were 53 week years, all the others 52.

Births in workhouses have been ascribed to the districts in which they occurred. The deaths in workhouses and other public institutions have been transferred to the districts to which the patients belonged, those from outside the City having been entirely omitted. Deaths of Leeds people dying outside the City have not been added, as our information was generally insufficient to fix the district to which they should be referred. Information about such is to be found in table D, part 2. For the method of obtaining the populations see Annual 1906, page 109, and the annual report for 1901.

[Tables 21a to 21k contain the information asked for by the Local Government Board in their table II.]

TABLE 21c.
SOUTH-EAST LEEDS.

Shewing for each year from 1890 to 1909 inclusive the births registered, the birth rate per thousand per annum, the deaths at all ages, and the death rate per thousand living, the deaths under one year of age and the ratio to the thousand births in the same period. Shewing also the average in these respects of the ten years previous to 1909.

YEAR.	Population estimated to middle of each year.	Births registered.	Birth rate per 1,000 per annum.	Deaths at all ages.	Death rate per 1,000 per annum.	Deaths under one year.	Death rate under one year per 1,000 births registered.
1890*	33,147	1,279	38·0	922	27·4	255	199
1891	33,363	1,241	37·3	1,063	32·0	293	236
1892	33,502	1,310	39·2	814	24·4	266	203
1893	33,629	1,208	36·0	1,022	30·5	307	254
1894	33,736	1,240	36·9	771	22·9	218	176
1895	33,865	1,180	35·0	836	24·8	269	228
1896*	33,942	1,146	33·2	834	24·2	213	186
1897	34,022	1,183	34·9	896	26·4	284	240
1898	34,104	1,222	36·0	850	25·0	282	231
1899	34,161	1,207	35·5	824	24·2	241	200
1900	34,235	1,221	35·8	876	25·7	284	233
1901	34,327	1,100	32·2	881	25·8	288	262
1902*	34,444	1,227	35·1	819	23·4	255	208
1903	34,564	1,258	36·5	801	23·3	233	185
1904	34,688	1,254	36·3	928	26·8	294	234
1905	34,817	1,235	35·6	771	22·2	251	203
1906	34,949	1,240	35·6	844	24·2	233	188
1907	35,085	1,211	34·6	804	23·0	213	176
1908*	35,226	1,220	34·1	871	24·3	248	203
Average of years 1899 to 1908 ..	34,650	1,217	35·1	842	24·3	254	209
1909	35,370	1,132	32·1	752	21·3	173	153

* The years 1890, 1896, 1902, 1908, were 53 week years, all the others 52.

Births in workhouses have been ascribed to the districts in which they occurred. The deaths in workhouses and other public institutions have been transferred to the districts to which the patients belonged, those from outside the City having been entirely omitted. Deaths of Leeds people dying outside the City have not been added, as our information was generally insufficient to fix the district to which they should be referred. Information about such is to be found in table D, part 2. For the method of obtaining the populations see Annual 1906, page 109, and the annual report for 1901.

[Tables 21a to 21k contain the information asked for by the Local Government Board in their table II.]

TABLE 21d.

HUNSLET.

Shewing for each year from 1890 to 1909 inclusive the births registered, the birth rate per thousand per annum, the deaths at all ages, and the death rate per thousand living, the deaths under one year of age and the ratio to the thousand births in the same period. Shewing also the average in these respects of the ten years previous to 1909.

YEAR.	Population estimated to middle of each year.	Births registered.	Birth rate per 1,000 per annum.	Deaths at all ages.	Death rate per 1,000 per annum.	Deaths under one year.	Death rate under one year per 1,000 births registered.
1890*	57,042	2,127	36·7	1,393	24·0	410	193
1891	58,515	2,231	38·3	1,307	22·4	380	170
1892	59,734	2,187	36·7	1,177	19·8	393	180
1893	60,903	2,203	36·3	1,347	22·2	482	219
1894	62,105	2,171	35·1	1,046	16·9	328	151
1895	63,290	2,190	34·7	1,314	20·8	446	204
1896*	64,414	2,141	32·7	1,273	19·5	380	177
1897	64,894	2,292	35·4	1,215	18·8	436	190
1898	66,086	2,198	33·4	1,149	17·4	401	182
1899	67,241	2,271	33·9	1,264	18·9	432	190
1900	68,329	2,296	33·7	1,481	21·7	450	196
1901	69,383	2,401	34·7	1,347	19·5	461	192
1902*	70,666	2,340	32·6	1,287	17·9	411	176
1903	71,959	2,282	31·8	1,120	15·6	387	170
1904	73,262	2,264	31·0	1,344	18·4	408	180
1905	74,576	2,140	28·8	1,080	14·5	342	160
1906	75,901	2,143	28·3	1,244	16·5	375	175
1907	77,237	1,994	25·9	1,147	14·9	278	139
1908*	78,584	2,056	25·8	1,176	14·7	331	161
Average of years 1899 to 1908 ..	72,714	2,219	30·5	1,249	17·2	388	175
1909	79,943	1,861	23·4	1,073	13·5	252	135

* The years 1890, 1896, 1902, 1908, were 53 week years, all the others 52.

Births in workhouses have been ascribed to the districts in which they occurred. The deaths in workhouses and other public institutions have been transferred to the districts to which the patients belonged, those from outside the City having been entirely omitted. Deaths of Leeds people dying outside the City have not been added, as our information was generally insufficient to fix the district to which they should be referred. Information about such is to be found in table D, part 2. For the method of obtaining the populations see Annual 1906, page 109, and the annual report for 1901.

[Tables 21a to 21k contain the information asked for by the Local Government Board in their table II.]

TABLE 21 e.

HOLBECK.

Shewing for each year from 1890 to 1909 inclusive the births registered, the birth rate per thousand per annum, the deaths at all ages, and the death rate per thousand living, the deaths under one year of age and the ratio to the thousand births in the same period. Shewing also the average in these respects of the ten years previous to 1909.

YEAR.	Population estimated to middle of each year.	Births registered.	Birth rate per 1,000 per annum.	Deaths at all ages.	Death rate per 1,000 per annum.	Deaths under one year.	Death rate under one year per 1,000 births registered.
1890*	23,168	798	33·9	568	24·1	145	182
1891	23,818	800	33·7	537	22·6	134	168
1892	24,410	837	34·4	522	21·5	133	159
1893	25,266	806	32·0	563	22·4	164	203
1894	26,035	866	33·4	497	19·2	163	188
1895	26,860	916	34·2	587	21·9	187	204
1896*	27,642	913	32·5	544	19·4	155	170
1897	29,026	997	34·5	602	20·8	213	214
1898	29,759	1,008	34·0	584	19·7	202	200
1899	30,425	1,063	35·1	674	22·2	180	169
1900	31,074	1,069	34·5	640	20·7	208	195
1901	31,741	1,055	33·4	679	21·5	221	209
1902*	32,421	1,106	33·6	589	17·9	187	169
1903	33,105	1,103	33·4	609	18·5	191	173
1904	33,795	1,108	32·9	630	18·7	197	178
1905	34,489	1,075	31·3	594	17·3	158	147
1906	35,189	1,007	28·7	595	17·0	185	184
1907	35,893	1,055	29·5	537	15·0	141	134
1908*	36,604	1,029	27·7	637	17·1	139	135
Average of years 1899 to 1908 ..	33,474	1,067	31·9	618	18·5	181	169
1909	37,320	1,004	27·0	544	14·6	118	118

* The years 1890, 1896, 1902, 1908, were 53 week years, all the others 52.

Births in workhouses have been ascribed to the districts in which they occurred. The deaths in workhouses and other public institutions have been transferred to the districts to which the patients belonged, those from outside the City having been entirely omitted. Deaths of Leeds people dying outside the City have not been added, as our information was generally insufficient to fix the district to which they should be referred. Information about such is to be found in table D, part 2. For the method of obtaining the populations see Annual 1906, page 109, and the annual report for 1901.

[Tables 21a to 21k contain the information asked for by the Local Government Board in their table II.]

TABLE 21f.
WORTLEY.

Shewing for each year from 1890 to 1909 inclusive the births registered, the birth rate per thousand per annum, the deaths at all ages, and the death rate per thousand living, the deaths under one year of age and the ratio to the thousand births in the same period. Shewing also the average in these respects of the ten years previous to 1909.

YEAR.	Population estimated to middle of each year.	Births registered.	Birth rate per 1,000 per annum.	Deaths at all ages.	Death rate per 1,000 per annum.	Deaths under one year.	Death rate under one year per 1,000 births registered.
1890*	48,631	1,699	34·4	1,015	20·5	277	163
1891	49,722	1,658	33·5	1,070	21·6	271	163
1892	50,815	1,683	33·2	954	18·8	279	166
1893	51,868	1,658	32·1	996	19·3	319	192
1894	52,943	1,702	32·3	925	17·5	274	161
1895	54,004	1,662	30·9	1,054	19·6	311	187
1896*	55,008	1,723	30·8	950	17·0	316	183
1897	55,969	1,765	31·6	1,028	18·4	299	169
1898	56,948	1,755	30·9	1,108	19·5	325	185
1899	57,916	1,777	30·8	1,108	19·2	338	190
1900	58,770	1,805	30·8	1,143	19·5	309	171
1901	59,585	1,790	30·1	1,045	17·6	315	176
1902*	60,618	1,863	30·3	1,049	17·0	317	170
1903	61,660	1,760	28·6	1,010	16·4	269	153
1904	62,710	1,666	26·7	1,100	17·6	292	175
1905	63,769	1,653	26·0	943	14·8	245	148
1906	64,837	1,616	25·0	917	14·2	225	139
1907	65,915	1,509	23·0	974	14·8	206	137
1908*	67,002	1,497	22·0	948	13·9	189	126
Average of years 1899 to 1908 ..	62,278	1,694	27·2	1,024	16·4	271	160
1909	68,099	1,356	20·0	845	12·5	175	129

* The years 1890, 1896, 1902, 1908, were 53 week years, all the others 52.

Births in workhouses have been ascribed to the districts in which they occurred. The deaths in workhouses and other public institutions have been transferred to the districts to which the patients belonged, those from outside the City having been entirely omitted. Deaths of Leeds people dying outside the City have not been added, as our information was generally insufficient to fix the district to which they should be referred. Information about such is to be found in table D, part 2. For the method of obtaining the populations see Annual 1906, page 109, and the annual report for 1901.

[Tables 21a to 21k contain the information asked for by the Local Government Board in their table II.]

TABLE 21g.
KIRKSTALL.

Shewing for each year from 1890 to 1909 inclusive the births registered, the birth rate per thousand per annum, the deaths at all ages, and the death rate per thousand living, the deaths under one year of age and the ratio to the thousand births in the same period. Shewing also the average in these respects of the ten years previous to 1909.

YEAR.	Population estimated to middle of each year.	Births registered.	Birth rate per 1,000 per annum.	Deaths at all ages.	Death rate per 1,000 per annum.	Deaths under one year.	Death rate under one year per 1,000 births registered.
1890*	29,307	923	31·0	543	18·2	147	159
1891	30,243	908	30·1	517	17·2	125	138
1892	31,538	926	29·5	420	13·4	98	106
1893	32,787	994	30·4	605	18·5	177	178
1894	34,063	946	27·9	471	13·9	120	127
1895	35,326	1,039	29·5	561	15·9	179	172
1896*	36,510	1,040	28·0	537	14·5	118	113
1897	37,639	1,026	27·4	576	15·4	153	149
1898	38,779	1,081	28·0	548	14·2	159	147
1899	39,875	1,067	26·9	602	15·1	148	139
1900	40,889	1,085	26·6	661	16·2	191	176
1901	41,859	1,027	24·6	535	12·8	148	144
1902*	43,055	1,098	25·1	560	12·8	112	102
1903	44,258	1,101	25·0	526	11·9	124	113
1904	45,468	1,069	23·6	551	12·2	143	134
1905	46,686	981	21·1	511	11·0	119	121
1906	47,911	1,020	21·4	513	10·7	99	97
1907	49,144	962	19·6	556	11·4	81	84
1908*	50,385	999	19·5	542	10·6	100	100
Average of years 1899 to 1908 ..	44,953	1,041	23·1	556	12·4	127	122
1909	51,635	944	18·3	525	10·2	84	89

* The years 1890, 1896, 1902, 1908, were 53 week years, all the others 52.

Births in workhouses have been ascribed to the districts in which they occurred. The deaths in workhouses and other public institutions have been transferred to the districts to which the patients belonged, those from outside the City having been entirely omitted. Deaths of Leeds people dying outside the City have not been added, as our information was generally insufficient to fix the district to which they should be referred. Information about such is to be found in table D, part 2. For the method of obtaining the populations see Annual 1906, page 109, and the annual report for 1901.

[Tables 21a to 21k contain the information asked for by the Local Government Board in their table II.]

TABLE 21h.
BRAMLEY.

Shewing for each year from 1890 to 1909 inclusive the births registered, the birth rate per thousand per annum, the deaths at all ages, and the death rate per thousand living, the deaths under one year of age and the ratio to the thousand births in the same period. Shewing also the average in these respects of the ten years previous to 1909.

YEAR.	Population estimated to middle of each year.	Births registered.	Birth rate per 1,000 per annum.	Deaths at all ages.	Death rate per 1,000 per annum.	Deaths under one year.	Death rate under one year per 1,000 births registered.
1890*	14,526	453	30·7	338	22·9	78	172
1891	14,867	497	33·5	260	17·5	50	101
1892	15,203	460	30·4	256	16·9	60	130
1893	15,515	462	29·9	312	20·2	89	193
1894	15,820	506	32·1	215	13·6	66	130
1895	16,109	468	29·2	273	17·0	70	150
1896*	16,351	481	29·0	280	16·9	82	170
1897	16,568	483	29·3	273	16·5	71	147
1898	16,798	444	26·5	298	17·8	85	191
1899	17,003	496	29·3	315	18·6	56	113
1900	17,188	449	26·2	262	15·3	66	147
1901	17,365	479	27·7	256	14·8	78	163
1902*	17,628	456	25·5	274	15·3	59	129
1903	17,895	491	27·5	259	14·5	56	114
1904	18,164	470	26·0	290	16·0	68	145
1905	18,435	459	25·0	246	13·4	47	102
1906	18,709	465	24·9	233	12·5	44	95
1907	18,986	458	24·2	260	13·7	58	127
1908*	19,265	476	24·3	276	14·1	36	76
Average of years 1899 to 1908 ..	18,064	470	26·0	267	14·8	57	121
1909	19,547	405	20·8	278	14·3	40	99

* The years 1890, 1896, 1902, 1908, were 53 week years, all the others 52.

Births in workhouses have been ascribed to the districts in which they occurred. The deaths in workhouses and other public institutions have been transferred to the districts to which the patients belonged, those from outside the City having been entirely omitted. Deaths of Leeds people dying outside the City have not been added, as our information was generally insufficient to fix the district to which they should be referred. Information about such is to be found in table D, part 2. For the method of obtaining the populations see Annual 1906, page 109, and the annual report for 1901.

[Tables 21a to 21k contain the information asked for by the Local Government Board in their table II.]

TABLE 21i.
CHAPELTOWN.

Shewing for each year from 1890 to 1909 inclusive the births registered, the birth rate per thousand per annum, the deaths at all ages, and the death rate per thousand living, the deaths under one year of age and the ratio to the thousand births in the same period. Shewing also the average in these respects of the ten years previous to 1909.

YEAR.	Population estimated to middle of each year.	Births registered.	Birth rate per 1,000 per annum.	Deaths at all ages.	Death rate per 1,000 per annum.	Deaths under one year.	Death rate under one year per 1,000 births registered.
1890*	13,420	308	22·6	185	13·6	32	104
1891	13,956	373	26·8	180	12·9	50	134
1892	14,994	403	27·0	201	13·4	49	122
1893	16,089	438	27·3	234	14·6	55	126
1894	17,319	488	28·3	203	11·8	47	96
1895	18,677	500	26·9	250	13·4	49	98
1896*	20,546	552	26·4	261	12·5	56	101
1897	22,686	638	28·2	321	14·2	106	166
1898	24,690	654	26·6	314	12·8	82	125
1899	26,936	735	27·4	322	12·0	82	112
1900	29,524	802	27·3	416	14·1	98	122
1901	32,306	796	24·7	409	12·7	114	143
1902*	34,148	860	24·8	403	11·6	89	103
1903	35,998	941	26·2	396	11·0	100	106
1904	37,856	930	24·7	454	12·0	106	114
1905	39,720	1,016	25·7	465	11·8	113	111
1906	41,594	964	23·3	471	11·4	82	85
1907	43,477	1,046	24·1	480	11·1	89	85
1908*	45,369	1,098	23·8	547	11·9	111	101
Average of years 1899 to 1908 ..	36,693	919	25·0	436	11·9	98	107
1909	47,270	952	20·2	534	11·3	85	89

* The years 1890, 1896, 1902, 1908, were 53 week years, all the others 52.

Births in workhouses have been ascribed to the districts in which they occurred. The deaths in workhouses and other public institutions have been transferred to the districts to which the patients belonged, those from outside the City having been entirely omitted. Deaths of Leeds people dying outside the City have not been added, as our information was generally insufficient to fix the district to which they should be referred. Information about such is to be found in table D, part 2. For the method of obtaining the populations see Annual 1906, page 109, and the annual report for 1901.

[Tables 21a to 21k contain the information asked for by the Local Government Board in their table II.]

TABLE 21 k.
OSMONDTHORPE.

Shewing for each year from 1890 to 1909 inclusive the births registered, the birth rate per thousand per annum, the deaths at all ages, and the death rate per thousand living, the deaths under one year of age and the ratio to the thousand births in the same period. Shewing also the average in these respects of the ten years previous to 1909.

YEAR.	Population estimated to middle of each year.	Births registered.	Birth rate per 1,000 per annum.	Deaths at all ages.	Death rate per 1,000 per annum.	Deaths under one year.	Death rate under one year per 1,000 births registered.
1890*	434	10	22·7	5	11·3	1	100
1891	429	12	28·1	6	14·0	..	..
1892	423	14	33·2	2	4·7	..	..
1893	417	9	21·7	7	16·8	1	111
1894	411	12	29·3	7	17·1	1	83
1895	406	14	34·6	3	7·4	1	71
1896*	401	6	14·7	10	24·6	2	333
1897	396	10	25·3	6	15·2	2	200
1898	391	9	23·1	13	33·4	2	222
1899	387	4	10·4	7	18·1	1	250
1900	383	3	7·9	4	10·5	1	333
1901	378	9	23·9	5	13·3	..	..
1902*	373	9	23·8	6	15·8	4	444
1903	368	9	24·5	7	19·1	2	222
1904	363	4	11·1	4	11·1	..	..
1905	358	3	8·4	6	16·8	..	..
1906	353	11	31·3	7	19·9	2	182
1907	349	11	31·6	7	20·1	2	182
1908*	344	6	17·2	7	20·0	2	333
Average of years 1890 to 1908 ..	366	7	18·8	6	16·4	1	203
1909	339	16	47·4	10	29·6	..	..

* The years 1890, 1896, 1902, 1908, were 53 week years, all the others 52.

Births in workhouses have been ascribed to the districts in which they occurred. The deaths in workhouses and other public institutions have been transferred to the districts to which the patients belonged, those from outside the City having been entirely omitted. Deaths of Leeds people dying outside the City have not been added, as our information was generally insufficient to fix the district to which they should be referred. Information about such is to be found in table D, part 2. For the method of obtaining the populations see Annual 1906, page 109, and the annual report for 1901. The population since 1901 is probably underestimated.

[Tables 21a to 21k contain the information asked for by the Local Government Board in their table II.]

LEEDS, 1909.

FROM PRELIMINARY REPORT.

In the 52 weeks ended 1st January, 1910, the following births and deaths were registered, and cases of infectious diseases reported.

Population estimated by the Registrar General	...	...	484,012
Acreage	...	...	21,572
Births registered	11,002	Birth rate per thousand	22·8
Average birth-rate, ten years, 1899-1908 †	...	...	28·1
Deaths (all ages)	6,854	Death-rate per thousand	14·2
(R.G. 6,784 = 14·06).*			
Average death-rate, ten years, 1899-1908*†	...	...	17·3
Deaths (under 1 year)...	1,350	Ratio to 1,000 births	123

	Total deaths. (52 weeks).	Death rate per thousand.		Cases notified. 1909.
		1909.	1899-1908.	
1. Small-pox ...	...	...	0·01	...
2. Measles ...	78	0·16	0·44	51 ||
3. Scarlatina ...	12	0·02	0·13	1,177
4. { Diphtheria ...	61	0·13	0·25	1,308
{ Memb. croup ...	4	0·01	0·03	11
{ Other croups ...	5	0·01	0·02	2 ||
5. Whooping cough ...	83	0·17	0·35	...
6. { Typhus ...	2	0·00	0·00	7
{ Typhoid ...	40	0·08	0·13	217
{ Ctd. fever ...	...	...	0·00	...
{ Puer. septicæmia ...	19	0·04	0·03	32
{ Erysipelas ...	13	0·03	0·03	359
7. Diarrhoea ...	110	0·23	0·86	...
Enteritis, gastro enteritis ...	80	0·17	0·24	...
Cholera (English) ...	...	...	0·00	...
Phthisis ...	548	1·14	1·32	934 §
Other tuberculous diseases	274	0·57	0·72	...
Seven commoner zymotics (including mem. croup) f	390	0·81	2·21	...
Bronchitis	1,291	2·68	2·99	...
Pneumonia				
Pleurisy				
Other lung diseases (without influenza) f	91	0·19	0·18	...
Malignant growths ...	449	0·93	0·87	...
Violence and accident ...	256	0·53	0·61	...

* The R.G. excludes deaths of non-municipal paupers. He also adds those of Leeds persons dying in Public Institutions outside. The rates 14·2 and 17·3 are calculated on the larger numbers. See also note to table 2.

† Calculated on average population, non-residents not excluded. The average of the published returns to one decimal place are birth-rate 28·2, death-rate 17·4. The death-rates for special groups are the uncorrected means of the published returns, from which non-residents were not excluded.

|| Means not notifiable. § Notification voluntary except as to paupers.

TABLE 22.

Table showing deaths from all causes at all ages, and death rates at all ages in the intercepts of the wards and townships of Leeds for the year 1909 (52 weeks).

			Deaths, 1909.	Average death rate per thousand.
HOLBECK	Holbeck		459	13·80
	West Hunslet*... ..		83	21·59
HUNSLET	West Hunslet		394	13·08
	East Hunslet		504	12·50
	South		177	19·02
SOUTH-EAST LEEDS	South ... }	25·55 {	96	24·03
	Central ... }		29	32·33
	East		627	20·65
OSMONDTHORPE ...	East* }	15·70 {	10	29·59
CHAPELTOWN ...	North-east* }		172	15·28
(part of)	North { C. A. }	9·78 {	63	11·14
	Pott. }		240	9·47
NORTH LEEDS ...	North		275	15·21
	North-east		395	17·91
	Central		199	10·82
	Central in W. }	10·78 {	1	5·83
WORTLEY	New Wortley		260	14·22
	Armley ... }	11·62 {	393	·31
	Wortley ... }		125	12·71
	Farnley		67	13·38
BRAMLEY	Bramley		278	14·27
KIRKSTALL	Kirkstall		61	13·25
	Burley	10·20 {	330	10·18
	Headingley		134	9·28
CHAPELTOWN ...	Headingley		21	14·68
(part of)	North-west	12·14 {	1	13·51
	Brunswick		37	11·03
WEST	Brunswick		265	13·40
	North-west		443	12·46
	Mill Hill		99	15·10
	West		422	18·02
CITY ... ..	... ..		6,660	13·81
	Outsiders		194	...

*The rates are calculated on populations estimated by the Registrar General's method, described at p. 88 of the Annual for 1904. The rates for West Hunslet (in Holbeck), for Osmondthorpe, and for N.E. (in Chapeltown), are more probably 10·97, 16·65, and 12·12, and that for Osmondthorpe with N.E. in Potternewton 12·31.

TABLE 22a.

Table showing deaths from all causes at all ages, and death rates at all ages in the intercepts of the wards and townships of Leeds in the five years 1905-9.

					Deaths, 1905-9.	Average death rate per thousand.
HOLBECK	Holbeck ... ..	...	...	...	2,472	15'14
	West Hunslet* ... ..	...	...	...	428	22'57
HUNSLET	West Hunslet ... ..	...	...	...	2,057	14'13
	East Hunslet ... ..	...	...	...	2,746	14'24
	South ... ..	...	...	...	924	19'44
SOUTH-EAST LEEDS	South	}	26'58	{	537	25'27
	Central				163	32'04
	East				3,342	22'40
OSMONDTHORPE	East*	}	16'52	{	37	21'22
CHAPELTOWN (part of)	North-east*				822	16'35
	North { C. A.				300	11'07
	Pott.				1,070	9'15
NORTH LEEDS	North ... ..	...	...	...	1,440	16'11
	North-east ... ..	...	...	...	2,180	19'55
	Central	}	13'32	{	1,235	13'24
	Central in W.				21	21'35
WORTLEY	New Wortley ... ..	...	...	...	1,568	17'01
	Armley	}	13'07	{	2,073	12'54
	Wortley				714	14'90
	Farnley				272	11'20
BRAMLEY	Bramley ... ..	...	...	...	1,293	13'61
KIRKSTALL	Kirkstall	}	10'77	{	304	13'50
	Burley				1,662	10'84
	Headingley				681	9'72
CHAPELTOWN (part of)	Headingley	}	13'13	{	110	15'90
	North-west				5	12'95
	Brunswick				190	11'93
WEST	Brunswick ... ..	...	...	...	1,400	14'04
	North-west ... ..	...	...	...	2,343	13'46
	Mill Hill ... ..	...	...	...	544	15'86
	West ... ..	...	...	...	2,240	18'98
CITY ... ..	... ..	...	...	...	35,173	14'95
	Outsiders ... ..	...	...	...	942	...

*The rates are calculated on populations estimated by the Registrar General's method, described at p. 88 of the Annual for 1904. (See also above pp. 40-41).

TABLE 25.

Shewing case-houses examined on account of certain diseases heard of during 1909, and some of the conditions found as to drainage and closet arrangements.

	1	2	3	4	5	6	7	8	9	10	
	Drains severed.										
	Water-closet.										
	Inside.				Outside.		T. W. C.		M. or P.		
	F. V.		not F. V.		def.	not	def.	not	def.	not.	
	def.	not	def.	not							
Through ...	...	...	...	...	...	...	...	...	...	...	} 1. Smallpox
Back-to-back ...	...	...	...	...	...	...	...	...	...	...
Through ...	16	164	...	1	12	133	2	21	2	14	} 2. Scarlet fever
Back-to-back ...	18	83	...	3	35	396	1	67	1	2	
Through ...	52	212	7	8	30	159	2	19	1	6	} 3. Diphtheria
Back-to-back ...	22	78	3	2	48	340	6	109	...	3	
Through ...	...	...	...	...	...	...	...	1	...	...	} 4. Membranous croup
Back-to-back ...	...	2	...	...	...	...	4	...	...	...
Through ...	...	...	...	...	...	...	...	...	...	...	} 5. "Croup"
Back-to-back ...	...	...	...	...	...	...	...	1	...	...
Through ...	...	...	...	...	...	...	...	...	...	...	} 6. Typhus fever
Back-to-back ...	...	...	...	...	...	4	...	...	...	...
Through ...	1	20	...	...	2	31	...	6	1	1	} 7. Typhoid fever
Back-to-back ...	...	5	1	2	13	56	...	41	...	1	
Through ...	...	...	...	...	...	...	...	...	...	...	} 8. Continued fever
Back-to-back ...	...	...	...	...	...	...	...	...	...	...
Through ...	...	31	...	1	...	47	...	11	...	1	} 9. Erysipelas
Back-to-back ...	...	21	...	2	...	110	...	44	...	2	
Through ...	...	...	...	...	...	3	...	1	...	...	} 10. Puerperal fever... ..
Back-to-back ...	...	1	...	...	...	13	2	4	...	...
Through ...	...	1	...	...	1	3	...	2	...	1	} 11. Measles : death-houses ..
Back-to-back ...	...	1	...	...	4	26	...	20	...	...
Through ...	...	6	...	...	...	4	...	...	...	...	} 12. Measles : recovery houses ..
Back-to-back ...	4	13	...	...	...	12	1	3	...	1	
Through ...	...	...	...	...	...	...	...	...	...	...	} 13. Measles : recoveries in death-houses
Back-to-back ...	...	...	...	...	...	...	...	1	...	...
Through ...	...	4	...	...	...	8	...	...	...	...	} 14. Diarrhœa
Back-to-back ...	...	3	...	...	...	38	...	33	...	1	
Through ...	...	26	...	...	...	42	...	2	...	2	} 15. Phthisis : death-houses ..
Back-to-back ...	...	11	...	...	...	84	...	36	...	...
Through ...	...	34	...	1	...	94	...	21	...	2	} 16. Phthisis : notified in life ..
Back-to-back ...	...	33	...	...	...	309	...	153	...	...
Through ...	...	16	...	...	...	36	...	3	...	...	} 17. Broncho-pneumonia
Back-to-back ...	...	18	...	...	...	107	...	55	...	2	
Through ...	...	24	...	2	...	39	...	4	...	2	} 18. Pneumonia
Back-to-back ...	...	11	...	1	...	108	...	52	...	1	
Through ...	...	4	...	...	...	...	...	...	...	...	} 19. Pleuro-pneumonia
Back-to-back ...	...	1	...	...	...	3	...	...	...	...
Through ...	...	3	...	...	1	2	...	...	...	...	} 20. Pleurisy... ..
Back-to-back ...	...	...	...	...	...	3	...	3	...	...
Through ...	...	1	...	...	...	...	...	...	...	...	} 21. Laryngitis
Back-to-back ...	...	1	...	...	...	1	...	2	...	...
Through ...	...	7	...	...	...	14	...	...	...	2	} 22. Influenza
Back-to-back ...	...	10	...	1	...	32	...	8	...	1	
Through ...	69	553	7	13	46	615	4	91	4	31	
Back-to-back ...	44	292	4	11	100	1646	10	632	1	14	
Both ...	113	845	11	24	146	2261	14	723	5	45	

TABLE 25.—Continued.

