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1905.

FORTIETH

Annual Report

TO THE

Bath Urban Sanitary Authority

BY THE

MEDICAL OFFICER OF HEALTH,

AND

SANITARY INSPECTORS.

Statistics is the bedrock of Sanitation.

BATH:
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1906

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BATH URBAN SANITARY AUTHORITY.

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Inspector of Canal Boats.
Inspector under the Food and Drugs Acts.
Inspector under Shop Hours Act.
W. A. CRAVEN
(Certificates of Royal Sanitary Institute, as Inspector of Nuisances and as Meat Inspector).

Assistant Inspector of Nuisances—
Inspector of Tenement Houses.
Inspector of Dairies, Cowsheds and Milkshops.
Clerk to the Statutory Hospital Management Committee.
F. W. KELWAY
(Certificates of Royal Sanitary Institute, qualifying for Inspector of Nuisances and as Meat Inspector).

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Office Boy—HAROLD BURT.

Contractor for Disinfecting—
WILLIAM HAYMAN, 30, Upper Wells Road.

Contractor for Ambulance—
SAMBOURNE WEEKS, 24, Upper Boroough Walls.

Medical Officer of Health—
W. H. SYMONS, M.D. (Brux.), M.R.C.S., L.R.C.P., F.I.C.
Diplomate in Public Health, University of Oxford.
Fellow of the Royal Meteorological Society.

Telephone Numbers: Office, 124: Hospital, 198; Dr. Collins, 01079.

Statistics is the bedrock of Sanitation.

SUMMARY OF STATISTICS, 1905.
City & County Borough of BATH.
Health Resort and Chief Town of Somerset.

Situation—Latitude 51° 23′ N. ; Longitude 2° 21′ W.

Elevation—Varies from 50 feet above sea level on the lower banks of the Bath Avon to about 550 feet on either side, the hills rising to about 750 feet not far from the City.

Mean Elevation—285 feet above sea level.

Geological Formation—Oolitic clays, limestones and sands.

Rainfall—Average of 40 years, 1866-1905, 30·47 inches annually. 1901, 26·41; 1902, 23·40; 1903, 42·57; 1904, 25·02; 1905, 22·79 inches.

Water—Constant Service, Corporation Reservoirs, Moderately hard, pure spring water. Average amount, 22 gallons per head.

Sewage disposal almost exclusively by water carriage.

House refuse removed and cremated by the Sanitary Authority.

Area of the Borough—3,338 statute acres land, 44 acres water.

Population—1901 Census, 49,839 ; Estimated 1905, 50,000.

Density of Population—Per acre, 15; per inhabited house, 5 persons

Number of Inhabited Houses—Census, 1891, 8,933 ;

" " " Census, 1901, 9,323 ;

Number of Occupied Houses—Census, 1901, 9,804 ;

" " " Rate-book, 1905, 10,214.

Assessable Value, October, 1905, £323,673 15s.

Rateable Value. October, 1905, £326,198 10s.

Rates—District Rate, 3/6 ; Poor-rate, 2/10 ; Total, 6/4 per £1.

Marriages Registered, 399 or 16 persons per 1,000 population.

Birth-rate—Average, 1891-1900, 20 ; 1905, 19·7 per 1,000.

Death-rate—Average, 1891-1900, 18·58.

Crude Death-rate, 1905, 16·2 ; Nett Death-rate, 14·5 per 1,000.

Recorded Death-rate reduced to standard age and sex for comparison with other districts 13·0 per 1,000.

Comparative Mortality Figure, 855.

Death-rate from seven principal "zymotic diseases," 1·16 per 1,000.

Infantile Mortality—89 per 1,000 Births.

Deaths under 5 years of age, 148 ; or 3·0 per 1,000 of all ages.

Deaths between 5 and 60 years of age, 207 ; or 4·1 per 1,000 of all ages.

Deaths over 60 years of age, 368 ; or 7·4 per 1,000 of all ages.

Deaths from Phthisis, 41, or 0·82 per 1,000 population.

To HIS WORSHIP THE MAYOR, and to the ALDERMEN, and COUNCILLORS of the CITY OF BATH.

GENTLEMEN,

I have the honour of submitting to you the Fortieth Annual Report on the Sanitary Condition of Bath, counting from the first printed Report of a Medical Officer of Health, or the Tenth counting only those which I have made personally.

The Death-rate for the year 1905 is lower than for any previous year except 1903. Including all deaths registered in Bath, the Crude Death-rate was 16·16 per 1,000. Excluding 88 deaths of non-residents, who had been brought into Bath for treatment, the Nett Death-rate was 14·48 per 1,000. The Nett Death-rate multiplied by the factor for correction 0·9 gives the Corrected Death-rate 13·03 per 1,000.

The factor for correction is calculated by comparing the English Death-rate for 1891-1900 with the Death-rate which would obtain if there were the same proportion of old and young people in England as in Bath. This factor for most towns is greater than unity, and the Corrected Death-rate is higher than the Crude Death-rate, but for Bath the Corrected Death-rate is lower because of the larger proportion of elderly people in the population.

The Death-rate for England and Wales for 1905 was 15·2 per 1,000, giving a Comparative Mortality Figure of 855 for Bath as compared to 1,000 for England. For Rural England the Death-rate was 14·9, for 76 great towns 15·6, for 142 smaller towns 14·4 per 1,000.

The Infantile Mortality was at the rate of 89 per 1,000 Births, which is the lowest recorded for Bath excepting for the year 1903. The rate for England and Wales was 128 per 1,000 Births. "Special interest attaches to the incidence of mortality in the earlier years of life because the mortality at that age is recognized as the most sensitive test of the health of communities." In the prevention of infantile mortality we have one of the best means of counteracting the falling birth-rate, and special efforts are now being made in this direction.

The Birth-rate for Bath was 19·7 per 1,000, which is slightly above the rate for 1901, if we consider the population of Bath to be 50,000. The Birth-rate for England and Wales was 27·2 per 1,000, which is lower than the rate of any other year on record.

The Population.

The population of Bath, as enumerated in 1901, was 49,839, and in previous census returns as follows :—

1801	1811	1821	1831	1841	1851	1861	1871	1881	1891
33,951.	38,090.	46,688.	50,800.	53,206.	54,240.	52,528.	52,557.	51,814.	51,844.

The Registrar-General, in estimating populations for intercensal periods, assumes that the increase or decrease of the previous decade has continued. and he estimates the population of Bath for the middle of 1905 as 49,169. I have many reasons for thinking this an under-estimate, and for the purpose of calculating the rates given in this report I take the population as 50,000, distributed among the various districts as follows :—Walcot, 31,200 ; Lyncombe and Widcombe, 14,500 ; Bathwick, 4,300.

It would be easy to pretend to greater accuracy by not using round figures, but we have no way of estimating populations exactly. We know the number of occupied houses on the rate-books every year, and we may assume the number of persons per house remains constant, or, in such a city as Bath, decreases at a regular rate. In 1891 the house density was 5·8, in 1901 it was 5·3, and we may assume it to be 5 persons per house in 1905. The number of occupied houses on the rate-book in 1901 was 9,691 ; in April, 1905, the number was 10,173, which with a house-density of 5 would give a population of 50,865. The City Surveyor informs me that since April, 1901, he has certified 750 new houses as fit for occupation, viz. :—1901, 109 ; 1902, 158 ; 1903, 148 ; 1904, 175 ; 1905, 160. These figures confirm the increase shown on the rate books.

We may also estimate the population from the number of births. We know the birth-rate is decreasing, but the number of births in Bath has been increasing thus :—Three years prior to 1901, mean 995 births ; three years prior to 1905, 1,016, viz. : 1899, 1,020 ; 1900, 962 ; 1901, 972 ; 1902, 988 ; 1903, 1,027 ; 1904, 1,034 ; 1905, 985. In 1881 the Bath birth-rate was 25·4 ; in 1891, 22·1 ; and in 1901, 19·6 per 1,000. Assuming the decrease to continue, the birth-rate would now be 18-6 per 1,000 ; but taking the birth-rate as 19, the number of births registered in 1905 would represent a population of 51,842.

The natural increase of population or excess of births over deaths, excluding non-residents in public institutions, has been 1,227, which added to the population of 1901 would be 51,065.

The mean of four methods of estimating populations is 50,720, and I think we may regard 50,000 as probably a low estimate.

Births and Birth-rates.

In the Annual Report for 1904 I drew attention to the apparent upward tendency of our birth-rate since 1900 thus:—1900, 19·3; 1901, 19·6; 1902, 19·9; 1903, 20·6; 1904, 20·8; these rates being calculated on the enumerated population of the census of 1901. For 1905 I have to report a slight decrease, the number of births registered being 985, with a birth rate of 19·8, assuming the population to be stationary, or 19·7 if we assume the population to be now 50,000.

The number of male births was 479, and of female births 506, being in the proportion of 946 males per 1,000 females, an accidental variation from our average of 20 years, i.e., 1,068 males per 1,000 females. In England and Wales the proportion of births of males to births of females is remarkably constant, during the past 50 years never less than 1,032, nor more than 1,052 per 1,000 females, the mean being 1,042.

The following returns of births registered for each quarter of five years will show the variations to be found when small numbers are dealt with, in the means of five years the variations disappear. The abnormality of the third quarter of 1904 is remarkable, there was no such variation in the English birth-rate.

Births registered in Bath in each Quarter of years 1901-5.

Year.	Winter.	Spring.	Summer.	Autumn.	Year.
1901	247	259	236	233	975
1902	230	249	253	256	988
1903	264	269	249	245	1,027
1904	269	243	296	226	1,034
1905	261	245	236	243	985
Mean	254	253	254	242	1,002

If instead of estimating the birth-rate per 1,000 population we calculate the number of births per 1,000 young married women, between the ages of 15 and 45 years, we get more information. Over 50 per cent. of all children are born of mothers between the ages of 25 and 35, and the proportion of such women in the population will to a great extent determine the birth-rate. The proportion in Bath was the same in 1881 as in 1901, namely 42 per 1,000.

The tables given on the next page show that alterations in the age groups of our population do not account for the diminishing birth-rate. The birth-rate per 1,000 young married women has fallen from 258 in 1881 to 199 in 1901, practically the same as the birth-rate per 10,000 of the population, from 254 in 1881 to 196 in 1901.

BATH. Births and Birth-rates, 1867 to 1905.

Year.	Births.	Rate.	Year.	Births.	Rate.
1867 ...	1349 ...	25·7	1887 ...	1157 ...	22·3
1868 ...	1413 ...	26·9	1888 ...	1236 ...	23·8
1869 ...	1411 ...	26·8	1889 ...	1196 ...	23·1
1870 ...	1397 ...	26·6	1890 ...	1135 ...	21·9
1871 ...	1437 ...	27·3	1891 ...	1147 ...	22·1
1872 ...	1349 ...	25·7	1892 ...	1102 ...	21·3
1873 ...	1374 ...	26·2	1893 ...	1057 ...	20·5
1874 ...	1324 ...	25·3	1894 ...	1112 ...	21·7
1875 ...	1324 ...	25·3	1895 ...	1107 ...	21·7
1876 ...	1400 ...	26·8	1896 ...	1086 ...	21·4
1877 ...	1320 ...	25·3	1897 ...	1009 ...	19·9
1878 ...	1359 ...	26·1	1898 ...	1003 ...	19·8
1879 ...	1293 ...	24·9	1899 ...	1020 ...	20·3
1880 ...	1292 ...	24·9	1900 ...	959 ...	19·1
1881 ...	1319 ...	25.4	1901 ...	973 ...	19·6
1882 ...	1293 ...	24·9	1902 ...	988 ...	19·9
1883 ...	1231 ...	23·8	1903 ...	1027 ...	20·6
1884 ...	1233 ...	23·8	1904 ...	1034 ...	20·8
1885 ...	1216 ...	23·5	1905 ...	985 ...	19·7
1886 ...	1195 ...	23·1			

BATH Population. Condition as to Marriage at various age periods.

	1881	1891	1901
Enumerated population ...	51,814	51,844	49,839
Married women aged 15 to 20 years ...	36	24	17
" " 20 " 25 " ...	559	503	463
" " 25 " 35 " ...	2,190	2,154	2,104
" " 35 " 45 " ...	2,067	2,076	2,139
" " 15 " 45 " ...	4,852	4,757	4,723
Legitimate births	1,250	1,100	940
Births per 1,000 married women, Bath	258	231	199
" " " England	286	268	235
Births per 10,000 population, Bath...	254	221	196
" " " corrected	301	271	241
" " " England...	339	314	285

Births attended by Midwives, April 1st to Dec. 31st, 1905.

Age of Mother.	Number and Sex. Male.	Female.	Infants.	Percentage of births.
17 to 20 years	2	5	7	2
20 " 25 "	30	46	76	20
25 " 30 "	51	57	108	29
30 " 35 "	46	47	93	24
35 " 40 "	24	32	56	15
40 " 45 "	13	19	32	9
45 and upwards... ...	3	2	5	1
All ages	169	208	377	100

Corrected Birth-rates.

In the Report for 1898 I drew attention to the necessity of correcting the Bath Birth-rate for the small proportion of married women in our population if we wished to compare with the birth-rate of England and Wales. In Bath there are 95 young married women per 1,000 population instead of 117 per 1,000 of the population of England. The factor for correction is 1·23, giving a Corrected Birth-rate of 24·2 for 1905. When this correction is made the fall in the birth-rate of Bath is seen to anticipate the fall in the birth-rate of England and Wales by about 10 years. In 1881 the corrected birth-rate of Bath was about the same as the English birth-rate of 1891 and the corrected Bath birth-rate of 1895, which was 26·7, very similar to that for England in 1905, viz., 27·2, the birth-rate for Rural England being 26·8 per 1,000.

