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COUNTY BOROUGH OF BURNLEY.

LOCAL SANITARY AUTHORITY.

Report on the Public Health
AND
Sanitary Administration,
FOR THE YEAR 1909,

TO WHICH IS ADDED THE

Annual Report to the Local Education Authority.

THOMAS HOLT, M.D., D.P.H.,

MEDICAL OFFICER OF HEALTH.

MEDICAL OFFICER, CROWN POINT SMALLPOX HOSPITAL,

MEDICAL OFFICER TO THE TRAMWAYS COMMITTEE.

MEDICAL OFFICER TO THE EDUCATION COMMITTEE.

BURNLEY :

JOHN DIXON, LTD., BOROUGH PRINTING WORKS, MANCHESTER ROAD.

HEALTH COMMITTEE, 1909.

ALDERMAN KEIGHLEY, J.P., Chairman.

COUNCILLOR HEATON, Vice-Chairman.

THE MAYOR (ALDERMAN GREY).

ALDERMAN NUTTER.

COUNCILLOR CHADWICK.

„ CLARKSON. (From November).

„ CLEGG. (From November).

„ R. HARGREAVES.

„ IRVING.

„ SIMPSON.

„ SINCLAIR.

„ A. H. SMITH. (Retired November).

„ WALMSLEY.

„ WHITEHEAD.

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COUNTY BOROUGH OF BURNLEY.

HEALTH DEPARTMENT.

MEDICAL OFFICER'S REPORT

For the Year ended 31st December, 1909.

TO THE URBAN SANITARY AUTHORITY,
COUNTY BOROUGH OF BURNLEY.

GENTLEMEN,

I have the honour to present my Annual Report as Medical Officer for the County Borough of Burnley for the year 1909.

The year is remarkable for the very low death rate, the lowest of which I have any record for Burnley. The infantile mortality is also much lower than last year.

The chief event in the Department of Public Health is the Compulsory Notification of Pulmonary Tuberculosis, the powers for which were obtained in the Burnley Act of 1908. This notification has been in force for eleven months, and an account of it will be found in the following Report.

Another event of great importance is the establishment of a Public Health Laboratory, an institution which in view of the discoveries and advances of preventive medicine in recent years is so essential for a Public Health Authority to be provided with. The examination of the blood of supposed enteric fever patients, the examination of sputum for tubercle bacilli, and that of the exudations from throats of suspected diphtheria patients is undertaken; these of course being the chief directions in which bacteriology effects the public health. The Laboratory was only opened for this work at the end of the year, and no report so far is presented. However, in the short time it has been opened, there is distinct evidence of the appreciation by the medical men of this aid to diagnosis of the diseases mentioned, and the Laboratory will aid us greatly in our dealing with infectious disease.

Another event of the year is the drawing up of Byelaws with respect to Nuisances ; these were sanctioned by the Local Government Board, in October.

I take this opportunity of thanking the Members of the Health Committee for their kindness and for their encouragement and assistance during the year.

To the various Members of the Staff of this Department for their assistance throughout the year, and also for the extra and tedious work entailed in getting the materials together for this report I wish to record my thanks.

I have the honour to be,

Gentlemen,

Your obedient Servant,

Thos Howard.

Medical Officer of Health.

March, 1910.

SUMMARY OF VITAL STATISTICS FOR 1909.

AREA 4,015 Acres.

POPULATION IN 1901 97,043

ESTIMATED POPULATION IN 1909 106,267

DENSITY..... 26.4

BIRTHS..... 2,656

Birth Rate, 24.9.

DEATHS 1,705

Death Rate, 16.0.

INFANTILE MORTALITY..... 157 per 1,000 Births.

DEATHS IN PUBLIC INSTITUTIONS 450

Union Workhouse Infirmary...	313	Non-residents...	119
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Victoria Hospital	110	„ ...	36
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Sanatorium.....	27	„ ...	4
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RATEABLE VALUE (MARCH, 1909)..... £407,117

REPORT.

GENERAL INFORMATION.

Extracts from
Memorandum of
Local Govern-
ment Board.

The following is an extract from the Memorandum issued by the Local Government Board as to Annual Reports of Medical Officers of Health :—

“ Every medical officer of health, appointed under Order of the Local Government Board is required to make an Annual report with regard to each sanitary district or division of a district, which is under his superintendence. This report is to be for the year ending the 31st of December.

The following deserve to be especially borne in mind as subjects concerning which the Board desire to obtain, through annual reports of the medical officer of health, not only definite general information, but record also of particular changes of condition that may have occurred incidentally or by action of the local authority :—

Physical features and general character of the district, and general conditions of its population.

The chief occupations of the inhabitants.

House accommodation, especially for the working classes, its adequacy and fitness for habitation.

Water supply of the district.

Milk supply, character and wholesomeness of milk produced within the district or imported ; condition of Dairies, &c., Tuberculous Milk.

Methods of Food inspection.

Sewerage and drainage.

Excrement disposal and disposal of house refuse.

Nuisances.

Byelaws as to houses let in lodgings, Offensive trades, &c.

Schools, especially Public Elementary Schools, Sanitary conditions of, arrangements for medical inspection of School children.

Methods of dealing with Infectious diseases.

Methods of control of Tuberculosis.”

Burnley—
Situation and
Physical
Features.

PHYSICAL FEATURES.—Burnley is situated in the valleys of the Brun and Calder, on the western slopes of the Penine Chain, in Latitude 53° 47' 30" N., and Longitude 2° 14' 30" W.

The height above sea level varies from 300 to 775 feet, with a mean of 465 feet.

Geological
Formation.

It is built on a clay subsoil, and derives its water supply from the hills to the east of the town.

Population.

POPULATION.—In 1891 the population was 87,016.

In 1901 ,, ,, 97,043.

The difference between these two numbers shews us the rate at which Burnley has increased in the decade, 1891—1901. If we estimate that Burnley has increased at the same rate during the period from 1901 to the present time, then the population in the middle of 1909 would come to 106,267, and it is on these figures that the rates for 1909 in this Report are calculated.

Another method of estimating the population is to subtract the number of deaths from the number of births and add the difference to the previous census. The excess of births over deaths in Burnley since the last census has been 8,449. Adding this number to the population of 1901, the population in Burnley to-day would be 105,492. This method, however, does not take into account the changes due to the migration of country populations into the larger towns, and it is not, as a rule, the method adhered to in estimating inter-census populations.

The following table gives the age and sex distribution for 1909, estimated in the way already mentioned :—

Table I.—AGE AND SEX DISTRIBUTION.

Ages.	Census of 1901.	Estimated for 1909.		
		Total 1909.	Males.	Females.
At all ages	97,043	106,267	49,732	56,535
Under 1	2,410	2,634	1,321	1,313
1 to 2.....	2,104	2,300	1,132	1,168
2 to 3.....	2,008	2,198	1,091	1,107
3 to 4.....	2,247	2,455	1,201	1,254
4 to 5.....	2,136	2,353	1,174	1,179
Total under 5.....	10,905	11,940	5,919	6,021
5 to 10	10,325	11,311	5,535	5,776
10 to 15	10,031	10,985	5,327	5,658
15 to 25	19,556	21,414	9,578	11,836
25 to 35	16,305	17,864	8,135	9,729
35 to 45	12,876	14,089	6,667	7,422
45 to 55	8,968	9,818	4,659	5,159
55 to 65	5,266	5,766	2,700	3,066
65 and over	2,811	3,080	1,212	1,868

Occupation.

OCCUPATION.—The occupation of the population is mostly in the cotton weaving trade. It is estimated that over 30,000 people are actually engaged in this in Burnley. It finds employment for children as “half-timers” who must be over twelve, and adults both men and women. The estimated numbers employed in this way are given in the following table. The hours the cotton operatives work are from 6 to 8, 8-30 to 12-30. and 1-30 to 5-30.

Table II.—THE AGE AND SEX DISTRIBUTION

OF PEOPLE EMPLOYED IN VARIOUS OCCUPATIONS ARE ESTIMATED AS FOLLOWS.

Ages.	Total.	Males.	Females.
COTTON INDUSTRY—			
At all ages	30,575	12,707	17,868
10 to 15	3,518	1,504	2,014
15 to 25	12,048	3,943	8,105
25 to 45	11,886	5,173	6,713
45 to 65	2,985	1,961	1,024
65 and upwards.....	138	126	12
Unmarried Females engaged in Cotton Industry.....			11,502
Married or Widowed Females engaged in Cotton Industry			6,366
Total.....			17,868
OTHER OCCUPATIONS—			Estimated Number.
Milliners, Dressmakers, and Seamstresses			1,392
Domestic Servants (Females)			1,376
Laundry and Charwomen			391
Clerks and Agents			946
Colliers and others employed in Mines			4,017
Engineers and Ironworkers			2,112
Builders and Workers of Constructions.....			2,472
General Labourers.....			730
Carriers, &c.			852

Houses.

HOUSES.—These are for the most part substantially built of sandstone, and the nature of the dwellings is as follows :—

One-roomed dwellings	102
Back-to-back and single dwellings	2208
Other dwellings	21495
Total.....	23805

Those shown as single room dwellings are mostly dwellings which are below the street level but are not cellars according to law.

The great bulk of the houses are four-roomed, self-contained and commodious ; each having its own back yard, which, in the newer houses, must contain 120 square feet.

Water Supply.

THE WATER SUPPLY, owned by the Corporation, is entirely of upland water. The present capacity of the reservoirs is 440,000,000 gallons, taken from a gathering ground of about 2,000 acres, in which there is no cultivated land. The water is contained in five reservoirs, which are all situated within three or four miles of the centre of the town. Powers have been obtained to construct a new reservoir which will hold another 300,000,000 gallons. The water from Cant Clough is filtered, partly through mechanical filters and partly through filter beds, as the water is often discoloured with peaty matter.

Consumption of Water.

The Consumption of Water during the year 1909 was 937,222,125 gallons, with an average daily consumption per head of 24·1 gallons for all purposes.

Rainfall.

The Rainfall for 1909 at the gathering ground was 42·43 inches ; at Queen's Park, 40·2 inches.

The Sewage System.

THE SEWAGE SYSTEM.—The excreta is disposed of chiefly by the water-carriage system, and is carried by gravity to the sewage works at Wood End and Altham. The sewage is passed into septic tanks, the deposit being afterwards pressed and used as manure. The effluent, after passing through the clinker beds, is discharged into the river.

The Sewage System.

Clean Water Closets.....	7125
Waste Water Closets	17375
Trough Closets—569 Closets..	2417
Wall, Earthenware, and Pail Privies.....	408
Number of Public Urinals	39

Refuse.

Disposal of Refuse.—This is disposed of at the Destructor, which is centrally situated, and at tips in various parts of the town.

There are in Burnley :—

	1908	1909
Ashpits	19244	19028
Ashbins	2989	3686

Streets.

STREETS.—Nearly all the main roads, streets and back courts are well paved. The regulation width of new streets is now 36 feet, and the back courts are mostly 12 feet wide.

Open Spaces.

The combined area of the **Public Parks and Recreation Grounds** amounts to over 181 acres.

Baths.

There are three **Public Baths**, owned by the Corporation, one in the centre of the town, a second in Gannow for the west end of the town, and the third in North Street nearly completed at the end of the year.

The number of bathers for the year ending March 31st, 1909, was 142,159. At the Central Baths there is a special room containing 25 shower baths for school children. There is also a similar provision in the new baths.

Abattoirs.

Abattoirs.—All the slaughtering is done at the Public Abattoirs, a matter of great advantage in the prevention of the sale of diseased or otherwise unfit meat. Further particulars about the Public Abattoirs will be found under the heading of Food Inspection.

Victoria Hospital.

PUBLIC INSTITUTIONS.—The **Victoria Hospital** which is a charitable institution, has provision for about 75 patients. It is a general Hospital, and quite a modern building.

Sanatorium

The provision for Infectious Diseases is controlled by the **Joint Hospital Board**, a Board with representatives from Burnley County Borough, Brierfield Urban District, Padiham Urban District, and Burnley Rural District. This Board has under its management the **Sanatorium**—a modern institution with pavilions capable of accommodating 116 patients. It is used for the treatment of all the Notifiable Infectious Diseases with the exception of Smallpox. It is situated about two miles from the centre of the town on a hill overlooking it.

**Smallpox
Hospital.**

The provision for Smallpox, also under the Joint Hospital Board, is at **Crown Point**, a hill on the south side of the town, about 1,000 feet high, and just outside the Borough. It is a corrugated-iron structure, and is in an excellent position as regards isolation. No patients have been admitted during the year to this Hospital.

The Corporation own a block of buildings in Briercliffe Road, which could be used if required for the isolation of any infectious disease contacts, or as a disinfecting station, more especially of smallpox contacts. These buildings which were formerly for the accommodation of smallpox patients, are under the charge of the Health Committee.

Workhouse.

The **Workhouse** of the Burnley Union, with its Infirmary, is situated within the Borough. There is also provision made for the isolation of Phthisical pauper patients.

Schools.

SCHOOLS.—The present total accommodation for children in Public Elementary Schools amounts to 19,284. Eleven of these schools are quite modern buildings, and accommodate about 9000 children.

VITAL STATISTICS.

Births and
Death.

BIRTHS AND DEATHS.—There are two Registration Sub-districts in Burnley, East and West Wards.

The East Ward* comprises the municipal wards of St. Andrew's, Daneshouse, Stoneyholme, St. Peter's, St. Paul's, and Fulfilledge.

The West comprises the municipal wards of Burnley Wood, Healey, Trinity, Whittlefield, Gannow, and Lowerhouse.

In the East Ward there were registered :—

Births	1,413
Deaths.....	1,171

In the West Ward there were registered :—

Births	1,243
Deaths.....	680

Births.

BIRTHS.—There have been 2,656 births (1,374 males and 1,282 females), of which 39 were born in the Workhouse (21 males and 18 females).

These figures give a birth rate of 24·9 as compared with 28·2 last year, and an average of 28·0 for the last 10 years.

The birth-rate for England and Wales for the last year was 25·6, and for the 76 large towns, 25·7.

The birth-rate is highest in St. Paul's Ward (31·9), and lowest in Healey (19·0).

Illegitimate
Births.

Illegitimate Births.—There have been 137 illegitimate births (71 males and 66 females) as against 161 last year. 23 of these were born in the Workhouse, and 10 were children of mothers whose homes were in other parts of the Union. Of these there were 127 Burnley mothers, as against 154 last year.

Deaths.

DEATHS.—The total deaths in Burnley were 1,851. Of this number 159 were of non-residents, whose deaths occurred either in the Workhouse, Victoria Hospital, or Sanatorium. This leaves

*All the Public Institutions are in this Ward.

Deaths.

1,692 deaths of residents. To this number has been added 13 deaths of Burnley people who have died in Public Institutions outside Burnley. Nine of these died in the County Asylum at Lancaster.

The net deaths, therefore, are 1,705 (males 868, females 837), giving a death-rate of 16·0. This rate is the lowest for at least the last 28 years, which is as far back as my records go.

The rate last year was 17·9, and the average for the last ten years 18·9.

The general death-rate for England and Wales in the year 1909 was 14·5, and for the 76 large towns 14·6.

The particulars of the deaths, with the ages and the wards, are given in the Appendix.

Inquests.

Inquests.—There were 123 inquests held in Burnley during the year ; the verdicts were as follows :—

Accidental Death	57
Natural Causes	48
Suicide	17
Homicide	1

Of the above number 10 were non-residents.

CAUSES OF DEATH.

Infantile Mortality.

Infantile Mortality.—The number of deaths of children under one was 417, and the Births numbered 2,656, which gives a rate of 157 deaths per thousand children born. Of the births 137 were those of illegitimate children, and 40 of these died during the year, the mortality rate of illegitimate children working out at 292 per thousand of illegitimate children born.

This Infantile Death-rate is a great improvement on last year, but still remains a high figure as compared with the rest of the country. Our relative position to other towns in Lancashire and to other large towns in the country is shown in two tables on pages 13 and 14. The great decrease this year is owing to what is for Burnley an exceedingly small number of deaths from Diarrhoea, the other causes maintaining relatively the same proportion as formerly.

The efforts of the Health Committee to combat our high infantile mortality commenced some years ago with the opening of a Milk Depôt, and the employment of Female Health Visitors. The Milk Depôt is still open and an account of its work will be found later. Three Female Health Visitors are employed and an account of their work is also found later.

During the year a new agency in dealing with this subject has come into being, the Guild of Help, and an account of some of the work of this Society will be given.

By arrangement also we employ for special cases, as occasion requires, the services of a Nurse from the Nursing Home.

The Early Notification of Births Act is also working successfully, and full particulars of it are given under that heading.

**Table III.—Infantile Mortality in the Lancashire Towns
during 1908 and 1909.**

NAME OF TOWN.	1908.	1909.
Ince-in-Makerfield.....	176	211
Hindley	161	181
Wigan	155	172
Ashton-under-Lyne	184	164
Farnworth	209	161
BURNLEY	200	156
Leigh.....	172	150
St. Helens	122	149
Stalybridge.....	218	146
Chorley	138	145
Liverpool.....	141	143
Salford	152	141
Gorton	166	140
Widnes	134	139
Preston	153	136
Bacup	108	136
Manchester	146	134
Stretford	103	132
Stockport	168	131
Warrington	134	130
Bury	129	130
Bolton	144	128
Darwen	118	127
Blackburn	148	126
Accrington	138	123
Birkenhead.....	135	123
Bootle	147	121
Oldham.....	159	119
Swinton and Pendlebury.....	152	113
Middleton	153	112
Radcliffe	145	112
Blackpool	139	112
Eccles	120	111
Colne	142	108
Lancaster	87	105
Rawtenstall	116	104
Southport	102	103
Chadderton	144	103
Rochdale	168	103
Nelson	117	87
Wallasey	102	83
Heywood	160	82
Barrow-in-Furness.....	111	81
Waterloo.....	133	80

**Table IV.—Showing Population, Birth Rate, Death Rate,
and Infantile Mortality in 36 large towns.**

Taken from the Registrar General's Reports.

Name of Town.	Population in 1909.	Birth Rate.	Death Rate.	Infantile Mortality.
Middlesborough	105,255	31·8	19·3	157
Oldham	143,301	27·3	19·0	119
Wigan	90,678	31·4	19·0	172
Liverpool	760,537	31·1	18·9	143
St. Helens	95,161	32·0	18·5	149
Salford	241,950	27·7	17·9	141
Manchester.....	655,435	27·7	17·8	134
Merthyr	78,365	35·5	17·6	143
Swansea.....	98,308	32·9	17·5	158
Warrington	72,276	31·2	17·0	130
Bootle	69,393	30·4	16·8	121
Rhondda	135,894	41·0	16·8	129
Sunderland.....	159,378	28·6	16·8	134
Stockport	103,706	26·3	16·4	131
Nottingham	263,443	25·6	16·2	149
Blackburn	136,959	22·8	16·2	126
Huddersfield	94,739	24·4	16·2	95
Bury.....	59,234	20·7	16·1	130
BURNLEY	106,267	25·0	16·0	156
Birkenhead	121,123	30·7	15·9	123
Preston	118,519	25·6	15·8	136
Rochdale	89,653	20·4	15·4	103
Birmingham	563,629	26·5	15·3	134
Sheffield	470,958	28·1	15·0	118
Bolton.....	187,824	24·6	15·0	128
Hull.....	275,252	29·3	14·9	113
Newcastle.....	281,584	27·2	14·6	114
Bradford.....	293,983	18·7	14·4	116
Leeds.....	484,012	22·7	14·0	121
Halifax	111,911	16·4	13·8	96
Derby	129,411	24·8	13·3	123
Cardiff	195,303	25·7	13·1	103
Leicester	244,255	21·8	12·8	137
Gateshead.....	131,024	28·6	12·6	112
Barrow-in-Furness	62,996	26·0	12·1	81
York.....	87 004	23·7	11·3	98

Showing Total Deaths for each week during 1909.

Deaths under One year shown black.