		1	2	3	4	5	6	7	8	9	10	11	Cases.		Total deaths in City.
		Drains not severed.													
		Water-closet.										No drain	Alive.	Dead.	
		Inside.		Outside.		T.W.C.		M. or P.							
		F.V.	not F.V.	def.	not	def.	not	def.	not	def.	not				
		def.	not	def.	not	def.	not	def.	not	def.	not				
1.	{ Through	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	{ Back-to-back	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2.	{ Through	1	5	...	...	5	12	1	5	...	2	...	396	...	12
	{ Back-to-back	3	7	1	...	19	65	11	22	...	...	6	740	...	...
3.	{ Through	1	5	...	...	6	14	...	6	...	...	...	528	...	61
	{ Back-to-back	4	17	...	...	18	38	5	19	2	...	3	710	7	...
4.	{ Through	...	...	...	...	...	...	...	...	...	...	...	1	...	4
	{ Back-to-back	...	...	...	...	...	1	...	1	...	...	2	10	...	...
5.	{ Through	...	...	...	...	...	...	...	...	...	...	...	...	...	5
	{ Back-to-back	...	1	...	...	...	...	...	...	...	...	...	2	...	...
6.	{ Through	...	...	...	...	...	...	...	...	...	...	...	...	...	2
	{ Back-to-back	...	...	...	...	...	3	...	...	...	...	...	7	...	...
7.	{ Through	...	1	...	...	...	...	...	1	...	1	1	66	...	40
	{ Back-to-back	...	2	...	...	2	7	3	6	...	...	1	140	...	...
8.	{ Through	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	{ Back-to-back	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9.	{ Through	...	3	...	...	...	8	...	...	...	...	...	102	...	13
	{ Back-to-back	...	6	...	...	...	23	...	12	...	...	...	220	...	...
10.	{ Through	...	...	...	...	...	1	...	...	...	...	...	5	...	19
	{ Back-to-back	...	...	...	...	...	2	1	...	1	...	...	22	2	...
11.	{ Through	...	...	...	...	...	...	...	1	...	...	...	...	9	78
	{ Back-to-back	...	...	...	...	...	3	8	2	4	...	...	...	68	...
12.	{ Through	...	...	...	...	...	...	...	...	...	...	...	10	...	...
	{ Back-to-back	...	...	...	...	...	...	...	2	...	...	...	36	...	...
13.	{ Through	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	{ Back-to-back	...	...	...	...	...	...	1	...	...	...	...	2	...	...
14.	{ Through	...	1	...	...	...	2	...	1	...	1	...	...	17	110
	{ Back-to-back	...	...	...	...	...	7	...	11	...	...	...	...	93	...
15.	{ Through	...	2	...	1	1	3	...	2	...	...	...	...	81	548
	{ Back-to-back	...	2	...	...	...	25	...	13	...	...	1	...	172	...
16.	{ Through	...	3	...	...	...	11	...	6	...	...	...	172	...	...
	{ Back-to-back	...	1	...	1	...	76	...	68	...	...	3	644	...	...
17.	{ Through	...	2	...	...	...	3	...	1	...	...	...	...	61	288
	{ Back-to-back	...	1	...	...	...	22	...	18	...	1	...	...	224	...
18.	{ Through	...	1	...	...	...	5	...	4	...	...	...	...	81	322
	{ Back-to-back	...	...	...	...	...	18	...	13	...	...	1	...	205	...
19.	{ Through	...	...	...	...	...	...	...	...	...	...	...	...	4	8
	{ Back-to-back	...	...	...	...	...	...	...	...	...	...	...	...	4	...
20.	{ Through	...	...	...	...	...	1	...	...	...	...	...	...	7	18
	{ Back-to-back	...	...	...	...	...	...	...	2	...	...	...	...	8	...
21.	{ Through	...	...	...	...	...	1	...	...	...	...	...	...	2	10
	{ Back-to-back	...	...	...	...	...	...	...	...	...	...	...	...	4	...
22.	{ Through	...	...	...	...	...	...	...	...	...	1	1	...	25	104
	{ Back-to-back	...	1	...	...	...	10	...	6	...	...	...	...	69	...
	Through	2	23	...	1	12	61	1	27	...	5	2	1280	287	...
	Back-to-back	7	38	1	1	44	304	22	197	3	1	17	2533	856	...
	Both	9	61	1	2	56	365	23	224	3	6	19	3813	1143	1642

MUNICIPAL YEAR.
VITAL STATISTICS FOR 1909-1910.

The following Births and Deaths were recorded in the several Sub-Registration Districts of the City of Leeds during the fifty-two weeks ended 1st October, 1910. The figures in italics after the Births and Deaths give the proportion per annum per 1,000 of the estimated population.

Districts.		Births.	Birth Rate.	Deaths.	Death Rate. All causes. 7 Zymotics.	
LEEDS.	North ...	...	...	831	14'21	0'91
	West ...	...	...	1,153	13'46	0'96
	South-East ...	1,115	31'53	792	22'40	2'12
	Hunslet ...	1,889	23'41	991	12'28	1'50
	Holbeck ...	1,023	27'10	545	14'44	1'51
	Wortley ...	1,273	18'53	838	12'20	1'13
	Kirkstall ...	923	17'60	492	9'40	0'61
	Bramley ...	403	20'46	241	12'24	0'66
	Chapelton	...	...	509	10'48	0'59
	Osmondthorpe ...	13	38'88	7	20'90	...
	<i>Outsiders</i> ...	...	...	215	...	...
Totals ...		10,833	22'21	6,614	13'57	1'11

Considered as occurring in the Municipal Wards, the foregoing Deaths are classed as follows:—

Wards.		Deaths.	Death Rate.	Wards.		Deaths.	Death Rate.
Eastern Division.				Western Division.			
Central ...	...	227	11'76	Mill Hill ...	...	98	15'18
North ...	...	527	10'53	West ...	...	402	17'18
North-East ...	...	562	16'67	North West ...	...	414	11'51
East ...	...	658	21'27	Brunswick ...	...	286	12'34
South ...	...	244	18'56	New Wortley ...	...	283	15'51
East Hunslet ...	...	492	12'01	Armley ...	...	496	10'94
West Hunslet ...	...	453	13'16	Bramley ...	...	300	12'12
Holbeck ...	...	451	13'35	Headingley ...	...	506	9'40

In both these tables deaths occurring in public institutions have been referred to the districts to which the patients belonged. The births in workhouses are included in those of the districts in which these institutions are situated. There were ninety-four deaths at Manston Hospital during this year.

The rates are calculated for the year on populations estimated by the Registrar General's method, described at p. 88 of the Annual for 1904. Owing to alterations in areas of district registrars, the birth rate for North, West, and Chapelton have been omitted, though included in the totals for the City.

TABLE I.

Table of Ward Inspectors' Work. Year 1909 (52 weeks).

		Quarters.				City Total 1909.
		I.	II.	III.	IV.	
HOUSE INSPECTION.						
1.	Houses and premises completely examined on account of	1160	1138	1158	1474	4930
2.	Houses and premises examined only as to	153	175	190	211	729
3.	Houses and premises examined only as to	2964	2578	2207	2261	10010
4.	Houses and premises examined only as to	39	77	52	213	381
5.	Houses and premises examined only as to	58	215	107	148	528
6.	Number of houses wholly or partly examined	333	471	299	392	1495
7.	Total number of above houses where sanitary defects were found	4707	4054	4013	4609	18073
8.	Sanitary defects found in above houses	1563	1264	1064	1103	4794
9.	NUISANCES, &c.	1733	1519	1508	1589	6449
10.	Houses dirty	120	183	164	147	614
11.	" overcrowded	51	61	83	56	251
12.	" damp or dilapidated	92	78	57	102	329
13.	" with defective eave-gutters or fall pipes	265	387	241	478	1371
14.	" badly drained	710	562	615	744	2637
15.	" without sink drain	2	5	6	1	14
16.	" badly lighted	2	7	6	3	18
17.	" badly ventilated	9	12	1	1	23
18.	" (a) with insufficient closet accommodation	938	627	303	422	2290
19.	" (b) with insufficient closet accommodation	154	122	263	294	833
20.	" with dirty closets	155	103	90	121	469
21.	" with drains, &c., temporarily stopped	565	536	438	579	2118
22.	" with other nuisances	825	682	508	832	2817
23.	Total nuisances found in houses	3894	3365	2775	3780	13814
24.	No. of houses in which above nuisances were found	3549	2949	2455	2251	12204
25.	Street gullies stopped	442	449	300	301	1591
26.	Offensive accumulations	75	70	68	59	278
27.	Other outside nuisances	398	271	142	300	1111
28.	Total nuisances found	4809	4161	3294	4440	16704
29.	Complaints unfounded	12	21	12	10	55
OTHER WORK DONE.						
29.	Additional visits	791	4696	2572	1086	9145
30.	Nuisances found	2411	2348	1991	2920	9670
31.	Completion of Reports	42	77	53	72	244
32.	Other causes	828	868	988	906	3590
OTHER WORK DONE (continued).						
33.	Special examinations of drains by tests	..	..	..	..	..
34.	Defects found by ditto	..	..	..	..	..
35.	Appointments	..	..	..	..	..
36.	Notices and letters served	..	..	..	..	..
37.	Notices and letters served	..	..	..	..	..
38.	Dwelling houses unfit for human habitation closed	..	..	..	..	..
39.	Dwelling houses rendered fit for human habitation	..	..	..	..	..
40.	Houses cleaned	..	..	..	..	..
41.	Overcrowded houses dealt with	..	..	..	..	..
42.	Defective spouting, &c., repaired	..	..	..	..	..
43.	Urinals cleaned or repaired	..	..	..	..	..
44.	Old midden privies repaired	..	..	..	..	..
45.	Ashpits repaired	..	..	..	..	..
46.	Privies converted into ordinary water closets	..	..	..	..	..
47.	Water closets erected	..	..	..	..	..
48.	Do.	..	..	..	..	..
49.	New dry ashpits	..	..	..	..	..
50.	Ashbins provided	..	..	..	..	..
51.	Pail closets converted into water closets	..	..	..	..	..
52.	T.C.'s converted into ordinary outside W.C.'s	..	..	..	..	..
53.	Closets cleaned (lime-washed, &c.)	..	..	..	..	..
54.	Drains in course of construction inspected	..	..	..	..	..
55.	" of reconstruction	..	..	..	..	..
56.	" inspected when connection made to sewer	..	..	..	..	..
57.	Disconnections of house drains effected	..	..	..	..	..
58.	Cesspools filled up	..	..	..	..	..
59.	Public or private wells abolished	..	..	..	..	..
60.	Houses supplied with town's water	..	..	..	..	..
61.	Trough and water closets repaired	..	..	..	..	..
62.	Other house nuisances remedied	..	..	..	..	..
63.	Total houses for which above work done	..	..	..	..	..
64.	Houses in which all defects found have been remedied	..	..	..	..	..
65.	Street gullies cleaned	..	..	..	..	..
66.	Offensive accumulations removed	..	..	..	..	..
67.	Pollutions of river or streams remedied	..	..	..	..	..
68.	Other non-domestic nuisances removed	..	..	..	..	..
69.	Additional visits paid to inspect work in progress	..	..	..	..	..
70.	Total nuisances abated	..	..	..	..	..
71.	Total nuisances abated	..	..	..	..	..

TABLE II—continued.

[illegible]

This table includes work done by four Works Inspectors and Yiddish Inspector.

TABLE III.

Shewing the number of drains or sources of pollution diverted from the River Aire and its tributaries and connected to the town sewers.

DATE.	Mills, factory, house drains, stables, and pigstyes.	Water closets.	Privies.	Trade pollu- tions.	Total.
Previous to 2nd Jan., 1909	5,888	512	233	82	6,715
During the 52 weeks end- ed 1st Jan., 1910 ...	...	...	...	...	...
Totals ...	5,888	512	233	82	6,715

TABLE IV.

Shewing the sanitary conditions at time of visit of workshops on register and occupied, during the 52 weeks ended 1st January, 1910.

DATE. 1909.	Visits to workshops.	EMPLOYEES AT TIME OF VISIT.			VENTILA- TION.		CONDITION OF WORKSHOPS.				Workshops found closed.
		male.	female.	total.	good.	defec- tive.	rooms.		closets.		
							clean.	dirty.	clean.	dirty.	
4 weeks ended Jan. 30	68	261	273	534	68	...	46	22	50	18	26
4 weeks ended Feb. 27	97	372	382	754	92	5	91	6	93	4	20
5 weeks ended April 3	194	698	490	1,188	190	4	166	28	165	29	26
4 weeks ended May 1	78	302	270	572	77	1	62	16	66	12	37
4 weeks ended „ 29	126	572	525	1,097	121	5	104	22	107	19	54
5 weeks ended July 3	152	495	448	943	150	2	133	19	137	15	29
4 weeks ended „ 31	27	29	147	176	27	...	25	2	22	5	1
4 weeks ended Aug. 28	40	115	72	187	40	...	38	2	33	7	3
5 weeks ended Oct. 2	58	242	296	538	56	2	52	6	50	8	15
4 weeks ended „ 30	105	346	584	930	102	3	97	8	85	20	7
4 weeks ended Nov 27	98	291	360	651	96	2	93	5	86	12	8
5 weeks ended Jan. 1 1910.	32	60	176	236	31	1	30	2	28	4	5
Totals	1,075	3,783	4,023	7,806	1050	25	937	138	922	153	231

BAKEHOUSES, 1909.

WARDS.	OVERGROUND.			UNDERGROUND.			Total visits to over-ground and under-ground bake-houses.
	Em- ployees beyond family.	Work- shop bake- houses.	Domestic Bake- houses.	Em- ployees beyond family.	Work- shop bake- houses.	Domestic Bake- houses.	
Central	45 in	14	15	7 in	3	2	114
North	33 "	17	32	6 "	2	2	131
North-East	17 "	14	66	1 "	1	—	198
East	12 "	6	36	—	—	—	103
South	18 "	10	52	2 "	2	1	254
East Hunslet	9 "	6	86	4 "	2	—	258
West Hunslet	14 "	5	104	2 "	2	4	189
Holbeck	25 "	11	83	—	—	1	225
Mill Hill	24 "	10	7	3 "	2	—	45
West	16 "	10	47	1 "	1	—	225
North-West	13 "	8	44	8 "	4	3	123
Brunswick	13 "	8	33	8 "	3	—	117
Armley and Wortley	25 "	19	60	2 "	2	—	280
New Wortley	19 "	8	42	—	—	—	110
Bramley	6 "	6	23	1 "	1	—	90
Headingley... ..	4 "	4	17	4 "	1	—	60
Burley	21 "	17	38	7 "	5	—	141
Kirkstall	1 "	1	4	—	—	—	14
Total	315 "	174	789	56 "	31	13	2,677

TABLE IVa—continued.

3, 4, 5.—OTHER MATTERS.

Homework:—	Number of		
	Lists.	Outworkers.	
<i>List of Outworkers (S. 107):—</i>		C.	W.
No homeworkers on our register except amongst those engaged in making wearing apparel) ... ..	...	...	...
Lists received twice in the year	328	392	1669
„ once in the year	12	22	71
Addresses of outworkers { received from other Authorities... { forwarded to other Authorities...		52	4
Notices to occupiers not sending lists... ..		253	
Prosecutions ... ..		...
Inspection of Homeworkers' premises (see table 5a)		1,158	
<i>Homework in unwholesome premises:—</i>			
Instances		102	
Notices		102	
Prosecutions ... ..		...
<i>Homework in infected premises:—</i>			
Instances		12*	
Orders made (S. 110)		7	
Prosecutions (SS. 109, 110) ... ..		...
[Infectious cases removed, disinfection both of places and material carried out under ordinary powers].			
<i>Workshops on the Register (S. 131) at the end of year—</i>			
Ordinary (143 trades)		1,072	
Domestic do. (19 trades)		517	
Bakehouses on register as workshops		205	
Do. domestic		802	
Total number of workshops on Register		2,596	
<i>Matters notified to H.M. Inspectors of Factories:—</i>			
Failure to affix Abstract of the Factory and Workshop Act (S. 133)		12	
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5).	Notified by H.M. Inspector ... Reports (of action taken) sent to H.M. Inspectors ...	112	
Other		30	
<i>Underground Bakehouses (S. 101):—</i>			
Certificates granted during the year ... ..		...
In use at the end of 1909		44	

* Of these 12, 5 were patients suffering from diphtheria, 1 from scarlet fever, and 1 from typhoid fever; all were removed to hospital, and disinfection of articles carried out. Five were phthisis patients.

TABLE V.

Shewing workshops not previously visited to which visits have been paid during the year, and the sanitary arrangements at time of visit.

DATE. 1909.	Workshops added to register.	DESCRIPTION OF DRAINAGE.			SITUATION OF CLOSETS				Workshops found closed.
		cut off.	not cut off.	none.	inside.		outside.		
					w.c. soil-pipe carried up.	w.c. soil-pipe not car- ried up.	Water Closets.	Privies.	
4 weeks ended Jan. 30	10	7	...	3	4	...	6	...	...
4 weeks ended Feb. 27	26	17	3	6	8	1	17	...	...
5 weeks ended April 3	29	18	7	4	11	5	13	...	...
4 weeks ended May 1	27	21	2	4	11	1	15	...	1
4 weeks ended „ 29	47	28	6	13	23	2	22	...	1
5 weeks ended July 3	35	29	5	1	18	...	17	...	...
4 weeks ended „ 31	31	21	1	9	15	...	16	...	8
4 weeks ended Aug. 28	12	8	1	3	2	...	10	...	1
5 weeks ended Oct. 2	20	13	1	6	6	1	12	1	1
4 weeks ended „ 30	15	10	3	2	6	...	9	...	1
4 weeks ended Nov. 27	20	11	6	3	10	1	9	...	2
5 weeks ended Jan. 1 1910.	35	21	6	8	10	2	22	1	1
Totals	307	204	41	62	124	13	168	2	16

TABLE Va. (Outworkers) 1909.

Wards.	Complete inspections of houses on first visit.	Additional visits about			Total.
		work ordered.	infectious disease.	other causes.	
Central	7	2	2	4	15
North	36	22	1	63	122
North East... ..	33	6	3	38	80
East	34	30	2	56	122
South	18	7	...	26	51
East Hunslet ...	16	8	...	28	52
West Hunslet ...	67	34	...	70	171
Holbeck	39	16	1	53	109
Mill Hill	2	...	1	3	6
West	59	31	15	65	170
North West ...	13	...	...	11	24
Brunswick	30	15	9	18	72
New Wortley ...	18	4	...	43	65
Armley and Wortley	18	...	1	19	38
Bramley	1	...	1	...	2
Headingley ...	13	18	2	26	59
Totals	404	193	38	523	1,158

Work entirely that of women inspectors.

TABLE Vb.

Other Visits paid by Senior Workshops Inspector and
his Assistant on account of

	Factories.	Workshops.	Workplaces.
Non-abatements	332	714	37
Drain inspection ... ..	...	...	...
Drains tested	17	9	10
Disease enquiries	139	16	27
River pollution ... ..	...	...	...
Complaints	158	167	28
Measurement of workrooms...	...	3	...
Wage enquiries	1	...	...
Bakehouses { underground	...	39	...
	... above ground	146	...
Other causes	187	409	114
Appointments	54	24	10
TOTAL	888	1,527	226

Work done.

	Factories.	Workshops.	Workplaces.
River pollutions abated ...	...	..	...
Nuisances abated	297	277	25
TOTAL	297	277	25

WORK OF WOMEN INSPECTORS.

Infectious diseases.—On account of puerperal fever, 31 houses have been completely examined and 201 other visits paid.

In addition to visiting cases reported during life as cases of puerperal fever, visits were also paid where the death of a puerperal woman was recorded from this disease or some similar cause.

Seventeen midwives and 54 women who, though not certified midwives, had been more or less in contact with puerperal cases, paid visits to the disinfecting station in order to have their persons and clothing disinfected. Their bags and appliances were also disinfected under the personal oversight of our women inspectors. In other cases the clothing of the nurse was sent from the house where the illness occurred to be disinfected at the station.

Two of the houses visited on this account were found to be dirty, and two of them had dirty closets. All of these were cleansed.

Midwives were found to have been in contact with two cases of erysipelas and with one case each of typhoid, diphtheria, measles and pneumonia. Action was taken and the midwives' clothes disinfected in all of these cases.

On account of infectious disease among persons employed 216 visits of enquiry were made to factories, 52 to workshops, 17 to workplaces and 36 to private houses.

Fifty-two visits were made to absent employées in connection with this work.

In the girls' and infants' departments of schools 793 visits of inspection and 250 return visits were made on account of infectious disease. To the houses of absentees 788 visits were paid; and 18 other visits were made in connection with this branch of the work.

Notices to the number of 181 were sent to the offices of the Education Committee informing them of cases where it was considered inadvisable that children should return to school until medical advice had been obtained.

It was necessary to give seven notices for nuisances found. All of these have been complied with.

Outworkers.—Table Va gives, as in previous years, the work of our women inspectors in visiting at their homes persons employed as outworkers. In addition to these visits 39 more were paid to the employers of outworkers.

Seventy-one notices for the cleansing of premises occupied by outworkers were given, and of these 58 were complied with, eight were referred to the District Inspector, and five lapsed because the occupiers had left.

Five structural defects required notices, four of which were complied with during the year. Two notices were given for overcrowding, both of which were complied with. Other sanitary defects to the number of 24 were remedied. Six sanitary defects found in 1908 were also remedied.

Workshops.—There were 567 inspections made of workshops, and 596 other visits were paid.

Eleven notices were given for defective ventilation and eight complied with during the year. Two cases of overcrowding were found and remedied. For cleansing and lime-washing 89 notices were given. Of these two lapsed because the occupiers had left, and 77 were complied with.

In the case of 18 other nuisances for which notices have been given 15 have been complied with. Sixteen sanitary defects found in 1908 were also found remedied this year. One visit was paid to a domestic workshop.

Of workshop laundries 31 inspections were made and 63 other visits paid.

Seven notices were given for cleansing and 12 for sanitary defects. All were complied with. Two sanitary defects found in 1908 were also found remedied.

Workplaces.—Of restaurant kitchens 154 inspections were made and 144 other visits paid.

Seven notices were sent on account of defects found and five complied with, while 19 notices were given for cleansing and limewashing, all of which were complied with.

Ten visits were paid to other workplaces.

Factories.—In addition to the 119 factories visited on account of infectious disease, six were visited on complaint, and 10 further visits were paid to them.

For cleansing and limewashing closets 44 notices were given and 43 were complied with.

Twenty-one other sanitary defects were found and remedied.

Infant mortality.—At the beginning of this year (1909) certain streets of a better class of house than most others in the South-East district, and in which the infantile death-rate was lower, were omitted from birth and death enquiries in order that the women inspectors might be able to pay more attention to the poorer parts.

During the year 190 investigations were made of deaths of infants and 231 other visits paid. In connection with this work 17 notices were given to cleanse and limewash, of these 16 have been complied with. Notices for other defects were given to the number of 10. All of these were remedied. Ten nuisances found in 1908 were also found remedied.

Visits to the newly born.—In South East Leeds 870 first visits were made to advise mothers how best to keep their babies in health, and 5,180 other visits were made to these homes.

Fourteen notices for sanitary defects, one for overcrowding and 22 for limewashing and cleansing were given, and in 30 cases the defects were remedied.

Six sanitary defects noticed in 1908 were found to have been removed.

In addition to these visits in South East Leeds 265 first visits and 2,593 other visits were paid in a certain district of West Leeds. Fifteen babies were systematically weighed, 16 others less regularly so.

In October, 1909, "The Leeds Babies' Welcome" was opened in Ellerby Road, since which time one at least of the Women Inspectors has attended once a week to assist in weighing the babies, filling in the charts, giving simple talks to the mothers, etc. It is to be hoped that the "Welcome" will help to materially reduce the infant mortality rate, which is still higher in this district than in any other part of Leeds.

Midwives Act.—Part of the work done in the supervision of midwives has been mentioned already under the heading Infectious diseases.

Thorough inspection of books and bags was made in 120 cases, and 317 visits were paid to midwives.

In addition to 320 other visits paid in connection with this work, 46 interviews took place at the Public Health Offices, and 9 interviews with maternity nurses or uncertified midwives.

The number of midwives who, during January, 1909, notified their intention to practise, was 60. Four others did so later.

During the year one midwife died, 2 were struck off the roll, 2 left the borough, and one was allowed to retire.

Altogether 2,929 cases were attended by certified midwives during the year. This number includes the still-births, of which 79 were notified. It does not include the cases taken by uncertified midwives, many of whom still continued to practise.

Of the 31 cases investigated as puerperal fever 8 were attended by certified midwives. In all, 14 of these cases recovered. Of the cases taken by midwives 2 were fatal.

In such cases special attention has always been given to the disinfection of the bags and their contents, as well as to the clothing and persons of those attending these cases.

Notifications of 79 still-births have been received during the year. Fifty-one of these were inquired into by the women inspectors.

There were 190 notifications of requests for medical assistance, and 12 deaths of infants were notified where no medical practitioner was in attendance.

Reference has already been made to the attention paid to midwives in contact with diseases of an infectious nature.

In consequence of investigation of deaths in the Registrars' Returns 159 visits were paid to ascertain if a midwife had had any connection with the case. This was found to be so in 8 instances.

Sixteen inquests on the deaths of infants and one on that of a mother were attended by the Women Inspectors.

Twenty-four midwives' houses were examined. No sanitary defects were found.

A course of 16 simple lectures was given to midwives at the Nurses' Home, Lovell Street, by the kind permission of the District Nurses Committee. These lectures were well attended.

On June 21st the Lord Mayor and Lady Mayoress very kindly entertained all the Certified Midwives to tea in the Town Hall. Their kindness was much appreciated by all the midwives who were able to be present.

Other work.—On receipt of complaints 5 inspections of houses were made, and 149 other visits were paid. In 29 cases cleanliness was enforced.

A house-to-house inspection was made of 46 houses in Scott Street, and 221 visits were also paid to them; in 24 cases cleanliness was enforced, and in 2 instances other defects were remedied.

In connection with public conveniences for women 8 inspections were made in Parks and 2 return visits paid. One inspection and 3 other visits were made to other lavatories in the town. In all 2 sanitary defects were found and the remedy secured.

In addition to the work already given 48 visits were paid to landlords, and 584 visits were made for various purposes which cannot be classified under any of the previous headings.

TABLE VI.

Ashpits put down for cleansing during the
52 weeks ended 1st January, 1910.

Requisitions to cleanse sent to Cleansing Sub-Department from Sanitary Office.	Number of latter returned as carried out.	Ashpits not cleansed within four days of requisition.
6,062	5,931	28

TABLE VII.

Refuse Removal (same period).

No. of midden emptyings.	No. of dry ashpit or tub emptyings.	No. of box or pail emptyings.	Total.	LOADS REMOVED.			Total.
				Night-soil.	Dry ashes.	Rubbish.	
—	2,111,029	12,432	2,123,461	—	—	—	171,846

CLEANSING.

Ashpit cleansing.—Tables VI. and VII. contain the usual information about ashpits. The total loads removed of nightsoil, dry ashes, and rubbish was 171,846, against 172,594 the previous year, 179,813 in 1907, 184,993 in 1906, 191,814 in 1905, and 181,807 in 1904. Of late we have been gradually increasing the number of our larger four-wheeled ashpit wagons. The actual ashpit emptying has increased 11 per cent. since 1908, which was a 53 weeks' year, and nearly 25 per cent. since 1907.

Destructors.—The following work has been done at the four destructors:—

At Armley Road 24,565 loads of rubbish, weighing 21,674·15 tons (0·88 tons or 17·65 cwts. per load) were destroyed during 294 working days. On an average of 12 cells, the work per cell per day would be 6·14 tons. The highest observed temperature was 1,500° Fahr.,* the lowest 620°; average, 1,461°. There were 7,056 observations taken. The firemen employed averaged 12·33 a day, and the amount turned over by each averaged 5·98 tons daily.

At Beckett Street, 25,066 loads of rubbish, weighing 20,249 tons (0·81 tons, or 16·16 cwts. per load) were destroyed in 8 cells during 292 working days, being an average of 8·67 tons per cell per day. The highest observed temperature was 1,500° Fahr.,* the lowest 875°; average 1,485°. There were 7,008 observations taken. The average number of firemen employed was 8·25, and their daily turn over 8·41 tons.

At Kidacre Street, 26,026 loads of rubbish, weighing 21,783·7 tons (0·84 tons, or 16·74 cwts. per load) were destroyed in 12 cells during 301 working days, being an average of 6·03 tons per cell per day. There were 7,224 observations of temperature taken, the readings averaged 1,472° Fahr., the highest was 1,500°,* the lowest 610°. The average number of firemen was 11·5, and they turned over an average of 6·29 tons a man daily.

At Meanwood Road, 17,269 loads of rubbish, weighing 14,425·2 tons (0·84 tons, or 16·71 cwts. per load) were destroyed

* The pyrometer does not register above 1,500° Fahr.

in 8 cells during 292 working days, being an average of 6.18 tons per cell per day. There were 7,008 observations of temperature taken, the readings averaged 1,463° Fahr., the highest was 1,500°,* the lowest 640°. The average number of firemen was 6.63, and they turned over an average of 7.46 tons each day.

Street Cleansing.—This heading is intended to include the work done in the ordinary sweeping and gully cleansing to the paved streets, in the watering of streets and roads, in the cleansing of certain Macadam roads and their gullies, and in the removal of snow.

Mr. Mann reports that during 292 working days, 328,633 street cleansings were effected, an average of 1,125 a day.

The cleansing of gullies was equivalent to cleansing 223,272 or an average of 765 per day; charges of disinfectant were applied to all gullies cleansed. In addition to this, 90,232 loads of street refuse were carted away (309 a day), and 113,606 cleansings of courts and yards were effected, an average of 389 a day.

The number of horse-days for street cleansing was 29,690 and for watering 4,679, being an average of 102 and (during 82 days) 57 horses a day respectively.

During the 82 street watering days 90,411 barrels of water were used.

The work done in connection with the unpaved streets has not been kept separate from the rest of the street cleansing work. In 1908 the total cleansing of streets and macadam roads was equivalent to the cleansing of 361,055 streets or roads. The total for this year is only 328,633, but as 53,272 loads of snow were removed in 1909, as against 8,517 in 1908, a certain amount of cleansing of streets was done in this way which is not put down in the ordinary street scavenging account.