The influence of social position on the birth-rate is well shown in the various London districts, thus :—

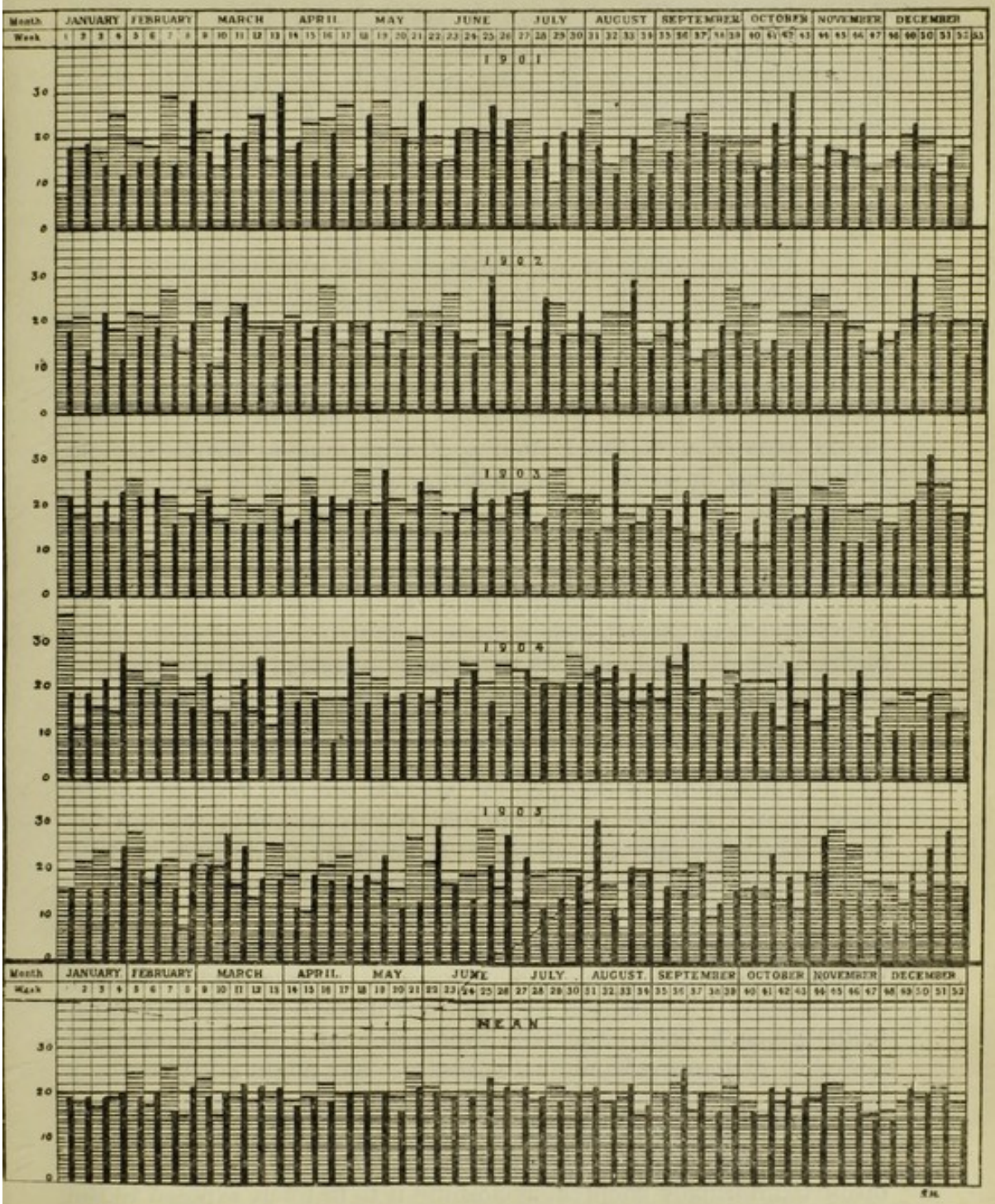
	Crude Birth-rate per 10,000 living.	Birth-rate per 1,000 married women aged under 45.
London	284 ...	232
Kensington	200 ...	195
Poplar	345 ...	276

A diminishing birth-rate is sometimes stated to be a sign of increasing prosperity, but Drs. Newsholme and Stevenson describe it as "Social Suicide." "It is associated with a general raising of the standard of comfort, and is an expression of the determination of the people to secure this greater comfort. It is not caused by the greater stress of modern life, but is a consequence of the greater desire for luxury." "France has anticipated the rest of the world, and has thus come near the consummation of its social felo-de-se. But it is only a question of decades in the absence of a great change in the moral standpoint of the majority of the people, before others follow in the same direction, possibly even at the same pace."

From a national standpoint the outlook is serious, the birth-rate is falling more rapidly than the death-rate. For the three years 1880-2, the English birth-rate was 34, death-rate 19·7, natural increase 14·3 per 1,000. For the three years 1900-2 the mean birth-rate was 28·5, the mean death-rate 17·1, natural increase 11·4 per 1,000. For the year 1905 the birth-rate was 27·2 and death-rate 15·2, natural increase 12·9. The birth-rate is falling throughout the British Empire, not merely in England.

Births 1901–1905, Mean of 5 Years.

Solid line—Registered. Shaded line—Actual.



Midwives Act, 1902.

Thirty midwives have registered as intending to practise in Bath, of these eight are on the roll of midwives by virtue of passing an examination, after undergoing training at a public institution, the remainder have claimed registration as having been in practice before July 31st, 1901. Twenty midwives reside in the city.

Some of the midwives cannot read or write ; it is therefore impossible for them to carry out personally the regulations of the Board as to book-keeping ; but those who live in the city keep their books fairly well by proxy or otherwise, and also send me a copy of such entry on a card provided for the purpose. In this way we get notice of more than 50 per cent. of all births within a few hours of their occurrence.

The midwife's fee varies from 5/- to 15/-, including attendance on mother and child for ten days. The usual charge appears to be 7/6. It is obviously unreasonable to suppose trained women will undertake this work for such remuneration ; on the other hand 7/6 is quite as much as many a poor person can afford to pay for the assistance she requires. The solution of the difficulty may be found in the extension of the system of district nursing homes, with or without lying-in-wards. The midwife who attends a case once a month may be a necessity in a rural district, but should be discouraged from practising in a city where more skilled help can be obtained.

During the nine months which the Act has been in force 377 births have been attended by midwives, or about 53 per cent. of all births. Nearly one-fourth of these were attended by one midwife, another fourth by the midwives of a District Nursing Institution. Three midwives averaged 32 cases each, leaving 102 cases for 24 midwives.

Notification of sending for medical aid was received in 31 cases, 20 of these were from the fully trained nurses of the Institution. The more ignorant midwives boast of not sending for medical assistance, in fact they do not know when there is danger.

No woman was formally suspended from practice, but after each case of puerperal fever the midwife agreed to cease from practice for one week, her appliances and clothing being officially disinfected. If disinfection were thoroughly carried out, the woman being given a bath under the supervision of a trained nurse, no period of quarantine would be necessary. She might safely continue her work. In some districts the midwife is sent to the discharging block of an infectious disease hospital to be disinfected. Rule V. seems intended to guard against possible failure of the methods of disinfection usually adopted, as clothing is to be freely exposed to the open air for several days after having been stoved by the local sanitary authority.

Pre-natal Mortality. Stillbirths.

Notwithstanding Section 18 of the Births and Deaths Registration Act, 1874, and the liability to a penalty of £10, infants who have lived are sometimes buried as having been stillborn, without any inquiry being made as to the cause of death. Under the regulations of the Midwives Act, "in all cases where a registered medical practitioner is not in attendance the midwife shall, as soon as possible after the occurrence of a stillbirth, notify the same to the local supervising authority." But it is desirable that all stillbirths should be registered, and legislation in this direction is urgently needed. I have only received notice concerning 8 stillbirths since the Act came in force last April. Midwives attend more than 50 per cent. of all births, and probably 50 per cent. of the stillbirths would come to their knowledge. Since the consecration of Lyncombe, Widcombe and St. James' Cemetery in 1862, no fewer than 1,079 infants have been buried there as stillborn. In Walcot and St. Saviour's Cemetery during the past four years the average number buried as stillborn has been 23. There are many other smaller Burial Grounds in Bath, and probably the total number buried as stillborn is about 60 each year, or 6 per cent. of all births.

Under the Midwives Act information is now available concerning miscarriages. As far as our statistics enables us to judge, the number is 7 to each 100 births; but these can only be a small proportion of actual miscarriages, and may perhaps be considered to be the number of preventable miscarriages. Preventable if a little more care were taken of the mother at this important period of her life. If we would have the children of the poor strong and healthy we must see that the mothers are properly fed and properly housed.

The commonest causes of infantile mortality are premature birth and debility; there are about 40 deaths in Bath each year from these causes, and 20,000 such deaths annually in England, it is obvious, therefore, that the work of preventing infantile mortality must be commenced before the birth of the infant. I think this could be best done by volunteers working in connection with a district nursing institution, each lady might make herself responsible for one child and become its true God-mother, taking a kindly interest in its home, giving advice as to its care and nuture, and if necessary rendering some slight financial help in tiding over a difficult time. In all cases of death under one year of age some inquiry should be made as the cause of death, but this might be done by the Sanitary Authority's officials.

Infantile Mortality.

A special table dealing with the causes of infantile mortality is, by order of the Local Government Board, now to be included in the Annual Reports of Medical Officers of Health. This subject is very properly attracting more attention every year, and special efforts are being made to lessen this waste of human life. In order to make our return more valuable I have also given a table showing the mortality for the five preceding years. By combining the figures for six years we eliminate many fallacies which might result from drawing conclusions from the figures of a single year and our returns are then as useful as the figures for a single year of a town of 300,000 population, and the influence of an exceptionally unhealthy season is to a great extent removed.

The total number of births registered during the six years was 5,968 and the number of deaths of infants 637, or 107 per 1,000 births. Births are usually registered five or six weeks after the date of birth, deaths are registered at once. In estimating the infant mortality for a year or longer period the number of births registered during that period may be safely taken as the measure of the infant population, but for shorter periods it is better to take the average of the preceding three months. The chart on page 11 will show the fallacy of estimating weekly birth-rates from the number of births registered in any one week.

Of the 5,968 infants born during the past six years, 147 died during the first week of life, and before the end of the first month 219 had died. In the second month of life there were 64 deaths, and in the third 60 deaths. In comparing the second and third months the value of taking the return for six years is shown ; taking the return for the year 1905 alone we might suppose that the mortality for the second month was twice as great as for the third month and we might look for some local circumstance to account for this, but, taking the return for six years we see that the mortality for the Second ~~third~~ month is only slightly in excess of that for the ~~second~~ month, the and this is in accordance with the returns of our large towns. The infantile mortality during the first three months of life was 60 per 1,000 births, during the second three months 18 per 1,000, third 16 and fourth 14 per 1,000. The infantile mortality during the first three months in large towns is 72 per 1,000 births, and is as great as it was 50 years ago, whereas considerable reductions have been made in the mortality for the remainder of the first year.

During the six years 1900-1905 the number of male births was 3,023, and of female births 2,945 being in the proportion of 1.026 males per 1,000 females. The number of male infant deaths during the same period was 361 and of female deaths 276, the proportion of males to females being as 1,308 is to 1,000. The average infantile mortality was 107 per 1,000 births, the male infantile mortality being 121 per 1,000 male births, and the female infantile mortality 94 per 1,000 female births. The comparative male infantile mortality is 1,287 if the female infantile mortality be taken as 1,000; the males commencing life with a majority are left in a minority at the end of the first or second year.

If infantile mortality could be regarded as a process of natural selection of the fit from the unfit we might not be so anxious to see the rate of mortality among infants reduced, but, the fight with Death is not a fair one, the infants are unduly exposed to disease and want, and those who survive are injured by the test. There is plenty of evidence to show that delicate children, placed under favourable conditions, become robust men and women; the earlier the conditions can be made favourable the greater the chance of overcoming any inherited or acquired weakness.

What can we do to make the condition of the poor more favourable to infant life? As far as this city is concerned Nature has done her share, the natural conditions are favourable, the artificial conditions need to be brought into line with natural conditions. The housing question is not our great difficulty, as it is in some of our large towns, but many of the people want to be taught how to use the houses they have, how to take advantage of the space at their disposal and how to increase that space by opening the window. They want to be instructed in the care of children, shown how to feed them and to keep the food and houses clean. Dirty houses in a town are far more dangerous than dirty houses exposed to the fresh air of a country place. Infants in town are less often breast-fed than children in the country, and when not breast-fed they are exposed to greater danger from dirt.

In most towns as large as Bath Lady Health Visitors have been appointed to act under the Medical Officer of Health. The salaries paid varying from £65 in Preston to £185 per year in Poplar.

Infantile Mortality during the Year 1905.

Deaths from stated Causes in Weeks and Months under One Year of Age.

	Cause of Death.	Class	Under 1 Week	1-2 Weeks	2-3 Weeks	3-4 Weeks	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under 1 Year.
All causes	Certified ..	C	22	4	5	4	36	12	5	6	3	1	5	6	6	5	3	7	95
	Uncertified ..	U	..	..	..	..	....	..	..	..	..	..	..	..	..		..	..	nil
Common Infectious Diseases.	Small-pox ..	1	..	..	.	..	....	..		..	..	..	..	..	..	..	..	..	....
	Chicken-pox ..	..	..	..	..	..	....	..	..	..	..	..	..		..		..	..	....
	Measles	2	..	..	..	..	....		..	..	..	..	..	1	1	..	1	3	6
	Scarlet Fever ..	3		..	..	..	....	..	..	..			..	..	..		..	..	....
	Diphtheria: Croup	..			..	..	....	..	..	..		..	..	..	..			1	1
	Whooping Cough	6	..	..	..	..	..	..	..		..		1	..	..	..	..	..	1
Diarrhœal Diseases.	Diarrhœa, all forms	11	..	..	..	..	....	..	..	2	..		1	..	..	..		..	3
	Enteritis .. (*not Tuberculous*)	13	..	..	..	..	....	1	..	1	1	1	..	1	..	1	1	..	7
	Gastritis, Gastro-intestinal Catarrh		..	..		..	....	..	..	..	..	..	..	..		.	..	..	....
Wasting Diseases.	Premature Birth	24	14	2	1	..	17	1	..	..	..	..	..		..	..		..	18
	Congenital Defects	..	..	1	2	..	3	1			..	..	..	..	..	..	..		4
	Injury at Birth	..	2	..	..		2	..	..			..	..	..	..	..	..	..	2
	Want of Breast-milk	..	..	..	..	..	....	..	..	..		..	..	..	..	..	..	..	....
	Atrophy. Debility, Marasmus		2	1	2	3	8	2	3	1	..	..	1	1	..	1		1	18
Tuberculous Diseases.	Tuberculous Meningitis	19	..	..	..	..	....	..	..	..		..	1	..		..	..	..	1
	,, Peritonitis: Tabes Mesenterica	19a	..			..	....	..	..			..	..	..	..	..	..	..	....
	Other Tuberculous Diseases		..	..	..	..	....	..	..	..	..	..	..	..	1	..	..	..	1
	Eresipelas ..	15	..	..	..	..	....	..	..	..	..	..	..	..	..		..	..	....
	Syphilis ..	16a	..	..	..	1	1	3	..	1	..	..	..	..	..		..	..	5
	Rickets ..	.	..	..	..		....	..	..	..	.	..	..	..	..		..	..	....
	Meningitis (*not Tuberculous*)	27	..	..	..	..	....	..	..	..	..	..	..	..	..	.	..	..	....
	Convulsions ..	43	3	..	..	..	3	..	2	..	..	..	..	1	..	1	..	..	7
	Bronchitis ..	30	..			1	1	3	..	1	..	..	1	1	2	1	1	..	11
	Laryngitis ..	..	..	..	..	..	....	..	..	..	..	..	..		..	..	..		....
	Pneumonia ..	32	..		..	..	....	..	..	..	..	..	..		..	1	..	..	1
	Suffocation, overlaying	40e	..			.	....	..	..		..	..	..	.	.	.	.	..	....
	Other causes ..	43	1			..	1	1	..	..	2	..	..	1	2	..	..	2	9

Included in above Table are 7 deaths of children who were non-resident.