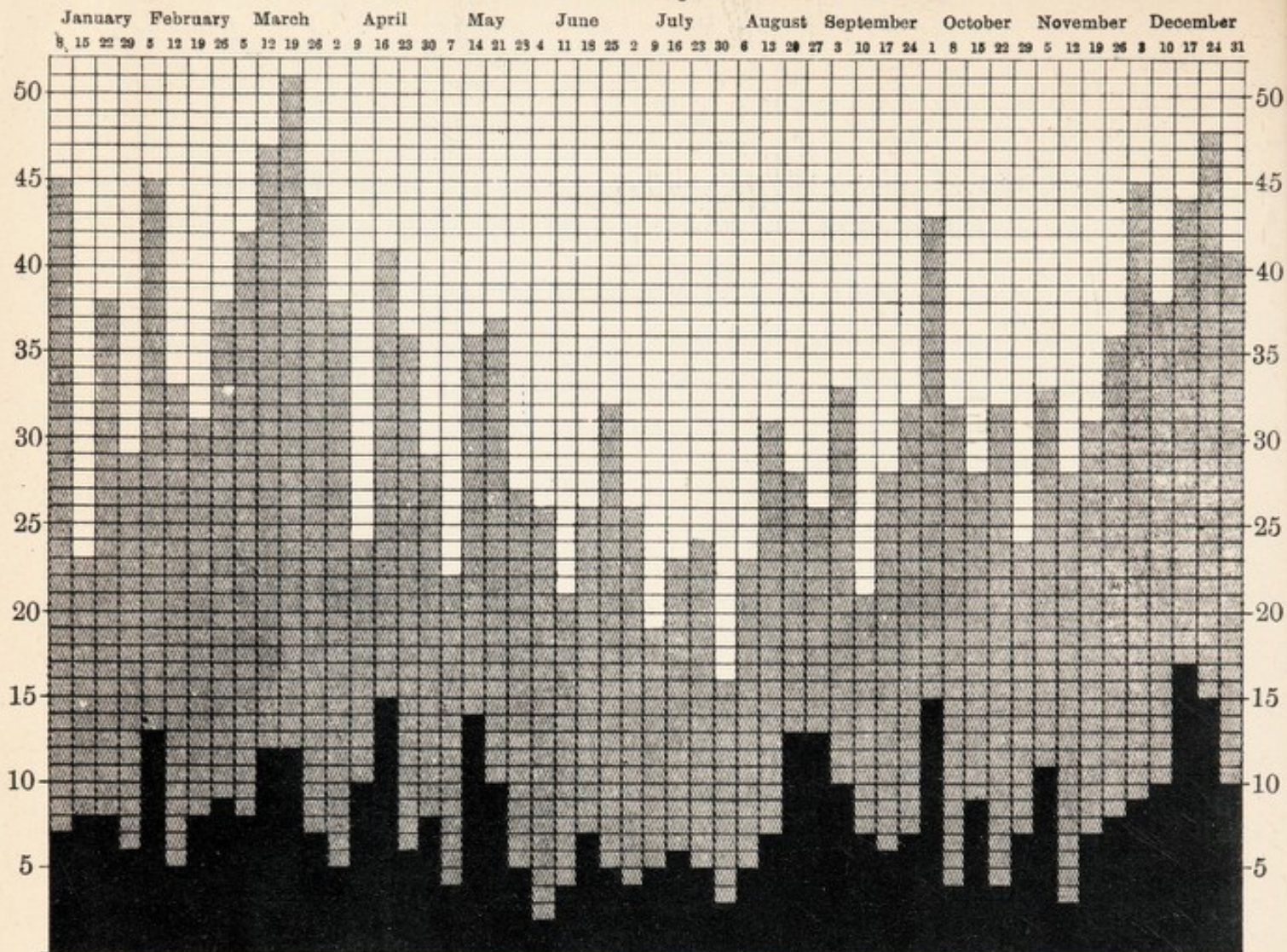
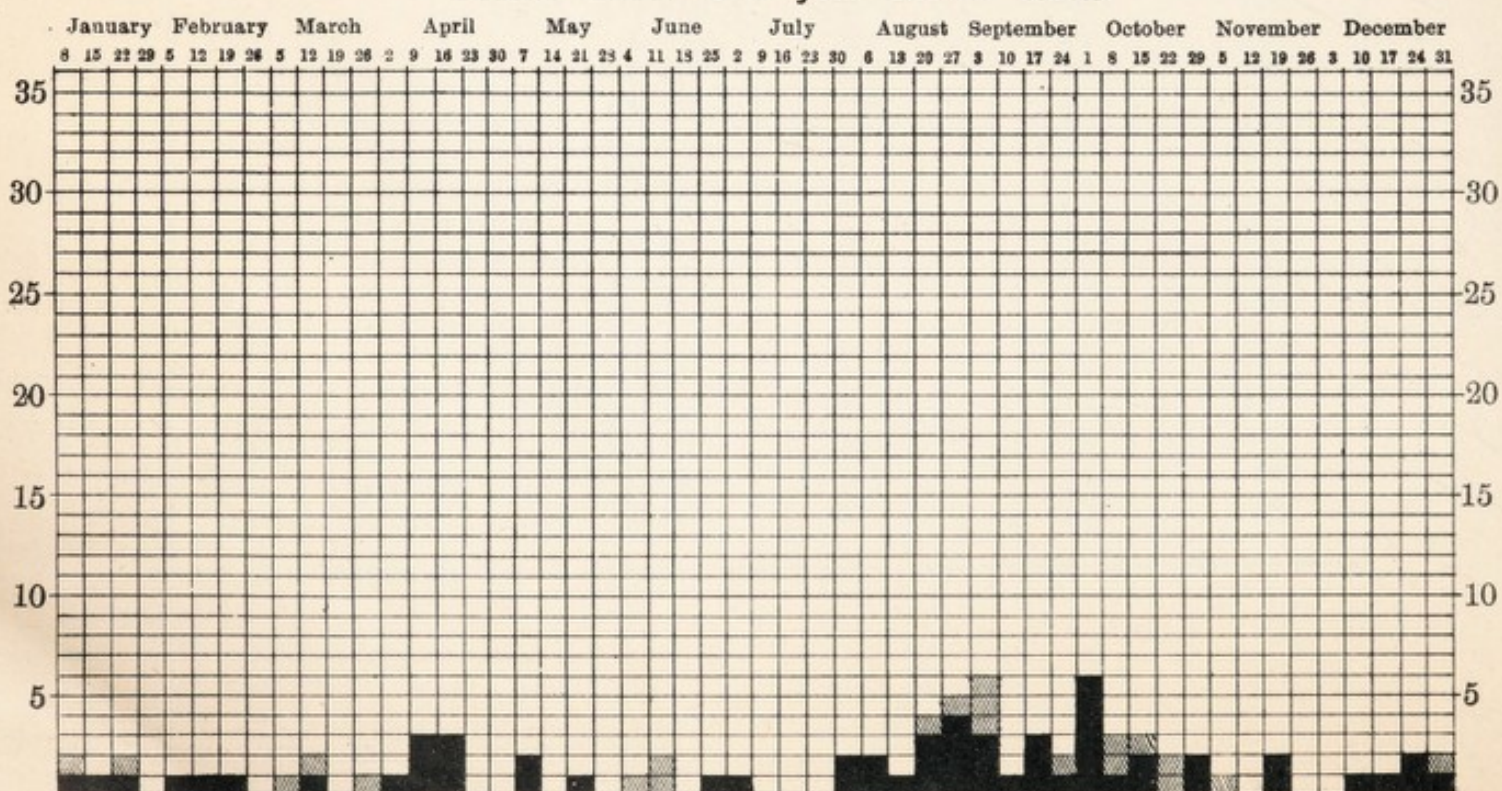


CHART No. 2.

Showing Deaths from Diarrhœa for each week during 1909.

Deaths under One year shown black.



Causes of Death of Children under One Year.

CAUSE.	No.
Congenital Diseases.....	140
Premature Births	65
Debility	42
Congenital Defects	33
Respiratory Diseases	108
Bronchitis	93
Pneumonia.....	14
Laryngitis	1
Diarrhœa	57
Tuberculous Diseases.....	20
Meningitis	10
Intestines	7
General	2
Glands.....	1
Convulsions.....	14
Gastritis.....	12
Accidental Death	*12
Whooping Cough	8
Syphilis.....	7
Measles	5
Meningitis	5
Teething	5
Natural Causes	4
Nephritis	3
Jaundice.....	2
Middle Ear Disease	2
Rickets	1
Scarlet Fever.....	1
Diphtheria.....	1
Influenza	1
Uncertified.....	9
Total.....	417

* 11 of these cases were accidentally suffocated.

Of the above number at least 225 can be looked upon as deaths from preventable disease.

Congenital Causes of Death.

Congenital Causes of Death.—Premature Birth, Debility from birth, Marasmus, and Congenital Defects. There were 140 deaths from these causes ; Premature Birth 65, Debility, &c. 42, Congenital Defects 33.

The number of deaths from Congenital causes for the last four years is as follows :—

	1906.	1907.	1908.	1909.
Number of deaths.....	94	147	167	140
Rate per thousand deaths..	33	49	56	52

Enquiry regarding the mothers shews the following :—

	Working Mothers.	Housewives.
Premature Birth	41	19
Debility, Marasmus, &c...	19	23
Congenital Defects.....	14	18
Totals.....	<u>74</u>	<u>60</u>

Some further particulars will be found under the heading "Infantile Mortality" in the Appendix.

Infantile Diarrhœa.

Infantile Diarrhœa.—The number of deaths from this disease is 57, the lowest figure for many years.

The following table shows the relationship between the infantile mortality and Diarrhœa :—

	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909
Diarrhœa Deaths.....	150	157	68	115	190	123	208	72	155	57
Infant Mortality per thousand births	208	227	175	216	232	174	212	156	201	157

That this disease is related very closely to the weather is here well shown. The summer was a very cold one, but what I think was of more effect even than the want of heat was the excess of moisture. During the three months that Diarrhœa is usually prevalent in Burnley—August, September and October—there were no less than 54 wet days out of 92.

Infantile Diarrhœa.

This moist state of our atmosphere has had the effect of preventing the diffusion of the usual amount of dust which undoubtedly is one of the chief sources of the pollution of food, and subsequent diarrhœa. Every possible means should be taken, especially in the dry weather, to prevent this pollution of the atmosphere which is brought about by the dust of the streets and from the emanations of the numerous uncovered ashpits and manure heaps.

The question of ashpits and manure heaps is one that should have very serious attention, and the sooner all the former can be abolished and dust bins substituted, the better. Dust bins of suitable size and emptied at frequent intervals should displace the old-fashioned, insanitary, and unpleasant ashpit, with its often-broken door, and unavoidable nuisance when it is emptied. As regards the manure heaps, much has been done during the year to improve these, and much remains to be done.

Feeding.—Of the 57 children who died from diarrhœa, 50 were fed by the bottle. Of the other 7, 4 were in very dirty homes, and the other 3 were under a month old at the time of death.

Occupation of Mother.—24 mothers were working at the time of the child's illness.

Respiratory Disease.

Respiratory Diseases.—Bronchitis, Pneumonia and Laryngitis have caused 108 deaths of children under one year of age during the year; Bronchitis 93, Pneumonia 14, Laryngitis 1.

These figures compared with last year show a proportionate increase. The bulk of these deaths occurred during the months of November and December, when the weather was exceptionally severe.

The number of deaths from these diseases for the last four years is as follows :—

	1906.	1907.	1908.	1909.
Number of deaths.....	91	126	69	108
Rate per thousand births..	32	42	33	40

Of the 108 infants who have died from Respiratory Diseases, only two were under one month old, 68 were bottle fed, 37 breast fed, and three were not visited.

Occupation of Mothers :—

Weavers, Winders, &c.	At Home.
56	52

Infectious Diseases.—15 deaths—Whooping Cough 8, Measles 5, Scarlet Fever 1, and Diphtheria 1. There were 37 deaths during 1908 of children under one from these diseases.

Infectious
Diseases.

The figures relating to the housing of the infants are as follows :—

Dwelling Place.	No. born.	Died.	Rate per 1,000 births.
Workhouse	39	21	538
Single-room Dwellings	38	7	184
Back-to-back Dwellings	414	71	171
Other Dwellings (4 rooms and over)....	2029	308	151
Not Visited	136	10	73
Totals	2656	417	157

Of the 2,656 births, 2,409 were enquired into by the Health Visitors, and of this number 1,114 were the children of working mothers.

RESPIRATORY DISEASES.

Bronchitis and
Pneumonia, &c.

During the year 528 deaths have been caused by Respiratory Diseases, as against 482 last year. This group includes Bronchitis, Pneumonia, Laryngitis, Pleurisy, Asthma, and Phthisis.

Bronchitis, &c.—408 deaths, last year 354. The age distribution of these deaths was as follows:—

Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	Over 65.
108	69	8	3	39	92	89

Bronchitis has caused most of the deaths under one and over 65, Pneumonia being given as the cause in most cases between 45 and 65. Further particulars will be found in the Table given in the Appendix.

Phthisis.

Phthisis or Tuberculosis of the Lungs caused 120 deaths, last year 128. The age groups were as follows:—

Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	Over 65.
—	2	9	18	54	29	8

Of the 120 Phthisis deaths, 32 died in the Workhouse, this number being the same as last year.

The average age at death was 36·7, as against 35·4 last year.

The following is a list of the occupations of the persons who have died from Phthisis during the year:—

Occupation.	No.
Textile Operatives.....	43
Labourers	13
Stone Masons	3
Other Occupations—Outdoor.....	7
Indoor	22
Housewives	20
No occupation.....	12
Total.....	120

Phthisis.

The following table shows the number of deaths from Tuberculosis of the Lungs in Burnley for the last ten years, together with the death rate per thousand of the population :—

	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909
No. of deaths from Phthisis	160	160	142	150	149	79	140	142	128	120
Rate per 1000 of the population	1·60	1·64	1·43	1·51	1·50	0·79	1·36	1·36	1·20	1·12

The powers obtained in the Burnley Act of 1908 for the compulsory notification of Tuberculosis of the Lungs were brought into force on February 1st. A month before that date the compulsory notification of Phthisis by Poor Law officials had commenced. This latter was brought about by an Order of the Local Government Board which provides that :—

“Whereas Tuberculosis is an endemic disease, and that form of the disease which is known as Pulmonary Tuberculosis is an infectious disease ; and whereas it appears to us to be expedient that for preventing the spread of Tuberculosis, including Pulmonary Tuberculosis, such Regulations as are hereinafter set forth be made in relation to that disease.”

The following is a summary of the Regulations :—

- (a) The Medical Officer of a Poor Law Institution shall notify a case of Pulmonary Tuberculosis occurring in that institution to the Medical Officer of Health for the area in which the Poor Law Institution is situate.
- (b) In the case of an inmate who has entered a Poor Law Institution from an area outside the district in which the institution is situate, the notification must be sent to the Medical Officer of Health for the area in which the person last resided.
- (c) A District Medical Officer must notify to the Medical Officer of Health a case of Pulmonary Tuberculosis in a poor person upon whom he is in medical attendance according to his agreement with a Board of Guardians.
- (d) In the case of a poor person suffering from Pulmonary Tuberculosis who is an inmate of a Poor Law Institution removing outside that institution, the Superintending Officer must

Phthisis.

notify the intended place of destination to the Medical Officer of Health for the area in which such place is situate.

- (e) A Relieving Officer shall notify to the Medical Officer of Health the particulars of a change of residence of a poor person who has been notified as suffering from Pulmonary Tuberculosis.

The section of the Burnley Act is as follows :—

SECTION 109.

(1)—(a) Every registered medical practitioner attending on or called in to visit any person within the borough shall forthwith on becoming aware that such person is suffering from tuberculosis of the lung send to the medical officer a certificate on a form to be supplied to him gratuitously by the Corporation, stating the name, age and place of residence, and employment or occupation (so far as can be reasonably ascertained) of the person so suffering, and whether the case occurs in his private practice or in his practice as medical officer of any hospital, public body, friendly or other society or institution.

(b) Any such medical practitioner who fails to give such certificate shall be liable on summary conviction to a fine not exceeding forty shillings.

(c) The Corporation shall pay to every such medical practitioner for each certificate duly sent by him in accordance with this section a fee of not exceeding two shillings and sixpence if the case occurs in his private practice, and of one shilling if the case occurs in his practice as medical officer of any hospital public body friendly or other society or institution.

(d) A payment made to any medical practitioner in pursuance of this section shall not disqualify that practitioner from serving as a member of the Corporation or as a guardian of a union situate wholly or partly in the borough or in any municipal or parochial office.

(5) No provisions contained in any general or local Act of Parliament relating to infectious disease shall apply to tuberculosis of the lung or proceedings relating thereto under this section.

(6) All expenses incurred by the Corporation in carrying into effect the provisions of this section shall be chargeable on the borough fund and general rate.

(7) The Corporation shall give formal notice of the provisions of this section by registered post to every medical practitioner in the borough, and any other registered medical practitioner known to be in practice in the borough, and this section shall come into operation at such time not being less than one month after the first publication of an advertisement prescribed by the section of this Part of this Act the marginal note of which is "Public notice to be given of provisions of this Part of Act," as the Corporation may fix.

Phthisis.

(8) The provision of this section shall cease to be in force within the borough at the expiration of two years from the date of the passing of this Act unless they shall have been continued by Act of Parliament or by Provisional Order made by the Local Government Board and confirmed by Parliament, which Order the Local Government Board are hereby empowered to make in accordance with the provisions of the Public Health Act, 1875.

As a result of representations made to the Local Government Board, the duties under the Local Government Board Order are suspended in Burnley in so far as they are covered by the section of the Local Act referred to. This means that any case of Phthisis in Burnley coming under the notice of a medical man must be notified under section 109 of the Local Act, whether a pauper or not. The part of the Order relating to changes ^{of address} of phthisical paupers has still to be carried out by the Poor Law Officials.

It is hoped by the compulsory notification of phthisis to attain a better knowledge of this extremely fatal disease. Our knowledge at the present time is very imperfect regarding its prevalence, its infectivity, and also its mortality. All our knowledge as a Public Health Authority of its prevalence has so far been based upon the number of deaths that occur from it. This, of course, is a very uncertain method of estimating. As to its infectivity it is well known that the disease is infectious but the infection of phthisis, and that say of smallpox, are so widely different that the term is hardly comparable when applied to the two diseases. In the case of smallpox, and this also applies to nearly all the acute infectious diseases, probably a single exposure to the infection is all that is required for a person to take the disease, and having "caught" it, to show within a short period marked symptoms and signs of that disease. These acute infectious diseases in almost all cases pursue a definite course. First there is the infection, and after a definite period of incubation comes the onset with as a rule high temperature. This onset is followed by certain signs and symptoms which exhibit themselves in definite order at periods which are of relatively fixed date for each disease. If we compare the history of an attack of phthisis with this, we can see that it differs in almost every particular. As far as we can judge the infection must be frequently repeated before a person succumbs, as indicating this there is every reason to believe many children take the disease owing to being constantly fed with milk from cows which have tubercular disease, and that older persons contract the disease by the constant exposure due to living and

Phthisis.

sleeping in the same room for months or even years with a person who has the disease and is giving off the infection by means of the sputum. As to the exact time that infection takes place, and length of the incubation period we cannot say. After infection and incubation it is not known how long a period elapses before any signs or symptoms are shown by the person suffering, and between the appearance of these signs and the end of the disease the period widely varies, being in some cases a few months or even weeks (galloping consumption) and in other several years (chronic consumption).

These facts are well shown by the results of the notifications already received. An appreciation of them will show how difficult it is to cope with an infectious disease of this kind from the Public Health standpoint. With the ordinary infectious disease a notification can as a rule be made within at the outside a day or two, but with phthisis several months may elapse and usually do before the disease is notified to the Authority, and it may be that during this time the person suffering has been constantly giving off infection. Phthisis is a disease that is often exceedingly difficult to diagnose, and the actual demonstration of the disease, *i.e.*, the presence of the tubercle bacilli in the sputum is difficult in the early stages.

The notification of phthisis is not carried out generally, and most of the places that have obtained the powers have only done so as an experiment. Our present powers in Burnley expire in August next, and application has been made for a renewal of those powers for a further period of 10 years, as the results of this notification have not had time to be conclusive in any way. The result of the notifications are given later.

Phthisis is an extremely fatal disease, but what proportion of cases prove fatal is not known. There is, broadly, two classes of cases that come before the medical man; the suspicious or incipient cases, and the well-marked and almost always fatal ones. Many of the former are treated by private medical men at home and recover, but as a rule cases in a town do not recover, and it is necessary to remove them to the country, where they may be put under better conditions as to purity of atmosphere. Many cases, even when well marked, recover when put under suitable conditions and with suitable treatment.

Phthisis.

The second class of cases, the well marked and extremely fatal, are those of the most urgent importance to a Public Health Authority, for they mostly give off infection, and notification if only of these alone, is of use, for it enables the infectious and therefore dangerous cases to be kept under supervision.

The diagnosis by means of the sputum has already been mentioned, and to aid in this, a laboratory was opened at the Health Office at the latter end of the year, where the examination of sputum for the tubercle bacilli can now be carried out for any medical man.

A few specimens of sputum were sent to the Public Health Laboratory, at Manchester, during the year with the following results :—

No. sent.	RESULT.		
	Positive.	Negative.	Doubtful.
34	13	20	1

By means of constant examination of sputum it is hoped that all cases will become known to the Public Health Authority at the earliest possible moment. Having found a patient suffering from phthisis who is giving off the infection by means of the sputum, we endeavour as far as possible to prevent the further spread of infection. For the present we give instructions for securing the isolation of the patient in the home and dealing with infectious sputum. A Sanitary Inspector has visited the home when necessary and given instructions regarding the necessity of the patient having if possible a room to himself, the necessity for opening windows, and the great danger that arises from the sputum if it is not at once dealt with.

The question of the more effective isolation of phthisical patients by means of a sanatorium has not so far been considered, sufficient facts regarding the prevalence of the disease not being at the disposal of the Local Sanitary Authority.

The benefits of sanatorium treatment may be divided into two parts: the curative and the preventive. The curative refers to the treatment of the incipient cases by fresh air, suitable food, &c.;

Phthisis.

the preventive deals with the prevention of further extensions of the disease by means of isolation and also by teaching sufferers how they may guard themselves against giving off the infection. This latter refers to sleeping by themselves, using a pocket spittoon, &c. That there is grave danger from promiscuous expectoration by phthisical patients cannot be too greatly insisted upon, and it was with this knowledge in view that the Local Authority had cards printed for exhibition in public places, warning persons against the habit and its possible dangers. There also exists a Byelaw against spitting on the Tramcars.

From February 1st, 1909, to the end of the year, 310 notifications of Phthisis were received. Some of these were notified twice, the total number of cases notified was 289.