During the 52 weeks, the sub-department removed 53,272 loads of snow.

* The pyrometer does not register above 1,500° Fahr.

COWSHEDS AND DAIRIES.

Examination of food, etc.—Table VIII. shows the work of dairy inspection. Table VIII a. of the special veterinary inspection of cattle in regard to the condition of their udders. Table VIII b. shows the result obtained in the examination for tubercle of milk sold in Leeds. As the subject of tubercle is treated somewhat at length in the earlier part of the report, it has been considered this year convenient to transfer the account of the work done in the biological examination of milk and the inspection of cows to that portion of the report. This will be found in pages 44 to 72.

Food and drugs.—Tables IX., IX a., IX c., deal with the chemical analyses of foods and the proceedings taken under the Food and Drugs Acts. In Table IX. we have an entire blank in the column "poor in quality," and in regard to milk, a somewhat large proportion of samples are labelled "adulterated" (24 per cent.). Many of these would at one time have been included amongst the genuine, but "poor in quality." In nearly every case the milks entered some years ago as "poor in quality" were really adulterated. The statements as given in the table are probably nearer the truth than if we transferred them to the heading "poor in quality" as some do.

TABLE VIII.

Work done in connection with the Cowsheds and Dairies
Order during the 52 weeks ended 1st January, 1910.

Cowkeepers on the register	...	...	...	133
Milk-retailers	"	...	...	428
Visits to cowsheds	...	...	...	517
" " (veterinary)	..	...	...	549
" milkshops	...	...	...	697
" railway stations	...	...	...	146
Cowkeepers discontinued business	...	...	...	6
New cowkeepers registered	...	...	...	8
New cowsheds built	...	..	...	2
Cowsheds reconstructed and provided with additional light, ventilation and drainage...				4
Farms or milkshops visited on account of infectious disease	...	...	...	32

TABLE VIIIa.

Veterinary inspection of Cattle, year ended 1st Jan., 1910.

Date of Inspection	Register No.	Ward.	Cattle and Condition.			Condition of Shed.
			No. Examined	Udder diseased.	General Condition	
1909.						
Jan. 2.	591	Hdy.	12	I (? tuberculous)	others healthy.	
Jan. 5.	400	Bmy.	1	I (tuberculous)	(See Dec. 24th, 1908)	
Jan. 6.	522	"	5	...	healthy	Satisfactory.
"	51	"	5	...	"	Do.
"	147	"	7	...	"	Do.
"	410	"	6	...	"	Do.
"	70	"	5	...	"	Do.
"	63	"	6	...	"	Do.
"	360	"	26	...	"	Do.
"	209	"	...	...		unoccupied.
"	352	"	8	...	healthy	Satisfactory
"	337	"	23	...	"	Do.
"	227 ^a	"	9	...	"	Do.
"	227 ^b	"	6	...	"	Do.
"	470	"	4	I (mastitis)	others healthy.	Do.
Jan. 7.	136	N.E.	13	...	healthy	Do.
Jan. 14.	67	N.	6	...	"	Do.
"	170	"	22	...	"	Do.
"	543	"	23	...	"	Do.
Jan. 18.	591	Hdy.	10	...	"	Fairly clean.
"	393	"	36	...	"	Satisfactory.
"	544	N.	12	...	"	Do.
Jan. 19.	90	E.	26	I (tuberculous)	others healthy.	Do.
"	172	"	31	...	healthy	Do.
Jan. 20.	406	W.H.	17	...	"	Do.
"	430	Bmy.	15	...	"	Do.
"	332	W.H.	55	...	"	Do.
"	96	"	8	...	"	Do.
Jan. 21.	812	Hdy.	4	...	"	Do.
"	88	N.W.	26	...	"	Do.
"	17	Hdy.	6	...	"	Do.
"	284	N.W.	22	...	"	Do.
"	49	"	24	...	"	Do.
"	213	Hdy.	5	...	"	Do.
"	609	"	15	...	"	Do.
"	347	"	7	...	"	Do.
Feb. 2.	266	E.H.	3	...	"	Do.
"	557	"	11	...	"	Do.
"	835	S.	12	...	"	Do.
Feb. 3.	353	Hdy.	12	...	"	Do.
"	75	"	18	...	"	Floor and walls dirty.
"	338	N.	2	...	"	Satisfactory.

TABLE VIII a.—Continued.

Date of Inspection.	Register No.	Ward.	Cattle and Condition.			Condition of Shed.
			No. Examined	Udder diseased.	General Condition	
1909.						
Feb. 3.	738	Hdy.	4	...	healthy	Satisfactory.
"	195	N.	18	...	"	Do.
"	167 ^c	Hdy.	22	...	"	Floors and walls dirty.
"	912	"	16	...	"	Satisfactory.
"	146	"	32	...	"	Do.
"	592	"	12	...	I (tuber- culous). others healthy.	Do.
"	591	"	10	...	healthy	Do.
"	676	"	10	...	"	Do.
"	550	"	14	...	"	Do.
Feb. 5.	372	A. & W.	4	...	"	Do.
Feb. 9	39	N.	2	...	"	Do.
Feb. 10.	75	Hdy.	0	...	(See Feb. 3rd).	Shed being cleaned and whitewashed.
"	522	N.	25*	...	healthy	Satisfactory.
Feb. 11.	85	Hol.	8	...	"	Do.
"	150	"	15	...	"	Do.
"	64	W.H.	8	I (?tuber- culous).	(others healthy)	Dirty.
"	135	"	10	...	healthy	Satisfactory.
"	390	"	12	...	"	Do.
"	392	"	7	...	"	Do.
"	43	"	37	I (?tuber- culous).	others healthy.	Do
"	522	N.	I (tuberculin tested.)	...	(See Feb. 10th)	
Feb. 12.	522	"	I	I (tuber- culous).	"	
"	196	"	21	...	healthy	Satisfactory.
"	94	Hdy.	13	...	"	Do.
Feb. 15.	256	A. & W.	8	...	"	Do.
"	708	"	16	...	"	Do.
"	126	Bmy.	14	I (?tuber- culous.)	others healthy.	Do.
"	36	"	3	...	healthy	Do.
"	99	A. & W.	24	...	"	Do.
"	38	"	25	...	"	Do.
Feb. 16.	43	W H.	I	...	(See Feb. 11th)	
"	64	"	I	recovered.	"	Cleaner.
"	585	"	15	I (?tuber- culous).	others healthy but dirty.	Dirty.
"	378	"	6	...	healthy	Satisfactory.
"	439	E. H.	35	...	"	Do.
"	633	"	9	I (?tuber- culous).	others healthy.	Do.

* One cow (?tuberculous udder) isolated by owner. Arranged to test.

TABLE VIII a.—Continued.

Date of Inspection.	Register No.	Ward.	Cattle and Condition.			Condition of Shed.
			No. Examined	Udder diseased.	General Condition	
1909.						
Feb. 17.	249	Bmy.	9	...	healthy but dirty.	Dirty.
"	92	"	3	...	healthy	Satisfactory.
"	801	"	4	...	"	Do.
"	407	"	4	...	"	Do.
"	665	N.	18	...	"	Do.
"	4	"	14	...	"	Do.
"	543	"	26	...	"	Do.
"	173	Bmy.	17	...	"	Do.
"	909	"	15	...	"	Do.
"	77	"	29	...	"	Do.
"	635	"	13	...	"	Do.
"	78	"	23	...	"	Do.
"	199a	"	13	...	"	Do.
"	400	"	27	...	"	Do.
"	73	"	26	...	"	Do.
"	126	"	1	(tuberculin tested).	(See Feb. 15th)	
Feb. 18	126	"	1	1	"	
"	148	"	13	(tuberculous)	healthy	Dirty.
"	141	"	19	...	"	Satisfactory.
Feb. 23.	585	W.H.	1	...	(See Feb. 16th)	
"	633	E.H.	1	(not tuberculous)	"	
Feb. 24.	104	A.&W.	19	...	healthy	Satisfactory.
"	431	"	32	...	"	Do.
"	813	"	39	...	"	Do.
"	321	Hdy.	13	...	"	Do.
"	35	W.	9	...	"	Do.
Feb. 25.	351	E.	13	...	"	Walls dirty.
"	101	"	15	...	"	Satisfactory.
"	478	N.E.	23	...	"	Do.
"	136	"	12	...	"	Do.
"	220	"	22	...	"	Do.
"	137	"	25	...	"	Do.
"	585	W.H.	1	(tuberculin tested).	(See Feb. 23rd)	
Feb. 26.	585	"	1	(not tuberculous)	"	
"	159	E.H.	23	...	healthy	Do.
Feb. 27.	543	N.	1	...	"	
Mar. 3.	295	N.E.	9	...	1	Do.
"	138	"	46	...	(tuberculous) others healthy.	Do.
Mar. 4.	765	Bmy.	11	...	healthy	Do.
"	398	"	12	...	"	Do.
"	199b	"	23	...	"	Do.
"	318	"	23	...	"	Do.

TABLE VIII a.—Continued.

Date of Inspection.	Register No.	Ward.	Cattle and Condition.			Condition of Shed.
			No. Examined	Udder diseased.	General Condition	
1909.						
Mar. 4.	127	Bmy.	26	...	healthy	Some cows dirty, shed satisfactory.
"	120	"	24	...	"	Satisfactory.
"	128	"	4	...	"	Do.
"	515	"	8	...	"	Do.
"	287	A. & W.	8	...	"	Do.
Mar. 5.	153	C.	8	...	"	Clean, but confined.
"	7	"	5	...	"	Satisfactory.
"	66	"	11	...	"	Do.
"	553	Bnk.	18	...	"	Do.
Mar. 8.	295	N.E	1	...	(See Mar. 3rd)	
Mar. 9.	39	N.	35	...	healthy	Do.
Mar. 11.	590	E.	5	...	"	Do.
"	329	"	0	...	"	
"	90	"	28	...	"	Do.
"	19	"	20	...	"	Do.
"	145	"	28	...	"	Do.
"	964	"	16	...	"	Do.
"	172	"	33	...	"	Do.
Mar. 13	45	N.	14	...	I	Do.
"	739	"	15	...	(? tuberculous) others healthy.	
"	553	"	23	...	healthy	Do.
"	896	"	8	...	"	Do.
"	343 ^b	"	24	...	"	Do.
"	343 ^a	"	15	...	"	Do.
"	602	"	21	...	"	Do.
Mar. 16.	243	Bmy.	9	...	"	Do.
"	201	"	0	...	"	
"	682 ^a	"	20	...	"	Do.
"	822	"	10	...	"	Do.
"	209	"	10	...	"	Fairly clean.
"	21	"	8	...	"	Satisfactory.
"	574	"	14	...	"	Do.
"	408	"	15	...	"	Do.
"	682 ^b	"	6	...	"	Clean.
"	88	Hdy.	20	...	"	Satisfactory.
"	45	N.	1	...	(See Mar. 13th)	
Mar. 17.	63	Bmy.	5	...	healthy	Fairly clean.
"	360	"	24	...	"	Satisfactory.
"	352	"	9	...	"	Do.
"	337	"	21	...	"	Do.
"	227 ^a	"	9	...	"	Do.
"	227 ^b	"	5	...	"	Do.
"	470	"	3	...	"	Do.

TABLE VIII a.—Continued.

Date of Inspection.	Register No.	Ward.	Cattle and Condition.			Condition of Shed.
			No. Examined	Udder diseased.	General Condition	
1909.						
Mar. 17.	322	Bmy.	5	...	healthy	Satisfactory.
"	51	"	6	...	"	Do.
"	410	"	5	...	"	Do.
"	147	"	8	...	"	Do.
"	70	"	5	...	"	Do.
"	389	"	12	...	"	Do.
Mar. 18.	10	A.&W.	4	...	"	Do.
"	246b	"	6	...	"	Do.
"	246a	"	10	...	"	Do.
"	402	"	11	1 (mastitis)	others healthy.	Do.
"	593	"	7	1 (mastitis)	"	Do.
"	45	N.	1	Tuberculin tested.	(See Mar. 16th) (tuber- culous)	
Mar. 19.	45	"	1	...	"	
Mar. 24.	347	Hdy.	5	...	healthy	Satisfactory
"	196	N.	22	...	"	Do.
"	544	"	12	...	"	Dirty.
"	812	Hdy.	4	...	"	Do.
"	88	N.W.	28	...	"	Satisfactory.
"	17	"	5	...	"	Do.
"	284	"	21	...	"	Do.
"	49	"	22	...	"	Do.
"	609	Hdy.	14	...	"	Do.
"	213	"	4	...	"	Do.
"	393	"	36	...	"	Do.
Mar. 25.	295	N.E.	8	...	"	Do.
"	136	"	14	...	"	Do.
"	220	"	22	...	"	Do.
"	137	"	25	...	"	Do.
"	138	"	46	...	"	Do.
Mar. 26.	665	N.	17	...	"	Do.
"	4	"	14	...	"	Do.
"	67	"	5	...	"	Do.
"	170	"	22	...	"	Do.
"	543	"	24	...	"	Do.
Mar. 29.	351	E.	10	...	"	Do.
"	101	"	15	...	"	Do.
"	478	N.E.	22	...	"	Do.
Mar. 30.	430	Bmy.	15	...	"	Do.
"	332	W.H.	55	...	"	Do.
"	96	"	8	...	"	Do.
"	406	"	12	...	"	Dirty.
Mar. 31.	173	Bmy.	18	...	"	Satisfactory.
"	909	"	16	...	"	Do.
"	77	"	33	...	"	Do.
"	635	"	13	...	"	Do.

TABLE VIII a.—Continued.

Date of Inspection.	Register No.	Ward.	Cattle and Condition.			Condition of Shed.
			No. Examined	Udder diseased.	General Condition	
1909.						
Mar. 31.	78	Bmy.	23	...	healthy	Satisfactory.
"	199a	"	14	...	"	Do.
"	249	"	9	...	"	Cleaner.
"	400	"	27	...	"	Satisfactory.
"	73	"	25	...	"	Do.
April 1.	714	Hdy.	10	...	"	Do.
"	167b	"	23	...	"	Do.
"	912	"	16	...	"	Do.
"	146	"	33	...	"	Do.
"	591	"	12	I (tuber- culous)	others healthy.	Do.
"	592	"	11	...	healthy	Do.
"	353	"	15	...	"	Do.
"	676	"	9	...	"	Do.
"	550	"	14	...	"	Do.
"	338	N.	2	...	"	Do.
"	738	Hdy.	5	...	"	Do.
April 2.	557	E.H.	11	...	"	Do.
"	266	"	4	...	"	Do.
"	835	S.	12	...	"	Do.
April 6.	591	Hdy.	1	I (tuber- culous)	(See April 1st)	
April 7.	94	"	11	...	healthy	Satisfactory.
"	522	N.	23	...	"	Do.
"	195	"	19	...	"	Do.
"	104	A.&W.	20	...	"	Do.
"	431	"	31	...	"	Do.
"	813	"	39	...	"	Do.
"	164	Hdy.	2	...	"	Do.
"	321	"	15	...	"	Do.
"	35	W.	10	...	"	Do.
April 8.	45	N.	1	...	(See Mar. 19th)	
"	553	Bnk.	cows out	...	...	Satisfactory.
"	39	N.	28	...	healthy	Do.
"	75	Hdy.	cows out	...	...	Do.
April 14.	136	N.E.	12	...	healthy	Do.
April 15.	136	"	12	tuberculin tested	...	
April 16.	136	"	12	...	...
April 23.	343a	N.	17	...	healthy	Satisfactory.
"	602	"	22	...	"	Do.
April 24.	633	E.H.	9	...	"	Do.
April 28.	64	W.H.	7	...	"	Do.
"	135	"	10	...	"	Do.
"	390	"	14	...	"	Do.
"	392	"	6	...	"	Do.

TABLE VIII a.—Continued.

Date of Inspection.	Register No.	Ward.	Cattle and Condition.			Condition of Shed.
			No. Examined	Udder diseased.	General Condition	
1909.						
April 28.	43	W.H.	34	...	healthy	Satisfactory.
"	150	Hol.	13	...	"	Do.
April 29.	127	Bmy.	26	...	"	Do.
"	120	"	22	...	"	Do.
"	128	"	3	...	"	Do.
"	515	"	9	...	"	Do.
"	34	A.&W.	3	...	"	Do.
"	801	Bmy.	5	...	"	Do.
"	407	"	2	...	"	Do.
"	92	"	4	...	"	Do.
"	765	"	11	I (tuberculous)	others healthy.	Do.
"	585	"	15	...	healthy	Do.
"	199b	"	22	...	"	Do.
April 30.	243	"	9	...	"	Do.
"	201	"	1	...	"	Do.
"	682a	"	19	...	"	Do.
"	822	"	10	...	"	Do.
"	209	"	10	...	"	Do.
"	21	"	7	...	"	Do.
May 4.	159	E.H.	22	...	"	Do.
"	378	W.H.	6	...	"	Dirty.
"	493	E.H.	31	...	"	Satisfactory.
May 5.	120	Bmy.	22	...	"	Do.
"	34	A.&W.	3	...	"	Do.
May 6.	322	Bmy.	cows out.	...	...	Do.
"	51	"	"	...	...	Do.
"	147	"	"	...	...	Do.
"	410	"	"	...	...	Do.
"	70	"	5	...	healthy	Do.
"	574	"	14	...	"	Do.
"	408	"	cows out.	...	...	Do.
"	389	"	"	...	...	Do.
"	63	"	6	...	healthy	Do.
"	681	"	5	...	"	Do.
"	360	"	24	...	"	Do.
"	352	"	8	...	"	Do.
"	337	"	cows out.	...	...	Do.
"	227a	"	9	...	healthy	Do.
"	227b	"	5	...	"	Do.
"	470	"	3	...	"	Do.
"	682b	"	cows out.	...	...	Do.
"	553	Bnk.	"	...	...	Do.
"	120	Bmy.	10	tuberculin tested	...	
May 7.	120	"	10	...	...

TABLE VIII a.—Continued.

Date of Inspection.	Register No.	Ward.	Cattle and Condition.			Condition of Shed.
			No. Examined	Udder diseased.	General Condition	
1909.						
May 7.	708	A. & W.	14	...	healthy	Satisfactory.
"	765	Bmy.	1	...	(See April 29th)	
May 11.	120	"	8	tuberculin tested	...	
May 12.	120	"	8	...	...
"	322	"	5	...	healthy	Satisfactory.
"	51	"	6	...	"	Do.
"	147	"	7	...	"	Do.
"	408	"	15	...	"	Do.
"	141	"	20	...	"	Do.
"	318	"	24	...	"	Do.
"	148	"	15	...	"	Cows dirty. Sheds fairly clean.
May 27.	406	W. H.	16	...	"	Satisfactory.
May 28.	553	N.	24	...	"	Do.
"	45	"	13	...	"	Do.
June 9	170	"	21	...	"	Do.
"	67	"	1	1 (mastitis)	...	Do.
June 10.	153	C.	5	...	healthy	Clean.
"	7	"	5	...	"	Satisfactory.
"	66	"	12	...	"	Do.
June 11.	136	N. E.	1	1 (tuberculous)	"	Do.
June 15.	67	N.	1	Recovered	(See June 9th)	
June 16.	136	N. E.	14	...	healthy	Satisfactory.
"	220	"	19	...	"	Do.
"	137	"	22	...	"	Do.
June 18.	896	N.	9	...	"	Do.
"	343 ^b	"	25	...	"	Do.
June 22.	120	Bmy.	21	...	"	Do.
June 30.	590	E.	6	...	"	Do.
"	172	"	29	...	"	Do.
"	19	"	18	...	"	Do.
"	145	"	27	...	"	Do.
"	964	"	cows out.	...	...	Do.
July 1.	120	Bmy.	21	...	healthy	Do.
July 6.	351	E.	9	...	"	Do.
"	101	"	15	...	"	Do.
"	478	N. E.	19	...	"	Do.
July 13.	145	E	1	1 (mastitis)	...	
July 14.	126	Bmy.	cows out.	...	"	Satisfactory.
"	36	"	3	...	healthy	Do.
"	99	A. & W.	22	...	"	Do.
"	38	"	19	...	"	Do.
"	256	"	6	...	"	Do.

TABLE VIII a.—Continued.

Date of Inspection.	Register No.	Ward.	Cattle and Condition.			Condition of Shed.
			No. Examined	Udder diseased.	General Condition	
1909.						
July 14.	287	A. & W.	4	...	healthy	Satisfactory.
July 28.	145	E.	1	...	(See July 13th)	
July 29.	616	N.W.	19	...	healthy	Satisfactory.
"	680	Bnk.	2	...	"	Do.
Aug. 5.	90	E.	21	...	"	Do.
"	964	"	14	I (tuber- culous)	others healthy	Do.
Aug. 6.	138	N.E.	48	...	healthy	Satisfactory
"	665	N.	18	...	"	
"	170	"	25	...	"	Satisfactory.
Aug. 9.	...	...	14	...	"	Do.
Aug. 10.	389	Hdy.	12	...	"	Do.
"	682b	Bmy.	8	...	"	Clean.
"	167a	Hdy.	19	...	"	Satisfactory.
Aug. 12.	909	Bmy.	15	I (? tuber- culous)	others healthy.	Do.
"	402	A. & W.	10	...	healthy	Do.
"	246b	"	6	...	"	Do.
"	246a	"	10	...	"	Do.
"	593	"	7	I (tuber- culous)	others healthy.	Do.
Aug. 23.	430	Bmy.	13	...	healthy	Satisfactory.
"	332	W.H.	54	...	"	Do.
"	96	"	8	...	"	Do.
"	406	"	15	...	"	Do.
Aug. 25.	410	Bmy.	7	...	"	Do.
"	147	"	7	...	"	Do.
"	337	"	20	...	"	Do.
"	126	"	14	...	"	Do.
Aug. 26.	550	Hdy.	13	...	"	Do.
"	338	N.	2	...	"	Do.
Aug. 31.	593	A. & W.	6	...	"	Do.
"	10	"	4	...	"	Do.
"	372	"	4	...	"	Do.
Sept. 7.	295	N.E.	8	...	"	Do.
"	136	"	12	...	"	Do.
"	220	"	18	...	"	Do.
"	137	"	16	...	"	Do.
Sept. 8.	75	Hdy.	15	...	"	Do.
"	195	N.	cows out.	...	...	Do.
Sept. 10.	45	"	13	...	healthy	Do.
"	739	"	—	...	...	Pulled down.
"	553	"	cows out.	...	...	Satisfactory.
Sept. 22.	64	W.H.	8	...	healthy	Do.
"	677	"	4	...	"	Do.

TABLE VIII a.—Continued.

Date of Inspection.	Register No.	Ward.	Cattle and Condition.			Condition of Shed.
			No. Examined	Udder diseased.	General Condition	
1909.						
Sep. 22.	135	W.H.	6	...	healthy	Satisfactory.
"	390	"	24	...	"	Do.
"	392	"	7	...	"	Do.
"	43	"	33	...	"	Do.
"	150	Hcl.	7	...	"	Do.
"	85	"	7	...	"	Do.
Oct. 4.	167a	Hdy.	20	I (? tuberculous)	others healthy.	Do.
"	4	N.	13	...	healthy	Do.
Oct. 12.	159	E.H.	23	...	"	Do.
"	493	"	32	...	"	Do.
"	633	"	9	...	"	Do.
"	378	W.H.	cows out.	...	"	Floor dirty.
Oct. 13.	35	W.	9	...	healthy	Satisfactory.
"	812	Hdy.	4	...	"	Some cows dirty, shed dirty.
"	167a	"	19	...	"	Satisfactory.
"	"	"	1	...	(See Oct. 4th)	"
"	389	"	12	...	healthy	Satisfactory.
Oct. 14.	678	N.	cows out.	...	...	Do.
"	896	"	cows out.	...	...	Do.
"	553	Bnk.	17	I (? tuberculous)	others healthy	Do.
Oct. 15.	553	"	1	...	(See Oct. 14th)	"
"	678	N.	6	...	healthy	Satisfactory.
Oct. 19.	553	Bnk.	16	...	"	Do.
"	"	"	1	(not tuberculous)	(See Oct. 15th)	"
Oct. 21.	544	N.	11	...	1 tuberculous. others healthy.	Satisfactory.
"	196	N.	21	...	healthy	Do.
"	49	N.W.	21	...	"	Do.
Oct. 26.	266	E.H.	4	...	"	Do.
"	557	"	13	...	"	Do.
"	835	S.	12	...	"	Do.
Oct. 27.	104	A.&W.	cows out.	...	...	Do.
"	431	"	31	...	healthy	Do.
"	813	"	40	...	"	Do.
"	167a	Hdy.	1	...	(See Oct. 13th)	"
"	164	"	2	...	healthy	Satisfactory.
"	321	"	cows out.	...	"	"
Oct. 28.	284	N.W.	4	...	healthy	Satisfactory.
"	609	Hdy.	14	...	"	Do.
"	213	"	5	...	"	Do.
"	94	"	11	...	"	Do.
"	393	"	36	...	"	Do.
"	347	"	cows out.	...	...	Do.

TABLE VIII a.—Continued.

Date of Inspection.	Register No.	Ward.	Cattle and Condition.			Condition of Shed.
			No. Examined	Udder diseased.	General Condition	
1909.						
Oct. 29.	153	C.	8	...	healthy	Fairly clean, but confined.
"	7	"	6	...	"	Satisfactory.
"	66	"	13	...	"	Do.
Nov. 2.	167a	Hdy.	1	1 (tuberculous.)	(See Oct. 27th)	—
Nov. 3.	10	A.&W.	3	...	healthy	Satisfactory.
"	37 ²	"	4	...	"	Do.
"	679	"	0	...	...	Do.
"	909	Bmy.	14	...	healthy	Do.
"	173	"	18	...	"	Do.
"	406	W.H.	18	...	"	Do.
Nov. 4.	...	...	14	...	"	Do.
"	101	E.	15	...	"	Do.
"	351	"	10	...	"	Do.
"	478	N.E.	21	...	"	Do.
Nov. 5.	896	N.	8	...	"	Do.
"	343 ^b	"	25	...	"	Do.
"	343 ^a	"	14	...	"	Do.
"	602	"	19	...	"	Do.
Nov. 11.	104	A.&W.	2	...	1 healthy. 1 affected with tumours.	Do.
"	126	Bmy.	cows out.	...	"	Do.
"	36	"	cows out.	...	...	Do.
"	99	A & W.	cows out.	...	...	Do.
"	38	"	23	...	healthy	Do.
"	256	"	5	...	"	Do.
"	287	"	3	...	"	Do.
Nov. 15.	708	"	13	...	"	Do.
"	585	Bmy.	16	...	"	Do.
"	127	"	27	...	"	Do.
"	128	"	3	...	"	Do.
"	515	"	8	...	"	Do.
"	34	A.&W.	4	...	"	Do.
"	120	Bmy.	cows out	...	...	Do.
"	199b	"	24	1 (mastitis)	others healthy	Do.
Nov. 17.	243	"	9	...	healthy	Do.
"	201	"	1	...	"	Do.
"	682a	"	20	...	"	Do.
"	822	"	12	...	"	Do.
"	209	"	10	...	"	Do.
"	21	"	7	...	"	Do.
"	574	"	14	...	"	Do.
"	408	"	15	...	"	Do.
"	682b	"	8	...	"	Clean.

TABLE VIII a.—Continued.

Date of Inspection.	Register No.	Ward.	Cattle and Condition.			Condition of Shed.
			No. Examined	Udder diseased.	General Condition	
1909.						
Nov. 17.	321	Hdy.	16	...	healthy	Satisfactory.
Nov. 18	17	"	5	I (?tuber- culous)	others healthy.	Do.
"	738	N.	5	...	healthy	Do.
"	522	"	23	...	"	Do.
"	195	"	18	...	"	Do.
Nov. 22.	17	Hdy.	1	I (tuber- culous)	(See Nov. 18th)	
Nov. 24.	590	E.	7	...	healthy	Satisfactory.
"	90	"	22	...	"	Do.
"	19	"	19	...	"	Do.
"	145	"	28	...	"	Do.
"	964	"	cows out.	...	...	Do.
Nov. 25	148	Bmy.	16	...	healthy	Do.
"	141	"	20	...	"	Do.
"	318	"	24	...	"	Do.
"	120	"	24	...	"	Some cows dirty. Shed walls dirty.
"	199b	"	1	recovered.	(See Nov. 15th)	
"	199b	"	23	...	healthy	Satisfactory.
Nov. 26.	665	N.	17	...	"	Do.
"	67	"	4	...	"	Do.
"	170	"	25	...	"	Do.
"	543	"	...	...	...	No cows kept.
Nov. 29.	295	N.E.	8	...	healthy	Satisfactory.
"	136	"	12	...	"	Do.
"	220	"	20	...	"	Do.
"	137	"	16	...	"	Do.
"	138	"	46	...	"	Do.
Nov. 30.	964	E.	12	...	"	Do.
"	172	"	33	...	"	Do.
Dec. 1.	104	A.&W.	19	...	"	Do.
"	126	Bmy.	13	...	"	Do.
"	99	A & W.	19	...	"	Do.
"	402	"	11	...	"	Do.
"	246b	"	6	...	"	Do.
"	246a	"	10	...	"	Do.
"	593	"	4	...	"	Do.
Dec. 2.	167b	Hdy.	12	...	"	Do.
"	714	"	10	...	"	Do.
"	75	"	18	...	"	Do.
Dec. 3.	45	N.	15	I (?tuber- culous)	others healthy.	Do.
"	680	Bnk.	2	...	healthy	Do.
"	284	N.W.	21	...	"	Do.
"	88	"	27	...	"	Do.

TABLE VIII a.—Continued.