The numbers in the first column refer to classes not to deaths.

Births in the year { legitimate 942. illegitimate 43. } Population, estimated to middle of 1905, 50,000.

Deaths from all Causes at all Ages ... 808.

Infantile Mortality during the Five Years 1901-5.

(also totals for the Six Years 1900-5).

Deaths from stated Causes in Weeks and Months under One Year of Age.

Under 1 Week		1-2 Weeks		2-3 Weeks		3-4 Weeks		Total under 1 Month.		1-2 Months.		2-3 Months.		3-4 Months.		4-5 Months.		5-6 Months.		6-7 Months.		7-8 Months.		8-9 Months.		9-10 Months.		10-11 Months.		11-12 Months.		Total Deaths under 1 Year 1901-1905.		Cause of Death. *
F		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
50		10	12	20	2	15	7	99	71	32	24	26	22	19	20	17	9	11	13	17	8	18	9	15	11	15	11	13	8	15	8	297	214	C
6		....		....		....		3	6	....		....		....		....		....		....		....		....		....		....		....		3	6	U
..		....		...		....		.....		....		....		....		....		....		....		....		....		....		....		....		.....		1
..		....		...		....		.....		....		....		....		....		...		....		....		....		....		....		....		.....		
..		....		....		....		.....		....		...		....		....		....		....		1		3	1	1	1	1	1	3	2	9	5	2
..		....		....		....		.....		....		....		..		....		....		1		..		..		....		....		....		1		3
..		....		....		....		.....		....		....		....		....		....		....		..		....		..		....		2		1		7
.		....		....		....		.....			1		2	1	2	1			1	2		3	1		2	1		3	1		1	11	11	6
..		....		....		1		1		2	1	....		2	2	3	2		1	3		1	1	1	1	1		....		....		14	8	11
..		....		....		1			1	1	1	3			1	3		1		1	2	....		...		1		....		1		11	5	13
..		....		....		....		.....		2	2	3		2	1		2	1		....		1	2	....		....		3	1	....		12	8	
2	33	5	4	8		2		47	37	3	1	....		....		1			1	..		....		....		....		....		....		51	39	24
5	1	1		4		3		13	1	1	1	....		..		1			1	....		1		1		....		....		1		18	3	
2	1	....		....		....		2	1	....		....		....		....		....		....		....		....		....		....		....		2	1	
..		...		....		...		.....		....		....			1	....		....		....		....		....		....		....		....			1	
5	8	2	6	5		6	3	19	17	13	5	8	10	5	2	1		3	3	2	1	3			2	2		1		1		57	41	
..		....		....		...		.....		....		....		....		....		....		....	1	....		....		....		...		1	1	1	2	19
..		....		....		....		.....		....		....		....		....		....		1		....		1		1		....		....		3		19a
..		....		....		1	1	1	1		1	1		....		....			1	....		....		1		....		....			1	3	4	
..		....		....		....		.....		....		....		....		....		....		....		....		....		....		....		....		.....		15
..			1	....		1		1	1	2	3	2	1	1	8		2	1	1	1		....		2	1		1	....		....		10	18	16a
..		....		....		....		.....		....		....		1		....		....		....		....		1		1		....		....		3		
..		....		....		....		.....		1	1	1		1			1	....		....		....			1	2		2		....		7	3	27
5	2	1			1	1	1	7	4	4	1	4	3	2	1	1		1	1	1	1	2		2		1	2	2	2	1		28	15	43
..		....		1		....		1		1	3	2	1	1		3	1		2	1		2	1		1	2	1	....		....		13	10	30
..		....		...		....		.....		....		....		....		....		....		1		..		....		....		....		....		1		
		....		1	1		1	2	2	2	2	2	2	3	2	3		3	1		2	4	3	3	1	2	3	1	2	5	2	30	22	32
	1	....		....		....		1	1	....		....		....		....		....		....		....		....		....		....		....		1	1	40e
5	10	1	1	1		....		7	11		1		3	....			1	1		3	1		1		1		3		1	1		12	23	43
5	72	14	14	23	3	19	9	131	98	38	30	32	25	22	21	22	11	13	18	23	11	20	11	18	15	16	15	13	10	17	11	365	276	1900-1905

* Numbers on the right denote class of disease as on page 16.

Births for the 5 years { legitimate 4804. illegitimate 205.

Population, estimated to middle of 1905, 50,000.

Deaths from all Causes at all Ages, 1901-5 ... 3755 (Residents).

Huddersfield has set an example to the World in elaborating a scheme against infant mortality. Two official Lady Health Visitors holding medical qualifications, voluntarily assisted by 16 Lady Superintendents and 82 Lady Helpers, co-operate in this scheme for a town with a population of 94,888. One shilling is paid for every birth notified to the Medical Officer of Health within forty-eight hours of its occurrence. The newly-born children are visited as soon as possible by one of the Lady Doctors, who give suitable advice and leave copies of the short or extended advice. Each Saturday a list of the cases in her district is sent to a Lady Superintendent, who distributes the cases among her Lady Helpers. These keep the cases under observation, and, where it appears necessary, invoke the aid of the Health Department. This scheme was started on October 14th, 1905, and was in full working order at the time of writing this Report.

I tried to initiate a somewhat similar scheme during the Spring of last year, information concerning births attended by Midwives, which constitute 50 per cent. of all births and probable 90 per cent. of those we wish to reach, was obtained free of cost except postage, the Midwives being requested to send a copy of all entries in their books within 24 hours, to avoid the necessity of a weekly inspection of Case Books. This part of the scheme has worked exceedingly well, it saves trouble all round, and not one of the Midwives has offered the least objection.

Your Sanitary Committee did not deem it necessary to appoint an official Lady Health Visitor. I therefore on June 6th addressed a letter to the Clergy and Ministers of all Denominations asking if their District Visitors were prepared to help in trying to prevent an unnecessary waste of life by visiting the mothers of newly-born children and instructing them in the proper care of children. In some districts this is already well done now, but in others the young infants are scarcely noticed. I got very few answers to my letter, and the few I did get, with one exception, made excuses. The Rector of Walcot was kind enough to put me into communication with one of his District Visitors, and this lady gave valuable assistance during the Summer months. An endeavour was made to get all mothers to suckle their infants, as there is no real substitute for mother's milk ; but where it was not possible for the mother to fulfil this duty, modified cows' milk, with the proper proportion of fat and milk sugar, was recommended. This preparation was to be put up in bottles, and "Milk Tickets" given to cover the difference in cost from cow's milk. I hope to report more progress in the coming year.

Zymotic Morbidity and Mortality.

The seven principal epidemic diseases caused 58 deaths, giving a death-rate of 1·16 per 1,000. The average of the preceding ten years was 1·03 per 1,000.

Measles was the most fatal of these diseases, causing 33 deaths of children under five years of age, equal to a death-rate of 0·66 per 1,000. During 1904 there were 4 deaths, and during 1903 only one death from measles, but the epidemic of 1902 killed 42 young children. The measles death-rate for England varies from 0·27 to 0·57 per 1,000, from 9,000 to 18,000 children being killed in one year; every alternate year appears to have a high death-rate corresponding to the London measles death-rate. In Bath epidemics of measles occur every third or fourth year, just as epidemics of scarlet fever used to do. Notification of measles is compulsory in some towns, and in London measles is made subject to the law relating to the prevention of infectious disease, except the requirement of notification; a child suffering from measles must not be exposed in a public place. Notification without isolation is useless; but if we had efficient notification, the isolation of the first cases, due to some case accidentally overlooked, might not be a serious expense. There appears to be no other remedy.

Whooping Cough caused 3 deaths: the average of the preceding ten years being 10 deaths, and the highest number in one year 15. This disease is more even in its incidence than measles. The English death-rate shows a steady fall, but it is the most fatal infectious disease to infants.

Diarrhœa and Enteritis caused 8 infantile deaths, the average number for the preceding nine years was 20 deaths. The warm and dry month of July led me to expect a repetition of the fatality of 1899, when we lost 37 children from this cause. Special efforts were made to distribute leaflets concerning the feeding of infants, but probably the heavy rainfall of August had most to do with preventing mortality. The domestic house-fly is now regarded as the common carrier of disease. The multiplication of this pest in the summer months is sufficient to account for the great mortallty among infants during dry, warm weather, and the variations year by year. In 1899 nearly 31,000 deaths from diarrhœa were registered in England, in 1903 only 18,000, the figures for Bath being 37 and 7. Meteorological conditions account for the difference; a bad year for the flies is a good year for the infants.

WEEKLY NOTIFICATIONS OF INFECTIOUS DISEASES FOR THE YEAR 1905.

WEEK. No.	Date of Ending.	Small Pox.	Scarlet Fever.	Diphtheria.	Typhoid Fever.	Chicken Pox.	Puerperal Fever.	Erysipelas.	Total.
1	January 7 ..	—	—	3	—	—	—	—	3
2	14 ..	—	4	1	—	—	—	1	6
3	21 ..	—	2	3	2	—	—	—	7
4	28 ..	—	1	1	—	—	—	—	2
5	February 4 ..	—	1	1	—	—	—	—	2
6	11 ..	—	1	3	—	1	1	2	8
7	18 ..	—	2	4	—	—	—	—	6
8	25 ..	—	—	1	—	2	—	—	3
9	March 4 ..	—	—	6	—	1	—	—	7
10	11 ..	—	3	10	—	—	—	—	13
11	18 ..	—	—	2	—	3	—	—	5
12	25 ..	—	—	2	—	—	—	—	2
13	April 1 ..	—	2	—	*1	1	—	—	4
14	8 ..	—	—	1	—	1	—	1	3
15	15 ..	—	—	3	—	1	—	1	5
16	22 ..	—	—	2	—	—	2	1	5
17	29 ..	—	1	2	—	4	—	—	7
18	May 6 ..	—	—	2	—	—	—	—	2
19	13 ..	—	—	2	—	2	—	1	5
20	20 ..	—	—	8	—	—	—	—	8
21	27 ..	—	—	2	—	—	—	—	2
22	June 3 ..	—	—	2	—	1	—	1	4
23	10 ..	—	—	3	—	2	—	—	5
24	17 ..	—	1	2	1	—	—	1	5
25	24 ..	—	—	6	—	2	—	1	9
26	July 1 ..	—	—	8	—	1	—	1	10
27	8 ..	—	—	2	—	1	—	—	3
28	15 ..	—	—	2	—	1	—	1	4
29	22 ..	—	1	1	—	—	—	1	3
30	29 ..	—	3	2	—	2	—	1	8
31	August 5 ..	—	1	1	—	1	—	—	3
32	12 ..	—	—	1	—	—	—	1	2
33	19 ..	—	1	—	—	—	—	—	1
34	26 ..	—	—	1	—	—	—	2	3
35	September 2 ..	—	—	—	—	1	—	—	1
36	9 ..	—	1	—	—	1	—	—	2
37	16 ..	—	—	—	—	1	—	—	1
38	23 ..	—	2	—	—	—	—	—	2
39	30 ..	—	—	—	—	1	—	1	2
40	October 7 ..	—	—	—	—	1	—	1	2
41	14 ..	—	1	—	—	1	—	1	3
42	21 ..	—	3	—	1	2	—	—	6
43	28 ..	—	1	—	†1	7	—	—	9
44	November 4 ..	—	—	—	—	1	—	—	1
45	11 ..	—	—	—	—	2	—	—	2
46	18 ..	—	2	—	—	1	1	—	4
47	25 ..	—	—	—	—	2	—	1	3
48	December 2 ..	—	3	1	—	5	—	—	9
49	9	—	1	2	—	7	—	2	12
50	16 ..	—	—	4	—	4	—	2	10
51	23 ..	—	—	—	—	2	—	—	2
52	30 ..	—	1	2	—	—	—	—	3
	Totals	—	39	99	6	66	4	25	239

* Infected at Weymouth, died at the Royal United Hospital.
† Infected at Basingstoke, nursed at home.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR, 1905.

January 1st to December 31st, 1905.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.												TOTAL CASES NOTIFIED IN EACH LOCALITY.										NO. OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY.											
	At all Ages.	At Ages—Years.											WALCOT.		LYN. & WID.		BATHWICK.		BATH.				WALCOT.		LYN & WID.		BATHWICK.		BATH.				BATH RURAL.	
		Under 1.		1 to 5		5 to 15		15 to 25.		25 to 65.		65 and over.																						
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Small-pox																																		
Cholera																																		
Diphtheria	99	1		17	12	21	29	4	5	1	9			29	39	12	15	3	1	44	55			27	25	9	11	3	1	39	37			10	5
Membranous croup																																		
Erysipelas	25					1			2	11	10		1	4	5	7	8	1		12	13													
Scarlet fever ..	39	1		4	5	13	11		1		4			6	12	10	9	2		18	21			6	6	4	5	2		12	11			5	1
Typhus fever ..																																		
Enteric fever ..	6					1		1		2	2			2	2	1		1		4	2													
Relapsing fever ..																																		
Continued fever ..																																		
Puerperal fever	4								1		3						4				4													
Plague ..																																		
Chicken Pox	66	3	5	10	7	16	21	2		1	1			25	27	7	5		2	32	34													
Totals	239	5	5	31	24	52	61	7	9	15	29		1	66	85	37	41	7	3	110	129			33	31	13	16	5	1	51	48			15	6

City Isolation Hospital—STATUTORY HOSPITAL, CLAVERTON DOWN, BATH RURAL DISTRICT.

Situated 2½ miles from Guildhall. Situation—N. Latitude 51° 21′ 52″, West Longitude 2° 19′ 10″. Elevation—520 feet above sea level.

Included with Enteric Fever are two non-residents.

Enteric Fever cases may be treated at the Royal United Hospital.