The ages of the cases notified was as follows :—

Age.	No.
Under 1	1
1—5.....	4
5—15	15
15—25.....	41
25—45.....	112
45—65.....	91
Over 65	20
No age given.....	5
Total.....	<u>289</u>

Of the above cases, 116 died before the end of the year. The period of time elapsing between the notification and the death was as follows :—

Dead when notified	6
Dead within 1 week of notification.....	14
Between 1 week and 1 month	30
Between 1 month and 2 months	31
Between 2 months and 3 months	12
Between 3 months and 4 months	7
Between 4 months and 5 months	5
Between 5 months and 6 months	3
Between 6 months and 7 months	2
Between 7 months and 8 months	1
Between 8 months and 9 months	3
Between 9 months and 10 months	2
Total.....	<u>116</u>

Phthisis.

Number of cases notified from the Workhouse 122, of which number 42 died during the year.

Number of Pauper cases notified outside the Workhouse 11, of which number 5 were removed to the Workhouse Infirmary.

The following are the numbers of rooms per house in which these cases were notified :—

One room.....	4
Two rooms.....	18
Three rooms	8
Four rooms	114
Over four rooms	21
Common Lodging Houses	1
Victoria Hospital.....	1
Workhouse	122
Total.....	<u>289</u>

The following are the occupations of the persons notified :—

Occupation-	No.
Weavers.....	60
Spinners.....	16
Winders	6
Other Textile Trades	8
Labourers	43
Stone Masons	9
Miners	7
Tailors.....	7
Iron Workers	5
Shop-keepers.....	5
Hawkers	4
Painters	4
Charwomen	3
Clerks	3
Cloggers	3
Barbers	2
Laundresses	2
Joiners	2
Printers.....	2
Gardeners	2
Other occupations	12
Housewives	37
At school age	8
Not stated	39
Total.....	<u>289</u>

Phthisis.

Circulars were sent out to the medical men who had notified cases of Phthisis, each Circular containing a list of questions concerning the patient.

(Copy of Circular).

COUNTY BOROUGH OF BURNLEY.

Public Health Department,
St. James' Street,
Burnley,

CONFIDENTIAL.

.....19

Dear Sir,

With reference to the case of Phthisis notified by you
on

Name

Address

I should be glad to have the case visited by my inspector, but if you think that undesirable I should be obliged if you would kindly supply me with the following information:—

1. Probable duration of illness?.....
2. How long have you attended?.....
3. Condition of patient? (Whether bedfast or not).....
4. Does patient have a room to himself or herself for sleeping?.....
5. Is there overcrowding in the house?.....
6. Is Sanatorium treatment likely to be of benefit?.....
7. Have you any opinion as to the cause of this illness?.....

.....
.....

I wish to obtain the above information in all cases if possible, in order that a report and recommendations may be made if necessary at the end of the year.

Yours faithfully,

THOMAS HOLT, M.D.,

Medical Officer of Health.

Dr.

Eighty of these Circulars were returned, and the following is a summary of the answers received:—

Probable duration of illness:—

Under one week	1
One week to one month	1
One to two months	1
Two to three months.....	3
Three months to six months	12
Six months to nine months.....	8
Nine months to one year.....	5
One to two years.....	12

Phthisis.

Two to three years	3
Three to four years	3
Four to five years	4
Over five years.....	3
Several years	2
Twenty years	1
Period not stated	21
	—
Total.....	80

How long have you attended :—

Under one week	15
One week to one month	27
One to two months	10
Two to three months.....	2
Three to four months	6
Four to five months	2
Five to six months	1
Six months to one year	1
One to two years.....	4
Two to three years	1
Three to four years	1
Four to five years	1
Over five years.....	2
At intervals	5
Not Stated.....	2
	—
Total.....	80

Condition of Patient :—

Bedfast	20
Not Bedfast.....	57
Dead when notified	3
	—
Total.....	80

Sleeping accommodation :—

Patients sleeping alone	37
Sleeping with husband	5
Sleeping with wife	4
Sleeping with other person	25
Not stated	9
	—
	80

Phthisis.

Is there overcrowding in the house :—

No	60
Yes	4
Not stated	16
	—
Total.....	<u>80</u>

Have you any opinion as to the cause of the illness :

No opinion given	36
Heredity	14

Predisposing causes :—

Pneumonia	4
Predisposing and heredity.....	4
Insufficient food	3
Alcoholism	2
Exposure	2
Illtreatment	1
Constitutional	1
Too frequent pregnancy	1
Influenza	1
Tubercular Glands	1
Marasmus	1
Heart Disease and Illtreatment	1
Influenza and Bronchitis	1
Tubercular knee	1
Indigestion	1
Personal habits	1
Stone Mason.....	1
Diabetes	1
Repeated Colds	1
Bronchitis	1
	—
Total.....	<u>80</u>

As will be seen from the Circular sent to the medical men, all the cases have not been visited by a member of our staff.

When the inspector, however, has gone to a case, he has instructions of the following nature to give to the people of the house, or the patient, as the case might be :—

- (1) Method of disposal of sputum, generally by means of heat.
- (2) Disinfection of clothing, bedding, &c.

Phthisis.

- (3) Sleeping accommodation, and the necessity for patient sleeping by himself, and having, if possible, a room to himself.
- (4) Ventilation, the necessity for the opening of windows.

The following is a summary of the action taken in regard to visiting of phthisis cases and disinfection of houses, bedding, &c. :—

Number of cases visited	51
Number of houses disinfected 11, rooms	32
Number of beds disinfected	16
Number of pillows disinfected.....	34
Number of mattresses disinfected	4
Number of sheets disinfected	9

OTHER DISEASES—

Tuberculosis.

Tuberculosis.—Besides the 120 deaths from phthisis given previously, there have been 61 deaths from other forms of tuberculosis. These are divided in the following way :—

General	9
Intestines	23
Meningitis.....	18
Osseous	8
Glands	1
Kidneys	2
Total.....	<u>61</u>

The age groups were as follows :—

Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	Over 65.
20	15	9	4	8	4	1

The following are the numbers of deaths from this disease for the past four years :—

1906.	1907.	1908.	1909.
55	69	65	61

Malignant
Disease.

Cancer and **Sarcoma** caused 59 deaths at the following age groups :—

5 to 15.	15 to 25.	25 to 45.	45 to 65.	Over 65.
2	0	10	29	18

Last year the number of deaths from these diseases was 83.

Other details in regard to Cancer are found in Table X.

INFECTIOUS DISEASES.

NOTIFIABLE.—

Scarlet Street.

Scarlet Fever.—There is a decrease of 23 cases of Scarlet Fever on last year, 462 against 485. There have been 17 deaths, giving a mortality rate per case of 3·67, as against an average of 4·86 for the last ten years.

This number of cases of Scarlet Fever can not be looked upon as an epidemic, for the distribution is fairly even over the whole of the year, and also over the whole of the town, as shown in Table V.

The following statement shows the comparative length of time that elapsed between the onset of the disease and notification to this office :—

Reported within 6 days of onset.	Over 6 and within 14 days.	Over 14 and within 21 days.	Over 21 and within 28 days.	Over 28 days.	Cases Notified in Public Institut'ns	Total.
352	64	14	11	11	10	462

In 38 of the cases the patient was actually peeling at the time of notification ; it is owing to the non-notification of these cases at an early date that the control of Scarlet Fever is often so difficult.

As is usual, the slight and therefore undetected cases, appear to be the chief source of trouble, for in no less than 410 cases no source of infection could be ascertained by the Inspector, and seven of the cases notified were cases discovered by the Inspector and verified by the Medical Officer of Health, these in all cases being discovered after the most infectious stage of the disease had passed.

Another source of Scarlet Fever is what is called "return" cases. It occasionally happens that when a case that has been treated in an Infectious Diseases Hospital is sent home there arises in the same house within ten days or a fortnight another case of the same disease. This kind of case is well known wherever Scarlet Fever is treated in an Infectious Diseases Hospital, and is probably due to the infectious nature of the discharges from the ears or nose which

Scarlet Fever. in many cases develop after the patient has left the hospital. We have had in Burnley during the last year seven of such cases. The infection given off by these convalescents is apparently of a slight nature, and it seems that it requires close contact of the infected one to "give" some other inmate of the house the disease, such as the contact of children playing and sleeping together. After a child has returned from the Sanatorium it should for some time be regarded as a possible source of infection, and any discharges from the nose or ears should be carefully dealt with.

Of the 462 cases notified 230 were removed to hospital, and the number of houses infected amounted to 385.

The following figures are the result of the enquiries made by the Infectious Diseases Inspector as to the source of infection, and show the difficulty of tracing the disease.

No. visited.	From same house.	From neighbours' house.	"Return."	No definite history.
452	26	9	7	410

Diphtheria.

Diphtheria.—Total notified 84, with 13 deaths, against 77 and 13 last year, the mortality rate being slightly lower. Like Scarlet Fever, this disease can hardly be said to be epidemic, for the cases are distributed over the whole of the year.

Table V.—Number of Cases of Scarlet Fever notified in each Ward during each week of 1909.

Week ending.	St. Andrew's.	Daneshouse.	Stoneyholme.	St. Peter's.	St. Paul's.	Fulledge.	Burnley Wood.	Healey.	Trinity.	Whittlefield.	Gannow.	Lowerhouse.	Workhouse.	Victoria Hospital.	Total for each week.
January 8..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1
" 15..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	2
" 22..	..	..	..	..	..	1	1	..	..	..	..	1	..	..	3
" 29..	..	2	..	..	1	1	..	..	..	1	..	..	..	..	5
Feb'y. 5..	..	1	..	..	..	2	1	..	..	..	..	..	..	..	4
" 12..	..	..	..	..	2	..	..	..	..	..	..	1	1	..	4
" 19..	..	1	..	..	..	..	1	1	..	..	1	2	..	..	6
" 26..	..	..	..	..	1	2	..	2	..	..	..	3	..	..	8
March 5..	..	..	1	..	..	1	..	..	..	..	..	3	..	..	5
" 12..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	2
" 19..	2	..	..	..	1	..	1	2	..	..	..	1	..	..	7
" 26..	..	..	1	..	1	..	..	..	..	1	..	1	..	..	4
April 2..	1	..	..	..	..	..	..	1	..	1	1	5	1	..	10
" 9..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	4
" 16..	4	..	..	..	1	1	..	..	..	..	1	2	..	..	9
" 23..	2	1	1	..	..	..	1	..	1	..	..	..	..	..	6
" 30..	..	1	..	..	..	..	..	..	..	..	2	1	..	1	5
May 7..	2	..	..	..	..	..	..	1	..	..	..	4	..	..	7
" 14..	2	1	..	..	..	..	..	1	..	..	3	3	..	..	10
" 21..	1	3	1	..	..	..	..	2	5	3	..	3	..	..	18
" 28..	5	3	..	..	..	..	..	1	..	1	1	1	2	..	14
June 4..	6	1	1	..	..	1	1	1	1	1	1	1	..	..	15
" 11..	5	1	1	..	2	..	1	2	..	..	3	1	..	..	16
" 18..	3	2	..	..	..	..	..	..	..	..	2	..	..	..	7
" 25..	4	3	..	..	..	..	2	1	..	..	1	..	..	..	11
July 2..	1	..	..	..	..	1	2	2	3	..	3	2	..	..	14
" 9..	..	..	..	..	1	1	..	..	..	..	2	..	..	..	4
" 16..	2	2	..	..	1	..	1	3	..	..	..	..	..	..	9
" 23..	1	..	..	1	..	1	..	1	..	..	2	2	..	..	8
" 30..	1	2	..	..	..	1	..	2	..	1	..	1	..	..	8
August 6..	7	3	2	..	..	..	3	2	..	..	1	2	..	..	20
" 13..	2	..	1	..	..	3	2	..	2	..	..	1	..	..	11
" 20..	2	3	3	..	..	3	1	..	..	..	..	2	..	..	14
" 27..	..	4	5	3	..	2	..	..	..	..	1	..	..	..	15
Sept. 3..	3	9	3	..	..	4	1	..	..	..	2	..	..	..	22
" 10..	1	7	1	2	..	..	1	..	..	..	1	2	1	..	16
" 17..	..	4	..	..	..	4	..	..	..	..	..	1	..	..	9
" 24..	1	..	..	..	..	..	..	..	..	..	2	1	..	..	4
October 1..	2	4	..	..	1	..	2	1	..	..	1	1	..	..	12
" 8..	1	5	..	1	1	..	2	1	..	..	..	1	..	..	12
" 15..	1	1	..	..	2	..	1	..	..	..	..	3	..	..	8
" 22..	2	2	..	1	..	..	1	1	..	1	1	3	..	..	12
" 29..	2	..	2	..	..	1	1	..	..	..	..	1	..	..	7
Nov. 5..	4	2	1	..	..	1	1	..	..	..	1	1	..	..	11
" 12..	..	1	2	..	1	..	1	1	..	1	..	..	..	..	7
" 19..	4	1	..	..	1	2	..	..	..	..	1	1	..	..	10
" 26..	3	2	1	..	..	..	..	..	1	..	2	1	4	..	14
Dec. 3..	4	..	..	..	..	2	..	1	..	..	..	..	..	..	7
" 10..	4	1	..	..	..	3	..	..	1	..	1	..	..	..	10
" 17..	..	..	2	..	2	..	..	..	..	..	2	..	..	..	6
" 24..	..	..	1	..	..	..	1	..	1	..	1	..	..	..	4
" 31	..	..	3	..	1	..	..	1	..	..	..	..	..	..	5
Total	85	75	33	8	21	39	30	31	15	11	40	64	9	1	462

Diphtheria.

To aid in the better diagnosis and therefore more satisfactory dealing with diphtheria arrangements were made to send "swabs" to Manchester, and out of the seven sent two positive results were given. These will in future be examined at our own laboratory. The examination by bacteriological methods of throats of "contacts," *i.e.*, persons who have been in contact with someone known to be suffering from the disease, is the most satisfactory method of prevention in the case of diphtheria, as many people, though showing no outward signs of the disease, have been found capable of propagating it, and the only aid to diagnosis in such cases is the one mentioned.

Of the 84 cases of diphtheria, twenty-nine were admitted to the Sanatorium.

The source of infection, as in the case of Scarlet Fever, is often difficult to find, and that probably for the reason given above.

Source of Infection.	From same house.	No definite history.
	5	79

Typhoid.

Typhoid or Enteric Fever.—Forty-three cases of this disease were notified, and there were eight deaths. The morbidity rate is the lowest for some years, with also the lowest mortality rate. The 43 cases of Typhoid reported have occurred in 34 houses. The figures for the last 10 years are given in Table VI.

The disease has been fairly evenly distributed, with the exception that 10 out of the 43 cases occurred in Trinity Ward, this being mainly due to four cases occurring in one house and two in another in the same street. The cause of this slight outbreak was never traced. Of the four cases, the first occurred on March 15th, being followed a week later by a second; after another fortnight two more started. Possibly some pollution of the food supply was the first cause, and the subsequent cases were due evidently to the infection of the first case.

Of the 43 cases reported 22 were admitted to the Sanatorium.

The modern test for Typhoid is the blood serum reaction, and the means for carrying out this diagnosis are now provided at the Public Health Laboratory. A regular and systematic test of every case of Typhoid will add greatly to our knowledge of the disease.

Last year nine specimens were sent to Manchester, with the following results :—

Positive.	Negative.	Doubtful.	Total.
2	5	2	9

**Puerperal
Fever.**

Puerperal Fever.—There were 14 notifications of this disease with 5 deaths. Four of the cases were admitted to the Sanatorium. Last year the figures were 6 cases, 2 deaths.

Though the figures are small they still show the extreme fatality of this complaint.

Erysipelas.

Erysipelas.—104 cases were notified, the same number as last year, with 3 deaths as against 4 last year. Of these 19 were admitted to the Sanatorium.

Table VI.—LIST OF NOTIFIABLE INFECTIOUS DISEASES.

SHOWING THE NUMBER NOTIFIED AND THE NUMBER OF DEATHS IN EACH WARD.

Wards and Institutions.	Notifications and Deaths.	Scarlet Fever.	Diphtheria and Membraneous Croup.	Typhoid Fever.	Puerperal Fever.	Erysipelas
St. Andrew's.....	Notified	85	3	2	0	5
	Deaths.....	1	0	0	0	0
Daneshouse	Notified ...	75	2	2	2	7
	Deaths.....	1	0	0	0	0
Stoneyholme	Notified	33	0	4	2	1
	Deaths.....	0	0	1	1	0
St. Peter's	Notified	8	3	4	1	7
	Deaths.....	0	0	0	1	0
St. Paul's	Notified	21	2	3	0	13
	Deaths.....	1	1	0	0	0
Fulledge	Notified	39	14	4	2	14
	Deaths.....	1	0	0	1	0
Burnley Wood...	Notified	30	8	4	1	13
	Deaths.....	1	1	0	0	0
Healey	Notified	31	8	0	1	7
	Deaths.....	0	1	0	0	0
Trinity	Notified	15	13	10	1	11
	Deaths.....	1	2	0	0	1
Whittlefield.....	Notified	11	9	0	0	7
	Deaths.....	0	0	0	0	0
Gannow	Notified	40	8	3	0	11
	Deaths.....	0	1	0	0	0
Lowerhouse	Notified	64	14	4	4	5
	Deaths.....	0	5	1	1	0
Workhouse	Notified	9	0	3	0	2
	Deaths.....	0	0	0	1	0
Hospital	Notified	1	0	0	0	1
	Deaths.....	0	0	0	0	0
Sanatorium	Admitted ..	230	29	22	4	19
	Deaths.....	11	2	6	0	2
Total Notified		462	84	43	14	104
Total Deaths.....		17	13	8	5	3
Percentage of deaths to cases		3·67	15·4	18·6	35·7	2·88

TABLE VII.—LIST OF NOTIFIABLE INFECTIOUS DISEASES

CASES, DEATHS AND MORTALITY RATE PER CENT. FOR TEN YEARS.

Year.	Notifications and Death Rate.	Small-pox.	Scarlet Fever.	Diphtheria and Mem-braneous Croup.	Typhoid Fever.	Puerperal Fever.	Erysipelas
1900	Notified	1	1008	78	65	5	116
	Deaths	0	54	15	17	5	4
	Mortality Rate	0	5.0	19.2	26.1	100	3.4
1901	Notified	0	274	128	56	9	99
	Deaths	0	10	46	9	5	2
	Mortality Rate	0	3.6	35.9	16.0	55.0	2.0
1902	Notified	41	952	192	77	5	90
	Deaths	5	68	40	18	1	2
	Mortality Rate	12.2	7.1	20.8	23.3	20.0	2.2
1903	Notified	231	412	94	43	4	110
	Deaths	9	25	18	14	2	3
	Mortality Rate	3.9	6.0	19.1	32.5	50.0	2.7
1904	Notified	31	234	75	61	9	128
	Deaths	0	13	20	19	6	4
	Mortality Rate	0	5.5	26.6	31.1	66.0	3.1
1905	Notified	81	330	65	75	12	176
	Deaths	4	19	18	12	7	6
	Mortality Rate	4.9	5.7	27.6	16.0	58.3	3.4
1906	Notified	0	262	80	64	10	149
	Deaths	0	12	12	11	3	10
	Mortality Rate	0	4.6	15.0	17.2	33.0	6.7
1907	Notified	0	512	77	43	15	119
	Deaths	0	13	14	10	10	9
	Mortality Rate	0	2.5	18.1	23.2	66.0	7.5
1908	Notified	0	485	77	70	6	104
	Deaths	0	13	13	13	2	4
	Mortality Rate	0	2.67	16.8	18.5	33.0	3.84
1909	Notified	0	462	84	43	14	104
	Deaths	0	17	13	8	5	3
	Mortality Rate	0	3.67	15.4	18.6	35.7	2.88
Average No. of cases ...		38.5	493.1	95.0	59.7	8.9	119.5
" " deaths		1.8	24.0	20.9	13.1	46.0	4.6
" percentage of deaths to cases...		4.6	4.86	22.0	21.9	51.6	3.8

NON-NOTIFIABLE.—**Measles.**

Measles.—There have been 18 deaths from this disease, as compared with 50 last year. In Table IX the figures are given for 10 years, and it will there be seen how alternate years show a large number of measles deaths. The average number of deaths for ten years is 49. The deaths from measles are divided as follows :—

Under 1.	Between 1 and 2.	Between 2 and 3.	Between 3 and 4.	Between 4 and 5.	Over 5.
5	9	1	1	0	2

A very serious epidemic of this disease commenced in St. Andrew's Ward. The first word of it was from Heasandford Infants' Department. From the end of August to the end of September 82 cases occurred at this school. As far as was then known the cases were confined to that district, but about the end of September the first case was notified from St. Andrew's Infants School, and between that time and the end of October there were 28 cases. This was followed by others from Abel Street and Stoneyholme Infants' School, from Hargher Clough, Lane Head and Back Lane. Just before the Christmas Holidays further notification came from Burnley Wood, Healey Wood, St. James' and Coal Clough School. The following table shows the distribution as regards date and school where the cases occurred :—

Table VIII.—MEASLES—Approximate date of onset of the cases reported, with the number of deaths for each week.