Date of Inspection.	Register No.	Ward.	Cattle and Condition.			Condition of Shed.
			No. Examined	Udder diseased.	General Condition	
1909.						
Dec. 3.	616	N.W.	25	...	healthy	Satisfactory.
Dec. 8.	17	Hdy.	4	..	"	Fairly clean.
Dec. 9.	45	N.	1	...	(See Dec. 3rd)	
Dec. 12.	38	A.&W.	23	...	healthy	
Dec. 14.	38	"	23	...	"	Shed being cleaned and disinfected.
Dec. 15.	146	Hdy.	33	...	"	Satisfactory.
"	912	"	13	...	"	Do.
"	592	"	19	...	"	Do.
"	353	"	15	...	"	Do.
"	676	"	7	...	"	Do.
"	550	"	13	...	"	Do.
"	591	"	..	...	"	Unoccupied.
"	45	N.	...	...	(See Dec. 9th).	
Dec. 16.	765	Bmy.	10	...	healthy	Satisfactory.
"	92	"	3	...	"	Do.
"	801	"	6	...	"	Dirty.
"	407	"	...	...	"	No cows kept.
"	38	A.&W.	23	...	healthy	Cleaned and disinfected.
Dec. 17.	...	...	15	...	"	Satisfactory.
Dec. 21.	38	A.&W.	23	...	"	Do.
"	39	N.	32	...	"	Do.
Dec. 23.	78	Bmy	21	...	"	Do.
"	199a	"	14	...	"	Do.
"	249	"	9	...	"	Do.
"	400	"	26	...	"	Do.
"	73	"	28	...	"	Do.
"	635	"	11	...	"	Do.
"	77	"	13	...	"	Do.
Dec. 30.	63	"	6	...	"	Do.
"	681	"	4	...	healthy but dirty.	Dirty.
"	360	"	24	...	healthy	Satisfactory.
"	352	"	9	...	"	Do.
"	337	"	22	...	"	Do.
"	227a	"	7	...	"	Do.
"	227b	"	5	...	"	Do.
"	470	"	2	...	"	Dirty.
"	322	"	5	...	"	Satisfactory.
"	51	"	6	...	healthy but dirty.	Dirty.
"	410	"	7	I (tuberculous)	others healthy	Satisfactory.
"	147	"	7	...	healthy	Do.
"	70	"	5	...	"	Do.
Dec. 31.	553	N.	21	...	"	Do.
"	678	"	7	...	"	Do.
"	45	"	14	...	"	Do.

TABLE VIII b.

Samples of Milk sent to the Bacteriological Laboratory
for Examination for Tubercle during 1909.

Date.	Where farm is situate.	No. of retailer.	Result of the test.
1909.			
Jan. 2	Yeadon	581	*Not tuberculous.
Jan. 13	Shadwell }	630	† Do.
"	Do. }	258	† Do.
Jan. 14	Leeds	485	† Do.
Jan. 19	Horton-in-Ribblesdale	306	† Do.
"	Do.	306	† Incomplete.
"	West Marton	349	† Not tuberculous.
Jan. 27	Elslack }	616	† Do.
"	Do. }	616	† Do.
"	Thornton-in-Craven }	422	† Do.
"	Do. }	422	† Do.
Feb. 2	Horton-in-Ribblesdale	306	† Do.
"	Do.	306	† Do.
"	Do.	306	† Do.
Feb. 9	Earby	422	† Do.
"	Clapham	555	† Do.
"	Goldsboro' }	422	† Do.
"	Do. }	422	† Do.
Feb. 16	Leeds }	592	† Do.
"	Do. }	6	† Do.
Feb. 17	Rylston	422	† Do.
"	Benningboro'	615	† Do.
Feb. 23	Seacroft }	222	† Do.
"	Do. }	258	† Do.
"	Whitkirk	258	† Do.
Feb. 24	Horsforth	190	† Do.
Mar. 3	Wakefield }	422	† Do.
"	Do. }	422	† Do.
"	Tadcaster	422	† Do.
"	Elslack	340	† Do.
Mar. 10	Rawdon }	561	† Do.
"	Do. }	174	† Do.
"	Horsforth	517	† Tuberculous.
"	Rawdon	561	† Do.
Mar. 16	Horsforth	118	† Do.
"	Rawdon	198	† Do.
Mar. 17	Tong	434	† Do.
"	Gargrave	340	† Not tuberculous.
Mar. 23	Guiseley	453	† Do.
"	Clapham	555	† Do.

* From single cows.

† Original specimen.

‡ Control specimen.

TABLE VIIIb.—Continued.

Date.	Where farm is situate.	No. of retailer.	Result of the test.
1909			
Mar. 23	Elslack	215	†Not tuberculous.
"	Pool	259	†Tuberculous.
Mar. 30	Bingley	605	†Not tuberculous
"	Carlton }	453	† Do.
"	Do. }	453	†Tuberculous
April 17	Rawdon	198	*Not tuberculous.
April 20	Pool	259	† Do.
April 21	Horsforth	517	† Do.
"	Tong	434	†Tuberculous.
April 26	Halton }	136	†Not tuberculous.
"	Do. }	136	† Do.
April 27	Horsforth	521	† Do.
"	Do.	812	† Do.
May 4	Roundhay }	114	†Tuberculous.
"	Do. }	114	† Do.
"	Do. }	114	† Do.
May 6	Whinmoor }	374	†Not tuberculous.
"	Do. }	46	† Do.
May 11	Carlton }	453	† Do.
"	Do. }	453	†Tuberculous.
"	Eccup }	399	†Not tuberculous.
"	Do. }	399	† Do.
May 18	Spofforth	207	† Do.
"	Nidd Bridge	206	† Do.
"	Roundhay }	537	† Do.
"	Do. }	537	† Do.
May 26	Pool	50	† Do.
"	Huby	50	† Do.
"	Bramhope	533	† Do.
"	Horsforth	74	† Do.
June 8	Swillington }	123	† Do.
"	Do. }	123	† Do.
"	Alwoodley	160	† Do.
June 15	Bramhope	432	† Do.
"	Leeds	6	† Do.
"	Denton	2	† Do.
June 22	Horton-in-Ribblesdale	296	† Do.
"	Barnoldswick }	422	† Do.
"	Do. }	422	† Do.
June 29	Carlton	453	†Tuberculous.
"	Rawdon	274	†Not tuberculous.
"	Leeds	629	† Do.
June 30	Guisseley	616	† Do.
July 7	Grassington	259	† Do.

* From single cows.

† Original specimen.

‡ Control specimen.

TABLE VIII b.—Continued.

Date.	Where farm is situate.	No. of retailer.	Result of the test.
1909			
July 7	Pool	306	† Not tuberculous.
"	Do.	259	‡ Not tuberculous.
July 8	Carlton	259	† Do.
July 14	Gargrave	508	† Do.
July 14	Denton	2	† Tuberculous.
July 15	Burnsall	418	† Not tuberculous.
July 28	Leeds	593	† Tuberculous.
"	Cookridge	490	† Not tuberculous.
"	Whinmoor	691	† Do.
Aug. 5	Adel	614	† Do.
"	Kildwick	110	† Do.
Aug. 18	Horsforth	76	† Incomplete.
"	Do.	812	† Not tuberculous.
"	Carlton	453	† Do.
Aug. 25	Seacroft }	48	† Do.
"	Do. }	510	† Do.
"	Do. }	692	† Do.
"	Whinmoor	293	† Tuberculous.
Aug. 31	Cookridge	614	† Not tuberculous.
Sept. 1	Gargrave	259	† Do.
"	Hellifield	194	† Do.
"	Ben Rhydding	215	† Tuberculous.
Sept. 7	Apperley Bridge	412	† Not tuberculous.
"	Do. }	302	† Tuberculous.
"	Do. }	150	† Do.
Sept. 8	Rawdon	110	† Do.
Sept. 14	Horsforth	569	† Do.
"	Rawdon	556	† Do.
"	Bramhope	596	† Not tuberculous.
"	Horsforth	190	† Do.
Sept. 21	Otley	581	† Do.
"	Cookridge	490	† Incomplete.
"	Pool }	50	† Not tuberculous.
"	Do. }	50	† Do.
Sept. 28	Old Bramhope	615	† Do.
"	Do.	27	† Do.
"	Alwoodley	160	† Tuberculous.
Sept. 29	Do.	113	† Not tuberculous.
Oct. 6	Bingley }	605	† Do.
"	Do. }	605	† Do.
"	Wigton }	552	† Do.
"	Do. }	552	† Do.
Oct. 12	Otley	180	† Do.
"	Bramhope	29	† Do.
Oct. 13	Oakworth	421	† Do.

† Original specimen.

‡ Control specimen.

TABLE VIII b.—Continued.

Date.	Where farm is situate.	No. of retailer.	Result of the test.
1909			
Oct. 13	Guisseley	422	† Not tuberculous.
Oct. 19	Guisseley	420	† Do.
"	Do.	435	† Do.
"	Do.	38	† Do.
"	Apperley Bridge ..	587	† Do.
Oct. 26	Bolton Abbey	594	† Do.
Oct. 27	Ripley Valley	422	† Do.
Nov. 2	Whinmoor }	460	† Do.
"	Do. }	29	† Do.
"	Do. }	603	† Do.
"	Oxenhope	422	† Do.
Nov. 9	Grassington	259	† Do.
"	Settle	149	† Do.
Nov. 10	Denton }	2	† Do.
"	Do. }	480	† Do.
Nov. 17	Gargrave	259	† Do.
"	Grassington	422	† Do.
"	Middleton	597	† Do.
"	Do.	542	† Do.
Nov. 23	Newsam Green } ..	535	† Tuberculous.
"	Do. }	169	† Do.
Nov. 24	Knostrop }	661	† Not tuberculous.
"	Do. }	661	† Do.
Nov. 30	Colton	365	† Do.
"	Leeds	134	† Do.
"	Halton	563	† Do.
"	Roundhay	563	† Do.
Dec. 7	Leeds }	347	† Tuberculous.
"	Do. }	347	† Not tuberculous.
Dec. 8	Bramhope	559	† Do.
"	Thorner	523	† Do.
Dec. 14	Rawdon }	274	† Do.
"	Do. }	274	† Do.
"	Do. }	274	† Tuberculous.
Dec. 15	Drighlington	75	† Not tuberculous.
"	Horsforth	76	† Do.

† Original specimen.

‡ Control specimen.

TABLE IX.

Samples of food sent to the City Analyst for examination
during the 52 weeks ended 1st January, 1910.

Article.	Genuine.	Poor in quality.	Adul- terated.	Total.	Sum- moned.	Con- victed.	Dis- missed
Milk	366	...	118	484	29	29	...
Butter	34	...	1	35	1	1	...
Bread	4	...	...	4	...	...	...
Lard	25	...	1	26	...	...	...
Jam	1	...	11	12	...	...	...
Sausage	6	...	3	9	...	...	...
Vinegar	1	...	...	1	...	...	...
Stout	1	...	...	1	...	...	...
Pepper	2	...	...	2	...	...	...
Olive Oil	2	...	...	2	...	...	...
Tea	1	...	...	1	...	...	...
Rice	3	...	4	7	...	...	...
Cheese	3	...	...	3	...	...	...
Cider ... ..	...	...	2	2	...	...	...
Lime Juice	1	...	...	1	...	...	...
Nitre ... ..	...	...	1	1	...	...	...
Cream ... ..	...	...	7	7	...	...	...
Cream of Tartar	13	...	...	13	...	...	...
Claret	1	...	...	1	...	...	...
Babies' Lotion	1	...	1	2	...	...	...
Total	465	...	149	614	30	30	...

TABLE IXa.

Summonses issued during the 52 weeks of 1909 under the Sale of Food and Drugs Acts, 1875, 1879 and 1899, for articles other than butter.

No. of sample.	Article.	Percentage of adulteration.			Fines.			Remarks.
					£	s.	d.	
14	Milk ...	21%	added water	...	10	0	0	and costs; seventh conviction
17	Do. ...	12%	do.	...	0	10	0	and costs
39	Do. ...	17%	fat removed	...	—			to pay costs
83	Do. ...	11%	added water, 8% fat removed	...	1	0	0	and costs
84	Do. ...	21%	fat removed	...	0	10	0	do.
85	Do. ...	24%	do.	...	—			to pay costs
138	Do. ...	21%	added water	...	—			do.
167	Do. ...	14%	do.	...	7	0	0	and costs
168	Do. ...	7%	do.	...				
170	Do. ...	6%	do. 4% fat removed	...	2	0	0	do.
195	Do. ...	28%	do.	...	5	0	0	do.
199	Do. ...	20%	do.	...	3	0	0	do.
261	Do. ...	11%	do.	...	5	0	0	and costs; second conviction
350	Do. ...	12%	do.	...	0	10	0	and costs; skim milk
426	Do. ...	20%	do.	...	5	0	0	and costs
429	Do. ...	17%	do.	...	2	0	0	do.
492	Do. ...	12%	do.	...	—			to pay costs; see No. 544
525	Do. ...	17%	do.	...	—			to pay costs; see No. 543
533	Do. ...	15%	do.	...	0	10	0	and costs; skim milk
543	Do. ...	18%	do.	...	5	0	0	and costs
544	Do. ...	30%	do.	...	10	0	0	
555	Do. ...	20%	do.	...	—			to pay costs; see No. 585
568	Do. ...	12%	do.	...	1	0	0	and costs
570	Do. ...	14%	do.	...	5	0	0	second conviction
582	Do. ...	13%	do.	...	—			to pay costs; see No. 533
584	Do. ...	7%	do.	...	—			to pay costs; see No. 585
585	Do. ...	8%	do.	...	7	0	0	and costs; second conviction
589	Do. ...	13%	do. 14% fat removed	...	20	0	0	eighth conviction
601	Do. ...	4.7%	do. 15% do.	...	—			to pay costs
				£	90	0	0	

TABLE IXc.

Adulterated Samples where no proceedings were taken.

No. of Sample.	Article.	Adulteration.	Remarks.
15	Milk	... 2.4% added water ...	purchased officially
16	Do.	... 5% fat removed ...	do.
19	Do.	... 4.4% do. ...	do.
21	Do.	... 2.4% added water ...	do.
26	Do.	... 3.3% do. ...	do.
28	Do.	... 4.7% do. ...	do.
44	Do.	... 22% added water, 4% fat removed...	private sample
45	Do.	... 3.6% added water ...	purchased officially
66	Do.	... 4.4% do. ...	do.
67	Do.	... 1.2% do. ...	do.
68	Do.	... 1.8% do. ...	do.
70	Do.	... 2% added water, 4.7% fat removed...	do.
86	Do.	... 7% fat removed ...	do.
89	Do.	... 4.4% added water ...	do.
91	Do.	... 1.8% added water, 1.6% fat removed	do.
93	Do.	... 2.2% do. 7.8% do.	do.
99	Do.	... 3% added water ...	do.
100	Do.	... 2.7% added water, 6.7% fat removed	do.
102	Do.	... 3.4% fat removed ...	do.
103	Do.	... 2% added water ...	do.
105	Do.	... 3.8% added water, 3.2% fat removed	do.
106	Do.	... 6.7% fat removed ...	do.
107	Do.	... 6.7% do. ...	do.
109	Do.	... 4% added water, 5.3% fat removed...	do.
144	Do.	... 1.2% added water ...	do.
145	Do.	... 1.2% do. ...	do.
148	Do.	... 7% do. ...	private sample
176	Do.	... 7.6% fat removed ...	purchased officially
180	Do.	... 3% added water ...	do.
194	Do.	... 3.5% fat removed ...	do.
196	Do.	... 2% added water ...	do.
221	Do.	... 3% do. ...	do.
235	Do.	... 4.6% do. ...	do.
240	Do.	... 2% fat removed ...	do.
242	Do.	... 6.7% do. ...	do.
244	Do.	... 3.3% do. ...	do.
245	Do.	... 3% do. ...	do.
248	Do.	... 22% added water ...	private sample
261	Do.	... 8% do. ...	do.
262	Do.	... 18% added water, 5% fat removed ...	do.
270	Do.	... 4.4% added water ...	purchased officially
286	Do.	... 3% do. ...	do.
306	Do.	... 6% fat removed ...	do.
308	Do.	... 1.2% added water, 2.2% fat removed	do.
310	Do.	... 4.5% added water ...	do.
318	Do.	... 33% fat removed ...	private sample
337	Do.	... 36% added water ...	do.
346	Do.	... 11% do. ...	cautioned by Dr. Cameron
348	Do.	... 4.5% do. ...	purchased officially
349	Do.	... 1.3% do. ...	do.
359	Do.	... 4% do. ...	do.
388	Do.	... 2.4% do. ...	do.

TABLE IXc.—*Continued.*

No. of Sample.	Article.	Adulteration.				Remarks.
389	Milk	...	2.4%	added water	...	purchased officially
393	Do.	...	3.9%	do.	...	do.
422	Do.	...	6.7%	fat removed	...	do.
432	Do.	...	6.7%	do.	...	do.
441	Do.	...	4.5%	added water	...	do.
443	Do.	...	5%	do.	...	do.
453	Do.	...	3.5%	do.	...	do.
454	Do.	...	1.7%	do.	...	do.
438	Do.	...	4.7%	do.	...	do.
439	Do.	...	4.5%	do.	...	do.
461	Do.	...	2.9%	do.	...	do.
464	Do.	...	10%	fat removed	...	cautioned by Dr. Cameron
493	Do.	...	3.6%	added water	...	purchased officially
518	Do.	...	11%	do.	...	private sample
519	Do.	...	17%	do.	...	do.
521	Do.	...	4.5%	do.	...	purchased officially
524	Do.	...	3%	added water, 4% fat removed	...	do.
531	Do.	...	3.8%	added water	...	do.
532	Do.	...	6.7%	fat removed	...	do.
535	Do.	...	10%	added water	...	private sample
542	Do.	...	5.3%	do.	...	do.
545	Do.	...	2.9%	do.	...	purchased officially
556	Do.	...	4%	added water, 2.7% fat removed	...	do.
567	Do.	...	26%	added water	...	private sample
569	Do.	...	24%	added water, 6% fat removed	...	do.
581	Do.	...	3.2%	added water	...	purchased officially
583	Do.	...	6.7%	fat removed	...	do.
586	Do.	...	2.4%	added water	...	do.
591	Do.	...	4%	fat removed	...	do.
597	Do.	...	1.4%	added water	...	do.
598	Do.	...	1.4%	do.	...	do.
603	Do.	...	10%	do.	...	private sample

TABLE XI.
Smoke, 1909 (52 weeks).

Complaints received	...	...	...	...	...	16
Furnaces inspected	...	...	...	...	...	7,672
Observations taken of chimneys (for a period of sixty minutes each)	...	...	...	...	...	1,622
Total number of minutes dense smoke	...	...	...	...	...	2,663
Average minutes duration of dense smoke during each observation of one hour (1 minute 38 seconds)	...	...	...	...	...
Smoke prevention appliances adapted to furnaces	...	...	...	...	...	60
Chimneys newly erected	...	...	...	...	...	6
Furnaces in connection with new chimneys	...	...	...	...	...	20
Notices served upon manufacturers	...	...	...	...	...	10
Do. do. stokers	...	...	...	...	...	13
Persons summoned before the magistrates	...	...	...	...	...	—
Do. convicted	...	...	...	...	...	—

TABLE XII.
Work done by Disinfecting Staff, 1909 (52 weeks).

Houses disinfected	...	...	...	...	3,784
Rooms disinfected (stripped 295, limewashed 527)	...	...	...	...	10,685
Beds and mattresses disinfected	...	...	...	...	8,415
Articles of bed clothing disinfected	...	...	...	...	31,360
Articles of wearing apparel disinfected	...	...	...	...	53,302
Miscellaneous articles disinfected	...	...	...	...	19,116

TABLE XIII.

Cases removed to hospital by our own staff.
Classified according to diseases certified.

Small-pox.	Scarlet fever.	Diphtheria.	Typhus fever.	Typhoid fever.	Other diseases.	Total, 1909.
...	1,051	896	7	194	65	2,213

(52 weeks).

TABLE XIV.

Return for the 52 weeks ended 1st January, 1910,
of patients in hospital.

	1 Small-pox.	2 Scarlet fever.	3 Diphtheria.	4 Typhus fever.	5 Enteric, or typhoid fever.	6 Other or doubtful cases.	7 Total.
No. in Hospital on Saturday, 2nd January, 1909	54	119	...	38	30	241
No. since admitted	1,002	866	7	154	320	2,349
No. discharged	823	805	5	132	294	2,059
No. died	14	38	2	28	30	112
No. remaining in Hospital, 1st January, 1910	219	142	...	32	26	419

TABLE XV.
Canal Boats (52 weeks).

Registered during the year 1909	...	...	...	8
Re-registered do.	...	...	...	4
Transferred to fresh owners	...	...	...	2
Struck off register (on adjusting register)	...	...	...	119
On register, 1st January, 1910	...	...	...	269
Visits of inspection to wharves and locks	...	...	...	800
Boats completely inspected (219 boats)	...	...	...	459

TABLE XVI.
Houses Let in Lodgings.

	Houses.	Rooms.
Registered during the year ; let as furnished rooms
Struck off register
On register, 1st January, 1910
Houses let in lodgings visited, but not registered
Visited for infective disease
Drain testing...
Visits for additional inspection, &c.	4,963	—
Nuisances found and abated—		
Overcrowded rooms
Dirty rooms
Dirty and bad bedding
Dilapidated dwellings
Defective drains
Dirty closets
Total	182	204

TABLE XVII.

Other work of Temporary Dwellings Inspector.

Visits to common lodging-houses	...	...	..	452
" " as to infective disease				118
" furnished rooms as to small pox	...	...		—
" " typhus fever			...	71
" vans	...	...	...	254
" tents and temporary dwellings	...		...	115
" cellar dwellings	...		...	91
" to test drains (common lodging-houses)	...			3
Common lodging houses—				
Drain testings 4, after infectious diseases ; defects found 0.				
University lodging houses—				
Houses inspected, 152 ; containing 916 rooms.				
Drain testings, 210 in 152 houses ; (defects found 83, in 62 houses).				
Retestings of above, 286.				
Retesting of drains of 57 houses previously examined 114 (defects found 4, in 4 houses).				
Retesting above drains on completion of work, 8.				
Additional visits for non-abatements, etc.				258
Total visits to these houses	...	...	...	746
Health Congress—				
Additional visits to lodgings, &c.	...	...	...	141
Drain testings (not included above) 201.				
Total				1,991

* There were 107 deaths at Manston Hospital (outside the City boundary).

† Including 37 deaths in the Consumptive Hospital, Armley (see quarters returns).

§ Including two deaths of Leeds persons in temporary premises situated in Chapeltown district.

‡ Deaths of Leeds persons occurring at the West Riding Lunatic Asylums, &c. || '14'21 includes deaths of 194 outsiders dying in Leeds, but not of 146 persons alleged to belong to Leeds dying away. These cannot be allocated to place of residence.

TABLE A, Part 2. (a)

Table of populations, registered births, and mortality at certain ages,
in the registration sub-districts.

(Public institutions regarded as sub-districts.)

Population estimated to middle of 1909 at each age group.				484,012	12,678	45,596	99,226	97,413	203,595	11,944	15,560	
REGISTRATION SUB-DISTRICTS OF LEEDS CITY.	Population at all ages.		Registered Births.	Mortality from all causes, at subjoined ages.								Deaths rate per 1,000 for each district
	Census 1901	Estimated to middle of 1909.		At all ages.	Under 1 year.	1 and under 5	5 and under 15	15 and under 25	25 and under 60	60 and under 65	65 and upwards	
Leeds Township—North ..	59,281	58,704	1,381	600	171	82	12	23	160	41	111	10·26
Do. do West ..	84,340	85,785	1,871	963	197	72	31	45	286	60	272	11·26
Do. do. South ..	34,299	35,370	1,132	581	166	84	27	29	131	33	111	16·48
Hunslet	69,064	79,943	1,861	886	247	118	21	39	231	60	170	11·12
Holbeck	31,572	37,320	1,002	477	115	67	17	18	133	24	103	12·82
Wortley	59,328	68,099	1,345	735	166	66	18	32	186	65	202	10·83
Kirkstall	41,561	51,635	944	479	84	45	14	21	112	36	167	9·31
Bramley	17,299	19,547	405	241	39	20	8	10	64	16	84	12·37
Chapeltown	31,845	47,270	952	480	80	33	7	19	162	40	139	10·19
Osmondthorpe ..	379	339	16	9	..	..	..	..	3	3	3	26·64
Infirmary .. ..	..	..	..	567	47	51	60	59	269	33	48	..
*Fever Hospitals ..	..	..	..	107	1	26	29	19	29	2	1	..
WORKHOUSES {	Leeds† ..	..	80	514	31	12	8	16	210	58	179	..
	Hunslet ..	..	..	80	1	2	..	..	23	16	38	..
	Holbeck ..	..	2	33	1	..	..	..	10	4	18	..
	Bramley ..	..	11	65	4	3	1	2	20	7	28	..
Consumptive Hospital ..	..	..	..	37	..	..	1	13	23	..	..	..
For the whole City ..	428,968	484,012	11,002	6,854	1,350	681	254	345	2,052	498	1,674	14·21

* There were 107 deaths at Manston Hospital (outside the city boundary). See note to table B.

† Including two deaths of Leeds persons, aged 82, and 74, occurring in temporary premises situated in Chapeltown district

TABLE A, Part 2 (B).

Mortality at certain ages in the registration sub-districts.
(Deaths in Public Institutions allocated to districts.)

DISTRICT	1909 (52 weeks).	Deaths at all ages.	Under 1 year.	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 60	60 and under 65	65 and upwards.	Death-rate per 1,000 for each district.
North ..	Registered in district } Registered in institutions } Total (see table E)	600 269 869	171 19 190	45 9 54	37 7 44	12 16 28	23 18 41	160 114 274	41 21 62	111 65 176	14.85
West ..	Registered in district } Registered in institutions } Total (see table E)	963 267 1,230	197 29 226	46 5 51	26 11 37	31 19 50	45 14 59	286 103 389	60 31 91	272 55 327	14.39
South-East ..	Registered in district } Registered in institutions } Total (see table E)	581 171 752	166 7 173	54 2 56	30 8 38	27 13 40	29 14 43	131 69 200	33 13 46	111 45 156	21.33
Hunslet ..	Registered in district } Registered in institutions } Total (see table E)	886 187 1,073	247 5 252	63 5 68	55 14 69	21 12 33	39 13 52	231 70 301	60 20 80	170 48 218	13.47
Holbeck ..	Registered in district } Registered in institutions } Total (see table E)	477 67 544	115 3 118	43 .. 43	24 5 29	17 4 21	18 6 24	133 24 157	24 6 30	103 19 122	14.63
Wortley ..	Registered in district } Registered in institutions } Total (see table E)	735 110 845	166 9 175	38 2 40	28 8 36	18 6 24	32 14 46	186 39 225	65 8 73	202 24 226	12.45
Kirkstall ..	Registered in district } Registered in institutions } Total (see table E)	479 46 525	84 .. 84	29 2 31	16 2 18	14 6 20	21 1 22	112 24 136	36 1 37	167 10 177	10.20
Bramley ..	Registered in district } Registered in institutions } Total (see table E)	241 37 278	39 1 40	7 2 9	13 1 14	8 3 11	10 4 14	64 15 79	16 3 19	84 8 92	14.27
Chapelton ..	Registered in district } Registered in institutions } Total (see table E)	480 54 534	80 5 85	15 2 17	18 3 21	7 8 15	19 4 23	162 18 180	40 3 43	139 11 150	11.34
Osmondthorpe	Registered in district } Registered in institutions } Total (see table E)	9 1 10	.. .. ..	.. .. ..	.. .. ..	.. .. ..	.. .. ..	3 1 4	3 .. 3	3 .. 3	29.60
City ..	Total of line in italics Outsiders dying in Leeds institutions. Leeds persons dying in institutions outside. NETT TOTAL.	6,660 194 146 6,806	1,343 7 1 1,344	369 2 .. 369	306 4 .. 306	242 12 1 243	324 21 3 327	1,945 107 95 2,040	484 14 13 497	1,647 27 33 1,680	13.81 '40 '30 14.11

Deaths of Leeds persons in the City Fever Hospitals and in Hunslet Workhouse are allocated to the districts from which they were sent in.

1909.—FIRST QUARTER.

Table shewing Deaths recorded in the City of Leeds during the thirteen weeks ended 3rd April, 1909, classified according to cause, age, and the registration sub-districts in which they occurred.

TOWNSHIP &c. Estimated Population— 484,012	L E E D S.						Fever Hospitals †	WORKHOUSES.				Con- sumptive Hos- pital.	TOTAL Mortality in City.		Annual rate per 1,000 pop.	Deaths of Out- siders occurring in City.		
	North.		West.		South E.			Leeds. †	Hunslet.	Holbeck	Bramley.		und. 5	over. 5				
	und. 5	ov. 5	und. 5	ov. 5	und. 5	ov. 5												
Under and over 5.	53,704	85,785	35,370	79,943	37,320	68,099	51,635	19,547	47,270	339	Osmond- thorpe.	In- firmaries, etc.	und. 5	ov. 5	und. 5	ov. 5	und. 5	ov. 5
Smallpox	3	3	1	2	8	4	4	1	2	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlatina	1	1	2	2	1	..	..	2	..	..	..	..	..	..	..	..	..	..
Diphtheria	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Croup (memb.)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" undefined	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough	2	1	4	6	4	..	4	1	2	..	..	..	..	..	..	..	..	..
Typhus	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..
Enteric	..	3	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Other or doubtful	..	1	2	1	..	..	2	1	1	..	..	..	..	..	..	..	..	..
Diarrhoea	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rheumatic Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Acute & Sub- acute Rheu- matism	1	..	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..
Erysipelas	..	1	..	1	1	..	..	..	1	..	..	1	..	..	..	..	1	..
Pyæmia	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever	1	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Ague	..	15	..	2	2	13	14	1	10	..	..	..	..	..	..	..	..	1
Phthisis	..	35	9	19	9	..	..	..	..	..	..	..	..	..	..	..	..	..
Bronchitis	28	39	24	21	17	9	8	7	11	1	..	..	..	..	..	..	..	5
Pneumonia	1	11	19	1	16	30	17	15	16	..	..	..	..	..	..	..	..	3
Pleurisy	1	2	4	2	2	1	3	..	1	2	..	6	28	..	1	..	13	4
Heart Disease	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Injury, &c.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of above causes	36	70	31	39	51	14	18	10	15	1	1	46	12	11	241	840	1081	2 13
All other causes	40	52	35	45	28	34	17	10	21	1	1	13	76	..	285	742	1037	1 36
Total ..	193	300	184	269	166	207	153	79	166	2	2	142	34	11	536	1582	2118	52
Mortality per 1,000 per an.	13.5	14.0	20.9	13.5	17.9	12.2	11.9	16.2	14.1	23.7	23.7	14.2	34	..	38.2	14.8	17.6	..

There were thirty-four deaths at Manston Hospital during this quarter.