Diphtheria.—Notifications were received for 99 cases of this disease, 66 cases being notified during the first six months of the year. The highest number notified in any previous year was 73 in 1897, but there were 72 cases in 1904. There were two distinct outbreaks, one caused chiefly by school infection, the echo of the 1904 outbreak at St. Mark's and Oldfield Council Schools, the other in St. Saviour's district, which was not so much associated with the school as with carrier cases not attending school. One carrier was imported from Bristol, being notified from that city as having the diphtheria bacillus in throat and nose. Although he exhibited no clinical sign of diphtheria he was isolated at the Statutory Hospital from January 12th to February 10th. A swab taken on February 22nd gave positive results, and he was again isolated until March 24th. On April 8th a third swab showed that the bacillus still persisted ; but, as three months had elapsed since notification, he was not further isolated. No other person was known to be infected by this patient. Some home-nursed cases discharged too early and allowed to mix with other children were the probable source of continued infection. Severe cases of diphtheria can be safely nursed at home, if there is sufficient room, but mild cases are difficult to control, and usually spread infection. Many cases are notified too late to get the full advantage of hospital treatment and are nursed at home, a free supply of antitoxin being offered. Among 23 home-nursed cases there were 9 deaths. The cases which are notified in an early stage of the disease are usually removed to hospital. Among 76 such cases there were 4 deaths. The two sets of cases are not comparable, except as showing the advantage of early notification. If antitoxin had been administered in sufficient quantity on the first day of the disease in each case, there would probably have been no death from diphtheria to record.

During the months of September, October and November no case of diphtheria was notified in Bath, and only so-called sporadic cases since. I say so-called sporadic cases because the diphtheria bacillus can be shown to persist so long in some persons, who have become immune to the disease by generating their own antitoxin, that it is not necessary to imagine spores outside the living body. The disease becomes epidemic when children act as carriers. We should certainly discourage the home nursing of mild cases, and should insist upon at least one month's isolation if cases are nursed at home.

Scarlet Fever.—Thirty-nine cases were notified during the year ; 23 of these were removed to the Statutory Hospital. The disease was of a mild type, there was no death, it also seemed to be less infectious than formerly. Several cases were not notified until they were desquamating, and although these had been attending school while suffering from the fever their school-fellows were not infected.

Enteric or Typhoid Fever.—Six cases were notified during the year. Two of these were undoubtedly infected in other districts, one boy dying in a public institution. In three cases the source of the infection could not be ascertained, one man developing the disease while under treatment at a public institution. The only fatal case recorded was due to secondary infection, a nurse acquiring the disease before it had been recognized in her patient. The average number of cases for the past five years has been 5·2 ; for the preceding quinquennium, 1896-1900, the average number was 24 cases annually. The deaths for the same periods being 1·4 and 4·1 per annum.

Erysipelas.—Twenty-five cases of this disease were notified and one death was registered as due to erysipelas. The utility of notifying this disease has been called in question ; but, now the control of the midwives is vested in the Sanitary Authority, the knowledge it gives us may be useful. One midwife was notified as suffering from this disease and was suspended from practice.

Puerperal Fever.—Four cases were notified and there were four deaths. During 1904 only one death was registered from this cause, and no such death in either of the three preceding years. All the cases occurred in one district on the south side of the river ; other cases are known to have occurred about the same time at Twerton. Two of the cases had been attended by midwives and two by medical men. The women were very poor, in two cases the husbands were out of work, and I think that want of proper nourishment contributed to the fatal results.

Chicken Pox was made compulsorily notifiable in 1902. The number of cases notified each year has been as follows :—79, 70, 88 and 66. The object of notification is to have the power to insist upon the isolation of a doubtful case, it being almost impossible to distinguish between some cases of modified small-pox and chicken-pox. Inquiries are made concerning adult cases. This is one of our safeguards against small-pox.

Impetigo, a contagious eruption of the skin, appears to have followed chicken-pox in one school. It is kept up by the dirty habits of the people and a fear of soap and water.

Mumps was very prevalent at the end of the year and necessitated the closure of one school. The disease was very mild, in the majority of cases the only sign being a swelling of the salivary glands; but there were some typical cases with painful glands, difficulty of swallowing, intolerance of acid drinks, deafness and general feeling of illness with fever. Where there was one such typical case there were from ten to twenty mild cases, which would not have been recognized as cases of mumps if they had not occurred in groups with a definite history of common exposure to infection some three weeks earlier. Mumps is a highly infectious disease, and it would be interesting to know that such mild attacks protect against future infection, probably they do so.

Influenza was returned as the cause of death in 12 instances, 2 males and 10 females. This is equivalent to a death-rate of 24 per 100,000, the average death-rate for the preceding five years was 36 per 100,000. The English death-rate for 1901-3 was 20, and for 1898-1900, 41 per 100,000. Speaking generally, influenza appears to have been more fatal in country districts than in towns.

Tuberculosis caused 52 deaths. Consumption of the lungs or phthisis being the fatal disease in 41 cases, 30 males and 11 females; 23 of these were persons in the prime of life, from 20 to 45 years of age. This number, 82 per 100,000, is also the average of the preceding three years. It is a satisfactory average compared with the average of ten years ago in Bath, or with the average of England of the present time, which is about 120 per 100,000, but it seems sad that so many should die from a preventable disease. The incidence of disease upon the sexes is very striking. The English phthisis death-rates for 1903 were: males 143, females 99 per 100,000. The average phthisis death-rates in Bath during the past four years have been: males 131, females 51. I drew attention to this remarkable difference in the distribution of phthisis among the sexes in my Report for the year 1901. It is not to be accounted for by the large number of servants in Bath. If we exclude all these from the population used to calculate the death-rate, we should have 60 instead of 51 per 100,000 females, but the proportion would be still abnormal. The causes at work diminishing the death-rate are obviously more in favour of the female or home-keeping population than of the male population; the male rate for the Rural Counties is 123, which is below the male phthisis rate of Bath. The Rural County female rate is 99 per 100,000. Worcester, Wiltshire and Buckinghamshire averaged less than 70 per 100,000, but still considerably above the rate for Bath.

The notification of cases of phthisis was made permissible in Bath on November 24th, 1900, and since that date 96 cases have been notified, the same fees being paid as for other infectious diseases. During the same period over 230 deaths from phthisis have been registered, so that we do not get more than about one-fifth of the cases notified. This is very disappointing, but is in a great measure due to the difficulty of detecting the disease in its early stage, because the sufferers do not present themselves for examination soon enough. But some good has been done, particularly by the removal of highly infectious cases to the Workhouse Infirmary. The good work of this institution is not confined to advanced and hopeless cases, the open-air treatment is freely offered to men who otherwise would have no chance of being cured. It was adopted at the Workhouse on October 15th, 1903. On February 6th, 1905, Dr. Craddock reported 67 cases as having been admitted, 10 of whom had been discharged cured, 22 left while under treatment, and 21 died. "Since that time there have been 55 patients under treatment, with the following results :– Cured 8, died 11, removed 2, discharged themselves 19, under treatment 18." These results are very encouraging considering the advanced stage of most of the cases.

It is too early to draw conclusions as to the results of the open-air treatment at Winsley Sanatorium. Eight cases have already occupied the two beds maintained by the Corporation of Bath. Like most of the cases so far under treatment, these were not the best class of case for treatment, being too advanced. The number of applications for the beds have been too few to admit of selection. This is surprising considering the number of persons who must be suffering from phthisis, and who ought to be under medical observation.

I hope the time is not far distant when the notification of phthisis will be compulsory. I believe that very little inconvenience would result. No one would think of enforcing penal clauses except for wilful expectoration in public places, and for this we already possess powers which we do not use. The whole system of notification is or should be confidential. Extra precaution might be taken in the case of phthisis to see that no injury was done by notification. The allocation of empty wards at infectious disease hospitals to the treatment of phthisis, as is done at Brighton and at Leicester, is undoubtedly part of the future method of dealing with this disease, but seems to require a resident medical officer, and hence is more suitable for large towns than small.

Accommodation for Cases of Small-pox.

In accordance with my statutory obligations under Article 18 of the Local Government Board's Order of March, 1891, I am from time to time required to report upon the isolation hospital accommodation and its sufficiency. Partly as the results of these reports a great many improvements have been made at the Statutory Hospital, and we now have 15 separate rooms or wards with beds for 79 patients. The cubic space is not up to the recognised standard, but the wards are seldom half full.

The number of cases of small-pox removed to the Statutory Hospital during the past thirty years was as follows :—

Year	1879	1880	1881	1883	1884	1885	1886	1893	1894	1902	1903	
	23	79	5	1	1	2	8	15	1	1	13	Cases

During one period of seven years there was no case of small-pox notified in Bath, and, that some persons fail to see the necessity for a separate hospital for small-pox cases is not to be wondered at, to be of much service the hospital must be kept constantly ready for use.

To purchase a site and build a hospital of 20 beds would cost about £4,000. To maintain such hospital constantly ready for use would cost about £100 a year. Repairs, sinking fund, and other expenses might bring the total up to £250, and the hospital might not be used for several years. On the other hand a severe epidemic of small-pox in Bath might cost as much as £100,000, and £250 annually is not a large sum to pay if it would prevent such a calamity.

If it is decided not to build a special hospital on another site, further provision should be made at the Statutory Hospital. I think a small block, with accommodation for four patients and a staff of four, with suitable kitchen and baths, placed near the Berthon's Tents, would enable us to meet the first onset of an epidemic, and perhaps prevent further extension. There would be a separate entrance and separate exercise ground, and it would be more than three times the distance away from the blocks than are the present blocks from one another. Furthermore the building would be a useful addition to our present hospital for general use at all times, as we have now insufficient accommodation for the Staff, and usually keep too small a Staff. We sometimes need as many wards as we have patients, and there should be a night and day nurse to each ward. The more we can classify our patients, the less cross infection and fewer return cases we shall have. Scarlet fever cases should be treated in three classes : Acute, Convalescing, and Disinfecting.

Return of Vaccination for the Borough of Bath, Years 1900 to 1905.

Years ended Lady-day.	Number Vaccinated. Including Prim. Vaccinations by Private Practitione rs	At cost of Rates. Prim Vacs.	Re-Vacs.	Vaccinated in W.H. but included in previous totals. Prim.	Re-Vac.	Cost. £	s.	d.
1900	781	376	1	7	..	232	3	5
1901	800	443	..	5	..	230	19	0
1902	939	629	427	39	32	352	0	2
1903	776	537	25	18	11	247	18	8
1904	890	509	5	28	..	239	13	4
1905	835	554	2	29	..	253	12	4

W. E. WINCKWORTH, *Clerk.*

Bath Statutory Hospital, 1905.

No. of Patients in Hospital 1st January, 1905 14

ADMITTED DURING THE YEAR :—

Urban Diphtheria ...	... 74	...	4 deaths
„ Scarlet Fever ...	... 23		
„ Doubtful Diphtheria	... 1		
„ „ Scarlet Fever	... 1		
Rural Diphtheria ...	... 15	...	1 death
„ Scarlet Fever ...	... 6		
Total	... 120	...	5 „

No. of Patients in Hospital 1st January, 1906 11

F. W. KELWAY,
Clerk to the Hospital Managing Committee.

ARTICLES DISINFECTED BY STEAM DURING THE YEAR 1905.

Articles.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total Year.
Mattresses ...	12	5	2	3	22
Beds ...	19	9	7	8	43
Bolsters ...	25	9	5	10	49
Pillows ...	59	23	17	21	120
Blankets ...	67	18	8	20	113
Sheets ...	50	22	12	10	94
Quilts ...	35	11	7	15	68
Towels ...	21	6	5	3	35
Articles of Clothing	208	151	25	928	1312
Miscellaneous ...	107	35	33	35	210
	603	289	121	1053	2066

Vital Statistics.

Marriages Registered in the City of Bath.

Quinquennial Means 1891-5, 1896-1900.

Annual Returns 1901—1905.

Years.	Winter.	Spring.	Summer.	Autumn.	Year.	Rate per 1000.
1891-1805	88	122	131	126	466	17·9
1896-1900	78	124	129	121	451	18·0
1901	78	131	127	124	460	18·5
1902	88	115	116	130	440	17·7
1903	82	105	137	117	441	17·7
1904	68	125	127	114	434	17·4
1905	74	102	108	115	399	16

Quarterly Returns of Births.

Births registered.	Winter.	Spring.	Summer.	Autumn.	Year 1905
Legitimate ...	253	235	219	235	942
Illegitimate ...	8	10	17	8	43
Total Births ...	261	245	236	243	985
Rate per 1000 ...	21·0	19·7	19·0	19·6	19·7
English Rate do.	28·3	27·8	27·3	25·5	27·2

Births Registered in Bath during the Year.

District.	Males.	Females.	Persons.	Rate per 1000
Walcot	267	295	562	18·0
Lyn-Widcombe ...	174	181	355	26·3
Workhouse ...	14	8	22	
Bathwick ...	24	22	46	10·8
City of Bath ...	479	506	985	19·7

Vaccination Returns.

District.	1903. Born.	1903. Vac.	1903. Died.	1904. Born.	1904. Vac.	1904. Died.	1st half of 1905. Born.	1st half of 1905. Vac.	1st half of 1905. Died.
Walcot ...	603	467	49	605	445	56	287	221	19
Lyn-Widcombe	368	274	41	382	279	34	191	136	11
Bathwick ...	56	54	2	48	37	3	23	19	1
City of Bath ...	1027	795	92	1035	761	93	501	376	31

Primary Vaccination per 1000 living infants.

1901.	1902.	1903.	1904.	1st half of 1905.	Decennium 1891-1900 (from available figures)
822	885	816	808	800	695

Return of Occupied and Void Houses.

Void Houses include those closed for repairs and between lets, etc.

Name of Parish.	April 1st, 1905.				October 1st, 1905.				Per centage Void.
	Private Houses, Hotels & Shops.		Other Buildings.		Private Houses, Hotels & Shops.		Other Buildings.		
	Let.	Void.	Let.	Void.	Let.	Void.	Let.	Void.	
Bathwick ..	831	112	88	9	850	97	78	11	10·4
Lyn. & Wid. ..	3317	280	172	14	3355	279	181	12	7·2
St. James' ..	629	16	133	3	626	13	129	10	2·9
St. Michael's ..	399	14	77	4	392	20	81	4	4·8
S.S. Peter & Paul	234	13	43	..	236	13	40	1	4·8
Walcot ..	4763	299	309	35	4755	322	305	40	6·7
Bath ..	10173	734	822	65	10214	744	814	78	6·9

Births and Deaths registered during the year ending December 30th, 1905.

(Population—Census 1901),

District.	Population. Male,	Female.	Births. M.	F.	Persons.	Rate.	Deaths. M.	F.	Persons.	Rate.
Walcot ..	12300	18883	267	295	562	18·0	192	218	410	16·3
Hospitals ..			—	—	—	—	65	33	98	
Lyn. and Wid..	6510	7862	174	181	335	26·3	68	84	152	17·2
Workhouse ..			14	8	22		50	45	95	
Bathwick ..	1384	2900	24	22	46	10·8	18	35	53	12·4
Bath	20194	29645	479	506	985	19·7	393	415	808	16·2

Corrected Sub-District Mortality,

including four deaths at Statutory Hospital.