SCHOOL.	Aug.	September.				October.					November.				December.					TOTAL.
		3	10	17	24	1	8	15	22	29	5	12	19	26	3	10	17	24	31	
Week ending...	27																			
Heasandford	9	25	24	17	1	6	...	...	...	...	...	4	1	1	1	...	...	...	...	89
Abel Street.....	...	...	1	...	3	1	...	4	2	21	5	26	2	...	...	...	...	...	...	65
Stoneyholme .....	...	...	...	...	1	...	5	3	7	1	8	5	21	3	...	...	...	...	...	54
St. Andrew's .....	...	...	...	...	16	2	6	...	3	1	...	...	...	...	...	...	...	...	...	28
Red Lion Street .....	...	...	...	...	...	...	4	...	2	1	...	...	...	...	...	...	...	...	...	7
Hargher Clough .....	...	...	...	...	...	...	...	5	1	9	...	...	...	1	3	...	...	...	...	19
Coal Clough .....	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	1	2	1	25	31
St. James' .....	...	...	...	...	...	...	...	...	2	...	...	...	...	1	3	...	12	...	...	18
Lane Head.....	...	...	...	...	...	...	...	...	...	...	7	2	1	...	...	...	...	...	...	10
St. John's, Gannow .....	...	...	...	...	...	...	...	...	...	...	2	3	...	...	...	...	...	...	...	5
Back Lane.....	...	...	...	...	...	...	...	...	...	...	...	1	16	1	1	...	...	...	...	19
Burnley Wood .....	...	...	...	...	...	...	...	...	...	...	...	...	1	...	12	1	9	4	3	30
Mitre Street .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Healey Wood .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	10	15
St. Stephen's.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	4	8
St. Thomas' .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Total	9	25	25	17	21	9	15	12	18	34	22	41	42	7	20	2	23	15	43	400
Deaths	1	...	...	...	...	...	...	...	1	3	2	...	...	2	4	1	...	1	1	16

Measles.

A notification of measles is sent by the Head of the School, and follows as a rule the visit to the home of the absentee child by the School Attendance Officer who calls to ascertain the reason for absence. Those children, however, attending school under five years of age are not visited by the Attendance Officer, and many of them have therefore to be discovered by members of the staff of this office. On receiving notification of a case of measles an inspector has called at as early a period as possible. He has been instructed to obtain an account of the source of the disease, the date of its onset, and the possibility of further cases resulting.

At Heasandford so many children were found to have been in school at a period when they were capable of giving the disease to others, that it was thought advisable to close the school for a period. Later this was carried out for the same reason at Abel Street and Stoneyholme. In other cases, certain classes only appeared to have been exposed to the infection, and these classes were closed at a period when certain of the scholars would otherwise have been in school whom we knew had been exposed to infection, and therefore might be suffering from the disease. This method of dealing with measles is often carried out with good results.

During the year a memorandum was issued by the Government on "Closure of and exclusion from School," and contains the following about measles :—

"CHARACTERISTICS OF THE DISEASE.—Certain facts need to be borne in mind in adopting preventive measures against measles. In towns the attack-rate is highest in the third, fourth, and fifth years of life, while the death rate caused by the disease is highest in the second year of life. After the age of five the death rate caused by it is relatively very small. These facts clearly indicate the importance of postponing an attack of measles, and of adopting special measures to ensure increased safety for children under five.

Persons seldom contract measles a second time, and as in populous districts epidemics commonly recur every two or three years, most of the older children are protected against it by having passed through a previous attack. This rule may not apply to a country village, in which epidemics may be absent for a long series of years.

The early infectiousness of measles while the symptoms are only those of a common "cold" is another marked feature of this disease. It is not unlikely that a majority of the total cases are infected by patients in this early stage. The incubation period from infection to the commencement of catarrhal symptoms is twelve to fourteen days with fair constancy.

Measles.

Although measles is very infectious, its infection does not appear to be long-lived, nor to be commonly conveyed by healthy persons. It thus differs from small-pox, scarlet fever, and diphtheria.

But though there is reasonable ground for the opinion that measles is not readily, if at all, conveyed to school by healthy children coming from infected households, it is desirable particularly in view of the greater fatality of attacks of measles in children under seven years of age, to assume the possibility of such spread by intermediaries in regard to scholars attending the infants' school, and to act accordingly."

Measles is a very unsatisfactory disease to deal with, as many of the cases are never heard of, and the most infectious period is at a time when no one knows the nature of the disease, that is before the rash appears. The length of the incubation period also is a bar to discovering the source, for many parents are quite unable to give an account of the child's movements so long back as twelve or fourteen days.

The results of the enquiry into this epidemic give the following figures :—

Number visited who have been notified from the	
Schools.....	400
Others visited	38

The ages of the children visited were as follows :—

Under 1.	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	Over.	Not ascertained.
3	14	10	31	78	148	78	22	54

Out of 249 cases enquired into 51 were in school either the day before or on the same day that the rash appeared, and therefore might be considered to be at school whilst in an infectious state.

Whooping Cough.

Whooping Cough.—There were 16 deaths this year and 37 last year. The ages of these were as follows :—

Under 1.	1 to 2.	2 to 3.
8	6	2

Influenza.

Influenza.—Fourteen deaths, this is slightly below the average. The ages at death were as follows :—

Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	Over 65.
1	1	0	0	3	4	5

The complications of Influenza which have caused death are as follows :—

Bronchitis.....	5
Heart Failure	3
Apoplexy	1
Diarrhoea	1
Pneumonia	1
Meningitis.....	1
Tonsilitis	1
Uncomplicated	1
Total.....	<u>14</u>

METHODS OF DEALING WITH INFECTIOUS DISEASE.

Method of
dealing with
Infectious
Disease.

The following diseases are notifiable according to the Notification of Infectious Diseases Act, 1889—Small Pox, Scarlet Fever, Diphtheria, Typhoid Fever, Puerperal Fever, Erysipelas, Typhus, Relapsing or Continued Fevers. There have not been during the year any cases of Small Pox, Typhus, Relapsing, or Continued Fevers.

Whenever any of these diseases are notified an Inspector immediately visits the house where it has occurred, and if isolation cannot be secured in the home, the patient is removed to the Sanatorium in the Ambulance provided by the Joint Hospital Board for that purpose. The householder is fully instructed as to the infectious nature of the disease, and as to the best means of preventing other members of the family from becoming affected. As soon as removal of the patient has taken place, the infected rooms are at once disinfected, generally by means of the formalin spray. The clothing, bedding, &c., are removed to the disinfecting station and disinfected by means of the " Equifex " Disinfector or by sulphur, as required.

The Education Committee are notified of all addresses where infectious disease has arisen.

Notification of
Infectious
Diseases.

The non-notifiable infectious diseases are only notified as they affect school children. These are measles, whooping-cough, chicken-pox, and mumps, and they have been notified in the following numbers :—

Measles	400
Whooping Cough	48
Chicken-pox	53
Mumps	116
Total.....	<u>617</u>

Many of the cases sent to us as mumps are not really that disease, but are the ordinary enlargements of cervical glands which are so common in children. However, the notifications are useful as giving an indication of the prevalence of mumps in certain districts.

No regular method of disinfection is carried out in these cases. When visited the Inspector gives the necessary instructions as regards isolation, and the methods by which infection may be guarded against.

TABLE IX.—NUMBER OF DEATHS FROM INFECTIOUS DISEASES.
IN THE TEN YEARS 1900 TO 1909.

	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909
Notifiable—										
Smallpox .....	...	...	5	9	...	4	...	...	...	...
Scarlet Fever.....	54	10	68	25	13	19	12	13	13	17
Diphtheria and Membranous Croup.....	28	46	40	18	20	18	12	14	13	13
Typhoid Fever	17	9	18	14	19	12	11	10	13	8
Erysipelas	4	2	2	3	4	6	10	9	4	3
Puerperal Fever	5	5	1	2	6	7	3	10	2	5
Phthisis	160	160	142	150	149	79	140	142	127	120
Non-Notifiable—										
Whooping Cough	41	31	12	54	43	27	27	26	37	16
Diarrhoea, Enteritis, &c.— Total Deaths...	191	196	90	157	230	156	256	91	196	79
Children under one	150	157	68	115	190	123	208	72	155	57
Measles.....	16	3	152	17	101	10	117	7	50	18
Influenza	35	12	6	17	7	10	15	15	17	14

DEPARTMENTAL ADMINISTRATION.

Departmental
Administration.

The offices are in St. James' Street, and the disinfecting station in Aqueduct Street.

The following is a short summary of the work of this Department :

- (a) The suppression and removal of nuisances, offensive trades, &c.
- (b) The erection or provision of public lavatories and urinals.
- (c) The supervision of houses let in lodgings.
- (d) The inspection of Canal Boats.
- (e) The registration of common lodging houses.

The administration of the following Acts of Parliament, amongst others :—

Sale of Food and Drugs Acts.

Notification of Infectious Diseases Acts.

Midwives' Act.

Notification of Births Act.

Fertilizers and Feeding Stuffs Act.

In addition to these the administration of the " Education (Administrative Provisions) Act " of 1907, (Medical Inspection) is carried out by the staff of this Department. A separate report on the work done under this Act is given at the end of this report.

FEMALE HEALTH VISITORS.

Female Health
Visitors.

Female Health Visitors.—The three visitors are qualified Sanitary Inspectors, one also possessing the Certificate of the Central Midwives Board.

The duties are primarily the visiting of houses where a birth has occurred at as early a period as possible, in order, if necessary, to advise or instruct the mother as to the care of her child. The other duties performed by the Health Visitors are those of Inspection of workshops where females are employed, the visiting of school cases, and one of the visitors acts as Inspector of Midwives. All the Visitors are engaged in making enquiries into the causes of death of the infants.

The work engaged in by the Health Visitors has been during this year greatly augmented by the Guild of Help, and a summary of the work of the Guild is given later.

SUMMARY OF YEAR'S WORK.	No.
Number of newly born children visited.....	2520
„ visits to newly born children.....	4447
„ children visited at end of six months.....	3198
„ visits to Diarrhœa cases.....	38
„ visits to children who are taking Humanised Milk.....	86
„ visits to School Children.....	379
„ visits to houses where children have died...	352

The above summary shows an increase in the school visiting, a most important branch of the Health Visitors' work. More details of the school visits are given in the School Report.

Burnley Guild
of Help.

Burnley Guild of Help.—This organisation, formed in January, 1908, offered to the Health Committee the services of its helpers to visit newly born children, under the direction of the Medical Officer of Health. The Health Committee, at a meeting held early in the year, gladly availed itself of the offer.

The town is divided by the Guild into districts, each with a head and a staff of visitors, and at intervals a batch of names of newly

Burnley Guild
of Help.

born children is sent from this office. The names sent are for the most part the worse cases, and have been obtained from the notifications sent in under the Notification of Births Act. They are chosen as either being in some undesirable part of the town, or as likely to be nursed out, or to require the supervision of a periodic visit from a helper. The names are sent to the Guild on sheets as below, with a request that when the child attains to a year old the sheet will be filled up and returned to the Medical Officer of Health, or in case the child dies before that time, to be filled up and sent in as soon as possible after the death.

(Copy of Sheet).

Date of 1st Visit.....19 Visitor.....
 Name of Child.....Address.....
 Date of Birth.....
 Name of Mother.....Age.....
 Food at Birth.....Date of Weaning.....Food after.....
 How many Children.....Age.....
 How many dead.....Cause of death and ages at.....

 Illness of Child, with date and length of illness.....

 Occupation of Father, with approximate wage.....
 Do. Mother do. do.
 If Mother works :
 Date of leaving work before confinement.....
 Do. resuming after do.
 Nursing of Child—Where nursed
 By whom.....

The summary of the work done by the Guild is as follows :—

Number of cases sent	159
Number of deaths	19

Sheets returned up to end of year :—

- 4, Because the child did not require visiting.
- 17, Left the town.
- 2, Baby over a year old.
- 6, Baby dead.

Though perhaps early to estimate accurately the benefits of this visitation by the helpers of the Guild, there is no doubt that great benefits must arise from periodic visits to the poorer class of

**Burnley Guild
of Help.**

home by a sympathetic visitor. Many of the cases sent are very poor people, and it has been necessary in many cases for the helpers, if these visits were to be of any practical value, to dispense a certain amount of charity. As the funds of the Guild were restricted the Health Committee was asked to assist, and in August the following resolution was passed :—

“ Resolved—That a monthly account be kept of all milk supplied to the Guild of Help, and on condition that such milk is supplied only to poor persons in the Borough who could not otherwise obtain the milk, a discount of 25 per cent. be allowed thereon.”

Notification of Births Act, 1907.

**Notification of
Births Act.**

Section 1. (1) “ In the case of every child born in an area in which this Act is adopted it shall be the duty of the father of the child and of any person in attendance upon the mother at the time of or within six hours after the birth, to give notice in writing of the birth to the Medical Officer of Health of the District in which the child is born.”

The Notification must be sent within 36 hours of the birth.

This Act was adopted in Burnley in 1908, and during the year 1909 there have been 2,723 births notified in accordance with it. These were notified by the following persons :—

Midwives	1012
Fathers	486
Doctors	737
Other persons	488
Total.....	<u>2723</u>

Of this number there were :—

Full-time stillborn	67
Premature stillborn.....	71
Total.....	<u>138</u>

Very little difficulty has been experienced in the working of this Act, as is seen by the smallness of the following numbers of persons who had to be communicated with regarding non-notification :

Fathers	19
Medical Men	8
Unregistered Midwives	2
Total.....	<u>29</u>

This Act leads to the early visiting of newly born children, and last year 305 children were visited within three days of birth.

Midwives.

Midwives Act, 1902.—The Local Sanitary Authority is the Supervising Authority under this Act, and has appointed the Health Committee to carry out these duties. Briefly these are to exercise general supervision over all midwives practising under this Act in the district; to investigate any charge of negligence or misconduct on the part of any midwife, and to report if necessary to the Central Midwives' Board; to suspend from practise any midwife where necessary to prevent the spread of infection.

The supervision of the midwives has been carried out by one of the Health Visitors who, being in possession of the certificate of the Central Midwives Board, is on the Midwives Roll.

Number of midwives on roll at beginning of year :—

Certificated	8
Bona-fide	36
Total.....	44

Number added during the year :—

Certificated	3
Bona-fide	1
	48

Left the town, Certificated

2

Total at end of year.....

46

Of the total of 46 midwives, nine only are certificated.

Midwives practising :—

Certificated	3
Bona-fide	26

The average number of cases attended by each midwife in practice works out at 30·5, one midwife alone attending 117 cases.

Supervision by the Inspector :—

Visits to Midwives' homes.....	298
Do. do. cases	196
Do. Puerperal Fever cases.....	15

Midwives.

Five of the midwives have been suspended during the year for the following reasons :—

For attending Puerperal Fever cases.....	3
Do. case of Ophthalmia.....	1
Do. case of Gangrene of Foot.....	1

One midwife has been reported to the Central Midwives Board for neglect of her cases.

The following warnings were also sent out :—

For not sending in proper forms	1
For not keeping Register correctly	4
For not sending for Medical aid in a case of Ophthalmia.....	1
For attending a case after being suspended...	1

Notifications received from midwives during the year :—

Intention to practice.....	21
Sending for medical aid	43
Still Births.....	23
Death of child	2
Change of Address.....	3
Total.....	<hr/> 92 <hr/>

A number of women who are not on the Midwives' Roll are practising in Burnley, and to them the following section of the Midwives Act applies :—

" Section 1 (1).—From and after the first day of April, one thousand nine hundred and ten, no woman shall habitually and for gain attend women in childbirth otherwise than under the direction of a qualified Medical Practitioner unless she is certified under this Act; any woman so acting without being certified under this act shall be liable on summary conviction to a fine not exceeding ten pounds, provided this section shall not apply to legally qualified Medical Practitioners, or to anyone rendering assistance in a case of emergency."

MILK DEPOT.

Milk Dépôt.

MILK DEPOT.—The Dépôt was opened in October, 1904, for the supply of humanised milk for infants.

The milk used is of a high standard, and is subject to frequent analysis by the Borough Analyst. The standard required is 3·5 per cent. fat for milk, and 50 per cent. for cream.

In the Contract with the Corporation the farmers undertake to supply milk at a certain standard. The milk must be strained and cooled at the farm before delivery.

At the Dépôt the milk is filtered through a U lax Filter, the essential feature of which is the employment of cotton wool as a filtering medium.

After filtering, the milk is modified or humanised, *i.e.*, it is mixed with certain proportions of cream, sugar, and water, that in its composition it may attain as near as possible to the constitution of human milk; it is then bottled in quantities to suit the requirements of different ages, each bottle containing enough for one meal. After the bottling, it is what is called Pasteurised, which is carried out as follows:—

The milk in the stoppered bottles is placed in the Sterilizer—a large pan heated by steam—the temperature of this vessel is raised to 160° F., and kept at that for twenty minutes, a higher temperature being used in the warmer weather.

The formulæ for the composition of the humanised milk vary for children of different ages, and arrangements are made for altering the composition to suit individual cases, or at the wish of the medical attendant.

The milk now being filtered, humanised, bottled in air-tight bottles, and Pasteurised—this being done to check the growth of putrefactive or other organisms that may have got into the milk—is distributed to the various shops, from which it can be obtained by the consumer. A sufficient number of bottles, each with enough for a meal, is placed in a wire cruet, one cruet being a twenty-four hours' supply.

When a child is supplied with milk for the first time, a few particulars are obtained as to the reasons for artificial feeding, the health of the child, &c. Directions are given as to the method of feeding the child, and particular stress is laid on the fact that once the bottle has been opened the contents must be used, if not all used the remainder must not be re-stoppered for use at another time. A request is made that the child be brought to the Dépôt from time to time, that it may be inspected and weighed.

Milk Dépôt.

The milk from the Dépôt must not be looked upon as in any way a substitute for breast milk, but there are a great number of mothers who have not a sufficient supply of breast milk for their children, and it is for these that the milk from the Dépôt is intended, and if we could persuade all such parents, especially in summer time, to make use of it, we should have a much lower figure as the result of our infantile deaths. Unfortunately, the children of that class whom we are most anxious should take the milk do not get it.

The number of children taking the milk shows an increase on previous years :—

	1909.	1908.
Number of Infants on Books, Jan. 1st	67	70
Admitted during the year.....	284	275
Discharged during the year.....	247	78
Number on Books, December 31st	104	67

Of the 247 infants discharged during the year, 41 had the milk for less than one week and twenty-four for less than two weeks. The average time of the remaining 182 cases being 20 weeks.

Out of the 284 infants admitted during the year 23 were not more than a week old at the time of commencing to take the milk ; twelve were a year or over, and the rest averaged fourteen weeks old.

The following reasons were given for bringing infants to the Milk Dépôt :—

Infant ailing	97
Infant delicate	23
Infant not thriving	33
Food not agreeing	17
Insufficient or no breast milk.....	36
Other reasons	78
Total.....	<u>284</u>

The method of feeding of the infants at the time of coming to the Dépôt was as follows :—

Artificial feeding.....	214
Breast feeding	40
Mixed feeding	18
Not stated	12
Total.....	<u>284</u>

Milk Dépôt.

One-hundred-and-fifteen of the children were being medically attended, and the parents had been recommended to try the milk by the Doctor.

Occupations of the Mothers and Fathers :—

Mothers.		Fathers.	
Working.....	138	Textile Operatives.....	74
Housewives	128	Labourers	32
Not stated	17	Miners.....	25
Mother dead	1	Office or Shop	37
		Other occupations.....	110
		Father dead	6
<hr/>		<hr/>	
Total.....	284	Total.....	284
<hr/>		<hr/>	

Arrangements are made in special cases to deliver the milk at the house, and this has been done in a greater number of cases than formerly. Probably this accounts to some extent for the increase in the number of infants taking the milk.

Guild of Help Cases.—

Number on books, December 31st, 1908.....	13
Admitted during the year.....	49
<hr/>	
Total.....	62
Discharged during the year.....	31
<hr/>	
Total on books at end of year.....	31
<hr/>	

DETAILS OF YEAR'S WORK.

Gallons of Milk obtained	7,679
Pints of Cream obtained	3,216

HUMANISED MILK.

Number of Bottles modified	221,580 and 1540 pints.
Sold at Shops	118,766 and 228 „
Sold at Dépôt	101,200 and 1312 „

Milk Dépôt.

STERILISED MILK.

Bottles sterilised	17,121
Sold at Shops	15,134
Sold at Dépôt	1,963

STERILISED CREAM.

Bottles sterilised	4,540
Sold at Shops	3,078
Sold at Dépôt	1,725

FOOD INSPECTION.

Food Inspection.

The inspection of food is carried out by Mr. Kenyon, M.R.C.V.S., the Veterinary Inspector. The fact that all the slaughtering is done at the Public Abattoirs makes the meat inspection an easy matter, and enables it to be carried out with efficiency. A system of voluntary surrender of any meat unfit for food is practised, and there has not been any prosecution during the year for exposure of meat unfit for human food.

MEAT INSPECTION.

Number of Animals Slaughtered at the Abattoirs.

	Beasts.	Sheep.	Pigs.	Lambs.	Calves.	Total.
January	534	11	788	2613	61	4007
February	576	...	530	3011	50	4167
March	713	...	598	3692	98	5101
April	525	...	392	2828	148	3893
May	532	296	354	2451	105	3738
June	402	1186	219	1004	59	2870
July.....	714	729	280	4090	81	5894
August	518	119	237	3589	102	4565
September	549	104	347	4567	121	5688
October	405	81	264	2826	75	3651
November.....	570	236	424	4036	103	5369
December	722	634	522	4388	128	6394
Total 1909	6760	3396	4955	39095	1131	55337
Total 1908	6823	22710	5437	13645	1067	49682

Compared with last year, this table shows a decrease of 63 Beasts, 19,314 Sheep, 482 Pigs, and an increase of 64 Calves, and 25,450 Lambs.