† Including the death of a Leeds person in temporary premises situated in Chapelwold district.

English.

1909.—SECOND QUARTER.

Table shewing Deaths recorded in the City of Leeds during the thirteen weeks ended 3rd July, 1909, classified according to cause, age, and the registration sub-districts in which they occurred.

TOWNSHIP &c. Estimated Population— 484,012	L E E D S .						Fever Hospitals .	WORKHOUSES.				Con- sumptive Hos- pital.	Total Mortality in City.		Annual rate per 1,000 pop.	Death of Out- siders occurring in City.																		
	North.		West.		South E.			Hunslet.		Holbeck.			Wortley.				Kirkstall.		Bramley.		Chapel- town.		Osmond- thorpe.		In- firmary, etc.		Leeds. †		Hunslet.		Holbeck.		Bramley.	
	und. 5	ov. 5	und. 5	ov. 5	und. 5	ov. 5		und. 5	ov. 5	und. 5	ov. 5		und. 5	ov. 5			und. 5	ov. 5	und. 5	ov. 5	und. 5	ov. 5	und. 5	ov. 5	und. 5	ov. 5	und. 5	ov. 5	und. 5	ov. 5	und. 5	ov. 5	und. 5	ov. 5
Under and over 5.	58,704	85,785	35,370	79,943	37,320	68,099	51,635	19,547	47,270	339																								
Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Croup (memb.)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" undefined	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough	8	1	3	5	2	2	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Typhus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other or doubtful	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhoea	..	..	2	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rheumatic Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Acute & Sub- acute Rheu- matism	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pyæmia	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ague	..	10	1	21	..	15	1	15	6	1	15	1	10	..	3	1	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Phthisis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bronchitis	21	19	15	26	23	13	10	15	9	9	11	23	8	13	4	7	3	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pneumonia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pleurisy	..	12	..	23	..	6	1	5	14	..	20	..	1	2	..	6	..	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Heart Disease	..	2	..	..	..	..	..	..	..	..	1	..	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Injury, &c.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of above causes	29	43	19	83	32	37	35	61	16	34	18	64	11	34	5	17	5	38	..	1	3	41	6	19	4	67	..	12	..	1	1	5	..	12
All other causes	27	32	46	86	25	30	56	69	28	29	47	59	18	30	7	22	20	41	..	2	15	85	..	3	10	46	1	13	..	9	1	12	..	1
Total ..	131	234	124	221	107	188	93	51	104	3	144	23	127	19	34	6	58	79	40	45	156	127	28	29	77	79	26	10	19	34	49	49	49	
Mortality per 1,000 per an.	9.0	10.9	14.1	11.1	11.5	11.1	7.2	10.5	3.8	35.5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

* There were twenty-eight deaths at Manston Hospital during this quarter.

† English.

1909.—THIRD QUARTER.

Table shewing Deaths recorded in the City of Leeds during the thirteen weeks ended 2nd October, 1909, classified according to cause, age, and the registration sub-districts in which they occurred.

[illegible]

* There were seventeen deaths at Manston Hospital during this quarter.

† Including the death of a Leeds person in temporary premises situated in Charnelton district.

• English.

1909.—FOURTH QUARTER.

Table shewing Deaths recorded in the City of Leeds during the thirteen weeks ended 1st January, 1910, classified according to cause, age, and the registration sub-districts in which they occurred.

TOWNSHIP &c. Estimated Population—484,012	LEEDS.			Hunslet.	Holbeck	Wortley.	Kirkstall	Bramley.	Chapel-town.	Osmond-thorpe.	Infirmary, etc.	Fever hospitals.	WORKHOUSES.				Consumptive Hos-pital.	TOTAL Mortality in City.		Annual rate per 1,000 pop.	Deaths of Out-siders occurring in City.
	North.	West.	South E.										Leeds.	Hunslet.	Holbeck	Bramley.					
Under and over 5.	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5	und. 5 ov. 5
Smallpox	1	2	4	1	1	2	2	..	1	..	..	..	..	..	..	..	..	18	19	0.16	..
Measles	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	2	0.02	..
Scarlatina	..	1	..	..	..	..	..	..	..	..	1	4	..	..	..	..	..	6	5	0.02	..
Diphtheria	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	1	0.09	1
Group (memb.)	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	2	0.01	..
" undefined	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.02	..
Whooping Cough	1	1	..	5	..	5	1	..	..	..	..	1	..	..	..	..	..	12	2	0.12	..
Typhus	..	..	1	..	..	..	..	1	..	..	..	10	..	..	..	..	..	..	13	0.11	..
Enteric	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other or doubtful	1	3	1	8	5	2	..	1	..	..	..	..	..	..	..	..	..	21	2	0.19	..
Diarrhoea	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rheumatic Fever	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	0.01	..
Acute & Sub-acute Rheumatism	..	..	1	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	4	0.03	..
Erysipelas	..	..	..	..	..	..	..	..	1	..	1	1	..	..	..	..	..	1	2	0.02	..
Pyæmia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	0.01	..
Puerperal Fever	1	..	..	2	..	..	..	..	..	..	1	..	..	..	..	..	..	..	4	0.03	..
Ague	13	..	5	17	7	11	9	5	10	..	1	3	21	..	..	..	..	2	124	1.04	4
Phthisis	..	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bronchitis	11	21	18	23	10	17	19	5	6	1	1	6	5	12	1	1	..	106	207	2.60	2
Pneumonia	1	23	9	17	15	26	9	3	15	..	8	..	1	25	2	3	..	1	170	1.42	3
Pleurisy	4	2	6	5	2	3	1	3	1	..	12	16	..	..	..	..	..	23	44	0.60	3
Heart Disease	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Injury, &c.	19	47	24	42	36	30	13	7	9	1	15	5	6	58	4	2	5	199	581	6.47	13
Total of above causes	27	39	25	54	20	62	21	7	16	1	11	3	10	64	10	6	2	263	618	7.31	2
All other causes	131	246	134	210	109	188	123	60	103	2	138	28	138	14	8	17	7	462	1199	13.77	46
Total ..	9.0	11.5	15.2	10.5	11.7	11.1	9.6	12.3	9.2	23.7	23.8	23.8	23.8	23.8	23.8	23.8	23.8	33.0	11.3	13.8	..
Mortality per 1,000 per an.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

* There were twenty-eight deaths at Manston Hospital during this quarter. † English.

1910.—FIRST QUARTER.

Table shewing Deaths recorded in the City of Leeds during the thirteen weeks ended 2nd April, 1910, classified according to cause, age, and the registration sub-districts in which they occurred.

TOWNSHIP &c.	L E E D S.						Hunslet.	Holbeck.	Wortley.	Kirkstall.	Bramley.	Chapel- town.	Osmond- thorpe.	In- firmary, etc.	Fever Hospitals *	WORKHOUSES.								Con- sumptive Hos- pital.	TOTAL Mortality in City.			Annual rate per 1,000 pop.	Deaths of Out- siders occurring in City.							
	North.		West.		South E.											Leeds.		Hunslet.		Holbeck.		Bramley.			und. ov.	und. ov.	und. ov.			und. ov.	und. ov.	und. ov.	und. ov.	und. ov.	und. ov.	und. ov.
	und. ov.	5 5	und. ov.	5 5	und. ov.	5 5										und. ov.	5 5	und. ov.	5 5	und. ov.	5 5	und. ov.	5 5													
Estimated Population— 490,985	53,661	86,003	35,518				81,313	33,042	69,206	52,894	19,831	49,183	334																							
Under and over 5.	und. ov. 5 5	und. ov. 5 5	und. ov. 5 5				und. ov. 5 5	und. ov. 5 5	und. ov. 5 5	und. ov. 5 5	und. ov. 5 5	und. ov. 5 5	und. ov. 5 5	und. ov. 5 5	und. ov. 5 5	und. ov. 5 5	und. ov. 5 5	und. ov. 5 5	und. ov. 5 5	und. ov. 5 5	und. ov. 5 5	und. ov. 5 5	und. ov. 5 5	und. ov. 5 5	und. ov. 5 5											
Smallpox	1	1	1				4					1																								
Measles									1						2																					
Scarlatina		1						1		2					6																					
Diphtheria									1						1																					
Croup (membr.)		1						1			1																									
" undefined																																				
Whooping Cough	1	4	4				3	1	14	1																										
Typhus																																				
Enteric		1								1		2			5																					
Other or doubtful							1			1																										
Diarrhoea	1	2	1									4	1																							
Cholera																																				
Rheumatic Fever			1																																	
Acute & Sub- acute Rheu- matism	1																																			
Erysipelas														1																						
Pyæmia																																				
Puerperal Fever			1											1																						
Ague	1	9																																		
Phthisis			19											2																						
Bronchitis	17	22	16	36	27	22	22	30	12	15	10	22	6	14	3	12	9	17																		
Pneumonia																																				
Pleurisy																																				
Heart Disease	3	14	2	31	2	12	20	6	23	3	6	17																								
Injury, &c.	7	7	9	2	5	4	1	4	1	1	2	3																								
Total of above causes	24	54	26	99	35	45	31	65	18	41	28	65	13	42	4	24	14	47	1	6	35	8	13	2	64	1	2	11	2	211	620	831	6	79	3	12
All other causes	30	47	35	9C	30	46	42	74	25	30	42	60	20	46	8	29	18	57		24	80	1			7	63		6		281	645	926	6	757	6	39
Total ..	155	250	156				212	114	195	121	65	136	1		22						145				136	7	20		492	1265	1757		1436		60	
Mortality per 1,000 per an.	10.6	11.7	17.6				10.5	12.0	11.3	9.2	13.2	11.1	12.0															34.6	11.7	14.4						

TABLE B, Part I. (SUB-DISTRICTS.)

TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the 52 weeks of 1909, in the Urban Sanitary District of Leeds; classified according to Diseases, Ages, and Localities.

[illegible]

Notification has been compulsory since the first of May, 1894. The Small-pox Hospital is at Killingbeck, outside the town. New wards for general fever cases were opened on the Manston estate in October, 1896, and further extensions were made and completed in October, 1904. The use of the Fever Hospital in Beckett Street (the old House of Recovery) was discontinued in November, 1904, the fever cases being treated entirely in the new hospital at Manston, except that, for a short time during the furnishing, the hitherto unused Small-pox hospital at Killingbeck was utilised for the purpose. The wards of the new Small-pox hospital at Killingbeck are a quarter of a mile away from any of the buildings on the Manston estate. The whole of the fever accommodation for Leeds is now in the township of Seacroft, only a few hundred yards from the boundary of the borough itself. Seven cases of scarlet fever, five of diphtheria, two of typhoid, and three of "other" disease, admitted to Manston Hospital, came from outside the city, and are not included in this table. Also fifteen members of the Manston Hospital staff were admitted to Manston, seven for scarlet fever, five for diphtheria, two for typhoid, and one for erysipelas, all over fifteen. None of these fifteen are counted, as they could not be classified under any district of the city. One case of scarlet fever, included in the 3,285 notified in 1905, is included in the 2,238 removed to hospital, although the actual removal did not take place until 1910.

B. 2.

TABLE B, Part 2. (Wards).

Names of Localities adopted for the purpose of these Statistics.	Population at all ages.		Aged under 5, 5 under 15, 15 upwards.	New Cases of Sickness in each Locality, coming to the knowledge of the Medical Officer of Health.												
	Census, 1901.	Estimated to middle of 1909.		1	2	3	4	5	6	7	8	9	10	11	12	13
				Small-pox.	Scarlatina.	Diphtheria.	Membranous Croup.	Fevers.					Cholera.	Erysipelas.	Other.	TOTAL.
								Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.				
(a)	(b)	(c)	(d)													
Central	20,996	19,510	Under 5, .. 13	..	22	..	..	1	..	..	..	..	..	3	7	36
			5 under 15, .. 29	..	34	..	..	..	..	..	..	..	..	3	7	73
			15 upwards. .. 2	..	24	..	..	3	..	..	..	1	..	4	6	40
North	38,762	49,240	Under 5, .. 24	..	31	..	..	1	..	..	..	..	..	2	3	61
			5 under 15, .. 77	..	60	..	..	4	..	..	..	..	..	3	11	155
			15 upwards. .. 20	..	34	..	..	13	..	..	..	5	..	47	7	126
North-East	29,084	33,421	Under 5, .. 27	..	27	1	..	2	..	..	..	..	..	3	5	65
			5 under 15, .. 71	..	71	..	..	11	..	..	..	..	..	1	9	163
			15 upwards. .. 11	..	29	..	..	17	..	..	..	1	..	27	6	91
East	28,297	30,800	Under 5, .. 15	..	12	..	..	1	..	..	..	..	..	2	3	33
			5 under 15, .. 57	..	27	..	..	3	..	..	..	..	..	3	8	98
			15 upwards. .. 9	..	18	..	..	8	..	..	..	1	..	18	8	62
South	15,047	13,345	Under 5, .. 4	..	4	..	..	..	..	..	..	..	..	1	..	9
			5 under 15, .. 11	..	5	..	..	2	..	..	..	..	..	1	..	19
			15 upwards. .. 4	..	4	..	..	9	..	..	..	1	..	15	5	38
East Hunslet	33,450	40,465	Under 5, .. 9	..	22	2	..	2	..	..	..	..	..	3	1	36
			5 under 15, .. 53	..	28	2	..	10	..	..	..	..	..	3	8	104
			15 upwards. .. 9	..	26	..	..	18	..	..	..	4	..	28	9	94
West Hunslet	29,267	34,090	Under 5, .. 9	..	21	1	..	..	..	..	..	..	..	2	4	37
			5 under 15, .. 47	..	35	..	..	..	..	..	..	..	..	1	4	87
			15 upwards. .. 6	..	27	..	..	12	..	..	..	3	..	18	1	67
Holbeck	27,871	33,372	Under 5, .. 14	..	15	..	..	1	..	..	..	..	..	..	..	30
			5 under 15, .. 23	..	33	..	..	5	..	..	..	..	..	2	2	65
			15 upwards. .. 6	..	41	..	..	15	..	..	..	..	..	24	1	87
Mill Hill	7,736	6,577	Under 5, .. 1	..	4	..	..	..	..	..	..	..	..	1	1	7
			5 under 15, .. 4	..	6	..	..	..	..	..	..	..	..	2	1	13
			15 upwards. .. 7	..	10	..	..	5	..	..	..	1	..	9	1	33
West	23,914	23,504	Under 5, .. 7	..	14	..	..	2	..	..	..	..	..	1	4	28
			5 under 15, .. 38	..	30	..	..	1	4	..	..	..	..	1	7	81
			15 upwards. .. 5	..	23	..	..	6	9	..	..	3	..	18	7	71
North-West	32,239	35,759	Under 5, .. 11	..	17	1	..	..	..	..	..	..	..	..	2	31
			5 under 15, .. 54	..	49	..	..	1	..	..	..	..	..	1	12	117
			15 upwards. .. 17	..	28	..	..	7	..	..	..	..	..	24	5	81
Brunswick	22,893	23,212	Under 5, .. 22	..	27	..	..	1	..	..	..	..	..	..	4	54
			5 under 15, .. 57	..	41	..	..	1	..	..	..	..	..	2	6	107
			15 upwards. .. 9	..	17	..	..	10	..	..	..	1	..	10	3	50
New Wortley	18,734	18,341	Under 5, .. 9	..	1	..	..	..	..	..	..	..	..	..	3	13
			5 under 15, .. 11	..	3	..	..	1	..	..	..	..	..	..	..	15
			15 upwards. .. 6	..	4	..	..	3	..	..	..	1	..	11	1	26
Armley and Wortley	36,243	44,735	Under 5, .. 23	..	10	..	..	..	..	..	..	..	..	2	2	37
			5 under 15, .. 110	..	23	..	..	1	..	..	..	..	..	2	4	140
			15 upwards. .. 19	..	3	..	..	4	..	..	..	4	..	17	3	50
Bramley	21,650	24,570	Under 5, .. 24	..	23	3	..	..	..	..	..	..	..	1	2	53
			5 under 15, .. 80	..	50	1	..	2	..	..	..	..	..	2	2	137
			15 upwards. .. 11	..	11	..	..	11	..	..	..	3	..	16	..	52
Headingley	42,785	53,071	Under 5, .. 17	..	45	..	..	..	..	..	..	..	..	3	..	65
			5 under 15, .. 56	..	105	..	..	1	..	..	..	..	..	4	3	169
			15 upwards. .. 22	..	109	..	..	14	..	..	..	3	..	24	7	179
Totals	428,968	484,012	Under 5, .. 229	..	295	8	..	11	..	..	..	..	..	18	34	595
			5 under 15, .. 778	..	600	3	..	1	46	..	..	..	..	30	85	1543
			15 upwards. .. 163	..	408	..	..	6	158	..	..	32	..	310	70	1147
Grand total ..	..	..	..	..	1170	1303	11	7	215	..	..	32	..	358	189	3285

TABLE B, Part 2.—Wards (continued)

Names of Localities adopted for the purpose of these Statistics.	Population at all ages.		Aged under 5, 5 under 15, 15 upwards.	Number of such Cases Removed from their Homes in the several Localities for Treatment in Isolation Hospitals.													
	Census, 1901.	Estimated to middle of 1909.		1 Small-pox.	2 Scarlatina.	3 Diphtheria.	4 Membranous Croup.	Fevers.						10 Cholera.	11 Erysipelas.	12 Other.	13 TOTAL.
								5 Typhus.	6 Enteric or Typhoid.	7 Continued.	8 Relapsing.	9 Puerperal.					
(a)	(b)	(c)	(d)														
Central ..	20,996	19,510	Under 5, .. 5 under 15, .. 15 upwards.	11 27 2	20 30 17	1 .. 2 7 6	32 54 27	
North ..	38,762	49,240	Under 5, .. 5 under 15, .. 15 upwards.	21 65 16	22 48 21	1 3 8 1 3	.. 11 7	5 127 56		
North-East ..	29,084	33,421	Under 5, .. 5 under 15, .. 15 upwards. ..	.. .. ..	22 60 10	20 62 24	1 .. ..	.. .. ..	1 9 15	.. .. ..	.. .. ..	.. .. ..	1 5 6	5 140 56
East ..	28,297	30,800	Under 5, .. 5 under 15, .. 15 upwards. ..	.. .. ..	14 49 8	11 26 13	.. .. ..	.. .. ..	.. 3 6	.. .. ..	.. .. 1	.. .. ..	1 6 8	3 85 40
South ..	15,047	13,345	Under 5, .. 5 under 15, .. 15 upwards. ..	.. .. ..	4 11 4	2 3 4	.. .. ..	.. .. ..	.. 2 5	.. .. ..	.. .. ..	.. .. ..	.. 3 5	6 17 21
East Hunslet ..	33,450	40,465	Under 5, .. 5 under 15, .. 15 upwards. ..	.. .. ..	7 50 8	10 19 12	.. 1 ..	.. .. ..	.. 8 14	.. .. ..	.. 1 ..	.. .. ..	.. 2 9	17 85 46
West Hunslet ..	23,267	34,090	Under 5, .. 5 under 15, .. 15 upwards. ..	.. .. ..	7 40 6	14 31 20	.. .. ..	.. .. ..	.. 12 ..	.. .. 1	.. .. ..	.. 1 3	4 3 1	25 75 43
Holbeck ..	27,871	33,372	Under 5, .. 5 under 15, .. 15 upwards. ..	.. .. ..	8 16 6	9 20 20	.. .. ..	.. .. ..	1 4 14	.. .. ..	.. .. ..	.. .. 3	.. 2 1	18 42 44
Mill Hill ..	7,736	6,577	Under 5, .. 5 under 15, .. 15 upwards. ..	.. .. ..	1 3 6	3 1 9	.. .. ..	.. .. ..	.. .. ..	.. .. ..	.. .. ..	.. .. 3	1 1 5	5 5 19
West ..	23,914	23,504	Under 5, .. 5 under 15, .. 15 upwards. ..	.. .. ..	7 35 5	9 23 14	.. .. ..	.. 1 6	2 4 7	.. .. ..	.. .. 1	.. .. 6	4 7 7	22 70 46
North-West ..	32,239	35,759	Under 5, .. 5 under 15, .. 15 upwards. ..	.. .. ..	11 43 15	10 25 16	.. .. ..	.. .. ..	.. 1 3	.. .. ..	.. .. ..	.. .. 3	2 12 5	23 81 42
Brunswick ..	22,893	23,212	Under 5, .. 5 under 15, .. 15 upwards. ..	.. .. ..	14 49 8	24 27 14	.. .. ..	.. .. ..	.. 1 4	.. .. ..	.. .. 1	.. .. ..	4 6 3	42 84 30
New Wortley ..	18,734	18,341	Under 5, .. 5 under 15, .. 15 upwards. ..	.. .. ..	7 9 5	1 3 2	.. .. ..	.. .. ..	.. 1 2	.. .. ..	.. .. 1	.. .. 2	3 .. 1	11 13 13
Armley and Wortley	36,243	44,735	Under 5, .. 5 under 15, .. 15 upwards. ..	.. .. ..	20 88 15	6 18 ..	.. .. ..	.. .. ..	.. .. 2	.. .. ..	.. .. 2	.. 2 3	2 4 3	28 110 24
Bramley ..	21,650	24,570	Under 5, .. 5 under 15, .. 15 upwards. ..	.. .. ..	20 75 11	18 42 10	1 1 ..	.. .. ..	.. 1 5	.. .. ..	.. .. ..	.. 1 2	2 122 28	41 122 28
Headingley ..	42,785	53,071	Under 5, .. 5 under 15, .. 15 upwards. ..	.. .. ..	10 41 19	14 55 30	.. .. ..	.. .. ..	.. .. 8	.. .. ..	.. .. ..	.. .. 1	.. 3 7	24 99 65
Totals ..	428,968	484,012	Under 5, .. 5 under 15, .. 15 upwards.	184 661 144	193 433 226	2 2 1 6	6 37 107 9 38	1 4 70	33 81 70	419 1219 600		
Grand total	969	852	4	7	150	9	43	184	2238		

New cases of Infectious Sickness heard of in the several
Sub-districts and Wards of the City of Leeds during the
thirteen weeks ended 3rd April, 1909.

	Where treated.	Small-pox.	Scarlet fever.	Diphtheria.	Membranous croup.	Typhus fever.	Typhoid fever.	Continued fever.	Puerperal fever.	Erysipelas.	Cholera.	Other.	TOTALS.
SUB-DISTRICTS.	North	{ Hosp. ... 6 Home ... 1	14	7	...	...	2	...	...	2	...	6	30
	West	{ Hosp. ... 22 Home ... 2	25	22	1	...	4	...	1	6	...	11	69
	South-East	{ Hosp. ... 5 Home ... 1	9	...	...	...	1	...	...	2	...	3	20
	Hunslet	{ Hosp. ... 24 Home ... 4	14	14	1	...	11	...	1	3	...	5	58
	Holbeck	{ Hosp. ... 5 Home ... 6	7	31	1	...	2	...	...	1	...	3	18
	Wortley	{ Hosp. ... 26 Home ... 5	12	7	...	...	1	...	1	3	...	6	49
	Kirkstall	{ Hosp. ... 16 Home ... 7	13	27	...	...	...	...	1	9	...	3	33
	Bramley	{ Hosp. ... 10 Home ... 2	5	7	...	...	4	...	...	...	...	...	19
	Chapeltown	{ Hosp. ... 17 Home ... 7	42	20	...	...	1	...	...	...	...	7	67
	Osmondthorpe	{ Hosp. ... Home ...	...	...	...	...	...	...	...	...	...	...	1
WARDS.	Central	{ Hosp. ... 1 Home ...	8	...	...	...	...	...	...	...	...	3	12
	North	{ Hosp. ... 14 Home ... 3	20	13	...	...	2	...	...	1	...	4	41
	North-East	{ Hosp. ... 5 Home ... 2	29	9	...	...	1	...	...	1	...	6	42
	East	{ Hosp. ... 4 Home ... 1	8	...	...	...	1	...	...	2	...	3	18
	South	{ Hosp. ... 1 Home ...	2	...	...	...	...	...	...	...	...	...	3
	East-Hunslet	{ Hosp. ... 14 Home ... 4	5	8	1	...	8	...	...	1	...	2	30
	West-Hunslet	{ Hosp. ... 12 Home ...	10	5	1	...	4	...	1	2	...	4	33
	Holbeck	{ Hosp. ... 3 Home ... 6	5	30	...	...	1	...	...	1	...	2	12
	Mill Hill	{ Hosp. ... 5 Home ... 1	1	3	...	...	...	...	...	2	...	...	8
	West	{ Hosp. ... 4 Home ...	11	7	...	...	3	...	1	2	...	7	28
	North-West	{ Hosp. ... 12 Home ...	5	4	1	...	1	...	...	1	...	2	21
	Brunswick	{ Hosp. ... 3 Home ... 4	8	8	...	...	...	...	...	1	...	2	14
	New Wortley	{ Hosp. ... 1 Home ... 2	1	1	...	...	1	...	1	2	...	2	8
	Armley & Wortley	{ Hosp. ... 21 Home ... 3	8	6	...	...	...	...	...	1	...	4	34
	Bramley	{ Hosp. ... 14 Home ... 2	8	7	...	...	4	...	...	...	...	...	26
	Headingley	{ Hosp. ... 17 Home ... 7	13	28	...	...	...	...	...	1	...	3	34
	CITY	{ Hosp. ... 131 Home ... 35	142	135	3	...	26	...	3	18	...	44	364
		Cases	166	277	3	...	47	...	8	110	...	45	656

One maid contracted diphtheria, one nurse typhoid, and one maid erysipelas. All were treated in the Hospital. These are not included in the 142, 26, and 18, given above. Manston Hall is outside the City.

B. 4.

New cases of Infectious Sickness heard of in the several Sub-districts and Wards of the City of Leeds during the thirteen weeks ended 3rd July, 1909.

		Where treated.	Small-pox.	Scarlet fever.	Diphtheria.	Membranous croup.	Typhus fever.	Typhoid fever.	Continued fever.	Puerperal fever.	Erysipelas.	Cholera.	Other.	TOTALS.	
SUB-DISTRICTS.	North	{ Hosp.	...	21	42	5	4	72	94
		{ Home	...	2	6	...	...	2	...	2	10	...	...	22
	West	{ Hosp.	...	51	36	...	7	2	3	...	15	114	163
		{ Home	...	2	30	...	...	2	...	...	15	...	...	49
	South-East	{ Hosp.	...	7	14	1	...	1	2	...	6	31	38
		{ Home	...	1	2	...	...	1	...	...	2	...	1	7
	Hunslet	{ Hosp.	...	13	34	8	...	1	1	...	9	66	100
		{ Home	...	1	20	...	...	1	...	2	10	...	...	34
	Holbeck	{ Hosp.	...	5	22	1	1	...	1	30	40
		{ Home	...	2	2	...	...	...	...	1	5	...	...	10
Wortley	{ Hosp.	...	29	3	...	...	...	...	...	1	...	1	34	54
	{ Home	...	5	3	...	...	2	...	2	8	...	...	20	
Kirkstall	{ Hosp.	...	11	49	...	...	1	...	...	...	...	7	68	154
	{ Home	...	2	78	...	...	1	...	...	5	...	...	86	
Bramley	{ Hosp.	...	10	5	...	...	...	...	...	1	...	1	17	23
	{ Home	...	...	2	...	...	1	...	...	3	...	...	6	
Chapeltown	{ Hosp.	...	37	25	...	...	...	...	...	...	...	4	66	112
	{ Home	...	11	21	...	...	3	...	1	10	...	...	46	
Osmondthorpe ...	{ Hosp.	...	...	...	...	...	...	...	...	...	...	...	...	...
	{ Home	...	...	...	...	...	...	...	...	...	...	...	...
WARDS.	Central	{ Hosp.	...	8	15	3	26	32
		{ Home	...	1	3	...	...	...	...	1	1	...	...	6
	North	{ Hosp.	...	39	21	5	65	98
		{ Home	...	7	8	...	...	4	...	2	12	...	...	33
	North-East	{ Hosp.	...	9	32	5	1	47	63
		{ Home	...	3	6	...	...	...	...	...	7	...	...	16
	East	{ Hosp.	...	6	12	1	...	1	2	...	6	28	34
		{ Home	...	1	2	...	...	1	...	...	1	...	1	6
	South	{ Hosp.	...	2	2	2	1	...	1	8	12
		{ Home	...	...	...	...	...	...	...	1	3	...	...	4
	East-Hunslet	{ Hosp.	...	6	17	5	...	1	8	37	59
		{ Home	...	...	14	...	...	1	...	1	6	...	...	22
	West-Hunslet	{ Hosp.	...	6	18	1	1	26	37
		{ Home	...	1	6	...	...	...	...	1	3	...	...	11
	Holbeck	{ Hosp.	...	5	20	1	1	27	35
		{ Home	...	2	2	...	...	...	...	...	4	...	...	8
	Mill Hill	{ Hosp.	...	1	3	1	5	9
		{ Home	...	...	...	...	...	1	...	...	3	...	...	4
	West	{ Hosp.	...	7	9	...	7	1	...	3	27	34
		{ Home	...	...	3	...	...	...	...	...	4	...	...	7
	North-West	{ Hosp.	...	7	8	1	...	5	21	54
		{ Home	...	1	25	...	...	1	...	...	6	...	...	33
	Brunswick	{ Hosp.	...	38	16	2	6	62	69
		{ Home	...	2	2	...	...	1	...	...	2	...	...	7
	New Wortley	{ Hosp.	...	4	1	5	8
		{ Home	...	...	1	...	...	...	...	...	2	...	...	3
	Armley & Wortley	{ Hosp.	...	23	3	1	27	41
		{ Home	...	5	1	...	...	1	...	1	6	...	...	14
	Bramley	{ Hosp.	...	12	5	1	...	1	19	28
		{ Home	...	...	3	...	...	2	...	1	3	...	...	9
	Headingley	{ Hosp.	...	11	49	1	7	68	165
		{ Home	...	3	88	...	...	1	...	...	5	...	...	97
CITY	{ Hosp.	...	184	230	...	7	18	...	2	9	...	48	498	778	
	{ Home	...	26	164	...	...	13	...	8	68	...	1	280	
	{ Cases	...	210	394	...	7	31	...	10	77	...	49	778		

One nurse contracted diphtheria, and was treated in the Hospital, but is not included in the 230 given above. Manston Hall is outside the City.