	Locality of Death. Private House.		Hospital.		Workhouse.		Total Persons	Corrected Rates Local.	Standard
	Male	Female	Male	Female	Male	Female			
Walcot ..	189	209	30	16	26	27	497	15·9	14·7
Lyn. and Wid..	65	85	6	7	2	8	173	12·0	11·1
Bathwick ..	18	30	1	4	1	—	54	12·6	11.1
Bath	272	324	37	27	29	35	724	14·5	13·0
Non-Municipal	5	12	32	8	21	10	88		

Annual Death Rates per 1000 from all causes and from seven Zymotic Diseases.

	All causes.	Zymotic Diseases (Cls. 3-9.)	Small Pox	Measles.	Scarlet Fever	Diphtheria	Whooping Cough	Fever.	Diarrhœa	Deaths under 1 year per 1000 Births.
England and Wales ...	15·2	1·52	0·00	0·32	0·11	0·16	0·25	0·09	0·59	128
Bath	14·5	1·16	—	0·66	—	0·26	0·06	0·02	0·16	89
76 Great Towns ..	15·7	1·88	0·00	0·39	0·13	0·16	0·29	0·08	0·83	140
141 other large Towns	14·4	1·50	0·00	0.31	0·11	0·15	0·23	0·13	0·57	132
England and Wales, less the 217 towns ...	14·9	1·09	0·00	0·24	0·09	0·15	0·20	0·09	0·32	113

Vital Statistics of Whole District during 1905 and Previous Years.

COUNTY BOROUGH OF BATH.

Year.	Population estimated to Middle of each Year.	Births.		Births per 1000 Married Women.	Total Deaths Registered in the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-Residents Registered in Public Institutions in the District.	Deaths of Residents Registered in Public Institutions beyond the District.	Net deaths at all Ages belonging to the District.	
					Under 1 Year of Age.		At all Ages.						
		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
1895	51,000	1107	21·71	..	149	134	956	18·74	170	..	..	..	..
1896	50,800	1087	20·97	217	153	141	921	17·79	195	55	7	873	17·17
1897	50,600	1009	19·94	201	129	128	861	17·02	179	61	5	805	15·9[8]
1898	50,400	1003	19·84	202	137	136	856	16·98	194	73	2	785	15·51
1899	50,200	1020	20·32	204	134	131	961	19·14	229	81	3	882	17·57
1900	50,000	962	19·14	192	121	126	933	18·66	193	89	6	850	17·00
1901	49,800	973	19.58	199	101	104	876	17·59	177	73	7	803	16·12
1902	49,800	988	19·40	202	105	106	911	17·93	223	70	2	822	16·48
1903	49,800	1027	20·62	208	92	89	751	15·08	135	57	2	668	13·41
1904	49,800	1034	20 76	209	121	177	826	16·58	212	75	8	738	14·82
Aver. 1895-1904	50,220	1021	20·22	204	124	121	883	17·55	190	70	5	803	16·01
1905	50,000	985	19·70	200	95	†97	808	16·16	194	71	4	724	14·48

* Rates in Columns 4, 8, and 13 calculated per 1000 of estimated population. † Net infantile death rate 89 per 1,000 births.

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

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions, viz., Bath Workhouse, the Royal United Hospital and Royal Mineral Water Hospital (the "Public institutions" taken into account for the purposes of these tables); and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere, *i.e.*, the Statutory Hospital

There were also 17 deaths of non-residents in private houses and private nursing institutions, making a total of 88 non-residents.

Area of district in acres (exclusive of area covered by water) 3,338

Total population at all ages ... 49,839
Number of inhabited houses ... 9,317
Average number of persons per house 5·3
} At Census of 1901.

Vital Statistics of separate Localities in 1905 and previous years.

COUNTY BOROUGH OF BATH.

Names of Localities.	Bath. Population 50,000.						Walcot. Population 31,200.						Lyn-Widcombe. Population 14,500.						Bathwick. Population 4,300.					
Year.	Births registered.		Deaths at all Ages.		Deaths under 1 year.		Births registered		Deaths at all Ages		Deaths under 1 year.		Births registered		Deaths at all Ages.		Deaths under 1 year.		Births registered		Deaths at all Ages		Deaths under 1 year.	
	M.	F.	M.	F	M	F	M.	F.	M.	F.	M	F	M.	F.	M.	F.	M	F	M.	F.	M.	F.	M	F
1895 ...	565	542	424	532	149		359	342	272	356			170	167	135	132			36	33	17	44		
1896 ...	576	510	442	479	153		371	299	280	313			186	182	132	128			19	29	30	38		
1897 ...	532	477	389	472	129		335	299	273	309			164	159	99	119			33	19	17	44		
1898 ...	541	462	413	443	83	54	318	280	271	289			200	158	116	125			23	24	26	29		
1899 ...	514	506	433	528	73	61	307	307	283	332			186	176	129	165			21	23	21	31		
1900 ...	496	466	382	468	66	55	299	267	256	317	38	31	171	176	110	115	24	20	26	23	16	36	2	2
1901 ...	508	467	415	461	53	48	288	258	254	266	35	30	198	177	143	156	16	14	22	32	18	39	2	4
1902 ..	489	499	389	433	60	45	280	300	254	303	36	30	179	180	111	93	20	13	30	19	24	37	4	2
1903 ...	527	500	302	366	56	37	296	304	204	252	38	15	199	167	74	78	16	14	32	29	24	36	2	2
1904 ...	525	509	328	410	63	52	313	292	210	284	38	29	183	195	87	93	21	22	29	22	31	33	4	1
Averages of Years 1895 to 1904.	527·3	493·8	391·8	459·2			316·6	294·8	255·7	302·1			183.6	173·7	113·6	120·4			27·1	25·3	22·4	36·7		
1905 ...	479	506	339	385	53	35	267	295	245	252	39	25	188	189	74	99	13	9	24	22	20	34	1	1

NOTES.—(*a*) The separate localities adopted for this table are areas of which the populations are obtainable from the census returns, *i.e.*, registration sub-districts. Block 1 is used for the whole district: and blocks 2, 3 and 4 for the several sub-districts.

(*b*) All known deaths of residents occurring in public institutions beyond the district are included in sub-columns of this table, and those of non-residents registered in public institutions in the district excluded. (See note on Table I. as to meaning of terms "resident" and "non-resident.")

(*c*) Deaths of residents occurring in public institutions, whether within or without the district, are allotted to the respective sub-district according to the previous addresses of the deceased.

CITY OF BATH.

Causes of, and Ages at, Death during the Year 1905, including 4 Deaths at Statutory Hospital.

	CAUSES.	Persons.	M.	F.	DEATHS IN WHOLE DISTRICTS AT SUBJOINED AGES. — 1		1—5		5 to 10		10 to 15		15 to 20		20 to 25		25 to 35		35 to 45		45 to 55		55 to 60		60 to 65		65 to 75		75 to 80		80 to 85		85 & over		DEATHS IN LOCALITIES. WALCOT.		LYN-WID.		BATHW'K		Non-Res.		Public Inst. Res.	
					M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
2	Measles.. ..	33	18	15	4	2	14	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17	12	1	3	..	..	..	..	..	1
3	Scarlet-fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	Influenza ..	12	2	10		1	1		..	..	..	..	..	..	..	..		1	..			2				1		2		1	1	2	..		1		6	1		3		1	3		..	
6	Whooping-cough ..	3	3	..	1		2		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3		..		..		..		..	
7	Diph. and M. Crp	13	7	6	1		3	4	3	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	3	1	3	1			1	3	2
9	Fever Enteric ..	1	..	1	..		..		..		..	..	..	..	..	..		1	..		..	..	..	..	..	..	..	..	..	..	..	..		1		..		..	1			1
11	Diarrhœa ..	3	2	1	2	1	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1		..		..		1	..	
12	Zymotic Enter. ..	1	..	1	..		..		..		..		..		..		..		..		..		..		..		1		..		..			1		..		..		..	
13	Enteritis	9	5	4	3	2	..		..		..	..	..		..		..		1		..			1		1	1		..		..		4	3	1	1		..	1	1	2	2
15	Erysipelas ..	1	1	..	..		..		..		..		..		..		..		..		1		..		..		..		..		..		1			..		..		..		..
16	Puerperal fever ..	4	..	4	..				..		..	..	..		..	1	..			3	..		..		..		..		..		..			..		4		..		..		1
16a	Venereal ..	8	3	5	2	3	..		..		..		..		..		..			1	1		..		1		..		..		..		3	4		1		..		..	1	2
17	Other Septic	4	2	2	..		..		..		..		..			1	..		..		..		..			2	1		..		..		2	2		..		..	3			1
17a	Rheumatic ..	..	..	..	..		..		..		..		..		..		..		..		..		..		..				..		..			..		..		..		..		..
19	Tuber. men.	5	1	4		1		2		1	1		..		..		..		..		..		..		..		..		..		..		1	4		..		..		..	1	1
19a	Tabes mesent ..	..	..	..	..				..		..		..		..		..		..		..		..		..		..		..		..			..		..		..		..		..
20	Phthisis ..	41	30	11	1		1		..		1		1	2	2	2	5	1	9	4	7	2	2		..		1		.		..		22	6	8	5		..	4		9	1
21	Other tuberclr. ..	6	4	2	..			1	1			1	..		..		1		..		..		1		..		1		..		..		2		2	2		..	1		1	1
23	Cancer	52	19	33	..		..		..			1	..		..			2		2	3	5	3	3	2	2	10	9	1	3		4		2	15	23	2	9	2	1	6	4	4	4
24	Premature birth ..	18	11	7	11	7	..		..		..		..		..		..		..		..		..		..		..		..		..			8	5	3	2	..		..		..	
25	Developmental ..	24	18	6	17	5	1		..		..		..		..			1	..		..		..		..		..		..		..			12	3	5	3	1		..		3	
26	Old age	56	22	34	..		..		..		..		..		..		..		..		..				..		2	5	4	9	9	11	7	9	17	22	2	9	3	3	3	5	4	8
27	Meningitis	6	3	3	..		2	1	..		..		1		..			1	..			1	..		..		..		..		..		..	2	3	1		..		..		..	1
28	Brain Inflam. ..	5	1	4	..		..		..			1	..		..		..		..			1		1	1			1	..		..		..	1	4		..		..		1	1	2
28a	Apoplexy ..	39	15	24	..		..		..		..		..		..		..			2		3	1	2	3	3	4	4	1	5	6	4		1	12	20	3	3		1		2	2	
28b	Hemiplegia ..	11	3	8	..		..		..		..		..		..		..		..		1	2	..		..		2	2		1		2	1		3	7		..		1	3			2
28c	Spinal	3	1	2	..		..				..				..		..		..		..		1		..			1		1	..		..		1	2		..		..		..		1

CAUSES.	Persons.	M.	F.	DEATHS IN WHOLE DISTRICT AT SUBJOINED AGES.																								DEATHS IN LOCALITIES.									
				—1		1—5		5 to 10		10 to 15		15 to 20		20 to 25		25 to 35		35 to 45		45 to 55		55 to 60		60 to 65		65 to 75		75 to 80		80 to 85		85 & over		WALCOT.		LYN-WID.		BATHW'K		Non-Res.		Public Inst.	
				M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
29 Heart	59	25	34	..		..		..		..		..		1		2	1	1	3		3	2	3	7	6	5	11	3	2	3	3	1	2	15	21	7	9	3	4	5	2	2	9
29a Heart failure ..	20	9	11	..		..		..		..		..		..		..		..		1			1	1		3	7	1	1	2	1	1	1	8	10	1	1	..		2	3	1	2
29b Vessels ..	5	5	..	..		..		..		..		..		..		..		..		2		..		2		..		1		..		.		4		1		..			1	1	
30 Bronchitis A ..	31	12	19	4	5	3		..		..		..		..				..		..			1	4	1		2	1	5		5	6	9	5	7	1	3	2	1	1	1
31 ,, Chronic	48	18	30	..		..		..		..		..		..		1		2		1	3	2	3	8	11	3	9	1	2		2	15	22	3	4		4	2		5	4	
32 Pneumonia ..	38	18	20		1		2		1	..		..		.		2		3		5	4	2		..		5	7	1			4		1	11	7	6	9	1	4	2		5	1
33 ,, Lobular	27	13	14	4	2	4	1		1	..		..		..		..		..			3	1		2	4		1	1	2	1		8	8	4	5	1	1	2		1	1
34 Stomach ..	4	1	3	..		..		..		..				..		..		..		..		1	2	..		..			1	..		1	1		2			1			..	
35 Obstruction .	10	5	5	..		..		..		..		..		..			1	1	2	1			1	1		1		1	1	..		3	3	1	1	1	1	1		1	1
36 Cirrhosis, Liver ..	10	6	4	..		..		..		..		..		..		1	1		2	1		2	1	1		1		..		..		3	2	3	2	..		..		2		
37 Nephritis ..	31	18	13		1	..		..	1	..		..		..		..		3	1	4	1		2	3	1	4	5	3	1	1		..		16	7	1	5	1	1	1	2	2	3
38 Genital .. .	3	..	3	..		..		..		..		..		..	2	..				1		..		..		..		..		..			2			..		..			1
39 Parturition ..	2	..	2	..		..		..		..		..	2	..		..				..		..		..		..		..		..			1			..		..			1
40a Mechanical	12	8	4	..		..		1		..		1		..		2		..		1		..		..		1	1		1	1	1	3	2	4		1	2	2		4	2
40b urns, Scalds ..	2	2	..			1		..		..		..		..		..		..		..		..		..		..		1		..		2			..			1		1	
40c Poisons ..	..	..	..	..		..		..		..		..				..		..		..		..		..		..		..		..		..			..			..		..	
40d Drowning ..	2	2	..			..		1		..		1		..		..		..		..		..		..		..		..		..		2			..			..		..	
40e Suffocation ..	1		1	..		..		..		..		..		..		..		..		..		..		..		..		..		1					..			..		..	
41 Suicide	2	2	..	..		..		..		..				..		2		..		..		..		..		..		..		..		2			..			..		..	
42 Ill defined ..	..	..	..	..		..		..				..		..		..		..		..		..		..		..		..		..		..			..			..		..	
43 All other causes ..	59	24	35	3	4	2	3	1		1		1	1	2		1			4	3	2	2	2	2	3	3	7		5	3	1		3	12	24	8		4		11	6	9	5
Total ..	724	339	385	53	35	34	27	7	5	3	4	5	3	5	6	16	11	18	23	33	29	18	21	26	25	59	81	20	42	31	44	11	29	...		..		..		..		..	
Walcot ..	497	245	252	39	25	27	16	4	2	2	1	4	1	3	3	10	9	13	15	25	16	8	15	19	15	40	59	17	27	22	27	8	21	245	252	..		..		..		..	
Lyn-Wid. ..	173	74	99	13	9	6	8	2	3	1	3	1	2	1	3	6	2	5	8	3	11	8	5	6	6	16	17	2	8	3	12	1	2	..		74	99	..		..		..	
Bathwick ..	54	20	34	1	1	1	3	1		..		..		1		..		..		1	2	2	1	1	4	3	5	1	7	6	5	2	6	..		..		20	34	..		..	
Non-resident ..	88	58	30	5	2	2	1	..		..		6	1	2		6	2	3	2	4	4	3	1	4	2	11	6	4	6	7	1	1	2	..		..		..		58	30	..	
Public Inst. Residents..	128	66	62	7	3	5	2	1	2	1	3	1		1	3	4	2	9	6	11	8	6	3	7	4	9	12	1	7	2	3	1	4	..		..					..	66	62

Elementary Schools.