Food
Inspection.

Number of Carcases and Amount of Meat brought to the Abattoirs.

	CARCASSES.		BEEF.		PORK.	
	Beef.	Mutton.	Hind Quart's.	But- tocks.	Clods.	Boxes.
January	19	...	31	...	35	...
February	15	...	12	...	47	...
March.....	6	...	9	...	60	...
April	24	...	...	...	...	...
May.....	12	...	...	...	...	...
June	35	...	2	...	...	...
July	7	...	...	...	...	...
August	12	...	...	...	...	...
September	35	...	...	...	...	...
October.....	26	...	...	...	...	...
November	38	...	...	...	...	...
December	23	...	...	...	...	...
Total—1909...	252	...	54	...	142	...
Total—1908...	140½	...	218	8	316	...

The above figures show a decrease in the amount of Birkenhead meat brought into the Borough during the year 1909.

Number of Animals Specially Examined.

	Beasts.	Sheep.	Pigs.	Lambs.	Calves.	Totals.
January	7	6	1	...	3	17
February	1	8	3	...	...	12
March.....	6	6	1	...	1	14
April	2	6	2	...	...	10
May.....	4	...	1	...	...	5
June	3	1	...	...	1	5
July	6	...	...	...	3	9
August	1	...	...	...	3	4
September	2	...	1	...	3	6
October.....	3	2	...	...	1	6
November	4	6	1	...	...	11
December	4	...	2	...	2	8
Total—1909...	43	35	12	...	17	107
Total—1908...	41	24	14	...	17	96

The above figures show an increase in the numbers of animals specially examined.

Food
Inspection.

Result of Special Examination.

	Beasts.	Sheep.	Pigs.	Lambs.	Calves.	Totals.
Passed	31	5	2	...	3	41
Rejected	12	30	10	...	14	66
Totals—1909.....	43	35	12	...	17	107
Totals—1908.....	41	24	14	...	17	96

Causes of Rejection.

	Beasts.	Sheep.	Pigs.	Lambs.	Calves.	Totals.
Rickets .....	...	...	1	...	...	1
Suffocated .....	...	21	2	...	4	27
Nephritis	1	...	...	...	...	1
Jaundice.....	...	1	3	...	1	5
Heart Disease	1	...	...	...	...	1
Unmarketable .....	...	...	2	...	...	2
Dropsy.....	...	4	...	...	...	4
Anthrax	1	...	...	...	...	1
Emaciated .....	...	3	2	...	3	8
Paralysis	1	...	...	...	...	1
Accident	2	...	...	...	...	2
Starved (Cold) .....	...	...	...	...	1	1
Pneumonia.....	1	1	...	...	...	2
Gastritis.....	1	...	...	...	...	1
Immature .....	...	...	...	...	5	5
Enteritis	2	...	...	...	...	2
Parturient Apoplexy...	2	...	...	...	...	2
	12	30	10	...	14	66

The animal which was condemned for Anthrax was brought on January 11th, 1909, to No. 7 Slaughterhouse for inspection. On post-mortem examination of the animal it had the appearance of having suffered from a contagious disease, and on making a bacteriological examination of the blood, the result showed the presence of the Anthrax Bacilli.

Information was at once sent to the Secretary of the Board of Agriculture, Town Clerk, and the Borough Police.

Food
Inspection.

On January 12th, 1909, the carcase and odds were removed to the Cleansing Department and destroyed. After the removal of the carcase the necessary precautions were taken, disinfection and cleansing was carried out, and No. 7 Slaughterhouse closed for 14 days.

Tuberculous Carcases Examined and Rejected.

1909.	Cows.		Heifers.		Bulls.		Bullocks.		Calves.		Sheep.		Pigs.		Totals.	
	Examined.	Rejected.	Examined.	Rejected.	Examined.	Rejected.	Examined.	Rejected.	Examined.	Rejected.	Examined.	Rejected.	Examined.	Rejected.	Examined.	Rejected.
January ...	4	...	2	...	...	...	1	...	...	...	...	...	...	...	7	...
February ..	10	...	...	...	...	...	...	...	...	...	...	...	1	1	11	1
March.....	8	...	1	...	1	...	2	...	...	...	...	...	1	1	13	1
April	4	1	2	...	1	...	1	...	...	...	...	...	1	1	9	2
May.....	2	...	...	...	2	...	3	...	...	...	...	...	1	1	8	1
June	2	1	...	...	...	...	2	...	...	...	...	...	...	...	4	1
July	8	...	...	...	2	...	3	...	...	...	...	...	...	...	13	...
August	6	...	...	...	2	...	...	...	...	...	...	...	...	...	8	...
September	7	2	4	...	...	...	1	...	...	...	...	...	1	1	13	3
October.....	6	...	2	...	...	...	1	...	...	...	...	...	1	1	10	1
November	3	...	2	...	...	...	1	...	...	...	1	1	...	...	7	1
December	6	...	1	...	1	...	...	...	...	...	...	...	...	...	8	...
Totals...	66	4	14	...	9	...	15	...	...	...	1	1	6	6	111	11

Weight of Carcases Destroyed.

	Beasts.	Sheep.	Pigs.	Lambs.	Calves.	Totals.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1909.....	10140	485	2608	364	...	11597
1908.....	13440	554	1245	425	...	15664

**Food
Inspection.**

The following is a list of food stuffs submitted to the Veterinary Inspector for examination outside the Abattoirs :—

- On December 24th, 1908—One box of liver (weighing 45 lbs.)
- On April 15th, 1909—Four pounds of sweetbreads (frozen).
- On June 1st, 1909—Five and one-half stones of haddock.
- On August 10th, 1909—One forequarter of chilled beef (weighing 193 lbs.), one case of sheep's skirts (weighing 56 lbs.)
- On August 14th, 1909—One case of beef kidneys (frozen, weighing 16 lbs.)
- On September 23rd, 1909—One quarter of chilled beef (weighing 170 lbs.)
- On October 17th, 1909—Fifteen couples of rabbits.

The above articles of food were all voluntarily surrendered, and were at once removed and destroyed at the Destructor.

Number of Visits to different Premises during the Year.

No. of visits to the Abattoirs.....	573
„ the Pig Market	301
„ the Shops.....	5985
„ the Wholesale Premises	754
„ Hardacre's Yard	147
„ Collinge's Yard	106
„ Edmondson's Yard	106
„ Sunter's Yard	106
„ Triperies	315
„ Meat, Fish and Fruit Market....	67
„ Cattle Market	70
„ Cold Air Stores	89
„ Knacker's Yard	22
Total.....	<u>8641</u>

During the time the Fair was held 10 extra visits were made to the Cattle Market, the Fruit and Ice Cream Stalls being examined. The fruit was of a good quality, and the ice cream, glasses, freezers, moulds, etc., were all in a satisfactory condition.

Triperies.

During the year the Veterinary Inspector made 315 visits to the Triperies, all of which were in a satisfactory condition. The

**Food
Inspection.**

food stuffs examined at these premises have been good and free from disease, and the tubs, utensils, and floors have all been kept very clean. Nearly all the tripe dressers are using for the storage of tripe, &c., tanks made of slate, which are far superior to the wooden tanks, being more sanitary and much easier to keep clean.

Inspection of Fertilisers and Food Stuffs.

During the year no applications have been made for samples to be taken under the Fertilisers and Food Stuffs Act.

Dairies, Cowsheds and Milk Shops.

Number of Farms visited.....	50
„ Visits to Farms.....	185
„ Cattle examined	2909
„ Visits to Dairies	35
„ Visits to Milk Shops.....	538

Number of Cattle affected with different Diseases of the Udder.

Atrophy.	Hypertrophy.	Induration.	Felon.	Mastitis.	Total.
27	1	—	4	1	35
Number of Cattle affected in 1908.....					16

Cowsheds.

The lighting, ventilation and drainage of the majority of the cowsheds are still far from satisfactory.

The floors of most of the cowsheds are not in good condition, and this makes it very difficult for farmers to keep them clean.

The water supply on the farms is good, with the exception of one, and on this farm the cattle have to drink the overflow water from two farms above, which runs down the hedgeroad into a trough situated on this farm. The milk from this farm is not distributed to the public, but is for the farmer's own use.

The milk vessels, utensils, water troughs, sieves, &c., on most of the farms have been kept very clean, but in a few cases complaint has had to be made of the dirty condition of the outside of the large and small kits. In some cases the cleaning of the farms and cattle has been far from satisfactory, for during the year 45 notices have been sent out for dirty cattle, lairages, walls, ceilings, and milking passages.

**Food
Inspection.**

In the months of April and September the usual notices (100) were sent out to the tenants of farms, requesting them to attend to the general cleansing of the cowsheds, &c. In each case the notice was complied with.

The cattle on the whole have been kept in good health and condition, but the cleaning of them is not satisfactory.

A new cowshed has been built in place of the old ones at Higher Haulgh Head Farm, and the floors at Lodge Farm have been altered so as to comply with the regulations.

In respect to Lane Ends Farm, Lowerhouse, the landlord has decided not to alter the cowsheds, so that on and after February 2nd, 1910, the buildings will cease to be occupied as cowsheds.

Examination of Milk for Tubercle Bacilli.

During the year eight samples of unmixed milk, and eight samples of mixed milk were collected and forwarded to Professor Delepine for bacteriological examination. The following Tables show the results obtained :—

**Unmixed Samples of Milk taken from Suspected Cows in
the Borough.**

No. of Sample.	Date of Collection.	Evidence of Disease in Cow's Udder.	Result of Bacteriological Exam.
33	Dec. 21st, 1908	Indurated	Negative
38	May 3rd, 1909	Knotty	Negative
40	Sept. 8th, 1909	Knotty	Negative
19	Sept. 8th, 1909	Indurated	Negative
31	Oct. 20th, 1909.....	Indurated	Negative
28	Oct. 29th, 1909.....	Knotty	Negative
7	Nov. 24th, 1909	Indurated	Negative
32	Nov. 24th, 1909	Knotty	Negative

Mixed Samples of Milk taken from Milk Carts.

No. of Sample.	Date of Collection.	Result of Bacteriological Examination.
18	May 5th, 1909	Negative
21	May 5th, 1909	Negative
23	May 5th, 1909	Negative
21	October 8th, 1909	Positive
39	October 8th, 1909	Negative
9	October 20th, 1909	Negative
26	October 20th, 1909	Negative
47	October 29th, 1909	Negative

**Food
Inspection.**

The above samples of milk were taken from carts which bring milk into the Borough, all of which were free from tubercle, with the exception of one sample.

In addition to the farms already mentioned, numerous visits have been made to the farm which supplies the Dépôt with milk, and on each visit the premises and cattle were found to be clean, and the floors, fixtures, water troughs, milk vessels, &c., in a very clean state.

Dairies.

There are only ten Dairies on the farms in the Borough, four of which are for the sole use of the farmer, and the remaining ones for the storing and making of butter and cream. The latter do not comply with the regulations, but as regards cleaning, they are in a satisfactory condition. During the year 35 visits have been made to the above.

Milk Shops.

There are 198 milk shops in the Borough, to which 538 visits have been made. All these have been kept as clean as possible with the exception of seven, to the tenants of which notices were sent for dirty floors, lids and measures, and on re-visiting the premises it was found that in each case the notice had been complied with. In the majority of cases the milk vessels, utensils, &c., have been kept exceedingly clean, and the milk has been kept behind the counter, or as far away as possible from the people who come into the shops. Lids sufficiently ventilated are still in use to cover the milk, thus to some extent preventing contamination of it.

The present shops where milk is kept for sale are entirely unsuitable for the purpose, having regard to the different assortment of goods kept on these premises. It would be far preferable if shops could be placed in different parts of the Borough for the sale of dairy produce only, thus to some extent lessening any risk of contamination of the milk, which might arise through the handling of such goods as are kept at the present milk shops.

During the year the Veterinary Inspector paid numerous visits to the Milk Dépôt, and everything was found to be satisfactory.

FOOD AND DRUGS ACTS.

Food and
Drugs Acts.

Food and Drugs Acts.—The duties under these Acts are carried out by the Health Committee, and the following is a list of the various Formal and Informal Samples taken by Mr. J. B. Massey, Chief Sanitary Inspector and Inspector of Food and Drugs, and submitted to the Borough Analyst :—

Nature.	FORMAL.		INFORMAL.		TOTAL.	
	Gen'ine	Adult.	Gen'ine	Adult.	Total.	Adult.
New Milk	220	17	3	...	223	17
Separated Milk	2	...	1	...	3	...
Cream	3	2	3	2	6	4
Butter	9	1	39	2	48	3
Bread and Butter.....	4	...	...	...	4	...
Lard.....	...	...	7	...	7	...
Cheese	1	...	4	...	5	...
Coffee.....	...	...	11	...	11	...
Coffee and Chicory ....	...	...	1	...	1	...
Cocoa .....	...	...	1	...	1	...
Pepper .....	...	...	9	...	9	...
Mustard .....	...	...	2	...	2	...
Ground Ginger.....	...	...	1	...	1	...
Seasoning .....	...	...	1	...	1	...
Vinegar.....	...	...	5	...	5	...
Stew.....	1	...	2	...	3	...
Jam	1	...	1	...	2	...
Marmalade .....	...	...	1	...	1	...
Potted Shrimps .....	...	1	...	...	...	1

Food and
Drugs Acts.

Nature.	FORMAL.		INFORMAL.		Total.	
	Gen'ine	Adult.	Gen'ine	Adult.	Total.	Adult.
Picked Shrimps .....	...	1	...	...	...	1
Unpicked Shrimps.....	...	2	...	...	...	2
Fish and Lobster .....	...	1	...	...	...	1
Fresh Prawns	1	...	...	...	1	...
Comp.Liquor'ce Powder	...	...	1	...	1	...
Lung Mixture.....	...	...	1	...	1	...
Olive Oil .....	...	...	1	...	1	...
Neatsfoot Oil	1	...	...	...	1	...
Eucalyptus Oil .....	...	...	1	...	1	...
Honey	2	...	...	...	2	...
Horehound and Honey	1	...	...	...	1	...
Sulphur & Sarp. Salt...	1	...	...	...	1	...
Cod Liver Oil	1	...	...	...	1	...
Tincture of Rhubarb...	...	...	1	...	1	...
Cocoanut .....	...	...	1	...	1	...
Jelly.....	...	...	1	...	1	...
Sweets .....	...	...	4	...	4	...
Whisky .....	...	...	2	...	2	...
Rum .....	...	...	2	...	2	...
Gin .....	...	...	2	...	2	...
Brandy .....	...	...	3	...	3	...
Port Wine.....	4	...	4	...	8	...
Turpentine .....	...	...	3	...	3	...
Total.....	252	25	119	4	371	29

Food and
Drugs Acts.

			Adulterated.
Total number of Formal Samples ...	277	...	25
Total number of Informal Samples...	123	...	4
Totals.....	400	...	29

Particulars of the Adulterations.**FORMAL SAMPLES.**

Sample.	Nature and extent of Adulteration.	Result of Proceedings.
New Milk	6 % deficient in fat	Costs
New Milk	6 % deficient in fat	10/- including costs
New Milk	22 % deficient in fat.....	Dismissed
New Milk	5 % deficient in fat	Dismissed
Cream	20 grains boric acid per pound.....	10/- and costs
Cream	22 grains boric acid per pound.....	10/- and costs
New Milk	7 % added water and 7 % fat abstracted	10/- and costs
New Milk	9 % added water	10/- and costs
Butter	100 % margarine.....	£5 and costs

In the following cases of adulteration no proceedings were taken :

Sample.	Nature and extent of Adulteration.
New Milk	7 % added water
New Milk	8 % added water
New Milk	8 % added water
New Milk	8 % added water
Potted Shrimps	21 grains of boric acid per lb.
Picked Shrimps	24 grains of boric acid per lb.
Unpicked Shrimps.....	31.5 grains of boric acid per lb.
Unpicked Shrimps.....	24.5 grains of boric acid per lb.
Fish and Lobster	33.6 grains of boric acid per lb.
New Milk	6 % added water
New Milk	2 % added water
New Milk	2 % added water
New Milk	4.5 % added water.
New Milk	2 % added water
New Milk	2 % added water
New Milk	2 % added water

Adulterations of Informal Samples.

Sample.	Nature and extent of Adulteration.
Cream	17 grains of boric acid per lb.
Cream	21 grains of boric acid per lb.
Butter	100 % Margarine
Butter	100 % Margarine

NUISANCE INSPECTION.

Nuisance
Inspection.

NUISANCE INSPECTION.—During the year Byelaws relating to Nuisances have been approved by the Local Government Board, of which the following are extractions :—

12. A person shall not keep any swine on any premises or deposit any swine's dung within the distance of one hundred feet from any dwelling-house.

13. A person shall not keep any rabbit, pigeon, guinea pig, duck, or fowl on any premises within the distance of twenty feet from any dwelling-house, unless the house, yard, or place in which such animal is kept be maintained in a cleanly and wholesome condition.

14. A person shall not keep any cattle or swine on any premises or deposit the dung of any cattle or swine in such a situation or in such a manner as to pollute any water supplied for use, or used, or likely to be used by man for drinking or domestic purposes or for manufacturing drinks for the use of man, or any water used or likely to be used in any dairy.

15. Every occupier of a building or premises wherein or whereon any horse or other beast of draught or burden or any cattle or swine may be kept shall provide, in connection with such building or premises, a suitable receptacle for dung, manure, soil, filth, or other offensive or noxious matter which may, from time to time, be produced in the keeping of any such animal in such building or upon such premises.

He shall cause such receptacle to be constructed so that the bottom or floor thereof shall not in any case be lower than the surface of the ground adjoining such receptacle.

He shall also cause such receptacle to be constructed in such a manner and of such materials and to be maintained at all times in such a condition as to prevent any escape of the contents thereof or any soakage therefrom into the ground or into the wall of any building.

He shall cause such receptacle to be furnished with a suitable cover, and when not required to be opened to be kept properly covered.

He shall likewise provide in connection with such building or premises a sufficient drain constructed in accordance with the provisions of any Statute, Byelaw, or Regulation for the time being in force within the district relating to the construction of drains, and in such a manner and of such materials and maintained at all times in such a condition as effectually to convey all urine or liquid filth or refuse therefrom into a sewer, cesspool, or other proper receptacle.

He shall, once at least in every week, remove or cause to be removed from the receptacle provided in accordance with the requirements of this byelaw all dung, manure, soil, filth, or other offensive or noxious matter

**Nuisance
Inspection.**

produced in or upon such building or premises and deposited in such receptacle.

He shall from time to time, as often as occasion shall require, limewash or otherwise properly cleanse every part of the interior of such building or premises.

He shall cause the floor of such building or premises to be properly laid with hard, impervious material, and to be properly sloped with a fall to a channel which shall discharge over a properly trapped gully into the drain provided in pursuance of this byelaw.

He shall not cause or suffer any inlet to any drain to be within such building.

Provided always that the foregoing byelaw shall not apply in any case in which any part of the building or premises wherein or whereon any such animal shall be kept, or any part of the receptacle provided in accordance with the requirements of this byelaw shall not be within two hundred feet of any dwellinghouse which is not in the same curtilage as such building or premises or receptacle.

ADMINISTRATION.—For administrative purposes, the town is divided into four districts, each having its inspector, who is responsible for his district to the Chief Sanitary Inspector.

Infectious diseases are dealt with by one inspector, who has the assistance, if required, of the inspector in the district in which the case of infectious disease is situated.

Nuisance
Inspection.

The following is a summary of the work done by the Sanitary Inspectors :—

	No.
Visits to Workshops and Workplaces.....	533
„ Bakeries	405
„ Restaurants	33
„ Confectioners	28
„ Chip, Fish and Tripe Shops.....	33
„ Ice-Cream Shops.....	44
„ Milk and Grocers' Shops.....	51
„ Fruiterers' and Fishmongers' Premises.....	24
„ Butchers, Bloodboilers and Food Preparers.....	29
„ Milliners and Dressmakers.....	96
„ Other Dress Trades.....	24
„ Hairdressers and Barbers.....	17
„ Marine Stores and Offensive Trades.....	54
„ Stables and Manure Tips.....	2796
„ Premises where animals are kept.....	67
„ Lodging-Houses, Registered	393
„ „ Unregistered	126
„ Vans, Tents, &c.....	97
„ Canal Boats.....	312
„ Cellar Dwellings.....	183
„ Single Dwellings.....	359
„ Back-to-back Dwellings.....	1672
„ Furnished Rooms.....	1425
„ Other Dwellings.....	7266
„ Reported Overcrowded	75
„ „ Dirty.....	81
„ New Property <i>re</i> Closets, &c.....	461
„ Old Property <i>re</i> Alterations.....	346
„ Premises where Nuisances exist.....	10777
Drains tested.....	238
Legal Notices served.....	739
No. of Preliminary Notices sent out to abate Nuisances...	1859
No. of Defects reported to Borough Surveyor.....	363
„ „ other Departments.....	980
Smoke Observations taken.....	970
Visits to Boiler Houses.....	63

Ashpits and
Stable Middens.

Inspection of Ashpits and Stable Middens.—In the above list it will be seen that a large number of visits have been paid to manure tips, and in the list of legal notices given on page 75 ashpits have a prominent place.

Many of the ashpits and manure middens are in an unsatisfactory condition. A number of the ashpits are without proper doors and coverings, this applying as a rule to ashpits which take the refuse from more than one house and even in some cases from a row of houses. These ashpits are in the most crowded parts of the town and therefore in a position where they will probably do the most harm.