New cases of Infectious Sickness heard of in the several Sub-districts and Wards of the City of Leeds during the thirteen weeks ended 2nd October, 1909.

One Assistant Medical Officer contracted diphtheria, and was treated in the Hospital, but is not included in the 207 given above. Manston Hall is outside the City. In addition to the 577 cases hospitalised (out of the 766 reported during the quarter), one case of diphtheria which had been reported in the previous quarter was also taken to hospital.

B. 6.

New cases of Infectious Sickness heard of in the several Sub-districts and Wards of the City of Leeds during the thirteen weeks ended 1st January, 1910.

		Where treated.	Small-pox.	Scarlet fever.	Diphtheria.	Membranous croup.	Typhus fever.	Typhoid fever.	Continued fever.	Puerperal fever.	Erysipelas.	Cholera.	Other.	TOTALS.		
SUB-DISTRICTS.	North	{ Hosp.	...	45	47	18	1	...	12	123	150	
		{ Home	...	4	4	...	...	2	...	1	16	...	...	27
	West	{ Hosp.	...	74	70	7	3	...	22	176	235	
		{ Home	...	18	20	...	...	5	...	1	15	...	...	59
	South-East	{ Hosp.	...	30	18	3	7	58	83	
		{ Home	...	8	4	...	...	1	...	...	11	...	1	25
	Hunslet	{ Hosp.	...	48	30	1	...	12	7	98	132	
		{ Home	...	7	5	2	...	3	...	3	13	...	1	34		
	Holbeck	{ Hosp.	...	22	11	12	1	46	65	
		{ Home	...	7	5	...	...	...	...	...	7	...	...	19
	Wortley	{ Hosp.	...	73	16	3	4	96	128	
		{ Home	...	22	3	...	...	...	...	...	7	...	...	32
Kirkstall	{ Hosp.	...	26	14	...	...	4	...	...	...	...	...	44	82
	{ Home	...	11	16	...	...	1	...	2	8	...	...	38	
Bramley	{ Hosp.	...	51	38	2	...	1	...	...	...	...	1	93	110
	{ Home	...	5	3	1	...	1	...	1	6	...	...	17	
Chapeltown	{ Hosp.	...	30	28	1	...	...	...	...	...	...	2	61	99
	{ Home	...	16	12	...	...	2	...	...	8	...	...	38	
Osmondthorpe ...	{ Hosp.	...	1	...	...	...	...	...	...	...	...	...	1	1
	{ Home	...	...	...	...	...	...	...	...	...	...	...	...
WARDS.	Central	{ Hosp.	...	12	17	3	4	36	45	
		{ Home	...	2	3	...	...	1	...	...	3	...	...	9
	North	{ Hosp.	...	26	27	4	1	...	4	62	89	
		{ Home	...	8	3	...	...	2	...	1	13	...	...	27
	North-East	{ Hosp.	...	36	31	1	...	11	6	85	106	
		{ Home	...	8	4	...	...	1	...	...	8	...	...	21
	East	{ Hosp.	...	27	18	1	6	52	74	
		{ Home	...	8	4	...	...	...	...	...	9	...	1	22
	South	{ Hosp.	...	8	2	4	1	15	20	
		{ Home	...	...	...	...	...	1	...	...	4	...	...	5
	East-Hunslet	{ Hosp.	...	29	8	1	...	6	4	48	70	
		{ Home	...	2	5	2	...	3	...	2	7	...	1	22		
	West-Hunslet	{ Hosp.	...	23	21	4	1	...	3	52	67	
		{ Home	...	7	2	...	...	...	...	1	5	...	...	15
	Holbeck	{ Hosp.	...	14	10	12	36	50	
		{ Home	...	5	3	...	...	...	...	...	6	...	...	14
	Mill Hill	{ Hosp.	...	4	6	3	13	23	
		{ Home	...	1	1	...	...	3	...	1	4	...	...	10
	West	{ Hosp.	...	31	14	3	2	...	5	55	65
		{ Home	...	3	5	...	...	...	...	...	2	...	...	10
	North-West	{ Hosp.	...	27	25	2	1	...	11	66	89
		{ Home	...	9	9	...	...	...	...	...	5	...	...	23
	Brunswick	{ Hosp.	...	13	25	2	3	43	63
		{ Home	...	7	7	...	...	2	...	...	4	...	...	20
	New Wortley	{ Hosp.	...	14	1	2	17	22	
		{ Home	...	2	...	...	...	...	...	...	3	...	...	5
	Armley & Wortley	{ Hosp.	...	51	9	1	4	65	87	
		{ Home	...	17	3	...	...	...	...	...	2	...	...	22
Bramley	{ Hosp.	...	59	44	2	...	1	...	...	...	...	1	107	129
	{ Home	...	8	3	1	...	1	...	1	8	...	...	22	
Headingley	{ Hosp.	...	26	14	...	...	4	...	...	...	...	...	44	86
	{ Home	...	11	20	...	...	1	...	2	8	...	...	42	
CITY	{ Hosp.	...	400	272	4	...	60	5	...	55	796	1085	
	{ Home	...	98	72	3	...	15	...	...	8	91	...	2	289
	{ Cases	...	498	344	7	...	75	...	...	8	96	...	57	1085

Two nurses and five maids contracted scarlet fever, two nurses diphtheria, and one nurse typhoid fever. All were treated in hospital. These are not included in the 400, 272, and 60, given above. Manston Hall is outside the City. In addition to the 796 cases hospitalised (out of the 1085 reported during the quarter), one case of scarlet fever which had been reported in the previous quarter, was also taken to hospital.

C. 1.

Table shewing deaths recorded in the City of Leeds during the fifty-two weeks ended 1st January, 1910, classified according to cause, age, and the registration sub-districts to which the patients belonged. Deaths in institutions allocated to districts to which patients belonged.

TOWNSHIPS, &c. ..	LEEDS.												Deaths of outsiders occurring in City.	TOTAL mortality in City.			Annual rate per 1,000 pop.					
	North. 58,704		West. 85,785		South E. 35,370		Hunslet. 79,943		Holbeck. 37,320		Wortley. 68,099			Kirkstall. 51,635		Bramley. 19,547		Chapeltown. 47,270		Osmond- thorpe. 339		
	under 5	over 5	under 5	over 5	under 5	over 5	under 5	over 5	under 5	over 5	under 5	over 5		under 5	over 5	under 5		over 5	under 5	over 5	under 5	over 5
Under and over 5 }																						
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles ..	4	9	11	1	16	..	20	1	6	..	..	..	8	..	..	..	75	3	78	2	0'00
Scarlet fever ..	1	2	3	1	..	..	..	1	2	..	..	..	1	..	..	..	5	1	12	7	0'16
Typhus ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	2	0'02
Euteric ..	..	8	..	7	..	5	..	8	..	2	3	..	..	1	..	2	..	40	40	2	0'00
Other or doubtful ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0'08
Influenza ..	2	9	..	22	..	14	..	12	..	7	..	..	..	8	..	..	5	99	104	..	..
Whooping-cough ..	16	1	5	..	7	..	21	..	8	1	10	..	1	9	1	5	81	2	83	2	0'22	
Diphtheria ..	4	6	10	4	1	1	8	4	3	2	3	3	1	3	3	..	34	27	61	..	0'17	
Cholera (English) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0'13
Diarrhoea, &c. ..	13	2	14	2	10	1	32	..	10	1	..	..	3	1	1	..	101	9	110	..	..
Ague ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0'23
Zoogenous diseases ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Syphilis ..	4	1	10	..	..	..	7	..	..	..	1	..	..	..	..	..	22	2	24	..	0'05
Gonorrhoea ..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	3	3	..	0'01
Stricture of urethra }																						
Erysipelas ..	..	1	..	4	2	..	..	2	..	2	1	..	..	1	..	..	2	11	13	..	0'03
Pyæmia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0'02
Phagedæna ..	..	..	..	4	..	2	1	1	..	..	2	..	..	1	..	..	2	10	12	..	0'02
Septicæmia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0'04
Phlebitis ..	..	3	..	3	..	..	..	5	..	1	3	..	..	1	..	1	..	19	19	..	0'04
Puerperal fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0'02
Parasitic diseases ..	..	..	3	..	1	..	1	..	1	..	..	..	..	3	..	..	5	3	8	..	0'11
Starvation, &c. ..	2	1	4	..	5	..	11	..	5	..	17	1	3	..	3	..	49	2	51	..	0'03	
Alcoholism ..	..	4	..	..	..	3	..	1	..	1	..	1	..	..	..	..	..	15	15	..	0'01
Rheumatic fever ..	..	1	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	3	3	..	0'03
Acute and Sub-acute rheumatism ..	..	2	..	..	..	2	..	3	..	1	2	..	..	1	2	..	1	12	13	..	0'03
Rheumatism ..	..	1	..	2	1	..	..	3	1	1	4	..	..	..	2	..	1	13	14	..	0'03
Gout ..	..	1	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	6	6	..	0'01
Rickets ..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	0'06
Cancer ..	9	3	3	..	3	3	..	60	3	3	3	3	3	3	3	10	30	440	440	..	0'03	

TABLE C (continued).

TOWNSHIPS, &c. ..	LEEDS.						Deaths of outsiders occurring in City.				TOTAL mortality in City.			Annual rate per 1,000 pop.									
	North.		West.		South E.		Hunslet.		Holbeck.		Wortley.		Kirkstall.		Bramley.		Chapeltown.		Osmond-thorpe.				
	under 5	over 5	under 5	over 5	under 5	over 5	under 5	over 5	under 5	over 5	under 5	over 5	under 5		over 5	under 5	over 5	under 5	over 5	under 5	over 5		
Under and over 5	1	..	6	..	..	..	20	..	7	..	14	1	2	..	..	..	..	1	..	..	51	1	52
Tabes mesenterica	3	3	4	4	4	..	12	4	5	..	3	8	..	..	..	..	..	2	..	..	43	26	69
Tub. meningitis	..	..	..	2	1	..	3	2	1	..	1	..	..	..	..	..	..	..	..	..	9	11	11
Hydrocephalus	..	..	..	..	..	..	3	76	1	33	2	..	..	..	..	..	..	..	..	..	11	537	548
Phthisis...	1	78	123	..	55	..	5	1	1	1	57	1	47	2	2	2	2	2	2	2	17	20	37
Tub. peritonitis	2	2	2	3	2	..	9	7	2	4	11	4	1	3	3	7	7	3	3	3	43	62	105
Other tuberculous	3	5	5	8	14	..	9	7	2	4	4	4	4	1	3	3	3	3	3	3	..	..	..
Scrofula...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Anæmia...	..	..	..	..	1	..	..	5	..	1	3	..	2	..	5	5	1	1	1	1	..	24	24
Diabetes, &c	..	1	4	..	5	..	..	5	2	2	7	8	8	..	4	4	8	8	8	8	..	46	46
Premature birth	20	..	28	..	..	..	43	..	23	..	38	14	..	14	..	18	..	..	..	..	245	..	245
Malformations and atelectasis (13)	2	..	2	..	..	..	9	..	3	..	4	5	..	4	..	9	..	..	..	..	54	..	54
Old age ..	..	22	68	..	23	..	..	49	..	31	37	31	..	..	22	..	25	2	2	2	..	310	310
Brain disease	..	37	67	..	28	..	1	43	..	26	44	34	34	..	18	..	28	7	7	7	2	334	336
Meningitis	6	11	11	3	9	..	13	7	5	4	2	3	3	3	4	5	1	2	2	2	43	56	99
Apoplexy	..	2	9	..	14	..	..	21	6	6	9	9	9	1	1	6	6	..	..	..	..	77	77
Paralysis	..	11	13	..	9	..	1	8	..	7	9	..	4	..	3	..	6	..	..	..	1	71	72
Gen. paralysis—Insanity	..	1	3	..	..	..	..	6	..	..	..	2	2	..	1	..	..	..	..	..	..	15	15
Epilepsy	..	..	2	1	3	..	..	3	..	1	3	..	1	..	1	..	1	..	..	..	1	15	16
Convulsions	22	..	..	10	..	..	24	..	9	..	15	13	..	4	..	7	7	..	..	123	..	123	
Bronchitis stridulus	..	..	..	1	..	..	1	..	..	..	2	..	..	..	..	1	..	..	..	6	..	6	6
Laryngismus stridulus	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other diseases of nervous system	1	2	4	..	3	..	..	4	..	3	3	3	3	..	2	..	..	5	5	5	1	29	30
Dis. of organs of special sense	1	1	..	1	..	..	1	1	..	..	1	..	..	..	1	1	..	1	1	1	6	10	16
Endocarditis, &c.	..	24	45	..	25	..	..	30	..	18	46	19	19	..	17	..	33	7	7	7	..	264	264
Pericarditis	..	2	..	..	..	..	..	1	..	2	..	1	1	..	..	..	..	..	..	..	..	6	6
Heart disease	2	58	70	..	42	..	1	43	..	37	65	25	25	16	16	..	26	4	4	4	3	386	389
Angina pectoris	..	1	1	..	3	..	2	2	..	3	..	3	3	1	1	..	4	..	..	..	..	17	17
Syncope...	..	1	1	..	1	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	1	4	5
Aneurism	..	2	4	..	2	..	..	1	2	2	1	..	2	..	..	..	..	..	..	..	..	14	14
Other circulatory	..	4	4	..	3	..	..	6	5	5	6	5	5	1	1	..	14	..	..	..	..	48	48
Laryngitis	..	1	..	..	1	..	1	..	..	1	2	1	..	..	..	..	1	..	..	..	5	5	10
Croup (membranous)	..	..	..	2	..	..	2	..	..	..	..	..	..	2	..	..	..	..	..	..	4	..	4
Croup (undefined)	30	62	98	43	55	..	18	71	13	39	26	40	40	9	20	8	38	2	2	2	172	483	655
Bronchitis	..	48	12	34	7	..	27	11	25	3	16	8	8	7	2	12	6	..	..	..	227	288	360
Broncho-pneumonia	..	8	5	6	37	..	24	53	8	17	3	21	2	3	4	4	15	8	8	8	63	259	322
Pneumonia	..	1	4	..	1	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	18	18
Pleuro-pneumonia	..	..	4	..	1	..	..	2	..	2	..	2	2	..	..	..	..	..	..	..	..	18	18
Pleurisy...	..	5	4	..	1	..	..	..	..	..	7	1	1	..	..	..	..	..	..	..	..	66	66
Other respiratory	2	6	11	1	5	..	1	10	1	7	5	1	5	..	2	2	10	3	3	3	15	66	81

TABLE C (continued).

TOWNSHIPS, &c. ...	LEEDS.												Deaths of outsiders occurring in City.		TOTAL mortality in City.			Annual rate per 1,000 pop.								
	North.		West.		South E.		Hunslet.		Holbeck.		Wortley.								Kirkstall.		Bramley.		Chapeltown.		Osmond- thorpe.	
	under 5	over 5	under 5	over 5	under 5	over 5	under 5	over 5	under 5	over 5	under 5	over 5	under 5	over 5	under 5	over 5	under 5		over 5	under 5	over 5	under 5	over 5	all ages.		
Under and over 5 {	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	0'00	
Stomatitis ..	7	..	..	13	..	6	..	9	..	9	6	..	3	..	..	..	..	..	..	..	..	..	..	54	0'11	
Tonsillitis, &c. ..	..	..	..	1	..	..	..	1	..	..	1	..	2	..	..	..	..	..	..	..	..	..	..	4	0'02	
Dis. of stomach ..	3	5	..	6	13	5	2	1	9	2	5	5	6	1	4	4	3	..	1	..	8	..	58	79	0'16	
Enteritis (Gastro 44) ..	16	..	..	12	1	11	3	10	2	6	12	1	3	1	..	..	2	..	..	..	..	..	72	86	0'17	
Hernia ..	1	6	..	8	..	3	..	1	3	1	2	..	2	..	2	2	..	1	..	..	5	..	32	35	0'07	
Fistula ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	0'00	
Peritonitis ..	..	2	..	..	3	..	1	..	4	1	1	1	1	..	..	..	2	..	..	..	..	..	1	15	0'03	
Ascitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	0'00	
Jaundice ..	..	..	..	1	1	..	..	2	..	..	..	..	..	..	..	..	1	..	..	..	..	..	3	1	0'01	
Cirrhosis ..	..	3	1	4	..	..	2	3	3	2	4	4	3	..	7	..	7	..	..	..	1	..	1	31	32	0'07
Dis. of liver ..	..	..	..	4	..	..	..	3	3	1	1	1	3	..	2	2	..	..	..	..	7	..	1	20	21	0'04
Dis. of bowels ..	3	6	3	15	..	..	3	2	5	4	3	4	1	..	2	2	6	..	..	..	18	..	15	63	78	0'16
Disease of ductless glands ..	..	1	..	5	..	..	..	1	..	3	..	2	..	..	..	..	1	..	..	..	2	..	1	14	15	0'03
Nephritis ..	1	16	..	25	2	7	8	3	14	..	2	8	..	9	1	7	15	..	..	..	5	..	10	114	124	0'26
Kidney disease ..	..	9	..	22	..	..	6	..	16	..	..	7	..	6	..	4	10	..	..	..	3	..	..	88	93	0'18
Albuminuria ..	..	2	..	..	..	..	1	..	2	..	..	..	..	..	..	..	1	..	..	..	..	..	..	6	6	0'01
Other urinary ..	..	..	..	1	..	..	..	..	2	..	..	1	..	1	..	..	2	..	..	..	1	..	..	12	12	0'02
Dis. of generative Organs ..	..	3	..	7	..	3	1	..	5	..	2	2	..	2	..	..	1	..	..	..	8	..	..	32	32	0'07
Childbirth ..	..	6	3	3	4	2	2	1	1	2	2	8	1	2	1	2	3	..	..	..	2	..	17	29	46	0'10
Disease of bones (6), Joints (2), arthritis (12) }	..	1	..	3	..	3	1	..	2	1	..	2	..	3	..	..	4	..	..	..	..	..	2	18	20	0'04
Ulcer: Phlegmon (o) ..	..	..	..	1	..	..	..	1	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..	4	4	0'01
Skin disease ..	..	..	4	1	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	5	2	7	0'01
Injury ..	11	27	9	30	6	25	14	28	5	18	7	25	3	14	1	6	8	..	1	..	2	13	62	195	0'53	
Lead poisoning ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mortification ..	..	1	..	3	..	..	..	4	..	5	..	2	..	1	..	1	..	..	..	..	3	..	..	22	22	0'05
Debility ..	7	..	15	..	11	1	6	..	..	7	9	1	4	..	..	..	5	..	..	..	..	..	64	2	66	0'14
Marasmus, Atrophy ..	32	..	20	..	21	..	18	..	9	..	13	..	3	..	2	..	1	..	..	..	..	1	120	..	120	0'25
Tumour ..	1	2	..	3	..	1	3	..	1	..	2	2	1	..	1	..	2	..	..	..	3	..	2	18	20	0'04
Abscess ..	1	..	..	1	..	..	..	4	..	3	2	2	1	..	1	..	2	..	..	..	4	..	5	19	24	0'05
Other causes ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total under 5 and over 5 ..	290	579	312	918	267	485	389	684	190	354	251	594	133	392	63	215	123	411	..	10	13	181	2,031	4,823	6,854	14'21
Total ..	869	..	1,230	..	752	..	1,073	..	544	..	845	..	525	..	278	..	534	..	10	..	194	..	6,854	..	..	..
Mortality per 1,000 per annum ..	14'9	..	14'4	..	21'3	..	13'5	..	14'6	..	12'5	..	10'2	..	14'3	..	11'3	..	29'6	..	..	..	36'2	11'3	14'2	..

NOTES TO TABLE C.

This table is printed for the first time in the report for 1892. In it the causes of death are more detailed than in the other tables. They are classified as in Table A, part 2, according as the deaths were those of persons under or over the age of five. All the deaths which occurred in the following public institutions: the Infirmary, the Women and Children's Hospital, the Borough Fever and Small-pox Hospitals, the Leeds, Hunslet, Holbeck, Bramley Workhouses, and the Home for Consumptives at Armley (the latter for the first time in 1905), have been classified under the districts to which the patients belonged. The 194 deaths of persons who belonged to no district in the city have been separated in two columns by themselves, as deaths of outsiders; these deaths are, however, included in the total mortality of the city. As far as possible, the order of the Registrar-General has been followed in the arrangement of this table. The horizontal lines correspond with the groups in the Registrar-General's annual report.

Septicæmia includes deaths from pyæmia (3), phlebitis (3), phagedæna (0), septicæmia (not puerperal) (6). *Parasitic* diseases include thrush (5). *Starvation* includes purpura hæmorrhagica (4), scurvy (1), privation and want of breast milk (3), malnutrition (9), and inanition (34 deaths). *Rheumatic fever* in reports previous to 1892 had only the deaths ascribed in those terms to this disease by the medical attendant. Deaths from acute and sub-acute rheumatism had previously been classed under "rheumatism." A separate line has been given, both in Table C and Table A, to prevent confusion and enable comparison. "*Rheumatism*" includes chronic rheumatism and disease simply described as "rheumatism" (see Report, 1893, page 144). *Anæmia* includes chlorosis (2), hæmophilia (0), but not leucocythemia; deaths from the latter have been referred to diseases of the *ductless glands*. In *malformations* are included cyanosis (0), patent foramen ovale (1), spina bifida (7), atelectasis (13), imperforate anus (2), cleft palate (1), harelip (2), and (28) other congenital defects.

Brain disease includes deaths registered from such causes as cerebral congestion, cerebral hæmorrhage, and softening of the brain. *Meningitis* includes diseases classified as meningitis (64), and spinal (1) meningitis, but not meningitis said to be tuberculous, lepto meningitis (27), and basal meningitis (7). *Apoplexy* includes all apoplexies not otherwise defined. *Paralysis* includes hemiplegia, paraplegia, and "paralysis." *General paralysis* (7) is included under insanity, and does not include deaths from "softening of the brain." *Convulsions* includes diseases so certified, and deaths (1) due to "fits." Fits of apoplexy, &c., come under other headings. We have tried, as far as possible, to keep to the old headings.

Endocarditis, &c., includes valvular disease of the heart. "Heart disease" includes such diseases as hypertrophy, atrophy, fatty degeneration, weak heart, cardiac disease or degeneration and "disease of the heart." *Angina pectoris* includes only those deaths in which the symptom but no disease is stated. *Aneurism* includes all the aneurisms so stated. *Other diseases of the circulatory system* includes atheroma. *Other respiratory diseases* includes asthma (20), emphysema (20), empyæma (18), pulmonary congestion (9), "lung disease" (0), and others (14). *Tonsillitis, &c.* includes pharyngitis (1), parotiditis (1). *Diseases of the stomach* includes dyspepsia, hæmatemesis, gastritis. *Disease of liver* includes hepatitis (1). *Diseases of the bowels* includes melœna (0), ulcer of intestines, obstruction of bowels, strangulation not due to hernia, intussusception, appendicitis. *Kidney disease* includes deaths from granular kidney (7), Bright's disease (61), other kidney diseases (16), and uræmia (4). *Albuminuria* includes only deaths in which the symptom without any pathological cause was registered. *Diseases of the urinary system* includes calculus, hæmaturia, cystitis and other diseases of the bladder. *Disease of the generative organs* includes uterine disease (3), ovarian disease (6), and "other diseases" of the generative organs, male (19), female (4). *Childbirth* includes all the accidents of parturition, except puerperal fever.

Diseases of the bones and joints includes disease of the spinal column, but not, of course, such diseases as spinal sclerosis, which are now referred to disease of the nervous system. A comparison of mortality previous to 1890 is difficult, as the term spinal disease was used to include both diseases of the spinal column and of the spinal marrow. *Abscess* includes cellulitis (6), carbuncle (2). *Injury* includes deaths from accident or negligence, homicide, misadventure, suicide, and execution.

TABLE D, Part 1.—Shewing death-rates from certain causes for the years 1890 to 1909.

	Small-pox.	Measles.	Scarlatina.	Diphtheria.	Whooping cough.	"Fever."	Diarrhoea.	All seven.	Group (men-branous and undefined)	Phthisis.	Influenza and diseases of the air-passages other than consumption.
1890 (53 wks.)	0'00	0'27	0'28	0'07	0'50	0'30	0'98	2'39	0'09	1'66	5'62
1891 (52 wks.)	0'00	0'71	0'18	0'04	0'41	0'20	0'86	2'41	0'08	1'79	6'11
1892 (52 wks.)	0'02	0'20	0'20	0'08	0'42	0'17	1'10	2'18	0'13	1'42	4'56
1893 (52 wks.)	0'08	0'90	0'08	0'15	0'44	0'30	1'60	3'55	0'18	1'70	4'60
1894 (52 wks.)	0'01	0'75	0'13	0'15	0'34	0'14	0'45	1'98	0'17	1'49	3'64
1895 (52 wks.)	...	0'35	0'13	0'10	0'29	0'22	1'58	2'65	0'12	1'55	4'34
1896 (53 wks.)	0'00	0'48	0'18	0'10	0'60	0'21	0'69	2'27	0'09	1'50	4'02
1897 (52 wks.)	...	0'40	0'23	0'13	0'24	0'21	1'58	2'79	0'10	1'44	3'90
1898 (52 wks.)	0'00	0'45	0'29	0'49	0'39	0'23	1'24	3'10	0'12	1'39	3'41
1899 (52 wks.)	...	0'37	0'15	0'71	0'38	0'17	0'96	2'73	0'12	1'41	3'72
1900 (52 wks.)	0'00	0'58	0'12	0'55	0'39	0'20	1'09	2'93	0'06	1'41	4'19
1901 (52 wks.)	...	0'58	0'19	0'38	0'33	0'19	1'47	3'14	0'07	1'41	3'46
1902 (53 wks.)	0'01	0'43	0'13	0'18	0'46	0'18	0'61	2'00	0'05	1'31	3'52
1903 (52 wks.)	0'05	0'28	0'25	0'14	0'27	0'13	0'62	1'74	0'03	1'27	3'09
1904 (52 wks.)	0'00	0'77	0'13	0'09	0'46	0'11	1'01	2'57	0'05	1'40	3'21
1905 (52 wks.)	0'01	0'24	0'09	0'08	0'27	0'12	0'80	1'60	0'03	1'23	3'07
1906 (52 wks.)	...	0'60	0'07	0'16	0'32	0'11	0'97	2'23	0'03	1'23	2'70
1907 (52 wks.)	...	0'22	0'12	0'14	0'34	0'06	0'41	1'29	0'01	1'29	3'15
1908 (53 wks.)	...	0'37	0'03	0'10	0'29	0'05	0'70	1'55	0'01	1'28	3'15
1909 (52 wks.)	...	0'16	0'02	0'13	0'17	0'09	0'23	0'80	0'02	1'14	3'08

See note to table D, part 2. Rates from 1890 to 1900 not recalculated.

TABLE D, Part 2.
For whole District.

Year.	Population estimated to middle of each year. *	Births.		Deaths under one year of age.		Deaths at all ages. Total.		Deaths in Public Institutions.	Deaths of non-residents registered in district.	Deaths of residents registered beyond district.	Deaths at all ages net.	
		Number.	Rate.*	Number	Rate per 1,000 births registered.	Number	Rate.*				Number	Rate.*
1	2	3	4	5	6	7	8	9	10	11	12	13
†1890	363,018	12,336	33·5	2,128	173	8,370	22·7	819	132	No return	8,238	22·3
1891	369,034	12,538	34·1	2,216	177	8,429	22·9	869	144	do.	8,285	22·5
1892	375,081	12,546	33·6	2,114	168	7,403	19·8	789	129	do.	7,274	19·5
1893	381,157	12,348	32·5	2,542	206	8,512	22·4	874	147	24	8,365	22·0
1894	387,259	12,502	32·4	1,945	156	6,935	18·0	772	142	7	6,793	17·6
1895	393,387	12,478	31·8	2,384	191	8,101	20·7	882	167	No return	7,934	20·2
†1896	399,535	12,573	31·0	2,120	169	7,682	18·9	908	161	8	7,521	18·5
1897	405,716	12,912	31·9	2,454	190	8,148	20·2	881	175	1	7,973	19·7
1898	411,895	12,971	31·6	2,372	183	7,996	19·5	940	142	9	7,854	19·1
1899	418,101	12,939	31·1	2,222	172	8,105	19·5	1,005	181	26	7,924	19·0
1900	424,322	13,091	31·0	2,397	183	8,619	20·4	1,084	184	90	8,525	20·2
1901	430,575	12,898	30·1	2,429	188	8,283	19·3	1,176	171	92	8,204	19·1
†1902	437,036	13,245	29·8	2,113	160	7,814	17·6	1,154	211	96	7,699	17·3
1903	443,559	12,996	29·4	1,992	153	7,334	16·6	1,094	184	113	7,263	16·4
1904	450,142	12,561	28·0	2,207	176	8,096	18·0	1,185	173	116	8,039	17·9
1905	456,787	12,337	27·1	1,875	152	7,124	15·6	1,225	178	102	7,047	15·5
1906	463,495	12,093	26·2	1,837	152	7,405	16·0	1,271	183	128	7,350	15·9
1907	470,268	11,678	24·9	1,533	131	7,227	15·4	1,301	188	128	7,167	15·3
†1908	477,107	12,007	24·8	1,654	138	7,505	15·5	1,371	199	124	7,430	15·3
Averages for years 1899-1908		12,585	28·1	2,026	161	7,751	17·3	1,187	185	102	7,665	17·1
1909	484,012	11,002	22·8	1,350	123	6,854	14·2	1,403	194	146	6,806	14·1

* Rates calculated per 1,000 of estimated population. The populations given in column 2 for the 11 years, 1890 to 1900, are those estimated by the method of interpolation from the census figures for 1881, 1891 and 1901. The rest are those of the Registrar-General.

The deaths included in column 7 of this table are the whole of those registered during the year as having actually occurred within the City or of Leeds persons in the fever hospital at Seacroft or the Hunslet workhouse at Rothwell. The deaths included in column 12 are the numbers in column 7, corrected by the subtraction of the numbers in column 10 and the addition of the numbers in column 11. Column 11 is, however, incomplete in some of the years.

By the term "Non-residents" is meant persons brought into the district on account of illness, and dying in some public institution, and paupers from townships outside the City dying at the Workhouse; and by the term "Residents" is meant persons who have died outside Leeds in some public institution, other than our own fever hospitals, and inmates of the County Asylums from the City townships.