The average number of children on the books of Elementary Schools, including the Blue Coat School and the Sutcliffe Industrial School, was 7,283, the average attendance 6,420, the percentage of attendance being 88·2. For 1904 the number on the books was 7,344, the average attendance being 88·15 per cent. For the census year 1901 the average number on the books was 6,967. I am indebted to Mr. A. Neate for this information. The increase in the number of children attending school as compared with the number in 1901 is another reason for thinking the population has not decreased as much as the Registrar-General estimates.

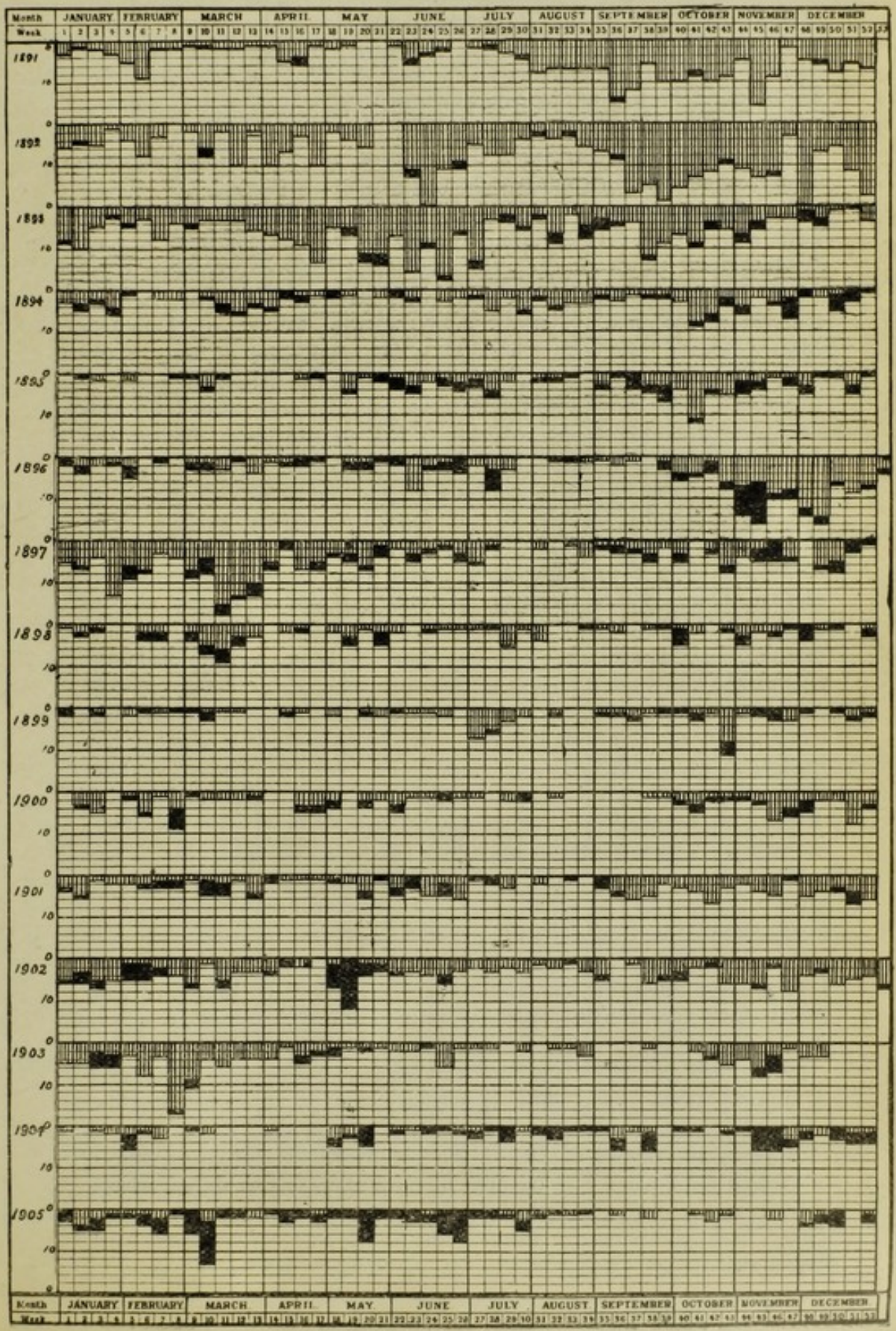
Considerable improvements have been made at St. Mark's and Lyncombe Council Schools, and also at Bathwick Schools, providing additional light and ventilation and removing curtains. A curtain is a very convenient partition to separate class from class, but hygienically most objectionable, collecting infectious dust, harbouring it between school hours, and sending it forth in showers when again brought into use. If curtains are used they should be frequently washed or sprayed with some disinfectant, and should be left unfolded, exposed to light and air during the mid-day interval.

I gave the necessary authority for closing the following schools :—

St. Saviour's Infants' School, Mar. 1st to Mar. 30th, for Measles.
Beacon Hill Infants' School, „ 10th to „ 31st, „
Christ Church Infants' School, „ 16th to April 3rd, „
Widcombe Infants' School, „ 10th to Mar. 31st, „
Lyn. Council Infants' School, „ 3rd to „ 25th, for Diphtheria.
St. Saviour's Boys', Girls' and Infants' Schools, July 17th to July 11th, „
Harley Street Girls' School, Dec. 14th to Dec. 23rd, „
St. Paul's Mixed and Infants' Schools, July 24th to July 29th, for Mumps.

On account of the epidemic of measles I offered the necessary certificate, under Article 45b of the Elementary School Code, for closing all the Schools from April 14th to May 1st, but the Managers of most of the Schools did not think this advantageous. It is doubtful if School closure has much influence in checking infectious disease when it has become epidemic in character ; but at present it seems almost the only weapon available against measles, a disease which every third or fourth year carries off 40 or 50 children.

Notification of Scarlet Fever & Diphtheria, 1891-1905.



Meteorology.

Meteorological observations have been regularly made at the stations equipped by the Corporation, and also at the Royal Literary and Scientific Institution, and at my own Observatory. We have again to thank Colonel Clutterbuck and Mr. W. P. Workman, B.Sc., for sending the barograms from their aneroids at Box and Lansdown, and the Waterworks Engineer for information concerning the rainfall at three reservoirs and the gauging of the springs, also the various observers for their careful work in all weathers.

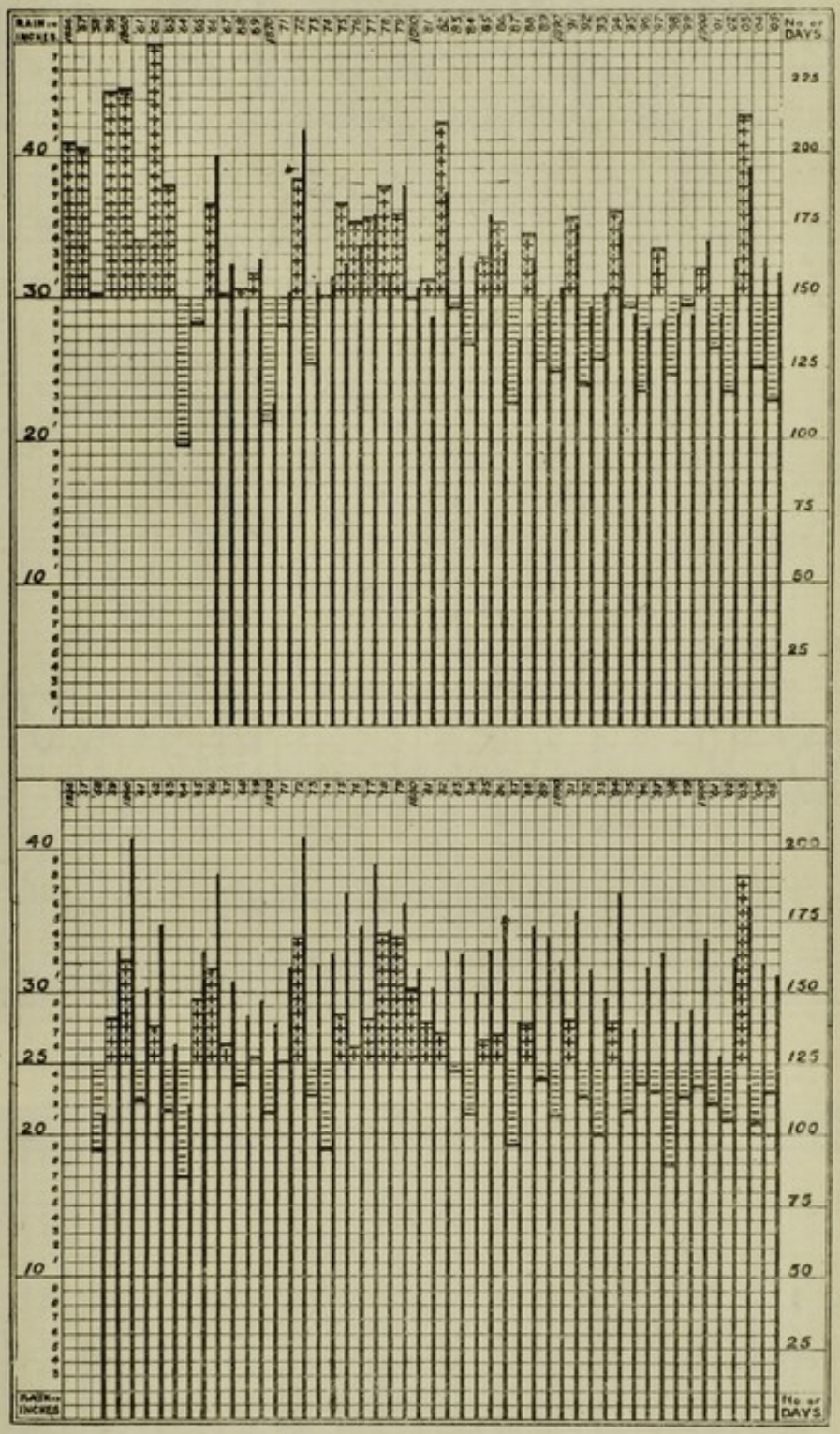
Observations are taken at the Central Station at 8 a.m., 9 a.m. and 6 p.m. Telegraphic reports of the 8 a.m. and 6 p.m. readings are sent to the Meteorological Office, London, daily. Monthly reports are made to the Registrar-General,to British Rainfall, the Meteorological Society, and to the Editor of Symons's Meteorological Magazine. Bath is now recognized as one of the principal Meteorological Stations in the South of England.

One of the most notable features in the observations for this year was the low temperature recorded on the grass during the summer months, July, August and September. There can be no reasonable doubt as to the accuracy of our observations. Readings are taken at the Central Station and in my own garden. The thermometers used are of the most sensitive description, a column of alcohol in a thin glass tube, about three inches long and one-eighth of an inch in diameter, is freely exposed to the sky, and its contraction recorded by an index placed in the stem of the thermometer. The grass is kept cut short, and there are no buildings within 200 feet and no walls to interfere with the downflow of cold air from the hills. A clear atmosphere, free from fogs, completes the explanation of our low records. It is absurd to compare our readings with those taken at some other stations, where the thermometers used are not so sensitive, and are protected from streams of cold air by walls all round, not 20 feet distant from the thermometer. These remarks may be taken as applying also to the "Minimum in the Screen," and more or less to all our readings. I know very few towns where the meteorological instruments are so freely exposed as they are in Henrietta Park.

This year we complete the 40 years' record with the Royal Literary and Scientific Institutions records. We are therefore able to calculate the monthly average rainfall for this period, which is still too short to furnish a reliable monthly mean. The Table on page 40 will complete the monthly records published in my first Annual Report, 1896. The Chart on page 37, prepared by Mr. Craven, will show the annual rainfall for 50 years. From 1855 to 1866 being the record of Dr. C. S. Barter, the first Medical Officer of Health for Bath. The number of rainy days is also shown where known, and also Mr. G. Symons' record for Camden Square, London, so we may compare the rainfall for South-east with South-west England.

Rainfall in Bath and London for 50 Years.

BATH.