The following letter was sent to the owners of some of the worst of these ashpits :—

COPY OF LETTER.

COUNTY BOROUGH OF BURNLEY.

Public Health Department,
St. James' Street,

.....19

Dear Sir,

I have to draw your attention to a nuisance caused by the absence of a door to the ashpit of your property No.....

.....
Unless the nuisance is immediately abated the matter will be laid before the Health Committee with a view to an Order being made requiring you to abate the nuisance.

By Section 85 of the Burnley Corporation Act, 1908, the Corporation may require the owner of any dwelling house not having an ashpit, &c., of suitable size and construction and in proper order and condition, to provide a galvanised iron dustbin in lieu of an ashpit, &c.

Dustbins are emptied oftener than ashpits and are greatly preferable from a sanitary point of view. I suggest that you should consider whether it would not be to your interest to remove the said ashpit and substitute therefor a dustbin. I feel confident that this course would ultimately prove a saving of expense. Dustbins may be obtained from any dealer, but they must be of a size and construction similar to the samples deposited for inspection at the Cleansing Department, Aqueduct Street, where they may be obtained at the price at which they are supplied to the Corporation. If you decide to substitute a dustbin for the ashpit kindly let me know as soon as possible, in order that a reasonable time may be allowed for the work to be done.

Yours faithfully,

THOMAS HOLT,

Medical Officer of Health.

To.....

.....

Ashpits and Stable Middens.

During the year also notices to the number of 161 were sent to the owners and occupiers of manure middens requiring periodical emptying. In nearly all the cases a week was the period fixed.

Housing of Working Classes.

Housing of the Working Classes.—The houses in Burnley are generally speaking commodious. They are well built and are adequate as regards numbers.

Of the 23,875 dwellings, the following do not quite fit the description given above :—

	No.
One-roomed Dwellings.....	102
Furnished Dwellings, not necessarily one-roomed	211
(Houses let in Lodgings..... 103)	
Back-to-back Houses..... 1873	} 2208
Single Houses 335	

The Housing and Town Planning Act, which became law during 1909, contains the following sub-section of section 17 :—

(7) A room habitually used as a sleeping place, the surface of the floor of which is more than three feet below the surface of the part of the street adjoining or nearest to the room, shall for the purpose of this section be deemed to be a dwelling-house so dangerous or injurious to health as to be unfit for human habitation, if the room either—

- (a) is not on an average at least seven feet in height from floor to ceiling ;
or
- (b) does not comply with such regulations as the local authority with the consent of the Local Government Board may prescribe for the securing the proper ventilation and lighting of such rooms and the protection thereof against dampness, effluvia, or exhalation : Provided that if the local authority, after being required to do so by the Local Government Board, fail to make such regulations, or such regulations as the Board approve, the Board may themselves make them, and the regulations so made shall have effect as if they had been made by the local authority with the consent of the Board.

No dwelling is believed to come within this definition in Burnley.

The 335 single dwellings are two or three-roomed houses without through ventilation and are thus equivalent to back-to-back houses though not actually back-to-back.

The Act just referred to contains a section prohibiting the building of back-to-back houses :—

Section 43. Notwithstanding anything in any local Act or Byelaw in force in any borough or district, it shall not be lawful to erect any back-to-back houses intended to be used as dwellings for the working classes, and any such houses commenced to be erected after the passing of this Act shall be deemed to be unfit for human habitation for the purposes of the provisions of the Housing Acts.

Provided that nothing in this section—

- (a) shall prevent the erection or use of a house containing several tenements in which the tenements are placed back to back, if the medical officer of health for the district certifies that the several tenements are so constructed and arranged as to secure effective ventilation of all habitable rooms in every tenement; or
- (b) shall apply to houses abutting on any streets the plans whereof have been approved by the local authority before the first day of May, nineteen hundred and nine, in any borough or district in which, at the passing of this Act, any local Act or Byelaws are in force permitting the erection of back-to-back houses.

The following dwellings have been closed during the year :—

Compulsory closing under Section 151 of the Burnley Borough Improvement Act, 1871 :—

Charles Street, 15½, 17½, 19½, and 21½.

Voluntary closing of Houses Let in Lodgings :—

5, Trafalgar Street.

Conversions of Houses Let in Lodgings to back-to-back dwellings and through dwellings, according to their original condition :—

Cliviger Court, 6 and 8.

Croft Street, 3, 5, 7 and 9.

Albion Street, 23½.

Voluntary closing of houses unfit for human habitation :—

Yatefield Fold, 6 and 7.

Accrington Road, 239A.

Other changes are as follows :—

3, Brown's Yard, now House Let in Lodgings.

Houses Let in Lodgings.

Houses Let in Lodgings.—There are 103 houses in Burnley registered as Houses Let in Lodgings in accordance with section 50 of the Public Health Act of 1875.

Byelaws have been made in accordance with this section and provide :—

- (1) For fixing and from time to time varying the number of persons who may occupy a house or part of a house which is let in lodgings or occupied by members of more than one family, and for the separation of the sexes in a house so let or occupied.
- (2) For the registration of houses so let or occupied.
- (3) For the inspection of such houses.
- (4) For enforcing drainage and the provision of privy accommodation for such houses, and for promoting cleanliness and ventilation in such houses.
- (5) For the cleansing and lime-washing at stated times of the premises, and for the paving of the courts and the courtyards thereof.
- (6) For the giving of notices and the taking of precautions in case of any infectious disease.

The 103 houses mentioned are divided into 211 separate tenements. These tenements are for the most part let furnished, and they are divided as follows :—

One roomed.....	190
Two roomed.....	15
Three roomed	6
	<hr/>
Total.....	211
	<hr/>

The number of tenements to each house varies from one to forty-three.

Fifty-three are really one-roomed houses, and only come under the definition of Houses Let in Lodgings because they are let furnished and are let from week to week.

The house with 43 tenements is the old Militia Barracks in Clifton Square.

The tenements vary in price according to the number and size of the rooms ; the rent varying from 3/- to 5/- a week, which includes the loan of the furniture, generally of a very inferior kind. The bed and bedding, curtains and blinds to the windows. These articles,

Houses Let in
Lodgings.

which are on loan from the landlord, are presumed to be kept clean by him, as are also common passages, sanitary conveniences, approaches &c. The rooms of course must be kept clean by the tenant.

In the summary of work done by the Sanitary Inspectors it will be seen that 1,425 visits have been paid to the furnished rooms during the year, so that these places have been very well looked after and the report from the Inspectors is that they are fairly satisfactory. The common complaint is that the tenants allow the rooms to get dirty if not watched. In some cases the sanitary arrangements have not been satisfactory and action has had to be taken by the Committee.

Total visits to 211 lodging houses.....	1425
Total defects found	81
Total defects remedied.....	59
Not remedied at end of year.....	22

The 81 defects found were as follows :—

Dirty floors	10
Intermixing of Sexes (Byelaw No. 1)	4
Overcrowding.....	5
Defective Slop Water Pipes and Drains.....	9
Defective Water Supply	2
Limewashing	12
Defective Roof, Flags, &c.....	11
Defective W.C.'s	6
Insufficient W.C. Accommodation.....	22
Total.....	<u>81</u>

Occupants.—On making an informal census at the end of the year it was estimated that 520 persons occupied the furnished rooms :—

Total.	ADULTS.		Infants under 1.	Children 1 to 12.
	Male.	Female.		
520	201	210	16	93

In the above list every person over 12 is counted as an adult in accordance with the byelaw 7, which says that :—

“ No lodger shall suffer any person above the age of 12 years to occupy as a sleeping apartment any room let to such lodger, if the room is occupied by more than one person above that age and of the opposite sex.”

**Inspection of
Working-class
Dwellings.**

Inspection of Working Class Dwellings.—The worse kind of these dwellings has been frequently visited. 1672 visits have been paid to back-to-back houses, 1425 to furnished rooms, 7266 to other dwellings. Seventy-five were reported to this office as overcrowded, but only ten were found to be actually in that state when visited, and six legal notices had to be served.

Dirty Houses.—Eighty-one houses were reported as dirty, but only 28 were found to be so on inspection. It was not found necessary to serve any notices to get these nuisances amended.

**Black Smoke
Nuisance.**

Abatement of Black Smoke.—The following resolution of the Health Committee obtains in the method of our dealing with the black smoke nuisance :—

“ That ten minutes in the hour be the maximum period allowed for the emission of black smoke from any chimney in this Borough, not being a chimney of a private dwelling house.”

The following is a summary of the results of the observations taken :—

No. of Chimneys observed.	No. of observations taken.	Average No. of observations taken per chimney.
151	212 hourly. 758 half-hourly.	6.42

Result of Hourly Observations—

	Dense.	Medium.	Light or None.
Total amount of Smoke in Minutes...	739.5	1639	10,287.5
Average amount of Smoke in Minutes..	3.74	7.73	48.53

Result of Half-hourly Observations—

	Dense.	Medium.	Light or None.
Total amount of Smoke in Minutes...	441	1643.5	20,655.5
Average amount of Smoke in Minutes..	0.58	217	27.25

**Black Smoke
Nuisance.**

The following is a statement of the action taken under Section 91 of the Public Health Act, 1875 (Paragraph 9), relating to the emission of black smoke :—

Letter Notices sent.....	69
Legal Notices served	17
No. of Firms proceeded against	2
Withdrawn on payment of Costs	1
Fined 10/- and costs.....	1

Legal Notices served during the year :—

Public Health Act, 1875, Sections 91-94.

Notices served 411, relating to :—

Defective Water Closets, Tippers, &c.....	153
„ Drains, &c.....	84
„ Dishgrates, Slop-pipes, &c.....	52
„ Ashpits	121
„ Ashbins.....	4
„ Yard Flags, Walls, &c.....	43
„ Troughs, Spouts, &c.....	25
„ Cellar Drains, Areas, &c.....	21
Damp House Walls, &c.....	18
Defective Privy Pails, Tanks, &c.....	6
„ Manure Pits.....	4
Dirty Premises	11
Nuisance from Pigs	1
Defective Ventilation.....	6

The number of defects noticed is 549, but in many cases more than one defect was put on one notice.

Public Health Act, 1875, Section 36.

Notices served 125, relating to :—

Insufficient Closet and Ashpit Accommodation.

Public Health Act, 1875, Section 50.

Notices served 161, relating to :—

Periodical emptying of Manure Pits.

Public Health Act, 1875, Sections 91-4.

Notices served 23, relating to :—

Overcrowding.....	6
Smoke	17

**Black Smoke
Nuisance.**

Byelaws—Houses Let in Lodgings. Notices served, 11.

Burnley Borough Improvement Act, 1871, Section 151.

Notices served 8, relating to :—

Closing dwellings unfit for human habitation.

**Factories and
Workshops.**

FACTORIES AND WORKSHOPS.—Under the Factories and Workshops Acts, 1891, 1895, 1901, and 1907, it is the duty of the Local Sanitary Authority to enforce the sanitary provisions relating to these places.

Number of factories and workshops on register at end of year :—

Factories.....	175
Bakehouses	216
Milliners and Dressmakers.....	245
Woodworkers	34
Tailors, Shoemakers and Cloggers	152
Metal Workers.....	29
Sundries.....	51
Total.....	<u>902</u>

This list is of necessity an approximate one, as the figures relating to workshops and bakehouses are constantly changing, especially the class of workshops which includes dressmakers. The number of bakehouses is constantly changing, for a bakehouse must be registered if it is a place “in which are baked bread, biscuits, or confectionery, from the baking or selling of which a profit is derived.” This definition includes in Burnley a great number of small grocers’ and confectioners’ shops.

In addition to the inspection by the male sanitary inspectors, a female sanitary inspector has visited those places where females only are employed.

**Factory
Inspection.****Factory Inspection—**

Number of inspections	130
Defects found	24
Legal Notices served	1

List of Defects—

Require Limewashing	1
Water Closets defects.....	10

**Factory
Inspection.****List of Defects (*continued*)—**

No Water Closet.....	1
Defective Slop Drains	7
Other Defects	5
Total.....	<u>24</u>

**Inspection of
Bakeries.****Inspection of Bakeries—**

Number on Register	216
Number of Visits paid	405

Details of Defects found—

Require Limewashing	31
Defective Water Closets.....	19
„ Drains.....	18
„ Ashpits	1
„ Slop Water Pipes.....	4
Defective Ventilation.....	1
No Abstract.....	2
Other Defects	7
Total.....	<u>83</u>

Three Notices have been served on the occupiers of these premises and the defects remedied. The remainder were remedied without the necessity of sending a notice.

**Other
Workshops.****Other Workshops—**

Inspections	428
Legal Notices served	11

Defects Found—

Defective Water Closets.....	25
Dirty Workshops	2
Defective Drains	4
Limewashing required	3
Structural defects—defective floors, roofs, yards, &c.....	7
W.C. not marked “Female”	1
No W.C.....	2
No Abstract.....	1
Other Defects	2
Total.....	<u>47</u>

Eleven Legal Notices have been served and the defects remedied ; the remainder were remedied without legal notice.

Offensive
Trades.

Offensive Trades.—These are the trades of blood boiler, tallow melter, fell monger, bone boiler, gut scraper, and gut cleaner, soap boiler, tripe boiler, and knacker. The premises on which these trades are conducted are subject to frequent inspection, and the work may be considered to be fairly well carried out, and with very little nuisance to the inhabitants who live in the neighbourhood. In most of these cases the only way to avoid nuisance is by the suitability and cleanliness of the premises, and by frequent removal of offensive material carried out in such a way and at a time as not to cause offence.

Marine Stores	8
Tripe Dressers.....	7
Blood Boilers	8
Fat Melters	4
Gut Scrapers	2
Bone Boiler	1
Fell Monger	1
Tanner	1
Knacker.....	1
Total.....	<u>33</u>

Fifty-four visits were paid to the above and all were found to be in a cleanly and satisfactory condition.

The following Table is called for annually by the Home Office. Some of the defects shewn therein were found towards the end of the year, and had not been remedied before the 31st of December.

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1909,

for the County Borough of Burnley, on the administration of the Factory and Workshop Act, 1901, in connection with

FACTORIES WORKSHOPS, LAUNDRIES, WORKPLACES AND HOMEWORK.

1.—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions
Factories	148	11	0
(Including Factory Laundries.)			
Workshops	815	84	0
(Including Workshop Laundries.)			
Workplaces .....	...	...	...
(Other than Outworkers' premises included in Part 3 of this Report.)			
Total.....	963	95	0

2.—DEFECTS FOUND.

Particulars.	Number of Defects.			No. of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
Nuisances under Public Health Acts :—*				
Want of cleanliness	38	38	...	0
Want of ventilation	1	0	...	0
Overcrowding	0	0	...	0
Want of drainage of floors	0	0	...	0
Other nuisances	57	55	...	0
†Sanitary accommodation { insufficient	2	0	...	0
{ unsuitable or defective.....	54	54	...	0
{ not separate for sexes.....	0	0	...	0
Offences under the Factory and Workshop Act :				
Illegal occupation of underground bakehouse (s. 101)	1	1	...	0
Breach of special sanitary requirements for bakehouses (ss. 97 to 100).....	29	29	...	0
Other Offences—Abstracts.....	4	...	4	0
(Excluding offences relating to outwork which are included in Part 3 of this Report.)				
Total.....	186	177	4	0

* Including those specified in sections 2, 3, 7 and 8, of the Factory and Workshop Act as remediable under the Public Health Acts.

† For districts not in London, state here whether section 22 of the Public Health Acts Amendment Act, 1890, has been adopted by the District Council; and if so what standard of sufficiency and suitability of sanitary accommodation for persons employed in factories and workshops has been enforced.

NATURE OF WORK.*	OUTWORKERS' LISTS, Section 107.							
	Lists received from Employers.						Addresses of Outworkers.	
	Twice in the year.			Once in the year.			Received from other Councils.	Forward'd to other Councils.
	Lists. §	Outworkers. §		Lists.	Outworkers. §			
Con-tractors.		Work-men.	Con-tractors.		Work-men.			
Wearing apparel—								
(1) making, &c.	5	5	5	15	1	24	...	...
(2) cleaning and washing.....								
Lace, lace curtains and nets...								
Artificial flowers								
Nets, other than wire nets ...								
Tents.....								
Sacks								
Furniture and upholstery								
Fur pulling								
Feather sorting								
Umbrellas, &c.....								
Carding, &c., of buttons, &c....								
Paper bags and boxes.....								
Basket making.....								
Brush making								
Racquet and tennis balls								
Stuffed toys.....								
File making								
Electro-plate								
Cables and chains								
Anchors and grapnels.....								
Cart gear								
Locks, latches and keys.....								
Pea picking								
Total .....	...	...	...	...	...	...	...	...

* If an occupier gives out work of more than one of the classes specified in column 1, and subdivides his list in (or 5 as the case may be) against the principal class *only*, but the outworkers should be assigned in columns 3 and 4

§ The figures required in columns 2, 3 and 4 are the *total* number of lists (received from employers who sent them will, therefore, usually be double of the number of such employers and (approximately) double of the number of individual name will often be repeated.

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.		Number.
Workshops upon Register		727
Bakehouses Overground	212	
" Underground	4	
Milliners and Dressmakers	245	
Woodworkers.....	34	
Tailors, Shoemakers and Cloggers.....	152	
Metal Workers	29	
Sundries	51	
Total number of workshops on Register		727

Date, April 7th, 1910.

NOTE.—The Factory and Workshop Act, 1901 (s. 132), requires the Medical Officer of Health in his Annual Report send a copy of his Annual Report, or so much of it as deals with this subject, to the Secretary of State (Home Office). Office the portions which do not relate to factories, workshops, laundries, workplaces or homework. The duties of of December, 1904. A further Memorandum, on the Home Work Provisions of the Factory Act, was issued to all

Prosecutions.		Inspections of Outworkers' premises.	OUTWORK IN UNWHOLESOME PREMISES, Section 108.			OUTWORK IN INFECTED PREMISES, Sections 109, 110.		
			Instances.	Notices served.	Prosecuti'ns.	Instances.	Orders made (S. 110.)	Prosecutions (S. 109, 110.)
Failing to keep or per- mit inspecti'n of lists.	Failing to send lists.							
...	...	47	...	...	...	...	...	...
...

such a way as to show the number of workers in each class of work, the list should be included among those in column 2 (or 6 and 7) into their respective classes. A footnote should be added to show that this has been done, both in February and August as required by the Act) and of the entries of names of outworkers in those lists. They outworkers whose names are given, since in the February and August lists of the same employer the same outworker's

5.—OTHER MATTERS.

Class.	Number.
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (s. 133).....	4
Action taken in matters referred by H.M. Inspector	32
as remediable under the Public Health Acts, but	
not under the Factory and Workshop Act (s. 5)	48
Other .....	...
Underground Bakehouses (s. 101) :—	
Certificates granted during the year .....	...
In use at the end of the year	4

(Signature) THOMAS HOLT, M.D., *Medical Officer of Health.*

to the District Council to report specifically on the administration of that Act in workshops and workplaces, and to If the Annual Report is presented otherwise than in print, it is unnecessary to include in the copy sent to the Home Local Authorities and the Medical Officer of Health under the Act of 1901 are detailed in the Home Office Memorandum District Councils and Medical Officers of Health in October, 1906.

Canal Boats.

CANAL BOATS ACTS, 1877 and 1884.—Particulars are found of the work done under these Acts in the following extract from a Report and Table supplied to the Local Government Board.

The inspection of Canal Boats forms part of the duties of the Sanitary Inspector, whose salary is inclusive and unapportioned.

312 boats were inspected during the year 1909, against 306 for 1908.

676 adult males, 42 adult females, 2 children of school age, and 27 children under school age were found on board.

Of the various infringements of the Canal Boats Acts none were of a serious nature, and all were soon remedied, only one formal notice being required, the rest were all amended on verbal notice being given.

No legal proceedings have had to be taken.

A case of Typhoid Fever was removed from one of the boats, and another boat was disinfected because a case of Diphtheria had been aboard at Bradford.

36 of the boats inspected were steamers.

CANAL BOATS ACTS, 1877 & 1884.

STATISTICAL SUPPLEMENT to the (1909) Annual Report of the
Burnley Urban Sanitary (Registration) Authority.

Have you Hospital Accommodation for any case of Infectious Disease met with on a Canal Boat in your Sanitary District?		Yes.	
Is Inspector's remuneration inclusive with payment for other duties?		Yes. If special, how much?	
2	Number of Boats added to Register in 1909	...	...
0	Number re-registered owing to Structural Alterations	...	...
0	Number re-registered owing to other reasons	...	...
127	Total Number registered to 31st December, 1909	...	...
70	Total Number of Registrations Cancelled	...	...
57	Actual Number of Boats on Register at 31st December, 1909	...	...
312	Number of Boats Inspected in 1909	...	...
291	Number of Boats conforming to the Acts and Regulations	...	...
21	Number of Boats infringing the Acts and Regulations	...	...
Total Number for which the Cabins were registered, 1,392 persons.			
Total Number occupying the Cabins		...	747.
Details of Occupation: Male Adults		...	676
Female Adults		...	42
Children of School Age		...	2
Children under School Age		...	27
			747

Number of Cases
met with.

Number of Cases
Remedied.