† 53 week years, the others 52.

TABLE E.
VITAL STATISTICS FOR 1909.

The following Births and Deaths were recorded in the several Sub-Registration Districts of the City of Leeds during the fifty-two weeks ended 1st January, 1910. The figures in italics after the Births and Deaths give the proportion per annum per 1,000 of the estimated population.

Districts.	Births.	Birth Rate.	Deaths.	Death Rate.	
				All causes.	7 Zymotics.
LEEDS. { North	1,461	<i>24.97</i>	869	<i>14.85</i>	<i>0.97</i>
West	1,871	<i>21.88</i>	1,230	<i>14.39</i>	<i>0.66</i>
South-East	1,132	<i>32.11</i>	752	<i>21.33</i>	<i>1.28</i>
Hunslet	1,861	<i>23.36</i>	1,073	<i>13.47</i>	<i>1.23</i>
Holbeck	1,004	<i>26.99</i>	544	<i>14.63</i>	<i>1.05</i>
Wortley	1,356	<i>19.98</i>	845	<i>12.45</i>	<i>0.55</i>
Kirkstall	944	<i>18.34</i>	525	<i>10.20</i>	<i>0.52</i>
Bramley	405	<i>20.79</i>	278	<i>14.27</i>	<i>0.51</i>
Chapelton	952	<i>20.21</i>	534	<i>11.34</i>	<i>0.42</i>
Osmondthorpe	16	<i>47.36</i>	10	<i>29.60</i>	...
<i>Outsiders</i> ... ..	...	...	194	...	...
Totals	11,002	<i>22.81</i>	6,854	<i>14.21</i>	<i>0.81</i>

Considered as occurring in the Municipal Wards, the foregoing Deaths are classed as follows:—

Wards.		Deaths.	Death Rate.	Wards.		Deaths.	Death Rate.
Eastern Division.				Western Division.			
Central	229	11.78		Mill Hill	99	15.10	
North	578	11.78		West	422	18.02	
North-East	567	17.02		North West	444	12.46	
East	637	20.75		Brunswick... ..	302	13.05	
South	273	20.53		New Wortley	260	14.22	
East Hunslet	504	12.50		Armley	518	11.62	
West Hunslet	477	14.04		Bramley	345	14.09	
Holbeck	459	13.80		Headingley	546	10.32	

In both these tables deaths occurring in public institutions have been referred to the districts to which the patients belonged. The births in workhouses are included in those of the districts in which these institutions are situated. There were one hundred and seven deaths at Manston Hospital during this year.

E. 2.

The following Births and Deaths were recorded in the several Sub-Registration Districts of the City of Leeds during the thirteen weeks ended 3rd April, 1909. The figures in italics after the Births and Deaths give the proportion per annum per 1,000 of the estimated population.

Districts.	Births.	Birth Rate.	Deaths.	Death Rate.	
				All causes.	Zymotics.
LEEDS. { North ...	415	28·4	273	18·7	0·8
{ West ...	472	22·1	383	17·9	0·7
{ South-East ...	317	36·0	226	25·6	1·1
Hunslet ...	467	23·4	317	15·9	1·1
Holbeck ...	248	26·7	185	19·9	1·5
Wortley ...	330	19·4	244	14·4	0·6
Kirkstall ...	254	19·7	165	12·8	1·0
Bramley ...	98	20·1	91	18·7	0·8
Chapelton ...	246	20·9	180	15·3	0·4
Osmondthorpe ...	4	47·4	2	23·7	...
<i>Outsiders</i> ...	...	...	52	...	...
Totals ...	2,851	23·6	2,118	17·6	0·9

Considered as occurring in the Municipal Wards, the foregoing Deaths are classed as follows:—

Wards.			Deaths.	Death Rate.	Wards.			Deaths.	Death Rate.
Eastern Division.					Western Division.				
Central	...	...	69	14·2	Mill Hill	...	...	29	17·7
North	...	...	194	15·8	West	...	...	121	20·7
North-East		...	180	21·6	North-West		...	141	15·8
East	...	...	197	25·7	Brunswick	...	...	96	16·6
South	...	...	73	22·0	New Wortley		...	76	16·6
East Hunslet		...	137	13·6	Armley	...	...	149	13·4
West Hunslet		...	155	18·2	Bramley	...	...	110	18·0
Holbeck	...	...	161	19·4	Headingley		...	178	13·5

In both these tables deaths occurring in public institutions have been referred to the districts to which the patients belonged. The births in workhouses are included in those of the districts in which these institutions are situated. There were thirty-four deaths at Manston Hospital during this quarter.

E. 3.

The following Births and Deaths were recorded in the several Sub-Registration Districts of the City of Leeds during the thirteen weeks ended 3rd July, 1909. The figures in italics after the Births and Deaths give the proportion per annum per 1,000 of the estimated population.

Districts.	Births.	Birth Rate.	Deaths.	Death Rate.	
				All causes.	Zymotics.
LEEDS. { North	358	24·5	202	13·8	0·9
{ West	479	22·4	307	14·4	0·5
{ South-East	260	29·5	167	19·0	1·0
Hunslet	472	23·7	271	13·6	0·7
Holbeck	263	28·3	127	13·7	0·9
Wortley	370	21·8	216	12·7	0·4
Kirkstall	259	20·1	108	8·4	0·2
Bramley	122	25·1	57	11·7	0·2
Chapelton	237	20·1	116	9·8	0·4
Osmondthorpe	6	71·0	3	35·5	...
<i>Outsiders</i> ... ..	...	...	49	...	...
Totals	2,826	23·4	1,623	13·5	0·6

Considered as occurring in the Municipal Wards, the foregoing Deaths are classed as follows:—

Wards.			Deaths.	Death Rate.	Wards.			Deaths.	Death Rate.
Eastern Division.					Western Division.				
Central	...	...	51	10·5	Mill Hill	...	...	26	15·9
North	...	...	140	11·4	West	...	...	107	18·3
North-East	...	...	123	14·8	North-West	...	...	112	12·6
East	...	...	137	17·9	Brunswick	...	...	70	12·1
South	...	...	80	24·1	New Wortley	...	...	64	14·0
East Hunslet	...	...	121	12·0	Armley	...	...	140	12·6
West Hunslet	...	...	120	14·1	Bramley	...	...	69	11·3
Holbeck	...	...	102	12·3	Headingley	...	...	112	8·5

In both these tables deaths occurring in public institutions have been referred to the districts to which the patients belonged. The births in workhouses are included in those of the districts in which these institutions are situated. There were twenty-eight deaths at Manston Hospital during this quarter.

E. 4.

The following Births and Deaths were recorded in the several Sub-Registration Districts of the City of Leeds during the thirteen weeks ended 2nd October, 1909. The figures in italics after the Births and Deaths give the proportion per annum per 1,000 of the estimated population.*

Districts.	Births.	Birth Rate.	Deaths.	Death Rate.	
				All causes.	Zymotics.
LEEDS. { North	374	25·6	185	12·6	1·4
{ West	487	22·8	233	10·9	0·7
{ South-East	295	33·5	173	19·6	2·2
Hunslet	458	23·0	230	11·5	2·1
Holbeck	260	28·0	109	11·7	1·1
Wortley	349	20·6	173	10·2	0·5
Kirkstall	236	18·3	118	9·2	0·7
Bramley	98	20·1	61	12·5	0·2
Chapeltown	255	21·7	121	10·3	0·8
Osmondthorpe	2	23·7	2	23·7	...
<i>Outsiders</i> ... ..	...	...	47	...	...
Totals	2,814	23·3	1,452	12·0	1·1

Considered as occurring in the Municipal Wards, the foregoing Deaths are classed as follows:—

Wards.			Deaths.	Death Rate.	Wards.			Deaths.	Death Rate.
Eastern Division.					Western Division.				
Central	...	...	60	12·3	Mill Hill	...	...	16	9·8
North	...	...	120	9·8	West	...	...	89	15·2
North-East	...	...	117	14·1	North-West	...	...	82	9·2
East	...	...	142	18·5	Brunswick...	...	...	58	10·0
South	...	...	65	19·5	New Wortley	...	...	62	13·6
East Hunslet	...	...	119	11·8	Armley	...	...	96	8·6
West Hunslet	...	...	92	10·8	Bramley	...	...	76	12·4
Holbeck	...	...	90	10·8	Headingley	...	...	121	9·2

In both these tables deaths occurring in public institutions have been referred to the districts to which the patients belonged. The births in workhouses are included in those of the districts in which these institutions are situated. There were seventeen deaths at Manston Hospital during this quarter.

E. 5.

The following Births and Deaths were recorded in the several Sub-Registration Districts of the City of Leeds during the thirteen weeks ended 1st January, 1910. The figures in italics after the Births and Deaths give the proportion per annum per 1,000 of the estimated population.

Districts.	Births.	Birth Rate.	Deaths.	Death Rate.	
				All causes.	7 Zymotics.
LEEDS. { North	314	21·5	209	14·3	0·8
{ West	433	20·3	307	14·4	0·7
{ South-East	260	29·5	186	21·1	0·8
Hunslet	464	23·3	255	12·8	1·2
Holbeck	233	25·1	123	13·2	0·8
Wortley	307	18·1	212	12·5	0·7
Kirkstall	195	15·2	134	10·4	0·2
Bramley	87	17·9	69	14·2	0·8
Chapelton	214	18·2	117	9·9	0·1
Osmondthorpe	4	47·4	3	35·5	...
<i>Outsiders</i> ... ..	...	...	46	...	...
Totals	2,511	20·8	1,661	13·8	0·7

Considered as occurring in the Municipal Wards, the foregoing Deaths are classed as follows:—

Wards.			Deaths.	Death Rate.	Wards.			Deaths.	Death Rate.
Eastern Division.					Western Division.				
Central	...	...	49	10'1	Mill Hill	...	...	28	17'1
North	...	...	124	10'1	West	...	...	105	17'9
North-East	...	...	147	17'7	North-West	...	...	109	12'2
East	...	...	161	21'0	Brunswick	...	...	78	13'5
South	...	...	55	16'5	New Wortley	...	...	58	12'7
East Hunslet	...	...	127	12'6	Armley	...	...	133	11'9
West Hunslet	...	...	110	13'0	Bramley	...	...	90	14'7
Holbeck	...	...	106	12'7	Headingley	...	...	135	10'2

In both these tables deaths occurring in public institutions have been referred to the districts to which the patients belonged. The births in workhouses are included in those of the districts in which these institutions are situated. There were twenty-eight deaths at Manston Hospital during this quarter.

E. 6.

The following Births and Deaths were recorded in the several Sub-Registration Districts of the City of Leeds during the thirteen weeks ended 2nd April, 1910. The figures in italics after the Births and Deaths give the proportion per annum per 1,000 of the estimated population.

Districts.			Births.	Birth Rate.	Deaths.	Death Rate. All causes. 7 Zymotics.	
LEEDS.	North ...	...	345	23·6	214	14·6	0·4
	West ...	...	513	23·9	307	14·3	0·5
	South-East	...	278	31·4	203	22·9	1·0
	Hunslet ...	..	448	22·1	251	12·4	0·8
	Holbeck...	...	277	29·2	134	14·1	0·4
	Wortley ...	...	325	18·8	224	13·0	1·2
	Kirkstall...	...	241	18·3	142	10·8	0·8
	Bramley ...	...	93	18·8	67	13·6	...
	Chapelton	...	242	19·7	154	12·6	0·9
	Osmondthorpe	...	3	36·1	1	12·0	...
Outsiders		...	...	60	...	...
Totals ...			2,765	22·6	1,757	14·4	0·7

Considered as occurring in the Municipal Wards, the foregoing Deaths are classed as follows:—

Wards.			Deaths.	Death Rate.	Wards.			Deaths.	Death Rate.
Eastern Division.					Western Division.				
Central	...	...	68	14'1	Mill Hill	...	...	23	14'3
North	...	...	157	12'5	West	...	...	101	17'3
North-East	...	...	139	16'4	North-West	...	...	109	12'1
East	...	...	162	20'9	Brunswick...	...	...	86	14'8
South	...	...	71	21'7	New Wortley	...	...	67	14'7
East Hunslet	...	...	122	11'8	Armley	...	...	142	12'4
West Hunslet	...	...	111	12'8	Bramley	...	...	82	13'2
Holbeck	...	...	110	13'0	Headingley	...	...	147	10'9

In both these tables deaths occurring in public institutions have been referred to the districts to which the patients belonged. The births in workhouses are included in those of the districts in which these institutions are situated. There were twenty-two deaths at Manston Hospital during this quarter.

TABLE F. (1).

Shewing Births, Deaths, from all and certain causes, Home Patients of the Dispensary, admissions to the Fever Hospitals, and some of the Meteorological conditions and the Death-rates from certain causes in Leeds: with the Birth and Death-rates from all causes in the 76 large English towns for each of the thirteen weeks ended 2nd January, 1909.

1908.		OCTOBER.				NOVEMBER.				DECEMBER.					TOTALS OR AVERAGES.	YEAR.
		Oct. 10th.	Oct. 17th.	Oct. 24th.	Oct. 31st.	Nov. 7th.	Nov. 14th.	Nov. 21st.	Nov. 28th.	Dec. 5th.	Dec. 12th.	Dec. 19th.	Dec. 26th.	Jan. 2nd.		
Total Births	1	263	222	196	209	201	198	221	201	184	221	238	164	236	2,754	12,007
Total Deaths	2	117	163	128	139	115	146	145	118	160	158	146	120	156	1,811	7,505
Under 1 year	3	47	53	26	41	31	28	27	20	31	17	24	14	30	389	1,654
1 to 2 years.....	4	7	9	19	14	9	14	12	2	7	10	5	12	8	128	560
2 to 5 years.....	5	5	9	10	9	4	7	11	9	6	6	5	6	11	98	409
5 to 60 years	6	31	59	39	39	43	55	48	50	68	63	48	50	59	652	2,741
60 yrs. and upwards	7	27	33	34	36	28	42	47	37	48	62	64	38	48	544	2,141
Deaths: Small-pox..	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	9	2	4	3	5	1	3	6	4	1	3	3	2	5	42	181
Scarlet Fever	10	...	...	...	...	...	...	...	...	...	...	1	...	...	1	14
*Diphtheria	11	...	1	...	1	...	1	1	...	1	...	3	4	4	16	50
Whooping-cough..	12	...	2	1	...	...	1	2	1	1	...	3	4	2	17	140
Typhus Fever	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhoid Fever ...	14	...	3	...	...	...	...	1	...	...	...	...	...	3	7	25
Other or doubtful	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea or Dysent.	16	7	14	3	5	5	2	2	1	...	...	...	...	2	41	341
All seven.....	17	9	24	7	11	6	7	12	6	3	3	10	10	16	124	751
Cholera (English) ...	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Croup	19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dis. of Resp. System	20	24	30	25	29	27	38	32	29	43	38	32	22	30	399	1,527
Influenza†	21	...	...	...	...	...	2	1	...	1	1	1	...	...	6	121
Phthisis	22	5	18	7	6	6	11	11	11	15	13	10	15	9	137	621
Dis. of Circul. System	23	3	16	13	10	15	14	17	11	15	20	8	12	12	166	707
Violent Deaths	24	5	3	3	7	4	4	7	...	12	6	3	5	11	70	310
Inquest cases	25	13	13	11	16	10	8	17	10	15	21	10	11	26	181	694
Deaths in Pub. Inst.	26	14	25	16	23	13	21	22	17	36	26	22	30	34	299	1,368
Dispensary: visits pd.	27	237	296	288	299	267	323	344	326	270	309	296	273	221	3,749	15,435
Cases admitted to our own hospitals	28	48	30	23	36	22	21	25	37	29	24	42	30	34	401	1,368
Barom. (inches)	29	30.03	29.99	30.17	30.02	30.04	29.81	29.97	29.82	30.21	29.40	29.45	30.04	30.11	29.93	29.90
Attached Ther. °F...	30	61.54	59.85	58.46	58.92	60.15	56.77	57.77	58.00	55.15	54.54	55.69	54.25	45.23	56.66	58.63
Dry bulb.....	31	56.92	56.15	49.77	51.77	48.31	44.69	46.15	49.69	38.77	42.15	44.31	43.50	34.62	46.70	51.31
Wet bulb.....	32	54.77	53.92	47.62	50.31	46.92	43.00	44.23	46.85	37.77	40.69	43.08	42.17	33.62	45.01	47.68
Humidity	33	86.62	86.00	85.00	90.08	90.00	87.62	86.08	80.54	90.92	88.38	90.54	89.33	84.15	87.32	77.79
Mn. of highest reading	34	63.71	60.86	54.71	56.00	51.71	50.86	50.71	53.71	43.29	45.86	47.71	45.57	38.14	50.99	56.08
„ lowest „	35	50.43	50.29	45.43	43.29	43.29	38.43	41.57	42.86	34.57	37.57	40.14	39.43	28.86	41.24	43.49
„ daily range	36	13.28	10.57	9.28	12.71	8.42	12.43	9.14	10.85	8.72	8.29	7.57	6.14	9.28	9.75	12.59
Total rainfall (inches)	37	0.23	0.08	0.57	0.36	0.02	0.65	0.17	0.33	0.05	0.51	0.62	0.03	0.59	4.21	22.34
Wind { Direction ...	38	NESE	NE	E NE	NESE	SE NE	SE	W	W	...	...	...	...	...	...	...
{ Force 0-6 ...	39	1	1	2	1	1	1	1	2	1	1	1	1	1	1	1
Amount of Cloud	40	...	...	...	...	...	...	...	...	Fog	...	...	...	...	...	...
Birth-rate (Leeds) ...	41	28.8	24.3	21.4	22.9	22.0	21.7	24.2	22.0	20.1	24.2	26.0	17.9	25.8	23.2	24.8
Death-rate (Leeds)...	42	12.8	17.8	14.0	15.2	12.6	16.0	15.9	12.9	17.5	17.3	16.0	13.1	17.1	15.2	15.5
Death-rate (76 towns)	43	12.8	13.9	13.8	15.3	15.1	16.0	15.6	15.6	15.6	15.5	15.3	12.9	18.2	14.9	14.9
Birth-rate (76 towns)	44	26.2	26.7	25.2	27.3	27.6	25.9	24.3	24.4	23.1	24.6	24.8	18.5	25.0	24.9	27.0
D.R. lung dis. (Leeds)	45	2.6	3.3	2.7	3.2	3.0	4.2	3.5	3.2	4.7	4.2	3.5	2.4	3.3	3.4	3.2
D.R. 7 Zymotics ..	46	1.0	2.6	0.8	1.2	0.7	0.8	1.3	0.7	0.3	0.3	1.1	1.1	1.7	1.0	1.5

The Dispensary returns are furnished me by the kindness of the resident staff, and have regard to a week ended in each case a day earlier than that given in the heading.

The meteorological data are compiled from returns sent us by Mr. Crowther. They are uncorrected readings, made at 10 a.m. and 4 p.m. The humidity each week is the average of the humidities calculated on each of the thirteen observations of the wet and dry bulbs. On January 17th, 1906, the attached thermometer was removed into an inner room in which there was a fire.

* Includes membranous croup. Line 19 includes non-spasmodic croup not returned as membranous. † Line 20 includes line 21.

TABLE F. (2).

Shewing Births, Deaths, from all and certain causes, Home Patients of the Dispensary, admissions to the Fever Hospitals, and some of the Meteorological conditions and the Death-rates from certain causes in Leeds; with the Birth and Death-rates from all causes in the 76 large English towns for each of the thirteen weeks ended 3rd April, 1909.

1909.		JANUARY.				FEBRUARY.				MARCH.					TOTALS OR AVERAGES.
		Jan. 9th.	Jan. 16th.	Jan. 23rd.	Jan. 30th.	Feb. 6th.	Feb. 13th.	Feb. 20th.	Feb. 27th.	Mar. 6th.	Mar. 13th.	Mar. 20th.	Mar. 27th.	Apl. 3rd.	
Total Births	1	210	217	222	186	218	200	249	192	200	212	230	251	264	2,851
Total Deaths	2	152	150	139	180	156	157	143	147	178	196	174	189	157	2,118
Under 1 year	3	29	34	12	26	27	20	21	23	23	34	33	23	23	328
1 to 2 years	4	10	17	8	10	8	6	3	3	5	7	7	13	13	104
2 to 5 years	5	5	6	8	6	10	13	9	5	6	7	13	6	10	104
5 to 60 years	6	60	54	63	77	53	72	54	67	79	73	65	65	60	842
60 yrs. and upwards	7	48	45	48	61	58	46	56	49	65	75	56	82	51	740
Deaths: Small-pox..	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	9	5	4	6	1	1	1	...	...	...	1	...	5	1	25
Scarlet Fever	10	...	...	1	...	...	...	...	...	2	...	1	...	...	4
*Diphtheria	11	1	5	3	1	2	5	3	1	3	1	...	1	1	27
Whooping-cough..	12	...	4	...	1	3	4	...	1	...	2	5	1	3	24
{ Typhus Fever	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhoid Fever	14	3	2	...	1	2	2	1	...	1	1	1	...	...	14
Other or doubtful	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea or Dysent.	16	2	1	...	...	...	1	2	...	...	1	1	...	1	9
All seven.....	17	11	16	10	4	8	13	6	2	6	6	8	7	6	103
Cholera (English) ...	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Croup	19	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dis. of Resp. System	20	36	33	40	42	46	43	35	44	58	73	48	65	42	605
Influenza†	21	3	...	3	2	3	5	...	5	3	13	9	16	5	67
Phthisis	22	9	11	14	15	12	17	12	14	12	14	17	10	14	171
Dis. of Circul. System	23	14	14	15	24	11	11	15	22	26	17	21	14	16	220
Violent Deaths	24	6	6	9	7	9	6	8	5	3	5	6	6	4	80
Inquest cases	25	11	14	15	19	15	9	14	16	13	20	13	20	12	191
Deaths in Pub. Inst.	26	22	31	28	34	28	32	32	29	29	29	26	45	29	394
Dispensary: visits pd.	27	307	301	284	320	301	301	303	341	363	366	375	279	351	4,192
Cases admitted to our own hospitals	28	25	27	39	26	32	26	41	35	26	20	25	35	29	386
Barom. (inches)	29	30.21	29.33	30.13	30.17	29.78	29.94	30.11	30.31	29.38	29.69	29.31	29.49	29.72	29.81
Attached Ther. °F ...	30	53.38	52.08	53.77	47.23	54.77	52.23	53.38	50.54	48.00	50.46	53.85	56.08	57.62	52.57
Dry bulb.....	31	42.69	40.77	39.15	31.15	44.54	36.54	39.77	36.92	34.00	36.92	41.31	44.46	47.15	39.64
Wet bulb.....	32	41.08	38.08	37.08	29.85	42.54	35.08	36.77	34.54	33.00	35.62	38.31	41.54	44.00	37.50
Humidity	33	87.15	79.15	83.23	86.23	85.69	86.69	76.85	79.62	89.46	88.77	76.62	79.46	78.54	82.88
Mn. of highest reading	34	46.29	44.86	43.71	36.57	48.57	39.29	45.43	43.43	38.00	40.00	46.71	49.00	51.43	44.10
„ lowest „	35	38.29	36.14	33.86	26.43	38.00	32.86	32.00	30.43	28.14	32.86	33.43	37.43	38.86	33.75
„ daily range ...	36	8.00	8.72	9.85	10.14	10.57	6.43	13.43	13.00	9.86	7.14	13.28	11.57	12.57	10.35
Total rainfall (inches)	37	0.13	0.86	0.01	0.01	...	0.30	0.03	0.01	0.41	0.79	0.16	0.50	0.99	4.20
Wind { Direction ...	38	NW	W	W	E	W	NE	WE	NW	NE	WN	NE	W	SE	NE
{ Force 0-6 ...	39	2	2	2	1	5	3	2	1	1	2	2	2	2	2
Amount of Cloud	40	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Birth-rate (Leeds) ...	41	22.6	23.4	23.9	20.1	23.5	21.6	26.8	20.7	21.6	22.9	24.8	27.1	28.5	23.6
Death-rate (Leeds)...	42	16.4	16.2	15.0	19.4	16.8	16.9	15.4	15.8	19.2	21.1	18.8	20.4	16.9	17.6
Death-rate (76 towns)	43	17.5	16.6	15.7	18.0	18.7	17.5	18.1	19.1	21.3	22.1	22.1	19.8	17.9	18.7
Birth-rate (76 towns)	44	28.7	27.0	26.0	24.3	26.8	25.9	28.3	26.1	23.8	27.6	27.4	26.9	27.9	26.7
D. R. lung dis. (Leeds)	45	3.9	3.6	4.3	4.5	5.0	4.6	3.8	4.7	6.3	7.9	5.2	7.0	4.5	5.0
D. R. 7 Zymotics ..	46	1.2	1.7	1.1	0.4	0.9	1.4	0.6	0.2	0.6	0.6	0.9	0.8	0.6	0.9

The Dispensary returns are furnished me by the kindness of the resident staff, and have regard to a week ended in each case a day earlier than that given in the heading.

The meteorological data are compiled from returns sent us by Mr. Crowther. They are uncorrected readings, made at 10 a.m. and 4 p.m. The humidity each week is the average of the humidities calculated on each of the thirteen observations of the wet and dry bulbs. On January 17th, 1906, the attached thermometer was removed into an inner room in which there was a fire.

* Includes membranous croup. Line 19 includes non-spasmodic croup not returned as membranous. † Line 20 includes line 21.

TABLE F. (3).

Shewing Births, Deaths, from all and certain causes, Home Patients of the Dispensary, admissions to the Fever Hospitals, and some of the Meteorological conditions and the Death-rates from certain causes in Leeds; with the Birth and Death-rates from all causes in the 76 large English towns for each of the thirteen weeks ended 3rd July, 1909.

1909.		APRIL.				MAY.				JUNE.					TOTALS OR AVERAGES.
		Apl. 10th.	Apl. 17th.	Apl. 24th.	May 1st.	May 8th.	May 15th.	May 22nd.	May 29th.	June 5th.	June 12th.	June 19th.	June 26th.	July 3rd.	
Total Births	1	234	207	228	232	244	189	226	197	178	235	226	194	236	2,826
Total Deaths	2	132	164	145	111	141	122	117	133	131	96	102	120	109	1,623
Under 1 year	3	34	27	32	20	33	20	21	32	33	22	16	23	21	334
1 to 2 years.....	4	4	19	3	5	12	4	4	9	3	3	8	4	6	84
2 to 5 years.....	5	9	6	5	6	3	5	3	5	4	3	7	8	3	67
5 to 60 years	6	40	69	60	52	55	53	48	38	40	46	41	53	51	646
60 yrs. and upwards	7	45	43	45	28	38	40	41	49	51	22	30	32	28	492
Deaths: Small-pox..	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	9	1	1	2	2	2	...	...	1	1	1	1	1	...	13
Scarlet Fever	10	...	...	...	...	...	...	...	...	...	1	...	...	1	2
*Diphtheria	11	3	1	1	1	1	...	...	1	3	1	3	...	...	15
Whooping-cough..	12	2	3	3	3	3	1	1	...	...	1	2	3	1	23
{ Typhus Fever.....	13	...	...	...	...	...	...	...	...	...	...	...	...	2	2
{ Typhoid Fever ...	14	...	...	1	1	...	2	1	1	1	...	...	...	...	7
{ Other or doubtful	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea or Dysent.	16	3	...	2	...	...	...	...	...	1	...	...	...	...	6
All seven.....	17	9	5	9	7	6	3	2	3	6	4	6	4	4	68
Cholera (English) ...	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Croup	19	...	2	...	...	...	1	...	...	...	...	...	...	...	3
Dis. of Resp. System	20	30	44	26	29	35	27	23	24	21	17	14	22	18	330
Influenza†	21	2	1	3	2	3	2	...	...	...	...	...	...	1	14
Phthisis	22	8	13	13	15	9	6	11	8	14	13	6	18	9	143
Dis. of Circul. System	23	13	15	13	14	12	15	14	22	13	11	17	11	15	185
Violent Deaths	24	3	7	11	2	4	2	4	5	5	4	1	5	4	57
Inquest cases	25	12	16	19	8	11	9	10	14	13	8	4	8	12	144
Deaths in Pub. Inst.	26	26	23	28	33	37	33	31	27	35	14	20	31	29	367
Dispensary: visits pd.	27	224	217	259	298	318	308	313	316	269	307	299	344	291	3,763
Cases admitted to our own hospitals	28	29	30	33	31	40	38	50	40	41	36	45	51	52	516
Barom. (inches)	29	30.26	29.64	29.67	29.74	30.27	30.06	30.03	29.73	29.90	29.98	30.20	29.55	30.00	29.92
Attached Ther. *F... 30	61.83	61.38	63.15	62.08	63.15	61.54	61.54	64.23	62.31	62.92	63.69	62.31	63.69	62.61	62.61
Dry bulb.....	31	52.58	51.92	53.92	49.85	58.92	51.77	59.46	58.46	57.85	56.69	59.85	58.38	59.46	56.11
Wet bulb.....	32	44.67	46.31	48.15	45.00	49.62	45.62	51.15	52.92	51.85	50.00	54.31	54.00	54.00	49.84
Humidity	33	57.33	66.62	66.92	69.00	52.69	63.69	59.31	69.54	66.15	62.62	69.77	75.15	70.07	65.34
Mn. of highest reading	34	61.29	57.43	60.14	55.86	63.71	56.43	64.71	63.14	62.57	61.57	65.14	62.14	65.57	61.52
„ lowest „	35	36.14	42.29	43.00	41.57	39.71	40.71	43.00	49.57	48.14	45.00	48.71	51.00	48.57	44.42
„ daily range ...	36	25.15	15.14	17.14	14.29	24.00	15.72	21.71	13.57	14.43	16.57	16.43	11.14	17.00	17.10
Total rainfall (inches)	37	...	0.43	1.35	0.61	0.08	0.14	0.45	0.98	0.09	0.07	0.02	2.03	0.32	6.57
Wind { Direction ...	38	SE NW	W	SE	EW	ESE	WNE	WE	W	NE	NW	NE W	SW N	NE	...
{ Force 0-6 ...	39	2	3	3	3	3	2	2	2	2	2	2	3	2	2
Amount of Cloud	40	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Birth-rate (Leeds) ...	41	25.2	22.3	24.6	25.0	26.3	20.4	24.4	21.2	19.2	25.3	24.4	20.9	25.4	23.4
Death-rate (Leeds)...	42	14.2	17.7	15.6	12.0	15.2	13.2	12.6	14.3	14.1	10.3	11.0	12.9	11.8	13.5
Death-rate (76 towns)	43	17.0	17.1	15.8	14.5	14.1	13.7	14.7	13.9	12.3	12.6	12.3	12.1	11.8	13.9
Birth-rate (76 towns)	44	26.1	27.0	29.2	26.7	28.5	26.1	26.5	25.5	22.6	28.5	27.4	23.9	27.2	26.6
D.R. lung dis. (Leeds)	45	3.2	4.7	2.8	3.1	3.8	2.9	2.5	2.6	2.3	1.8	1.5	2.4	1.9	2.7
D.R. 7 Zymotics ..	46	1.0	0.5	1.0	0.8	0.6	0.3	0.2	0.3	0.6	0.4	0.6	0.4	0.4	0.6

The Dispensary returns are furnished me by the kindness of the resident staff, and have regard to a week ended in each case a day earlier than that given in the heading.