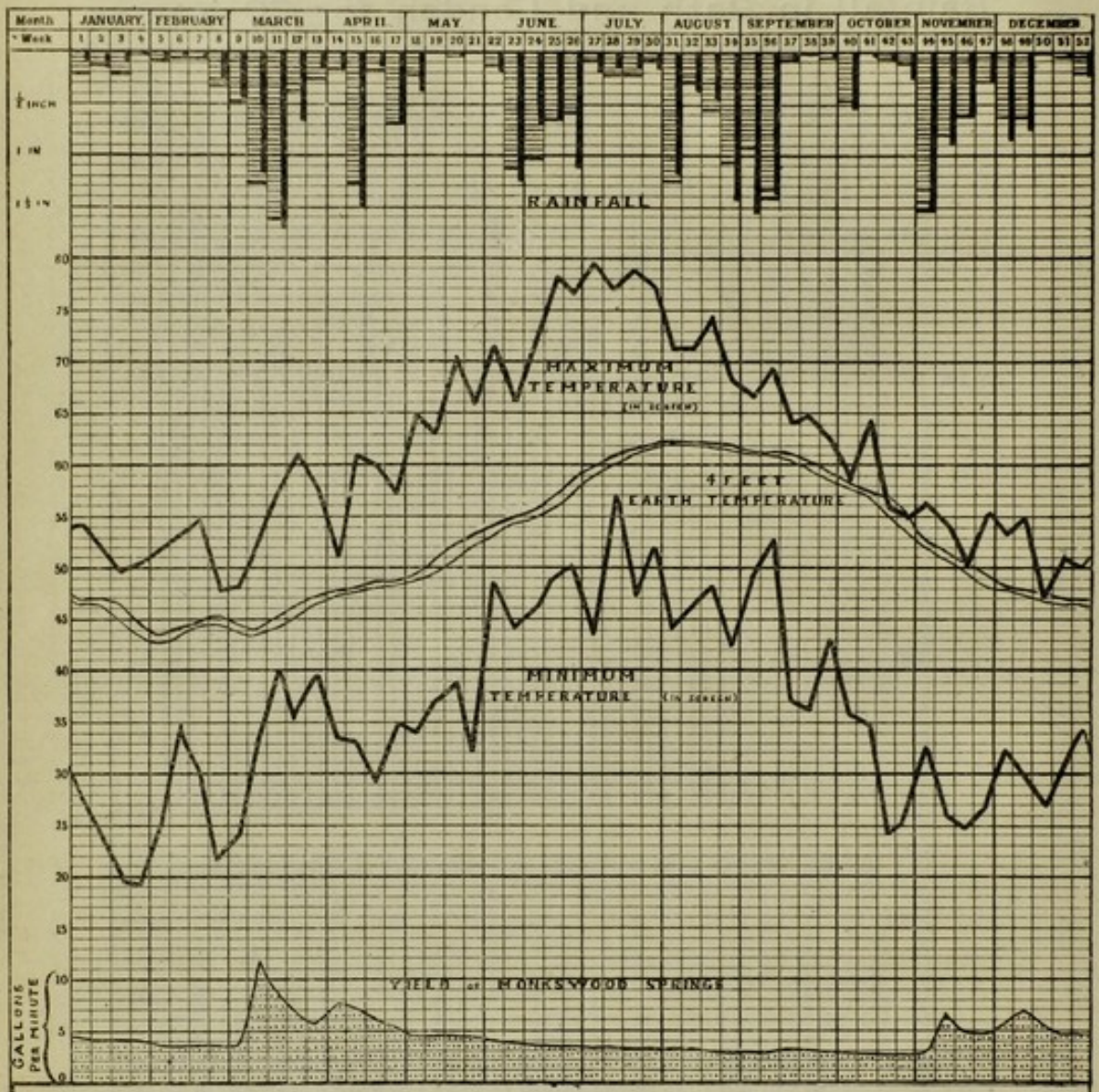
LONDON (62, CAMDEN SQUARE).

Solid black lines indicate number of rainfall days.

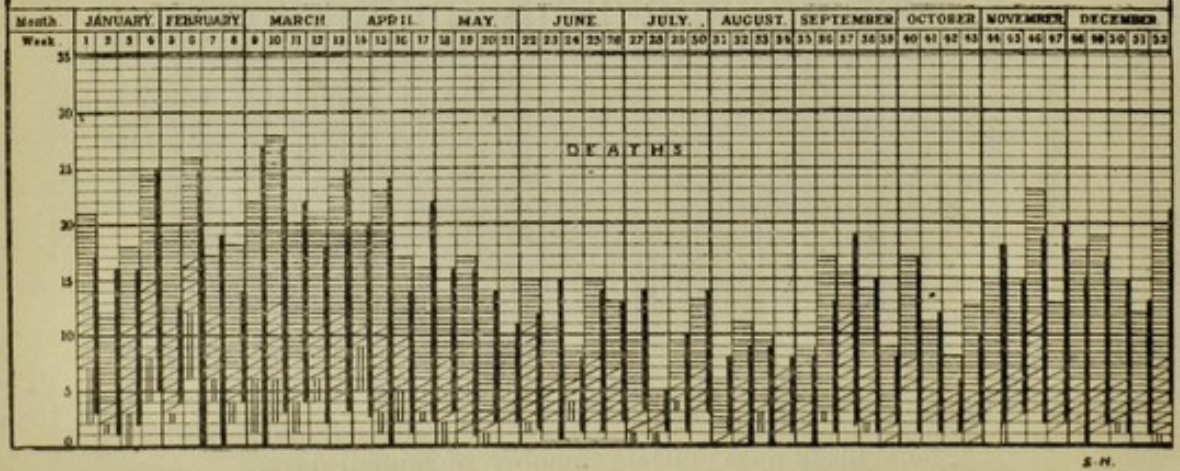
1905.

TEMPERATURE, RAINFALL AND YIELD OF SPRINGS.

Rainfall in Bath—Shaded lines. At Monkswood—Solid line.



DEATHS FROM ALL CAUSES.



NOTES:—Total Deaths registered each week shown by solid black line; blank space at base indicates deaths of non-resident.

Deaths of Residents actually occurring weekly shown by shaded lines in age periods under 1, 1-5, 5-60 and 60 years upwards.

BATH CENTRAL CLIMATIC STATION, HENRIETTA PARK.

SUMMARY OF METEOROLOGICAL OBSERVATIONS FOR THE YEAR 1905.

North Latitude 51° 23' 8", *West Longitude* 2° 21' 14". *Estimated Height above Sea Level: Barometer, 84 feet; Thermometers, 70 feet.*

1905	Barometer.						Thermometers in Stevenson Screen.										Earth Temperatures.				Bright Sunshine in hours.
	Mean 9 a.m. corrected to 32°	Absolute Maximum Corrected.	Day of Month.	Absolute Minimum Corrected.	Day of Month.	Range.	Mean Temperature of Air.	Mean of Maximum.	Mean of Minimum.	Absolute Maximum.	Day of Month.	Absolute Minimum.	Day of Month.	Mean of Dry Bulb.	Mean of Wet Bulb.	Relative Humidity.	4 Feet in Gravel. Max.	Min.	Mean	1 Ft. Mean	
Jan. ...	30·215	30·912	28	29·195	17	1·717	40·5	48·2	32·1	54·2	7	19·0	27	37·5	36·0	87	47·0	43·0	45·5	39·1	68·5
Feb. ...	30·166	30·502	12	29·140	26	1·362	42·8	48 2	37·3	54.8	14	21·5	25	42·4	39·8	80	45·2	42·8	44·2	41·4	75·0
March	29·648	30·224	3	28·776	15	1·448	45·3	52·3	38·8	61 0	22	25·0	4	45·6	42 7	80	46·8	43 6	45·1	44·2	125·9
April ..	29·772	30 206	1	29·217	30	·989	46 7	53·3	40·7	61·0	13	29·2	22	47·6	44·3	77	48·8	47·0	48·0	47·9	89·4
May ...	30·063	30·374	9	29·297	1	1·077	51·5	61·8	42·4	71·5	28	32·0	23	54·0	48·4	66	53·6	48·8	51·2	53·8	260·0
June ..	29·875	30·304	22	29·630	18	·674	58·7	67·0	51·5	78·0	22	44·0	9	60·0	55·2	72	58·8	53·8	55·8	60·2	166·2
July ...	29·994	30·193	19	29·760	1	·433	63·6	72·4	55·9	79·8	8	43·5	7	65·5	59·8	70	62·4	59·0	60·9	65·8	230·9
Aug. ...	29·808	30·232	12	29·304	4	·928	58·8	67.0	51·6	74·5	15	42·2	24	61·4	56·2	71	62·4	61·1	62·1	62·8	177·8
Sept. ...	29·912	30·291	17	29·481	7	·810	54·8	62·1	48·2	69·5	5	36·0	21	56·3	52·9	78	61·3	58·5	60 2	58·6	109·6
Oct. ...	29·990	30·416	11	29·154	30	1·262	45·6	53·7	37·9	64·5	9	24 0	17	45·2	42·8	83	58·4	52 2	55·9	51·0	107·4
Nov. ...	29·580	30·117	21	28·904	13	1·213	41·1	48·6	33·5	55·2	25	24·6	17	40·0	38·7	90	52·2	47·9	50·2	43·6	80·0
Dec. ...	30·163	30·796	12	29·349	28	1·447	41·2	46·3	35·8	54·8	7	27·0	11	40 3	39 1	91	48·0	46·6	47·1	42 2	50·5
Means for Year	29·933						49·2	56·7	42·1					49·7	46·3	78·7			52·2	50·9	1541·2

MONTHLY RAINFALL AT BATH, 1896—1905.

Mean Monthly Rainfall for various periods. Average number of wet days each month for 40 years.

Years.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
1896	0·41	0·41	2·81	0·91	0·28	1·27	0·96	2·79	6·12	2·52	0·73	4·21	23·42
1897	1·79	3·08	4·36	2·97	1·37	3·04	1·88	5·31	2·78	1·17	0·96	4·58	33·29
1898	0·38	1·83	0·57	2·29	3·16	1·78	0·68	2·34	1·01	4·26	3·11	3·17	24·58
1899	5·03	3·76	0·94	3·87	1·61	1·64	0·27	1·22	3·26	2·43	3·07	2·19	29·29
1900	3·27	5·68	1·27	1·24	2·36	1·92	1·28	2·56	0·56	2·74	2·61	6·40	31·89
Mean 1896—1900	2·18	2·95	1·99	2·26	1·76	1·93	1·01	2·84	2·75	2·62	2·10	4·11	28·50
1901	2·01	0·85	2·49	2·83	1·24	1·90	2·86	1·53	2·50	1·60	0·66	5·94	26·41
1902	1·62	0·85	1·79	1·36	2·03	3·17	1·56	2·64	1·65	1·95	2·58	2·20	23·40
1903	3·80	1·78	3·83	3·14	5·05	4·38	3·03	3·94	2·24	6·90	2·12	2·36	42·57
1904	3·20	3·61	1·86	1·80	1·97	1·46	2·45	2·82	1·37	0·71	1·81	1·96	25·02
1905	0·61	0·86	1·64	2·47	0·07	3·48	0·56	3·98	1·66	1·45	3·08	0·93	22·79
Mean 1901—1905	2·25	1·59	2·72	2·32	2·27	2·88	2·09	2·98	1·88	2·52	2·05	2·68	28·23
Mean 1896—1905	2·12	2·27	2·36	2·29	2·01	2·40	1·55	2·91	2·32	2·57	2·07	3·39	28·27
Mean 1866—1900	2·90	2·33	1·97	2·03	2·03	2·12	2·59	2·78	2·97	3·13	2·93	3·03	30·79
Mean 1866—1905	2·82	2·44	2·07	2·07	2·03	2·22	2·53	2·81	2·83	3·05	2·82	2·99	30·47
Days	13	13	13	12	12	11	13	14	13	15	14	15	158

MONTHLY RAINFALL AT VARIOUS STATIONS, 1905.

Mean Monthly Rainfall, Years 1866-1905.

Observations 9 a.m. daily, at all Stations, 1905.	Central Station, Henrietta Pk. N. Latitude, 51° 23′ 8″ W. Longitude 2° 21′ 14″ 5 in. Gauge. O.D. 67 ft.				Kingswood School. N. Latitude, 51° 23′ 27″ W. Long., 2° 22′ 5″ 5 in. Gauge. O.D. 620 ft.	39, Combe Park. N. Lat. 51° 23′ 30″ W. Long. 2° 23 10″ 5 in. Gauge. O.D. 165 ft.	Monkswood. N. Lat. 51° 26′ 19″ W. Long. 2° 21′ 16″ 5 in. Gauge. O.D. 363 ft.	Batheaston. N. Lat. 51° 24′ 53″ W. Long. 2° 19′ 51″ 5 in. Gauge. O.D. 248 ft.	Charlcombe. N. Lat. 51° 23′ 49″ W. Long. 2° 21′ 37″ 8 in. Gauge. O.D. 325 ft.	Climatic Station, Statutory Hospital. N. Latitude, 51° 21′ 52″ W. Longitude, 2° 19′ 10″ 5 in. Gauge. O.D. 520 ft.				Royal Literary Institution. N. Lat. 51° 22′ 52″ W. Long. 2° 21′ 21″ 6 in. Guage. O.D. 74 ft.	Mean 40 Years 1866-1905.
	Rain and Snow Total depth in inches.	Number of Days on which Rain fell.	Greatest fall in 24 hours. Depth.	Date.						Rain and Snow Total depth in inches.	Number of Days on which Rain fell.	Greatest fall in 24 hours. Depth.	Date.	
January ..	0·61	12	·17	4	0·50	0·55	0·48	0·40	0·54	0·67	11	·22	4	0·49	2·82
February ..	0·86	10	·27	25	0·83	0·90	0·73	0·69	0·91	1·00	13	·31	25	0·82	2·24
March ..	3·64	21	·57	10	3·45	3·71	3·80	3·65	3·54	4·13	22	·67	10	3·73	2·07
April ...	2·47	17	·44	10	2·67	2·43	2·72	2·74	2·49	2·74	18	·39	10	2·54	2·07
May ..	0·07	6	·02	18	0·02	0·04	0·11	0·15	0·11	0·09	4	·04	1	0·04	2·03
June .	3·48	16	·72	12	4·00	3·85	3·86	3·64	3·55	3·52	16	·76	12	3·43	2·22
July ..	0·56	6	·21	22	0·64	0·51	0·68	0·57	0·64	0·52	8	·27	22	0·55	2·53
August ..	3·98	20	·70	25	4·43	3·91	4·90	5·05	4·24	5·59	20	·60	27	3·90	2·81
September	1·66	9	·59	9	1·86	1·72	1·58	2·01	1·81	1·75	10	·62	9	1·65	2·83
October ..	1·45	13	·44	31	1·82	1·47	1·78	1·70	1·76	1·63	13	·41	31	1·43	3·05
November	3·08	17	·59	10 & 12	2·97	2·77	3·24	3·23	2·93	3·73	14	·76	10	3·09	2·82
December..	0·93	11	·33	7	1·06	0·98	1·10	1·04	1·12	1·05	8	·39	7	0·97	2·99
	22·79	158			24·25	22·84	24·98	24·87	23·64	26·42	157			22·64	30·48

Annual Report for 1905

IN CONNECTION WITH

Factories, Workshops, Laundries, Workplaces and Homework in the County Borough of Bath.

1.—INSPECTION (including inspection made by Sanitary Inspectors or Inspectors of Nuisances).

Premises.	Number of Inspections.	Number of Written Notices.
Factories (including Factory Laundries)	13	5
Workshops (including Workshop Laundries)	409	27
Workplaces	43	8
Homeworkers' Premises	249	8
	714	48

2.—DEFECTS FOUND.

Nuisances under the Public Health Acts:— Particulars.		Number of Defects Found.	Remedied.
Want of Cleanliness		13	all
Want of Ventilation		4	,,
Overcrowding		—	—
Want of drainage of floors		—	—
Other nuisances		39	,,
Sanitary Accommodation	insufficient	1	,,
	unsuitable or defective	12	,,
	not separate for sexes	—	—
		69	

3.—OTHER MATTERS.