Details showing Numbers Infringing in respect to—

.....	Registration	.....
.....	Notification of Change of Master	.....
1	Absence of Certificate	1
.....	Certificate not Identifying Owner with Boat	.....
.....	Marking	.....
.....	Overcrowding	.....
.....	Partition (Reg ⁿ . 8, b. ii.)	.....
.....	Females over 12 Improperly Occupying	.....
.....	Cleanliness	.....
3	Painting	3
.....	Ventilation	.....
15	Dilapidation	15
.....	Removal of Bilge Water	.....
.....	Without Pump	.....
.....	Refusal of Admittance to Inspector	.....
2	No proper Water Vessel	2
.....	Without requisite Double Bulkheads	.....
.....	†Non-notification of Infectious Disease* ¹	.....
.....	Number of Boats detained for Cleansing (not for I/D.)	.....
21	Total Cases met with.	Total Cases Remedied 21
†	Number of Legal Proceedings taken* ²	.....
.....	Number of printed Notice Forms issued	1
.....	Number of Notices attended to	1
.....	Number still corresponding about* ³	.....

† Particulars of these should be given on sheets to be attached. *¹ State Disease and measures of isolation adopted. *² State infringements in respect of which taken and results.

*³ Reasons for delay in compliance

Disinfection.

DISINFECTION.—The usual method of disinfection of houses where infectious diseases have occurred is by means of the formalin spray.

Clothing, bedding, carpets, curtains, &c., are removed in a covered van to the Dépôt, and disinfected in an “Equifex” steam disinfecter.

The particulars of the work in this department are as follows :—

Visits to Infected Houses	1602
Houses Disinfected. (Rooms—1,037)	407
Number of times Disinfecting Machine used.....	84
Schools Disinfected.....	5
Cabs do.	3
Beds do.	112
Mattresses do.	25
Pillows do.	281
Blankets do.	107
Sheets	147
Coverlets do.	177
Articles of Clothing Disinfected.....	368
Carpets Disinfected.....	32
Visits to Consumption Cases	76
Measles Cases Visited	400
Persons Cleansed	1
Canal Boats Disinfected.....	2

Cleansing of
Persons' Act.

Cleansing of Persons' Act, 1897.—Under this Act, which the Burnley Local Sanitary Authority has adopted, means of cleansing persons infected with vermin are provided. One person has availed himself of these means during the year 1909. The arrangements for carrying out this cleansing, as before pointed out, are not satisfactory.

COMMON LODGING HOUSES.

Common
Lodging
Houses.

COMMON LODGING HOUSES.—The registration and supervision of the Common Lodging Houses is under the direction of the Health Committee. Byelaws affecting these places received the sanction of the Local Government Board in 1907.

These are :—

- (1) For fixing and from time to time varying the number of lodgers who may be received into a common lodging house, and for the separation of the sexes therein ; and
- (2) For promoting cleanliness and ventilation in such houses ; and
- (3) For the giving of notices and the taking precautions in the case of any infectious disease ; and
- (4) Generally for the well-ordering of such houses.

There are eight registered common lodging houses in Burnley, and the whole of them at the beginning of the year were registered for more lodgers than would allow of 400 cubic feet of air space each. Section 152 of the Burnley Borough Improvement Act, 1871, is as follows :—

“ It shall not be lawful for any person to suffer any lodgers to use as a sleeping room any room in any house belonging to or occupied by him, unless there are in such room 400 cubic feet of space at least for every person at any time using it as a sleeping room ; and if any person offends against this enactment he shall be liable to a penalty not exceeding forty shillings and to a further penalty not exceeding twenty shillings for every day during which such offence continues.”

During the year notice was given the owners to reduce the accommodation to the numbers which would allow of the air space mentioned, and the list of Common Lodging Houses with the capacity of each is now as follows :—

Lodging House.	No. of Lodgers for which registered.	Previous No. for which registered.
*Bluebell	47	57
Water Street	38	40
*Bank Parade.....	59	96
*Bridge Street.....	55	87
King's Arms	58	73
Calder Street.....	127	165
Kay Street.....	215	248
Curzon Street	13	18
*Admit Women Lodgers.		

Common
Lodging
Houses.

The Lodging Houses have been periodically visited by the Sanitary Inspectors :—

Number of visits	393
Defects found	39
These defects were :—	
Water Closets	13
Drains	12
Urinals, &c.....	2
Dirty Condition of Rooms, &c.....	11
Other Defects	1

All these were remedied.

In addition to the registered Common Lodging Houses there are a number of unregistered ones, and 126 visits have been paid to these. Generally speaking these houses are not satisfactory on account of the class of people who live in them, the want of supervision, and the construction of the buildings. Eight of these places have been Public Houses, the majority being at the time they were licensed, of the lowest class.

Application has been made to register some of them as Common Lodging Houses, but the Health Committee would not entertain these applications. Several night visits have been paid, but no infringement of the law was discovered.

LIST OF POLICE COURT PROCEEDINGS DURING 1905.

DATE OF HEARING.	ACT UNDER WHICH PROCEEDINGS WERE TAKEN.	OFFENCE.	RESULT.
Jan. 13th ..	Public Health Act, 1875 ..	Black Smoke	Withdrawn on payment of costs.
March 29th.	Public Health Act, 1875 ..	Blocked Closet Drain	Adjourned, eventually work done and case withdrawn on payment of costs.
May 19th ..	Food and Drugs Acts	Milk deficient in fats, &c.	Dismissed on payment of costs.
May 26th ..	Public Health Act, 1875 ..	Black Smoke	Adjourned, eventually 10/- and costs.
June 30th .	Food and Drugs Acts	Milk	10/- including costs.
July 7th ...	Food and Drugs Acts	Milk	Dismissed.
Aug. 4th ..	Food and Drugs Acts	Milk	Adjourned and eventually dismissed.
Aug. 4th ..	Food and Drugs Act	Cream	10/- and costs.
Aug. 4th ..	Food and Drugs Acts	Cream	10/- and costs.
Aug. 20th .	Public Health Act, 1875 ..	Keeping Pigs within 100 feet of dwellings	To remove pigs within 14 days and pay costs.
Aug. 20th .	.....	Overcrowded Furnished Room	To abate the overcrowding within 14 days.
Sept. 20th..	Public Health Act, 1875 ..	No ashpit door	Adjourned and eventually work done and case withdrawn on payment of costs.
Sept. 29th..	Public Health Act, 1875 ..	No ashpit door	Do. do. do.
Oct. 6th ...	Public Health Act, 1875 ..	Blocked closet drain	Work done—withdrawn on payment of costs.
Nov. 10th..	Public Health Act, 1875 ..	Defective closet cistern	To abate within seven days and pay costs.
Nov. 10th..	Public Health Act, 1875 ..	Defective closet tipper	Do. do.
Nov. 10th..	Public Health Act, 1875 ..	Defective closet tipper	Work done—withdrawn on payment of costs.
Nov. 10th..	Public Health Act, 1875 ..	Defective slop water pipe	To abate within seven days and pay costs.
Nov. 10th..	Public Health Act, 1875 ..	Defective slop water pipe	Do. do.
Nov. 10th..	Public Health Act, 1875 ..	Defective house roof and damp walls.	Adjourned and eventually work done—withdrawn on payment of costs.
Dec. 1st ...	Food and Drugs Acts	Milk } same defendant	10/- and costs.
Dec. 1st ...	Food and Drugs Acts	Milk }	To pay costs.
Dec. 22nd..	Public Health Act, 1875 ..	Blocked cellar drain	Work done—withdrawn on payment of costs.

APPENDIX.

- TABLE X. Shewing the Causes of Death for the year 1909, at various ages.
- TABLE XI. Shewing the Population, Birth Rate, Death Rate, and Infantile Mortality in Burnley for the last twenty-eight years.
- TABLE XII. Being Table I of the Local Government Board, shewing Population, Number of Deaths, Number of Births, Number of Deaths of Children under one, &c., for the last ten years.
- TABLE XIII. Being Table III of the Local Government Board, shewing numbers of cases of Infectious Disease notified, with their respective ages.
- TABLE XIV. Being Table IV of the Local Government Board, shewing causes of death, and deaths in Public Institutions.
- TABLE XV. Being Table V of the Local Government Board, shewing causes of death of children under one year of age, and the ages in weeks and months.
- TABLE XVI. Shewing the Birth Rate, Death Rate, Infantile Mortality, Diarrhoea Deaths, &c., for each of the twelve wards.

METEOROLOGY.

INFANTILE MORTALITY AND INDUSTRIAL OCCUPATION OF MARRIED WOMEN.

REPORT TO EDUCATION COMMITTEE.

TABLE X.—CAUSES OF DEATHS FOR THE YEAR, 1909.

	TOTAL.	MALES.	FEMALES.	Under 1.	1 and 5.	5 and 15.	15 and 25.	25 and 45.	45 and 65.	Over 65.	Workhouse.	Victoria Hospital.	Sanatorium.
Males	868	868	..	239	93	29	26	117	198	161	117	43	13
Females	837	..	837	178	93	33	33	114	190	201	77	31	10
Smallpox .....	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever	17	9	8	1	10	6	..	..	..	..	..	..	11
Diphtheria and Membranous Croup	13	9	4	1	7	5	..	..	..	..	..	..	2
Enteric Fever	8	3	5	..	..	3	1	2	2	..	..	..	6
Measles	18	10	8	5	11	1	1	..	..	..	..	..	..
Whooping Cough	16	10	6	8	8	..	..	..	..	..	..	..	..
Mumps	1	..	1	..	1	..	..	..	..	..	..	..	..
Erysipelas	3	2	1	..	..	..	..	3	..	..	..	..	2
Puerperal Fever	5	..	5	..	..	..	2	3	..	..	1	..	..
Other Septic Diseases	3	1	2	..	..	..	..	1	2	..	..	..	..
Influenza	14	10	4	1	1	..	..	3	4	5	..	..	..
Rheumatism	14	6	8	..	..	3	4	1	5	1	2	..	..
Diarrhoea and Dysentery	79	37	42	57	13	1	1	1	3	3	1	..	..
Syphilis	7	3	4	7	..	..	..	..	..	..	..	..	..
Tuberculous Diseases—													
Lungs	120	70	50	..	2	9	18	54	29	8	32	1	..
General	9	4	5	2	3	1	1	2	..	..	1	..	..
Intestines	23	12	11	10	7	1	2	2	1	..	1	4	..
Meningitis	18	10	8	7	5	5	..	1	..	..	2	..	..
Osseous	8	2	6	..	..	2	1	2	3	..	1	1	..
Glands	1	..	1	1	..	..	..	..	..	..	..	..	..
Kidneys	2	1	1	..	..	..	..	1	..	1	1	..	..
Respiratory Disease—													
Pneumonia	94	51	43	14	14	3	2	28	23	10	4	3	..
Bronchitis	294	156	138	93	50	5	..	10	60	76	28	1	..
Asthma	4	1	3	..	..	..	..	..	3	1	..	..	..
Pulmonary Congestion	2	1	1	..	..	..	1	..	..	1	..	..	..
Pulmonary Œdema	1	..	1	..	..	..	..	..	1	..	..	..	..
Pulmonary Gangrene	1	1	..	..	..	..	..	..	1	..	..	..	..
Pulmonary Thrombosis	1	..	1	..	..	..	..	..	1	..	..	..	..
Empyema	1	1	..	..	..	..	..	..	1	..	..	1	..
Pleurisy	4	3	1	..	..	..	..	1	2	1	..	..	..
Laryngitis	6	2	4	1	5	..	..	..	..	..	..	..	..
Heart Disease	119	41	78	..	..	3	4	22	51	39	8	3	1
Aneurysm	1	..	1	..	..	..	..	..	1	..	..	..	..
Aterio Sclerosis	2	2	..	..	..	..	..	1	1	..	..	1	..
Apoplexy	86	41	45	..	..	..	1	12	39	34	15	1	..
Stomach—													
Gastritis	16	6	10	12	..	..	..	..	4	..	..	..	..
Gastric Ulcer	9	2	7	..	..	..	1	3	5	..	..	3	..
Dyspepsia	1	..	1	..	..	..	..	1	..	..	..	1	..
Intestinal Diseases—													
Appendicitis	5	4	1	..	..	1	2	1	..	1	..	4	..
Obstruction	7	2	5	..	..	..	..	2	3	2	..	2	..
Peritonitis	5	3	2	..	1	..	1	3	..	..	..	3	..
Colitis	1	..	1	..	..	..	..	..	1	..	..	..	..
Ulceration of Duodenum	1	..	1	..	..	..	..	..	1	..	..	..	..

CAUSES OF DEATHS FOR THE YEAR 1909—Continued.

	TOTAL.	MALES.	FEMALES.	Under 1.	1 and 5.	5 and 15.	15 and 25.	25 and 45.	45 and 65.	Over 65.	Workhouse.	Victoria Hospital.	Sanatorium.
Congenital Defects (<i>continued</i>)—													
Melæna Neonatorum	1	..	1	1	..	..	..	..	..	..	..	..	..
Accidents at Birth	3	3	..	3	..	..	..	..	..	..	..	..	..
Anæmia	4	2	2	..	..	..	1	1	2	..	2	..	..
Rickets	6	5	1	1	5	..	..	..	..	..	3	..	..
Debility	43	23	20	42	1	..	..	..	..	..	6	..	..
Teething	13	6	7	5	8	..	..	..	..	..	..	..	..
Menopause	2	..	2	..	..	..	..	2	..	..	..	..	..
Old Age	106	41	65	..	..	..	..	..	2	104	37	..	..
Malignant Diseases—													
Cancer—Reproductive	14	..	14	..	..	1	..	4	7	2	1	2	..
Alimentary	36	19	17	..	..	..	..	5	20	11	3	5	..
Other forms	4	..	4	..	..	..	..	..	2	2	..	..	..
Sarcoma	5	2	3	..	..	1	..	1	..	3	..	..	..
Parturition—													
Syncope	1	..	1	..	..	..	..	1	..	..	..	..	..
Premature Delivery	1	..	1	..	..	..	..	1	..	..	..	..	..
Acute Puerperal Mastitis	1	..	1	..	..	..	1	..	..	..	..	..	..
Acute Nephritis	1	..	1	..	..	..	..	1	..	..	..	..	..
Concealed Hæmorrhage	1	..	1	..	..	..	..	1	..	..	..	..	..
Hernia	6	4	2	..	..	..	..	1	2	3	..	1	..
Diabetes	15	6	9	..	..	..	1	6	5	3	..	..	..
Gangrene	2	2	..	..	..	..	..	..	1	1	1	..	..
Alcoholism	1	1	..	..	..	..	..	1	..	..	..	..	1
Diseases of the Ear—													
Middle Ear Disease	4	2	2	2	1	..	1	..	..	..	..	..	..
Mastoid Disease	2	1	1	..	..	1	..	1	..	..	..	2	..
Naso Pharyngeal Ulceration	1	..	1	..	..	..	..	1	..	..	..	..	..
Exophthalmic Goitre	1	..	1	..	..	..	..	..	1	..	..	..	..
Scrotal Abscess	1	1	..	..	..	..	..	..	1	..	..	..	..
Necrosis of Bone	1	..	1	..	..	..	..	..	1	..	..	..	..
Hydrocele	1	1	..	..	..	..	..	..	1	..	..	1	..
Accidental Death	49	27	22	12	11	5	3	7	8	3	1	21	..
Suicide	17	14	3	..	..	..	..	6	10	1	2	..	..
Homicide	1	1	..	..	1	..	..	..	..	..	..	..	..
Natural Causes	44	30	14	4	2	..	2	3	19	14	4	2	..
Uncertified	19	11	8	9	3	..	..	1	..	6	..	..	..
Ill-defined Causes of Death—													
Ulceration of Bowels	1	..	1	..	..	..	..	1	..	..	..	..	..
Inflammation of Bowels	1	..	1	..	1	..	..	..	..	..	..	..	..
Paralytic Seizure	2	1	1	..	..	..	..	..	2	..	..	..	..
Total	1705	868	837	417	186	62	59	231	388	362	194	74	23

Table XI.—Population, Birth Rate, Death, and Infantile Mortality in Burnley for the last 28 years.

On comparing this Table with previous Annual Reports, and also with Table I of the Local Government Board Reports on page 93, the estimated populations for many of the years will be found to vary greatly. This is especially noticeable between the years 1891 and 1901. Between the years 1881 and 1891 the population had increased at the rate of 48 per cent., and as the customary method of estimating populations is to assume that the increase is at an even rate, the population estimated in this way in 1901 should have been 128,000. However, when the census came to be taken, the population was found to be only 97,043, which figure is given on the following table, and the rate of increase therefore was found to have been only 11 per cent., as compared with 48 per cent. in the previous decade. I have, therefore, estimated the population for the various years between 1891 and 1901 on this basis of 11 per cent. increase. This, of course, has reduced the previous estimations of those years to a marked extent, and has in a corresponding manner increased the birth rates and also the death rates, which will be found to be different on comparison. Of course, the figures for the infantile mortality are not an estimation, but are calculated each year on numbers that are known, *i.e.* number of births, and number of deaths of children under one.

Year.	Population.	Birth Rate.	Death Rate.	Infant Mortality.
1882	61,695	41·8	23·5	204
1883	64,509	40·1	23·7	201
1884	67,322	39·3	23·8	221
1885	70,135	37·8	21·2	186
1886	72,949	35·4	23·6	246
1887	75,761	36·0	20·7	214
1888	78,574	36·4	21·3	204
1889	81,388	37·2	23·2	225
1890	84,201	34·1	22·5	220
1891	87,016	36·0	23·1	221
1892	88,019	35·9	20·9	189
1893	89,022	35·4	22·8	227
1894	90,024	34·5	19·9	174
1895	91,027	35·0	25·6	249
1896	92,030	34·6	20·2	173
1897	93,033	33·8	22·1	223
1898	94,036	31·9	19·0	194
1899	95,039	29·9	23·6	273
1900	96,041	30·5	19·7	208
1901	97,043	27·5	18·9	227
1902	98,193	29·6	19·2	175
1903	99,344	27·5	19·0	216
1904	100,494	27·2	20·0	232
1905	101,693	26·5	16·8	174
1906	102,914	27·5	19·7	212
1907	103,947	28·7	17·4	156
1908	105,100	28·2	17·9	201
1909	106,267	24·9	16·0	157

TABLE XII.

Vital Statistics of Whole District during 1909 and previous Years.

(Being Table I. of the Local Government Board).

Year.	Population estimated to Middle of each Year.	Births.		Total Deaths Registered in the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Nett Deaths at all Ages belonging to the District.	
				Under 1 Year of Age.		At all Ages.						
		Number.	Rate. *	Number.	Rate per 1,000 Births registered.	Number.	Rate. *					
1899	100,000	2843	28.4	778	273	2341	23.4	295	98	...	2243	22.4
1900	100,000	2934	29.3	611	208	1992	19.9	308	92	...	1900	19.0
1901	97,500	2680	27.5	609	227	1948	20.0	301	100	...	1848	18.8
1902	99,000	2906	29.6	511	175	2008	22.3	330	110	...	1898	19.2
1903	99,000	2713	27.5	586	216	1962	19.8	344	115	...	1847	19.0
1904	99,000	2685	27.2	625	232	2066	20.9	376	125	...	1941	20.0
1905	100,000	2667	26.6	465	174	1799	18.0	379	119	...	1680	16.8
1906	102,914	2838	27.5	612	215	2144	20.8	448	134	20	2030	19.7
1907	103,947	2987	28.7	468	156	1933	18.6	439	142	19	1810	17.4
1908	105,100	2967	28.2	598	201	2039	19.0	448	168	20	1891	17.9
Averages for years 1899-1908.	100,646	2822	28.0	586	207	2023	20.1	366	120	...	1908	18.9
1909	106,267	2656	24.9	417	157	1851	17.4	450	159	13	1705	16.0

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

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

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

The "Public institutions" to be taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses and lunatic asylums. A list of the Institutions in respect of the deaths in which corrections have been made should be given on the back of this Table.

At Census of 1901—

Area of District in acres (exclusive of area covered by water) 4,015

Total population at all ages 97,043
 Number of inhabited houses 21,194
 Average number of persons per house.. 4.578

TABLE XIII.

Cases of Infectious Disease Notified during the Year 1909.

(Being Table III of the Local Government Board.)

Name of District—County Borough of Burnley.

Notifiable Disease.	Cases Notified in Whole District.							Not Stated.	Total cases removed to Hospital.
	At all Ages.	At Ages—Years.							
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.		
Small-pox .....	...	...	...	...	...	...	...	...	...
Cholera .....	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous croup)	84	2	27	30	10	9	...	6	29
Erysipelas.....	104	4	5	5	8	64	6	12	19
Scarlet fever.....	462	7	138	285	15	8	...	9	230
Typhus fever .....	...	...	...	...	...	...	...	...	...
Enteric Fever	43	...	3	15	10	12	...	3	22
Relapsing fever .....	...	...	...	...	...	...	...	...	...
Continued fever .....	...	...	...	...	...	...	...	...	...
Puerperal fever	14	...	...	...	2	3	...	9	4
Plague .....	...	...	...	...	...	...	...	...	...
Total.....	707	13	173	335	45	96	6	39	304

Isolation Hospital—Burnley District Sanatorium.

Table XIV.—CAUSES OF, AND AGES AT DEATH DURING YEAR 1909.
(BEING TABLE IV. OF THE LOCAL GOVERNMENT BOARD.)