The meteorological data are compiled from returns sent us by Mr. Crowther. They are uncorrected readings, made at 10 a.m. and 4 p.m. The humidity each week is the average of the humidities calculated on each of the thirteen observations of the wet and dry bulbs. On January 17th, 1906, the attached thermometer was removed into an inner room in which there was a fire.

* Includes membranous croup. Line 19 includes non-spasmodic croup not returned as membranous. † Line includes line 21.

TABLE F. (4).

Shewing Births, Deaths, from all and certain causes, Home Patients of the Dispensary, admissions to the Fever Hospitals, and some of the Meteorological conditions and the Death-rates from certain causes in Leeds: with the Birth and Death-rates from all causes in the 76 large English towns for each of the thirteen weeks ended 2nd October, 1909.

1909.		JULY.				AUGUST.				SEPTEMBER.					TOTALS OR AVERAGES.
		July 10th.	July 17th.	July 24th.	July 31st.	Aug. 7th.	Aug. 14th.	Aug. 21st.	Aug. 28th.	Sep. 4th.	Sep. 11th.	Sep. 18th.	Sep. 25th.	Oct. 2nd.	
Total Births	1	200	241	208	215	218	215	231	240	242	200	211	200	193	2,814
Total Deaths	2	104	102	106	102	103	119	116	114	131	106	133	99	117	1,452
Under 1 year	3	22	19	32	24	19	26	33	45	41	32	42	30	20	385
1 to 2 years.....	4	14	8	7	4	7	9	6	7	6	8	8	4	7	95
2 to 5 years.....	5	1	7	6	5	2	11	8	4	8	2	5	4	5	68
5 to 60 years	6	31	40	38	39	46	44	45	32	34	36	52	32	52	521
60 yrs. and upwards	7	36	28	23	30	29	29	24	26	42	28	26	29	33	383
Deaths: Small-pox..	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	9	...	1	2	5	1	6	1	2	3	...	...	...	...	21
Scarlet Fever	10	...	...	...	...	...	...	1	1	...	...	1	...	...	3
*Diphtheria	11	...	1	...	...	2	1	1	1	3	...	...	...	2	11
Whooping-cough..	12	3	1	1	2	1	2	1	3	1	2	3	1	1	22
{ Typhus Fever.....	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Typhoid Fever ...	14	1	1	...	...	...	...	...	...	2	...	1	...	1	6
{ Other or doubtful	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea or Dysent.	16	2	...	2	1	2	2	8	16	12	10	7	8	2	72
All seven.....	17	6	4	5	8	6	11	12	23	21	12	12	9	6	135
Cholera (English) ...	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Croup	19	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dis. of Resp. System	20	13	17	17	14	16	21	19	14	10	5	19	10	20	195
Influenza†	21	1	...	...	...	...	...	...	...	...	...	1	1	...	3
Phthisis	22	8	11	9	8	12	13	8	6	7	4	5	4	13	108
Dis. of Circul. System	23	9	9	11	9	10	7	11	12	19	15	11	13	11	147
Violent Deaths	24	4	3	4	2	6	4	5	5	3	5	4	...	2	47
Inquest cases	25	11	7	11	2	10	11	10	8	8	12	14	5	6	115
Deaths in Pub. Inst.	26	19	30	18	18	21	22	24	22	26	24	29	17	22	292
Dispensary: visits pd.	27	258	307	232	245	254	233	242	247	239	218	238	258	254	3,225
Cases admitted to our own hospitals	28	48	66	41	32	49	33	30	42	37	52	60	40	68	598
Barom. (inches)	29	29.71	29.91	29.75	29.69	30.11	30.11	29.66	29.80	29.83	29.85	30.13	29.96	29.84	29.87
Attached Ther. °F...	30	66.23	65.23	65.31	63.85	66.00	71.79	67.85	63.85	62.85	62.69	61.23	62.31	61.31	64.65
Dry bulb.....	31	61.23	62.46	62.38	59.69	65.77	70.77	62.46	60.24	57.69	55.77	55.23	56.08	54.92	60.36
Wet bulb.....	32	55.54	56.85	56.23	55.23	58.38	63.69	58.31	56.15	52.46	51.54	52.77	53.08	52.77	55.62
Humidity	33	68.69	69.77	66.77	75.00	64.08	65.77	77.15	77.15	69.85	74.31	84.31	81.69	86.38	73.92
Mn. of highest reading	34	65.71	66.71	66.14	65.00	70.57	78.14	68.86	63.71	63.00	60.43	61.29	61.57	58.14	65.33
„ lowest „	35	52.57	53.14	53.43	52.71	51.86	57.29	56.43	52.00	48.71	47.00	48.71	48.29	49.71	51.68
„ daily range ...	36	13.14	13.57	12.71	12.29	18.71	20.85	12.43	11.71	14.29	13.43	12.58	13.28	8.43	13.65
Total rainfall (inches)	37	0.38	0.69	0.18	1.30	0.92	...	1.03	0.52	0.28	0.25	0.21	0.29	0.62	6.67
Wind { Direction ...	38	NW	WNW	W	NW	NW	W	NW	NW	NW	NW	NE	NW	SE	...
{ Force 0-6 ...	39	2	3	4	3	1	2	2	3	3	2	1	2	1	2
Amount of Cloud	40	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Birth-rate (Leeds) ...	41	21.6	26.0	22.4	23.2	23.5	23.2	24.9	25.9	26.1	21.6	22.7	21.6	20.8	23.3
Death-rate (Leeds)...	42	11.2	11.0	11.4	11.0	11.1	12.8	12.5	12.3	14.1	11.4	14.3	10.7	12.6	12.0
Death-rate (76 towns)	43	11.8	11.5	10.6	10.8	10.5	11.5	11.8	12.9	12.9	12.8	13.0	12.6	12.3	11.8
Birth-rate (76 towns)	44	24.7	26.2	25.6	26.3	23.7	26.3	24.8	26.4	25.8	24.6	25.4	25.4	24.2	25.3
D.R. lung dis. (Leeds)	45	1.4	1.8	1.8	1.5	1.7	2.3	2.0	1.5	1.1	0.5	2.0	1.1	2.2	1.6
D.R. Diarrhoea „	46	0.2	...	0.2	0.1	0.2	0.2	0.9	1.7	1.3	1.1	0.8	0.9	0.2	0.6

The Dispensary returns are furnished me by the kindness of the resident staff, and have regard to a week ended in each case a day earlier than that given in the heading.

The meteorological data are compiled from returns sent us by Mr. Crowther. They are uncorrected readings, made at 10 a.m. and 4 p.m. The humidity each week is the average of the humidities calculated on each of the thirteen observations of the wet and dry bulbs. On January 17th, 1906, the attached thermometer was removed into an inner room in which there was a fire.

* Includes membranous croup. Line 19 includes non-spasmodic croup not returned as membranous. † Line 20 includes line 21.

TABLE F. (5).

Shewing Births, Deaths, from all and certain causes, Home Patients of the Dispensary, admissions to the Fever Hospitals, and some of the Meteorological conditions and the Death-rates from certain causes in Leeds; with the Birth and Death-rates from all causes in the 76 large English towns for each of the thirteen weeks ended 1st January, 1910.

1909.		OCTOBER.				NOVEMBER.				DECEMBER.					TOTALS OR AVERAGES.	YEAR.
		9th. Oct.	16th. Oct.	23rd. Oct.	30th. Oct.	6th. Nov.	13th. Nov.	20th. Nov.	27th. Nov.	4th. Dec.	11th. Dec.	18th. Dec.	25th. Dec.	1st. Jan.		
Total Births	1	209	204	200	177	207	207	209	193	183	186	202	126	208	2,511	11,002
Total Deaths	2	123	107	107	106	109	126	119	139	147	152	133	130	163	1,661	6,854
Under 1 year	3	27	26	21	17	25	30	18	21	23	32	17	17	29	303	1,350
1 to 2 years	4	5	3	7	4	7	7	6	11	10	8	5	6	9	88	371
2 to 5 years	5	6	5	7	4	2	3	8	4	7	7	2	5	11	71	310
5 to 60 years	6	51	42	42	40	40	47	52	51	65	44	58	59	51	642	2,651
60 yrs. and upwards	7	34	31	30	41	35	39	35	52	42	61	51	43	63	557	2,172
Deaths: Small-pox..	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	9	1	...	...	1	...	1	1	3	3	2	2	3	2	19	78
Scarlet Fever	10	1	...	...	...	1	...	...	1	...	...	...	...	...	3	12
*Diphtheria	11	1	1	...	1	1	...	1	1	2	...	2	1	1	12	65
Whooping-cough..	12	2	...	1	2	1	...	2	...	...	3	2	...	1	14	83
Typhus Fever	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Typhoid Fever	14	...	...	2	2	1	3	3	...	...	...	...	2	...	13	40
Other or doubtful	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea or Dysent.	16	6	4	3	2	2	1	1	...	1	...	...	...	3	23	110
All seven	17	11	5	6	8	6	5	8	5	6	5	6	6	7	84	390
Cholera (English) ...	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Croup	19	...	...	...	...	...	...	...	...	1	...	...	...	1	2	5
Dis. of Resp. System	20	15	28	12	13	19	21	26	31	45	47	25	29	45	356	1,486
Influenza†	21	...	2	...	...	...	...	...	3	2	6	4	1	2	20	104
Phthisis	22	8	8	8	10	7	11	13	10	13	3	10	15	10	126	548
Dis. of Circul. System	23	22	15	15	8	12	15	14	11	10	18	20	10	21	191	743
Violent Deaths	24	3	1	4	3	7	4	10	5	6	8	9	4	8	72	256
Inquest cases	25	8	6	7	11	12	14	19	13	20	18	16	14	25	183	633
Deaths in Pub. Inst.	26	23	24	29	26	22	23	18	33	29	24	27	37	35	350	1,403
Dispensary: visits pd.	27	213	185	153	175	206	249	248	274	280	296	312	258	205	3,054	14,234
Cases admitted to our own hospitals	28	68	64	84	68	86	56	56	52	72	60	64	51	51	832	2,322
Barom. (inches)	29	29.60	29.59	29.65	29.68	30.02	29.89	30.00	30.06	29.00	29.57	30.01	29.22	29.84	29.71	29.83
Attached Ther. °F...	30	61.69	61.15	62.92	50.08	58.54	57.62	52.31	52.54	53.92	51.31	53.85	46.83	50.85	55.40	58.81
Dry bulb	31	56.31	56.77	55.92	43.31	50.69	44.85	38.85	40.54	42.85	41.46	40.23	35.92	45.23	45.67	50.44
Wet bulb	32	53.69	53.31	53.08	39.62	48.15	41.69	36.77	37.92	40.85	40.00	38.85	35.00	43.08	43.28	46.56
Humidity	33	83.62	78.77	82.31	73.38	82.46	77.31	82.85	79.69	84.46	87.92	88.69	89.83	84.46	82.71	76.22
Mn. of highest reading	34	61.57	60.43	61.14	47.86	53.43	49.00	43.43	44.71	45.86	44.14	42.71	39.71	48.00	49.38	55.08
„ lowest „	35	49.14	49.00	49.00	37.00	43.43	38.43	32.71	33.86	38.29	34.86	37.29	29.14	37.00	39.16	42.25
„ daily range ...	36	12.43	11.43	12.14	10.86	10.00	10.57	10.72	10.85	7.57	9.28	5.42	10.57	11.00	10.22	12.83
Total rainfall (inches)	37	0.72	0.66	0.41	0.02	0.03	...	0.02	0.02	1.48	0.76	0.48	1.78	0.44	6.82	24.26
Wind (Direction ...	38	SW NW	SW W	SW	NE NW	NW W	NW	NW NE	NW	SW	NW SW	NE	SW	W	...	...
(Force 0-6 ...	39	3	3	3	3	1	3	1	2	2	2	2	2	2	2	2
Amount of Cloud	40	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Birth-rate (Leeds) ...	41	22.5	22.0	21.6	19.1	22.3	22.3	22.5	20.8	19.7	20.1	21.8	13.6	22.4	20.8	22.8
Death-rate (Leeds) ...	42	13.3	11.5	11.5	11.4	11.8	13.6	12.8	15.0	15.8	16.4	14.3	14.0	17.6	13.8	14.2
Birth-rate (76 towns)	43	12.9	12.2	12.0	12.0	13.3	13.8	14.6	16.4	16.5	16.6	15.0	15.4	16.7	14.3	14.7
Death-rate (76 towns)	44	25.1	24.9	26.0	24.7	26.5	25.7	24.0	24.3	22.4	24.2	24.5	20.7	24.6	24.4	25.7
R. lung dis. (Leeds)	45	1.6	3.0	1.3	1.4	2.0	2.3	2.8	3.3	4.9	5.1	2.7	3.1	4.9	3.0	3.1
D. R. 7 Zymotics ..	46	1.2	0.5	0.6	0.9	0.6	0.5	0.9	0.5	0.6	0.5	0.6	0.6	0.8	0.7	0.8

The Dispensary returns are furnished me by the kindness of the resident staff, and have regard to a week ended in each case a day earlier than that given in the heading.

The meteorological data are compiled from returns sent us by Mr. Crowther. They are uncorrected readings, made at 10 a.m. and 4 p.m. The humidity each week is the average of the humidities calculated on each of the thirteen observations of the wet and dry bulbs. On January 17th, 1906, the attached thermometer was removed into an inner room in which there was a fire.

* Includes membranous croup. Line 19 includes non-spasmodic croup not returned as membranous. † Line 20 includes line 21.

TABLE F. (6).

Shewing Births, Deaths, from all and certain causes, Home Patients of the Dispensary, admissions to the Fever Hospitals, and some of the Meteorological conditions and the Death-rates from certain causes in Leeds: with the Birth and Death-rates from all causes in the 76 large English towns for each of the thirteen weeks ended 2nd April, 1910.

1910.	JANUARY.				FEBRUARY.				MARCH.					TOTALS OR AVERAGES.	
	8th. Jan.	15th. Jan.	22nd. Jan.	29th. Jan.	5th. Feb.	12th. Feb.	19th. Feb.	26th. Feb.	5th. Mar.	12th. Mar.	19th. Mar.	26th. Mar.	2nd. Apr.		
Total Births	1	238	201	208	165	210	216	225	229	243	213	201	217	199	2,765
Total Deaths	2	147	134	143	147	142	144	119	135	141	119	128	125	133	1,757
Under 1 year	3	24	29	19	23	25	23	25	27	38	25	17	25	24	324
1 to 2 years	4	4	11	6	10	7	5	10	6	8	8	6	4	8	93
2 to 5 years	5	8	6	7	5	7	5	4	4	7	5	10	3	4	75
5 to 60 years	6	54	49	58	61	45	69	41	57	50	44	50	50	51	679
60 yrs. and upwards	7	57	39	53	48	58	42	39	41	38	37	45	43	46	586
Deaths: Small-pox..	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	9	2	1	1	1	...	...	...	1	1	...	1	...	1	9
Scarlet Fever	10	2	...	2	1	1	...	...	1	...	...	2	...	1	10
*Diphtheria	11	2	1	1	3	4	...	...	1	1	1	...	1	1	16
Whooping-cough..	12	4	4	2	4	1	2	4	...	3	1	4	...	2	31
Typhus Fever	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhoid Fever ...	14	...	2	...	...	...	1	...	2	2	...	1	...	1	9
Other or doubtful	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea or Dysent.	16	2	4	1	..	1	1	1	1	1	...	1	...	...	13
All seven.....	17	12	12	7	9	7	4	5	6	8	2	9	1	6	88
Cholera (English) ...	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Croup	19	...	...	...	1	...	...	...	...	...	1	...	...	...	2
Dis. of Resp. System	20	42	31	28	22	39	39	30	28	32	31	27	27	35	411
Influenza†	21	5	2	7	...	3	4	2	3	7	2	1	2	1	39
Phthisis	22	10	4	9	15	13	16	5	14	9	5	9	7	8	124
Dis. of Circul. System	23	12	19	18	9	17	14	15	17	16	12	20	13	14	196
Violent Deaths	24	6	4	8	3	8	6	2	5	7	7	3	6	7	72
Inquest cases	25	10	18	16	12	20	18	7	17	14	15	14	12	15	188
Deaths in Pub. Inst.	26	34	23	28	33	26	32	20	37	23	28	22	23	23	352
Dispensary: visits pd.	27	203	244	214	222	221	250	259	215	223	185	229	253	146	2,864
Cases admitted to our own hospitals	28	50	36	46	44	47	54	47	61	33	30	59	52	43	602
Barom. (inches)	29	30.24	29.73	29.48	29.09	29.51	29.75	29.25	29.32	29.85	29.79	29.91	30.29	30.35	29.73
Attached Ther. °F...	30	55.62	52.62	51.54	45.77	50.15	54.38	55.15	53.38	54.54	57.54	57.31	57.33	57.92	54.08
Dry bulb.....	31	45.08	41.69	38.00	31.08	39.69	43.00	45.31	40.69	44.46	46.38	43.85	48.44	47.38	42.66
Wet bulb.....	32	43.31	39.69	36.00	30.31	38.23	40.85	42.31	38.08	41.77	44.00	40.00	44.58	42.77	40.12
Humidity	33	86.77	84.62	82.00	90.85	87.77	83.92	78.85	80.54	80.77	83.46	72.85	74.67	69.77	81.33
Mn. of highest reading	34	48.71	45.57	42.71	35.43	42.86	47.14	49.14	46.43	49.14	51.57	48.00	54.29	55.29	47.41
„ lowest „	35	40.14	36.43	33.71	25.86	33.86	39.00	39.71	35.43	36.14	40.14	36.29	40.43	34.57	36.29
„ daily range ...	36	8.57	9.14	9.00	9.57	9.00	8.14	9.43	11.00	13.00	11.43	11.71	13.86	20.72	11.12
Total rainfall (inches)	37	0.10	1.21	0.46	1.07	0.31	0.28	0.43	0.87	0.07	0.33	0.07	...	0.02	5.22
Wind / Direction ...	38	SW W	SW W	WNW	NW	SW SE	SW NW	W SW	W	SE SW	W NE	NW	NW	NE	...
Force 0-6 ...	39	2	3	3	2	2	2	4	2	2	2	3	2	1	2
Amount of Cloud	40	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Birth-rate (Leeds) ...	41	25.3	21.4	22.1	17.5	22.3	23.0	23.9	24.3	25.8	22.6	21.4	23.1	21.1	22.6
Death-rate (Leeds)...	42	15.6	14.2	15.2	15.6	15.1	15.3	12.6	14.3	15.0	12.6	13.6	13.3	14.1	14.4
Death-rate (76 towns)	43	14.8	14.9	14.8	16.3	17.0	16.6	15.8	14.7	14.5	13.6	13.5	13.9	14.4	14.8
Birth-rate (76 towns)	44	27.0	24.8	23.6	22.7	26.3	26.3	25.9	25.1	27.1	25.9	26.2	24.2	25.5	25.4
D.R. lung dis. (Leeds)	45	4.5	3.3	3.0	2.3	4.1	4.1	3.2	3.0	3.4	3.3	2.9	2.9	3.7	3.4
D.R. 7 Zymotics ..	46	1.3	1.3	0.7	1.0	0.7	0.4	0.5	0.6	0.9	0.2	1.0	0.1	0.6	0.7

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* Includes membranous croup. Line 19 includes non-spasmodic croup not returned as membranous. † Line 20 includes line 21.

HEALTH OF LEEDS.

SUPPLEMENTARY REPORT

ON THE

MUNICIPAL YEAR, 1909-1910.

SANITARY WORK AND HEALTH IN LEEDS IN THE
MUNICIPAL YEAR 1909-1910.

The most complete statement on the work of the Sanitary Department is that contained in the Medical Officer of Health's "Annual." This deals with the health conditions, and the work done during what is practically the "calendar year." Another report is issued by the Committee, dealing, but less fully, with the health conditions and work done during the financial year. This report deals with the 12 months ended with the first quarter of the calendar year and has been issued to the whole Council. These two reports may be referred to in regard to statistical figures as the "annual" report, and "financial year" report. The present report will deal in some respects statistically with the municipal year, consisting of the 52 weeks ended on the 1st of October, 1910. All death rates in any of these three reports which refer to any shorter time than a year are calculated to correspond with a complete solar year.

Death rate in municipal year 1909-1910.—During the municipal year 1909-1910, the death rate in Leeds, calculated in this way for the whole year upon the deaths returned during the 52 weeks ended Saturday, October 1st, was 13·6. These figures give the gross, crude death rate, and are based on returns which include all the deaths that occurred in the City, whether the person dying belonged to Leeds or not, and all the deaths that occurred in the Poor Law and Municipal Hospitals within the City, whether the persons dying previously belonged to the City or not, and include also the deaths of Leeds persons in the City Fever Hospitals and the Hunslet Workhouse, although these hospitals are outside the City.

The above rate of 13·6 therefore is increased by the deaths of a number of persons who did not in any way belong to Leeds. These crude returns are corrected by the Registrar-General so as to exclude certain deaths occurring in institutions within the City of persons not belonging to the City, and to include, though less completely, the deaths of certain Leeds persons occurring in public institutions outside Leeds, not under Leeds management.

The whole of this information cannot easily be obtained, except for the annual report. For that report some care is taken to secure the deaths of Leeds persons outside the City. Meantime, however, the Registrar-General's figures as published in his quarterly returns for the fourth quarter of 1909, and for the first and second quarters of 1910, and his weekly returns for the third quarter of 1910, have been added together, and a provisional death rate according to the Registrar-General's figures obtained for the municipal year. The rate thus obtained is 13·4, and is a little less than the figure already given, in which the Registrar-General's corrections have not been made. It is, however, still subject to further correction, when his quarterly report for the third quarter for 1910 sees the light. This matter of correction for outsiders as well as that of correction for age and sex is referred to in the Annual for 1909, p. 2.

In comparing the health of Leeds with that of the nine largest towns in the United Kingdom, it is convenient to use the Registrar-General's own figures, both in regard to population and regard to deaths. The position of Leeds amongst these nine large towns is that of third. The death rate in London calculated from the figures mentioned was 12·6, in Sheffield 13·0, Leeds as already said had a rate of 13·4. Close upon our heels came Birmingham with a rate of 13·5, Edinburgh had a rate for the same period of 14·1, Manchester and Glasgow followed with rates of 16·1 and 16·7, Liverpool and Dublin with death rates of 18·1 and 20·0. It may be well to add that all these returns are for a full year.

During the municipal year the health of Leeds has been, it will be seen from the figures, unusually good. There has been an entire absence of small-pox and typhus fever, diseases which have occasionally given us a great deal of trouble. Scarlet fever has been fairly prevalent, more so than during the corresponding period of 1908-1909. Diphtheria, on the other hand, although exciting a good deal of anxiety, has been less prevalent than during the preceding municipal year (1908-1909); and the death rate from diarrhœa, although not less than in the preceding

municipal year, has been, as for some years back, considerably less than it used to be.

Scarlet fever during 40 years.—In regard to scarlet fever it may be interesting to note that in a table given in the annual report for 1909 (Table 12a), it is shown that the death rate from this disease in the seventies was 1·11 per 1,000; in the eighties it fell to 0·68 per 1,000; in the nineties to 0·19 per 1,000; whilst in the ten years 1900-1909, the rate of mortality was only 0·11 per 1,000. There have, of course, been fluctuations of the death rate during these periods, but taking the ten-year periods there has been a steady improvement. One of these fluctuations accounts for a death rate in the municipal year 1909-1910 of 0·06, which though below the average rate of the ten calendar years 1900-1909 is slightly in excess of that for the municipal year 1908-1909 (0·02).

Death rate from diphtheritic disease in last 20 years.—In regard to diphtheria, similar figures are not available, principally because a change has occurred in the use of the term "diphtheria." In the seventies the name was seldom applied except to very severe cases where a membrane could be seen. In 1894 the Registrar-General included under the term "diphtheria" cases of membranous croup, and since that time the word "membranous croup" has been gradually disappearing from the death certificates in favour of the term "diphtheria." Previous to 1890 in Leeds, we have no statistics in regard to deaths from diphtheria, which would include the allied diseases croup and laryngitis, which used to cause the greatest fatality from diseases of the throat amongst young children, and whose deaths would now be usually assigned to diphtheria. In regard to the twenty years, 1890-1909, however, the deaths reported from these allied diseases have been carefully recorded, and notwithstanding the fact that diphtheria, *so called*, has apparently been more common and more fatal of late years, it is found when we take into account the other fatal throat affections, that while the death rate from the group in the earlier of the two decades (1890-1899) was 0·40, in the later (1900-1909) it had fallen to 0·25. The

fluctuations already referred to account for a death rate from diphtheria, croup, and laryngitis together, in the past municipal year (1909-1910) of 0·14, which is considerably less than the reduced rate in the decade of the calendar years 1900-1909.

Position of Leeds in comparison with the largest towns.—

Although the death rate of 13·4 is the lowest death rate we have ever recorded in Leeds for a whole year since 1870, beyond which our figures do not go, we have lost the honourable position for this year of being nearest to London in regard to lowness of death-rate, Sheffield having a rate of 0·4 per thousand below our low death rate of 13·4; whilst Birmingham comes so close behind us (13·5) that a very slight alteration in the rectification of hospital cases might even place us fourth.

In considering in what way Sheffield and Birmingham have been able to come so close upon us in regard to healthiness during this year—and one of them actually to take precedence of us—I fear I must remind you that in both these towns—Sheffield and Birmingham—a greater amount of energy is being put into the personal house visitation by the women inspectors than it is possible for us with our limited staff to expect. Our women inspectors consist of the six originally recommended more than ten years ago by the Committee who considered this matter, with the occasional help of two probationers. Since that time the new work of the inspection of midwives has been thrown upon our small staff, and occupies a great deal of their time. The work of visiting houses where young children have died, and advising the mothers where children have been newly born, has necessarily had to be confined by us to a very small district of the town. It could with great advantage be extended to other parts of the town where the infant mortality is also high. But it is not merely very young life that is benefitted by the visits of our women inspectors. A higher standard of cleanliness is being gradually obtained in the district that they visit, which, although far from all that could be hoped for, is probably a distinct factor in improving the health of the town.

I find that, in Sheffield, instead of the eight women who are assisting us in this way, they have fifteen similarly qualified, and to this I am, to a great extent, inclined to attribute the fact that Sheffield has during the past twelve months outstripped us in the race for a low death rate. Sheffield is very nearly the same size as Leeds, although the estimated population even on its increased area is 12,000 below that with which the Registrar-General credits us, but they have practically double the number of women inspectors. This alteration has been made within the last two or three years.

Birmingham is a town considerably larger than Leeds, but they have in addition to fifteen health visitors, one superintendent of health visitors, one woman doctor who visits infants, as well as three other women inspectors specially charged with the care of workshops, the superintendence of midwives, and the dealing with tuberculous patients. In all, they have twenty women on their staff, against our eight.

House inspection.—During the municipal year 1909-1910, amongst other work done, 18,397 houses have been systematically examined, 15,780 of them from top to bottom as to number of inmates, available air space and ventilation, closet accommodation and arrangement for refuse disposal, drainage, etc., and 2,617 partially but systematically either as to inmates and their houses or as to drainage or as to other conditions of the premises. Other special examinations have also been made, and 19,667 nuisances have been removed in consequence of our work. In many cases the drains have been tested by the smell test, and this action has revealed the existence of 3,955 drainage defects apart from the obviously visible stopped drains which are more easily discovered.

Milk inspection.—Not only have a large number of samples of milk and other foods been submitted for chemical analysis to the City Analyst, but a very considerable number of samples of milk have been obtained from farmers within and without the City for the purpose of ascertaining their freedom from tuberculous infection. These have mostly been taken as they reach

the City, and the Veterinary Assistant to the Medical Officer of Health has in consequence of information thus received paid 52 visits to 19 milk farms outside the City, and made 1,169 examinations of 458 cows in these farms. In this way 13 tuberculous cows, whose milk was being sent into Leeds, have been detected and removed from the milking herds.

Within the City itself a systematic examination of the cattle in the Leeds cowsheds has now been carried out for a good many years. Every farm is veterinarily inspected about four times a year, every cow being carefully examined to find out any disease of the udder which might communicate tubercle to the milk sold. For this purpose the Veterinary Assistant to the Medical Officer of Health has during the municipal year visited 578 milk farms or cowsheds and examined no fewer than 7,544 cows.

Every one of these cows even suspected of having tuberculosis of the udder has been at once removed from the milk herd, and, where any doubt has remained as to the exact nature of the disease in the cow, the farmer, where he has acted fairly by the public, has received compensation for any loss of milk where he has at the request of the Medical Officer refrained from sending that of a suspected cow for sale.

Cleansing.—Amongst the work done by the Scavenging Department during the municipal year was the cleansing of 446,446 streets and 247,151 gullies. The number of loads removed from the streets were 95,867. The average number of horses and men working daily during the year were respectively 105 and 364, exclusive of the large number of men employed during the snow period.

The number of cleansings of ashpits and bins amounted during the same municipal period to a total of 2,112,437; the number of loads removed was 184,226, of which 92,931 loads weighing 77,066 tons were consumed at the destructors. The work also included the cleansing of 12,253 pails, of which 7,854 were washed, and the cleansing by our own staff of 986,217 trough water-closets. The average number of horses per day employed in this work during the year has been 122.