Failure to affix Abstract of the Factory & Workshop Act (s. 133):—

Class.		Number
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. Inspectors	3
	Reports (of action taken) sent to H.M. Inspectors	3

Underground Bakehouses (s. 101):—

Certificates granted during the year	1
In use at the end of the year	16

Homework: Lists of Outworkers (s. 107):—	Lists.	Outworkers
Lists received	45	303
Addresses of Outworkers forwarded to other Authorities	6	102
Addresses of Outworkers received from other Authorities	—	—

Workshops on the Register (s. 131) *at the end of the year:*— (16 discontinued in 1905; 31 added in 1905).

Workshops	335
Workplaces	70
Domestic Workshops	29
Workshop Bakehouses	6
Laundries	10
Total number of workshops on Register	450

NOTE.—The Factory and Workshop Act, 1901 (s. 132), requires the Medical Officer of Health in his Annual Report to the District Council to report specifically on the administration of that Act in workshops and workplaces, and to send a copy of his Annual Report, or so much of it as deals with this subject, to the Secretary of State (Home Office).

Sanitary Condition of Workshops.

CLEANLINESS.—Thirteen workshops were found to require cleansing and limewashing, and in each case the work has been satisfactorily carried out. With the above exceptions the workshops inspected were found fairly clean. Some workshops, because of the nature of the work carried on, require cleansing oftener than others, and I think it is unfortunate that the Act does not fix a period for the cleansing of workshops as it does in the case of factories. Once a year cannot be considered too often for limewashing. As it is, legally, we have to wait until the ceiling, floor or walls become a "nuisance" before we can take action to bring about a better state of things.

AIR SPACE.—No case of actual overcrowding was found during the year, but several workrooms provide little more than the statutory minimum standard of 250 cubic feet per person.

VENTILATION.—Four workshops were deficient in ventilation. By the Special Order of February, 1902, the standard of ventilation was fixed at not less than 600 cubic feet per hour for each person employed, which certainly cannot be regarded as too high. The improvement in the workshops in this direction is very slight, the objection of employees to ventilation is still a great difficulty. In some cases where permanent ventilating openings have been provided, I have found upon revisiting that they have been blocked in some way or other, and the whole object has been defeated. The provision as to ventilation does not apply to men's workshops; this is regrettable, for some of these are amongst the worst we have to deal with, and many of them which are in other respects satisfactory are anything but sweet as regards the atmosphere, every ventilator being tightly closed.

SANITARY CONVENIENCES.—Twelve nuisances from workshop W.C.'s were found; these were abated after notice. One workshop was without any sanitary convenience for the persons employed; this was provided after notice.

The drains were defective in 10 workshops.
The paving was „ 3 „
The roof, rain-water pipes, etc., in 9 „

These defects have all been remedied after notice to the owners.

Three notices were received from H.M. Inspector of Factories relating to the cleansing of workrooms, and these received prompt attention.

Outworkers.

Forty-five lists containing the names and addresses of 303 outworkers were received during the year. Although more lists were received there is a falling off in the number of outworkers. 102 outworkers receiving work from firms in the City reside in other districts and their names and addresses were forwarded to the various authorities of the districts in which the workers reside. There have been 249 inspections and re-inspections of homeworkers' premises. Eight nuisances were found which have all been abated.

Number of Workshops on Register December 31st, 1905 ...	450
Worshop Inspections and re-inspections	465
Homeworkers' Premises Inspected	249
Worshops Discontinued during 1905	16

The following Workshops were inspected and added to the Register during the year :—

Engineer	1
Plumber and Gasfitter	1
Watch and Clock Makers	2
Carpenters	2
Carvers and Gilders	3
Tailors	6
Dressmakers	7
Milliners	1
Umbrella Maker	1
Boot and Shoe Makers	4
Saddler	1
Bookbinder	1
Laundress	1
	31

W. A. CRAVEN, A.R.S.I., *Sanitary Inspector.*

Inspector of Nuisances' Report for 1905.

6,757 inspections, re-inspections and visits of enquiry have been made during the year. This number includes house-to-house inspections, slaughter-houses, food stores, dairies and cowsheds, mews, offensive trades, common lodging-houses, canal boats, workshops, workplaces and out-workers' premises, houses in which infectious disease has occurred, smoke observations, &c.

House-to-house inspections have been made as follows :—

Brooklyn Road	10	Larkhall Terrace ...	14
Brookleaze Place	11	Lyncombe Terrace ...	6
Catsley Place	9	Margaret's Hill ...	15
Davis' Place	4	Summerlays Place ...	10
Eldon Place	51	York Terrace... ...	12
Ferry Lane	6	Warwick Cottages ...	4
Hatfield Buildings and Wood-		Budbrook Place ...	5
bine Place	22	Randall's Cottages ...	5

Re-inspections have been made of most of the houses in Abbey Green, Ambury, Avon Street, Back Lane, Back Street, Bolwell's Court, Broad Quay, Corn Street, Holloway (Courts, &c.), Little Corn Street, Lockyer's Court, Margaret's Passage, Milk Street, New Quay, North Parade Buildings, Old Orchard, Peter Street, Rose Hill, Somerset Street, St. James' Parade, Westgate Buildings, &c.

147 nuisances from defective drains, soil pipes, &c., were abated by structural works.
94 nuisances from defective w.c.'s and urinals were abated.
60 „ „ „ waste pipes, rain-water pipes „
24 „ „ „ ventilation (windows made to open) „
27 „ „ „ paving were abated.
21 „ „ „ roofs, ceilings „
10 „ „ „ cesspools „
9 „ „ „ water supply, &c., were abated.
95 premises were cleansed and limewashed.
9 nuisances from overcrowding abated after notice.
53 accumulations of ashes, &c., in houses and yards removed after notice.
14 ashbins provided after notice.
90 nuisances from keeping pigs, fowls, rabbits, &c., abated.
3 nuisances in slaughter-houses abated.
1 „ in common lodging-house abated.
4 „ from accumulations of manure abated.
23 „ from various causes abated.
3 „ reported to police.
103 matters reported to City Surveyor.
465 workshops and workplaces inspected.
249 homeworkers' premises „
31 workshops placed on Register after inspection.
563 inspections of dairies, cowsheds, food stores, &c.
482 „ common lodging-houses.
1468 „ slaughter-houses.
117 „ offensive trades premises.
120 „ canal boats.
181 samples obtained under Food and Drugs Acts.

The following articles of food were destroyed as diseased, unsound or unwholesome :—

1 box of dates, 2 cases of lemons, 7 bags of nuts, 1 box of tomatoes, 5 boxes of haddock, 100 boxes of bloaters, 10 cwt. 2 qrs. of pork.

W. A. CRAVEN, A.R.S.I., *Inspector of Nuisances.*

Sale of Food and Drugs Acts, 1875-1899.

During the year 1905 the number of samples submitted for analysis under the above Acts was 181, as compared with 149 in 1904. The number taken last year was much greater than in any previous year. The following were the articles analysed :—

Description of Article.	No. of Samples.	Genuine.	Adulterated.	
Milk ...	78	69	9	(1) Deficient in fat to extent of 20%. Fine 20/- and costs. (2) 6% added water. Fine 40/- (3) Deficient in fat 23·7. Fine 10/- (4) 11·5% added water. Dismissed on production of warranty. (5) 25% added water. Fine £4. (6) 14 2% ,, ,, £4. (7) 18·6% ,, ,, £2. (8) 23% ,, No action taken (9) 14% ,, and 10% deficient in fat. Fine £10 & costs
Butter ...	57	50	7	Five contained added water varying from 16·2% to 17·4% Letters cautioning the sellers were sent in each case. Two prosecutions were issued against wholesale dealers; in one case (0·5 added water) a fine of £10 and costs was imposed; and in the other (1·4 added water) a fine of £20 and costs.
Coffee ...	11	11		
Jam ...	10	10		Contained no artificial preservatives
Sugar ...	6	6		
Lard ...	4	4		
Lime Juice ...	4	4		Contained no artificial preservatives
Pepper ...	3	3		
Golden Syrup	2	2		
Arrowroot ...	2	2		
Cheese ...	1	1		
Ginger ...	1	1		
Honey ...	1	1		
Tea ...	1	1		

The percentage of adulteration is higher than it has been in recent years : 9 samples of milk or 11·5 % were adulterated, and 7 samples of butter, or 12·3 %. All the other articles were certified as being genuine.

Proceedings were taken in 11 cases, and penalties varying in amount from 10s. including costs, to £20 and costs were imposed. The total amount received in penalties was £53 10s. with costs in four cases. In five cases of adulteration reported to the Sanitary Committee, proceedings were not instituted for satisfactory reasons. but the vendors were cautioned by order of the Committee,

The great increase in the number of samples taken is accounted for by the number of informal or test samples taken at the suggestion of the Board of Agriculture. The adoption of this course has given much additional trouble, but as pointed out by the Board "the advantages of this system afford a means of obtaining reliable information of the character of the trade of the district without giving offence to the honest trader or putting the dishonest trader on his guard." This method has further proved that in most cases of adulteration it is not the retailer but the wholesale dealer who is the offender.

The high rate of adulteration in butter is regrettable ; this is a matter not merely of local but of national importance, and a Sale of Butter Bill, dealing with manipulated butter and raising the standard and quality of butter is much to be desired. What is known as the "faking" or sophistication of butter is now carried on to an alarming extent. A few years ago there were only one or two butter factories but now it is stated on reliable authority that there are over one hundred places where the blending or "faking" of butter is practised, and this "faking" has now reached such a stage that it would appear that science has triumphed, for a time, over the methods of the analyst. Unfortunately, the Inspectors under the Board of Agriculture have no power of entry into butter factories, as they have in the case of margarine factories, although they have proved in several cases that butter was subjected to some process for the purpose of adding water to it. So long as this practice is carried on I am afraid that all the efforts of the leading agricultural bodies in this country to secure the improvement of butter making will be thrown away if water is to be added to butter by mechanical processes after it leaves the hands of the producer, and to prevent this, very stringent regulations are needed.

Judging from the percentage of adulterated articles, which is higher than in any recent year, it would appear that adulteration has resolved itself into a science, and the time of a pure milk and a pure food supply is yet distant, but it will be my endeavour, as it has been in the past, to devote as much time as possible to the effective administration of the Food and Drugs Acts, and to so carry out their provisions as to make it increasingly difficult for the sellers of adulterated or sophisticated articles to find a market for their goods in this City.

WALTER A. CRAVEN.

January 1st, 1906.

Canal Boats Acts, 1877–1884.

I have to report that 120 canal boats were inspected during the year 1905, as compared with 129 in 1904.

Most of the boats are getting rather old in the service, and very few new boats are being built in the neighbourhood. The general condition of the boats in use is satisfactory, and the breaches of the Acts and Regulations have been few and unimportant.

The infringements were as follows :—

2 boats were improperly marked.
5 ,, required cleansing.
3 ,, ,, painting.
2 cabins had leaky roofs.
1 cabin was insufficiently ventilated.
1 pump was out of order.
2 boats required general repairs.

These defects have been, or are being, remedied. It was not necessary to serve any statutory notice or to take legal proceedings in any case, the necessary repairs being carried out upon a letter being sent to the owners. Many of the boats are used for carrying cargo only and not as dwellings, and to these the Acts do not apply.

Mr. Llewellyn, the Government Inspector of Canal Boats, estimates that only about half the number of boats registered throughout England and Wales are used as dwellings.

No notification of any infectious disease occurring on any boat was received, nor was any boat detained for cleansing and disinfection.

No application for registration were received during the year.

Mr. Llewellyn made one or two visits during the year, and expressed his satisfaction with the condition of the boats, &c. ; and had no fresh suggestions to make.

January 29th, 1906. W. A. CRAVEN.

Dairies, Cowsheds and Milkshops Order.

Number of Registered Dairymen and Purveyors of Milk ...	65
,, ,, Cow-keepers	8
,, Purveyors registered during 1905	5
,, ,, who discontinued selling during 1905	5
,, ,, changing premises	2
,, Premises Inspected previous to selling ...	9

The total number of cow-keepers, dairymen and purveyors of milk now on the register is 73, being exactly the same number as last year.

There are 10 private persons keeping cows within the borough boundary ; these are exempt from registration.

The regulations have, generally, been well carried out during the year, and the usual attention has been given to the cleanliness of the premises, vessels, etc.

I wish we had a regulation dealing with the manure in the yards, but I am pleased to report that the cow-keepers have not been so bad in this respect as in former years.

The city water has been laid on to one farm at very considerable expense, and now 7, out of the 8 farms, have either the city or high level water laid on.

There are 2 farms in Bath now pasteurizing milk previous to delivery; there are others who have plant laid down but do not use it.

Plans have been passed for a new cowshed to be built in the Lyn.-Wid. district. Personally I should be pleased to see more cow sheds within the borough boundaries : for, as a rule, town sheds are better kept than most of the ones in the country ; besides, the milk stands less chance of being contaminated than does milk coming from a long distance. The quantity of train milk sent to Bath is not large, although I am afraid the quantity is likely to increase.

I am pleased to report the absence of any infectious disease among the dairymen or their employes during the year ; also that the farms have been free for several years now of any of the contagious diseases. I think this is a matter for congratulation.

F. W. KELWAY, A.R.S.I.,

Inspector of Dairies, Cowsheds & Milkshops.

Conclusion.

In conclusion, I have to thank the Registrar and Sub-Registrars of Births and Deaths for prompt information and other assistance. The daily return of births and deaths is a great improvement upon the old system of weekly returns. Copies of death certificates are sent to me on cards provided for the purpose within twenty-four hours of registration, so that we are able to make inquiry, and, when necessary, offer to disinfect a room before it is taken into use after a death. Our early information concerning births we get from the midwives.

My thanks are likewise due to the members of the medical profession for their co-operation in the prevention of disease. Among the deaths of the year I regret to have to record that of Dr. Field, for twenty-seven years the medical attendant of the Statutory Hospital. As a physician he was universally respected, and his devotion to his duties at the Hospital was remarkable. His death is a great loss to the City.

I have also to acknowledge valuable advice from the Town Clerk, and the cheerful assistance I have received from each member of the Staff of the Health Department. The amount of work accomplished is a sufficient testimony of industry.

To the City Council, and especially to the Members of the Sanitary Committee, I have to express my gratitude for much kindness. The duties of a Medical Officer of Health bring him into conflict with many private interests, and great responsibility attaches to most of his actions. The tendency is to give such an officer the maximum of responsibility with the minimum of control; to be successful he must be quick to think out a problem to the end, but slow to speak. Success in preventing disease necessarily attracts no notice; but a failure, a single false step, a thoughtless remark, or perhaps a mishap he could not prevent, is patent to every one. At such a time the sympathetic confidence of this Committee is invaluable.

I remain, their obedient servant,

W. H. SYMONS,

Medical Officer of Health.

Guildhall, Bath;

March 21st, 1906.