CAUSES OF DEATH.	Deaths at the Subjoined Ages of "Residents" whether occurring in or beyond the District.							Total Deaths whether of "Residents" or Non-Residents in Public Institutions in the district
	All Ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	
Small-pox .....	...	...	...	...	...	...	...	...
Measles	18	5	11	1	1	...	...	12
Scarlet Fever.....	17	1	10	6	...	...	...	...
Whooping Cough	16	8	8	...	...	...	...	...
Diphtheria (including Membranous Croup)	13	1	7	5	...	...	...	2
Croup .....	...	...	...	...	...	...	...	...
Fever (Typhus) .....	...	...	...	...	...	...	...	...
„ (Enteric)	8	...	...	3	1	4	...	8
„ (Other continued) .....	...	...	...	...	...	...	...	...
Epidemic Influenza	14	1	1	...	...	7	5	...
Cholera .....	...	...	...	...	...	...	...	...
Plague.....	...	...	...	...	...	...	...	...
Diarrhœa	79	57	13	1	1	4	3	2
Enteritis.....	16	12	...	...	...	4	...	...
Puerperal Fever	5	...	...	...	2	3	...	1
Erysipelas	3	...	...	...	...	3	...	3
Phthisis (Pulmonary Tuberculosis)	120	...	2	9	18	83	8	51
Other Tubercular Diseases	62	20	15	9	4	13	1	16
Cancer (Malignant Disease)	59	...	...	2	...	39	18	26
Bronchitis	294	93	50	5	...	70	76	46
Pneumonia	94	14	14	3	2	51	10	15
Pleurisy	4	...	...	...	...	3	1	...
Other Diseases of Respiratory Organs	16	1	5	...	1	7	2	4
Alcoholism (Cirrhosis of Liver) ...	9	...	...	...	...	8	1	4
Venereal Diseases.....	...	...	...	...	...	...	...	...
Premature Birth	65	65	...	...	...	...	...	5
Diseases and Accidents of Parturition	5	...	...	...	1	4	...	...
Heart Diseases	119	...	...	3	4	73	39	21
Accidents	49	12	11	5	3	15	3	30
Suicides	17	...	...	...	...	16	1	2
Nephritis	39	3	1	1	1	27	6	14
Old Age	106	...	...	...	...	2	10	61
Apoplexy.....	84	...	...	...	13	37	34	26
All other causes	374	124	38	9	7	146	50	101
All causes	1705	417	186	62	59	619	362	450

Table XV.—INFANTILE MORTALITY DURING THE YEAR 1909.

DEATHS FROM STATED CAUSES IN WEEKS AND MONTHS UNDER ONE YEAR OF AGE.

(Being Table V. of the Local Government Board).

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under One Year.
<i>All Causes.</i>																	
Certified	63	17	25	12	117	54	34	34	23	23	26	24	25	20	15	13	408
Uncertificated	3	1	..	..	4	1	1	..	..	1	..	1	..	1	..	..	9
<i>i. Common Infectious Diseases.</i>																	
Small-pox .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles .....	..	..	1	..	1	..	..	..	2	..	..	1	..	1	..	..	5
Scarlet Fever.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Diphtheria (including Membranous Croup) .....	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1
Whooping Cough .....	..	..	..	..	..	1	..	2	2	1	..	..	..	..	2	..	8
<i>ii. Diarrhæal Diseases.</i>																	
Diarrhœa, all forms.....	..	..	4	1	5	9	6	5	4	7	6	3	6	3	2	1	57
Enteritis, Muco-enteritis, Gastro-enteritis..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gastritis, Gastro-intestinal Catarrh..	..	..	..	..	..	2	2	4	..	2	1	1	..	..	..	..	12
<i>iii. Wasting Diseases.</i>																	
Premature Birth	40	8	6	5	59	6	..	..	..	..	..	..	..	..	..	..	65
Congenital Defects	8	5	7	1	21	7	..	1	..	1	..	..	..	..	..	..	30
Injury at Birth	2	..	1	..	3	..	..	..	..	..	..	..	..	..	..	..	3
Want of Breast-milk, Starvation..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Atrophy, Debility, Marasmus..	3	2	1	5	11	13	6	1	2	2	4	1	1	1	..	..	42
<i>iv. Tuberculous Diseases.</i>																	
Tuberculous Meningitis .....	..	..	..	..	..	..	..	1	..	..	1	1	1	1	..	2	7
Tuberculous Peritonitis : Tabes Mesenterica..	..	..	..	..	..	1	1	..	2	2	..	2	2	..	..	..	10
Other Tuberculous Diseases ..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	3
<i>v. Other Causes.</i>																	
Erysipelas .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Syphilis .....	..	..	1	..	1	1	3	2	..	..	..	..	..	..	..	..	7
Rickets.....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
Meningitis (not Tuberculous) ..	..	..	..	..	..	..	..	1	..	2	..	..	..	1	1	..	15
Convulsions	4	1	2	..	7	1	1	1	..	1	..	1	..	..	2	..	14
Bronchitis .....	..	..	2	..	2	6	8	10	10	5	11	12	10	7	4	8	93
Laryngitis .....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1
Pneumonia .....	..	..	..	..	..	1	3	2	..	..	3	1	1	2	1	..	14
Suffocation, overlying	3	..	..	..	3	3	3	1	..	..	..	1	..	..	..	..	11
Other Causes.....	6	2	..	..	8	4	2	1	..	1	..	1	3	5	2	..	27
	66	18	25	12	121	55	35	34	23	24	26	25	25	21	15	13	417

District of BURNLEY.

Births in the year—Legitimate 2,519
 Illegitimate 137

Population (estimated to middle of 1909).... 106,267

Deaths in the year of—Legitimate Infants .. 377
 Illegitimate Infants .. 40

Deaths from all Causes at all Ages—1,705.

TABLE XVI.—PARTICULARS OF THE TWELVE WARDS.

WARDS.	Population.	Acreage.	Acreage built upon.	Density of portion built upon.	Birth Rate.	Death Rate.	Notifiable Infectious Diseases.	Morbidity Rate.	Mortality Rate.	Diarrhea Death Rate.	Infantile Mortality.
St. Andrew's.....	13780	823	166	83·0	19·4	9·4	95	6·89	·14	0·36	104
Daneshouse. ...	9556	140	84	113·7	24·4	12·2	88	9·20	·31	0·42	136
Stoneyholme.....	7336	540	90	81·5	19·5	10·3	40	5·43	·54	0·81	125
St. Peter's.....	6490	114	91	71·3	29·6	18·8	23	3·54	·30	1·38	187
St. Paul's.....	8007	152	105	76·3	31·9	18·2	39	4·87	·54	1·99	183
Fulledge.....	9668	425	103	93·8	29·0	13·4	73	7·55	·31	0·41	131
Burnley Wood...	9810	166	95	103·0	24·2	11·9	56	5·71	·30	0·61	109
Healey	7936	364	110	72·1	19·0	9·9	47	5·92	·12	1·01	158
Trinity	8586	93	93	92·3	23·6	13·3	50	5·82	·58	0·69	182
Whittlefield.	5764	175	74	77·8	28·1	13·5	27	4·68	...	0·52	135
Gannow	9730	496	84	115·8	26·2	15·9	62	6·37	·41	0·81	231
Lowerhouse	9574	527	150	63·8	24·5	14·2	92	9·61	1·26	0·31	123
Totals for the town as a whole	106267	4015	1245	85·3	24·9	16·0	717	6·75	·43	0·74	157

METEOROLOGY.

Meteorological
Observations.

THE METEOROLOGICAL OBSERVATORY is at Queen's Park. It is attached to the Meteorological Office and is called an Auxiliary Climatological Station. The results of the observations are sent to that Office, and monthly returns are published from all the places that supply readings. A weekly return of temperature and rainfall is also sent by us for the use of the Registrar General, and is published in a weekly return sent out from his office.

The Instruments consist of a Kew pattern barometer—this is in the potting shed—the reservoir is 458 feet above sea level, and in the enclosure are the following :—

In the Stephenson Screen	{	Wet Bulb Thermometer.
		Dry Bulb ,,
		Maximum ,,
		Minimum ,,

Solar Radiation Maximum Thermometer.

Grass Minimum Thermometer.

Earth Thermometers—1 foot.

4 foot.

Sunshine Recorder. (Campbell Stokes).

Rain Gauge. (8 inches in diameter).

The floor of the Stephenson screen is 461 feet above sea level.

The readings are taken daily at 9 o'clock a.m., and the results are posted each day in front of the Town Hall, and published on the Wednesday in each of the two local papers.

SUMMARY OF READINGS FOR THE YEAR.

Barometer.—The mean reading was 29.934 inches ; highest reading 30.680 on January 4th, lowest reading 28.447 on December 3rd.

Temperature.—The highest temperature in the shade recorded was 77.5° on May 15th ; the lowest temperature being 10.0° on December 20th. The mean temperature for the year was 45.8°, the mean daily range being 13.0°. The lowest reading of the Grass Thermometer was 10.0° on December 6th, the number of days of ground frost being 170.

Rainfall.—The total amount of rain for the year was 40.2 inches, the highest amount in one day being 1.11 inches on February 3rd, the number of rainy days has been 190. The mean relative humidity at 9.0 a.m. was 83.0 per cent.

**Meteorological
Observations.**

Sunshine.—The total amount of bright sunshine registered was 1,144 hours, highest amount in one day 13 hours 30 minutes on May 5th and 8th. The mean reading of the Solar Radiation thermometer was 94.7° , the highest reading being 127° on August 13th.

Earth Thermometers.—The mean reading of the 1-foot thermometer was 45.5° , mean reading of 4-foot thermometer 46.3° .

MONTHLY SUMMARY OF READINGS.

January.—Mean reading of barometer 30.120 inches. Mean range for the month 1.476 inches. Mean temperature in shade 37.0° . Mean reading of 4-foot thermometer 41.9° . Total rainfall 2.55 inches on 16 days. Mean relative humidity at 9-0 a.m. 89.2 per cent. Bright sunshine 26 hours, greatest amount 5 hours 15 minutes on the 20th. 16 days without sun.

February.—Mean reading of barometer 30.152 inches. Mean range for the month 1.199 inches. Mean temperature in shade 36.4° . Mean reading of 4-foot thermometer 39.5° . Total rainfall 3.15 inches on 8 days. Mean relative humidity at 9-0 a.m. 86.5 per cent. Bright sunshine 57 hours 55 minutes, greatest amount 7 hours 50 minutes on the 21st. 10 days without sun.

March.—Mean reading of barometer 29.536 inches. Mean range for the month 1.033 inches. Mean temperature in shade 36.7° . Mean reading of 4-foot thermometer 38.3 . Total rainfall 2.51 inches on 17 days. Mean relative humidity at 9-0 a.m. 89.6 per cent. Bright sunshine 50 hours 30 minutes, greatest amount 7 hours 15 minutes on the 15th. 10 days without sun.

April.—Mean reading of barometer 29.948 inches. Mean range for the month 1.074 inches. Mean temperature in shade 45.4° . Mean reading of 4-foot thermometer 41.5° . Total rainfall 3.75 inches on 14 days. Mean relative humidity at 9-0 a.m. 74.8 per cent. Bright sunshine 175 hours, greatest amount 10 hours 50 minutes on the 9th. No days without sun.

May.—Mean reading of barometer 30.109 inches. Mean range for the month 0.971 inches. Mean temperature in shade 48.6° . Mean reading of 4-foot thermometer 45.7° . Total rainfall 2.09 inches on 12 days. Mean relative humidity at 9-0 a.m. 69.5 per cent. Bright sunshine 212 hours 20 minutes, greatest amount 13 hours 30 minutes on the 5th and 8th. 1 day without sun.

June.—Mean reading of barometer 29.993 inches. Mean range for the month 1.030 inches. Mean temperature in shade 51.4° . Mean reading of 4-foot thermometer 49.6° . Total rainfall 2.61 inches on 14 days. Mean relative humidity at 9-0 a.m. 82.4 per cent. Bright sunshine 132 hours, greatest amount 13 hours 15 minutes on the 7th. 5 days without sun.

July.—Mean reading of barometer 29.872 inches. Mean range for the month 0.748 inches. Mean temperature in shade 56.1° . Mean reading of 4-foot thermometer 52.6° . Total rainfall 5.86 inches on 22 days. Mean relative humidity at 9-0 a.m. 78.5 per cent. Bright sunshine 115 hours, greatest amount 13 hours 15 minutes on the 8th. 2 days without sun.

**Meteorological
Observations.**

August.—Mean reading of barometer 29.982 inches. Mean range for the month, 0.838 inches. Mean temperature in shade 57.4°. Mean reading of 4-foot thermometer 54.4°. Total rainfall 2.93 inches on 17 days. Mean relative humidity at 9.0 a.m. 79.0 per cent. Bright sunshine 146 hours 10 minutes, greatest amount 13 hours on the 6th. 4 days without sun.

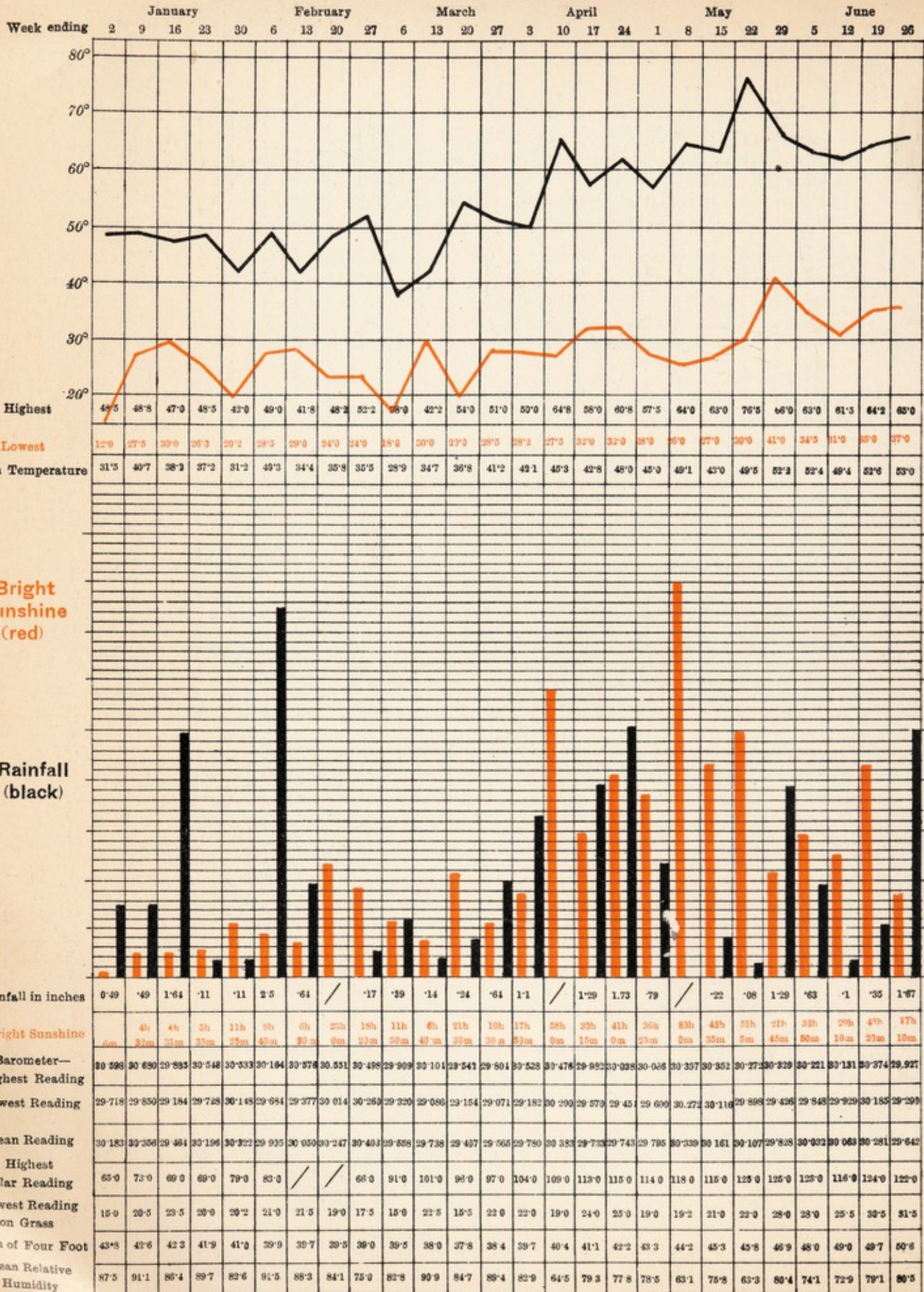
September.—Mean reading of barometer 30.056 inches. Mean range for the month 0.835 inches. Mean temperature in shade 51.1°. Mean reading of 4-foot thermometer 52.9°. Total rainfall 2.27 inches on 14 days. Mean relative humidity at 9.0 a.m. 84.2 per cent. Bright sunshine 70 hours 35 minutes, greatest amount 10 hours 45 minutes on the 2nd. 2 days without sun.

October.—Mean reading of barometer 29.749 inches. Mean range for the month 0.989 inches. Mean temperature in shade 49.4°. Mean reading of 4-foot thermometer 51.5°. Total rainfall 4.78 inches on 23 days. Mean relative humidity at 9.0 a.m. 83.8 per cent. Bright sunshine 90 hours 30 minutes, greatest amount 7 hours 30 minutes on the 25th. 5 days without sun.

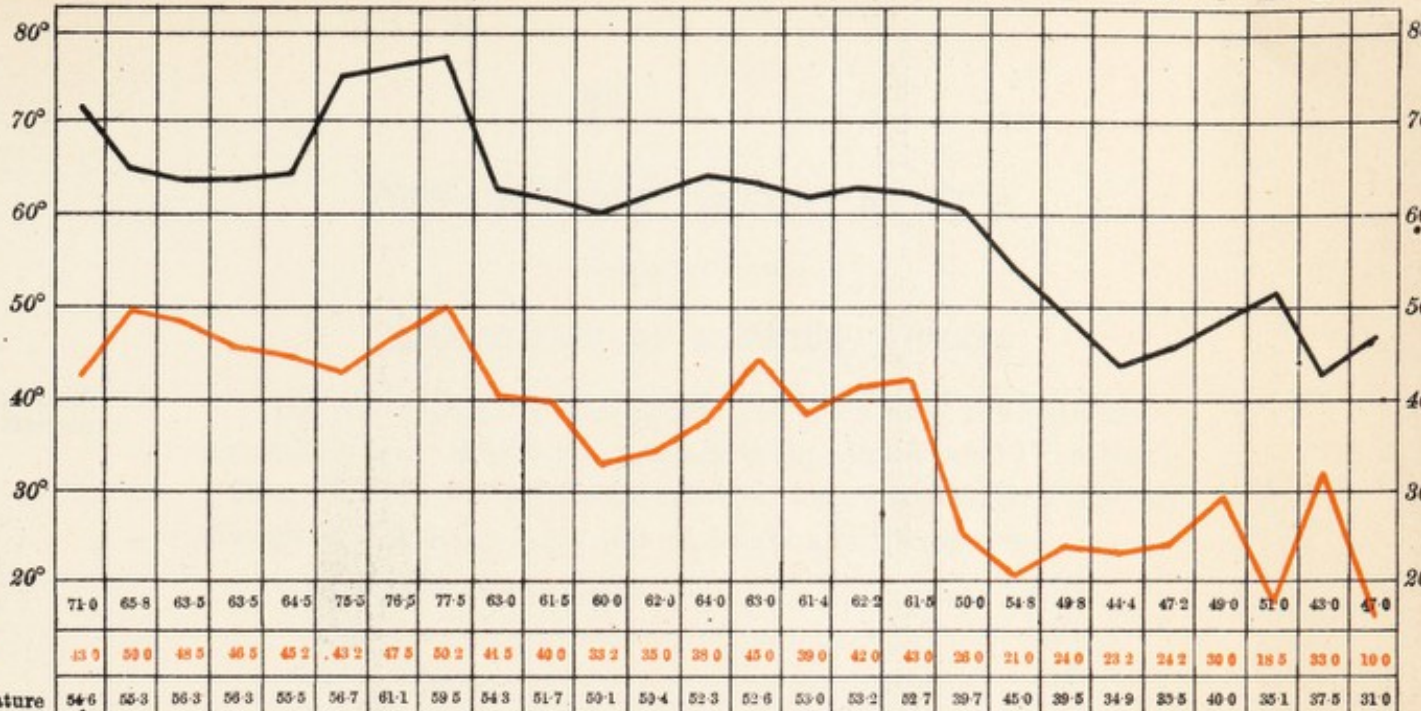
November.—Mean reading of barometer 30.034 inches. Mean range for the month 1.249 inches. Mean temperature in shade 44.3°. Mean reading of 4-foot thermometer 46.3°. Total rainfall 1.91 inches on 11 days. Mean relative humidity at 9.0 a.m. 87.6 per cent. Bright sunshine 53 hours 25 minutes, greatest amount 5 hours 5 minutes on the 16th. 10 days without sun.

December.—Mean reading of barometer 29.663 inches. Mean range for the month 2.105 inches. Mean temperature in shade 36.7°. Mean reading of 4-foot thermometer 42.1°. Total rainfall 5.79 inches on 22 days. Mean relative humidity at 9.0 a.m. 91.0 per cent. Bright sunshine 14 hours 45 minutes, greatest amount 3 hours 20 minutes on December 25th. 18 days without sun.

Weekly Report of Meteorological Observations.



Week ending 3 10 17 24 31 July 7 14 21 28 August 4 11 18 25 September 2 9 16 23 30 October 6 13 20 27 November 4 11 18 25 December



Bright Sunshine (red)

Rainfall (black)

Rainfall in inches

Bright Sunshine

Barometer—Highest Reading

Lowest Reading

Mean Reading

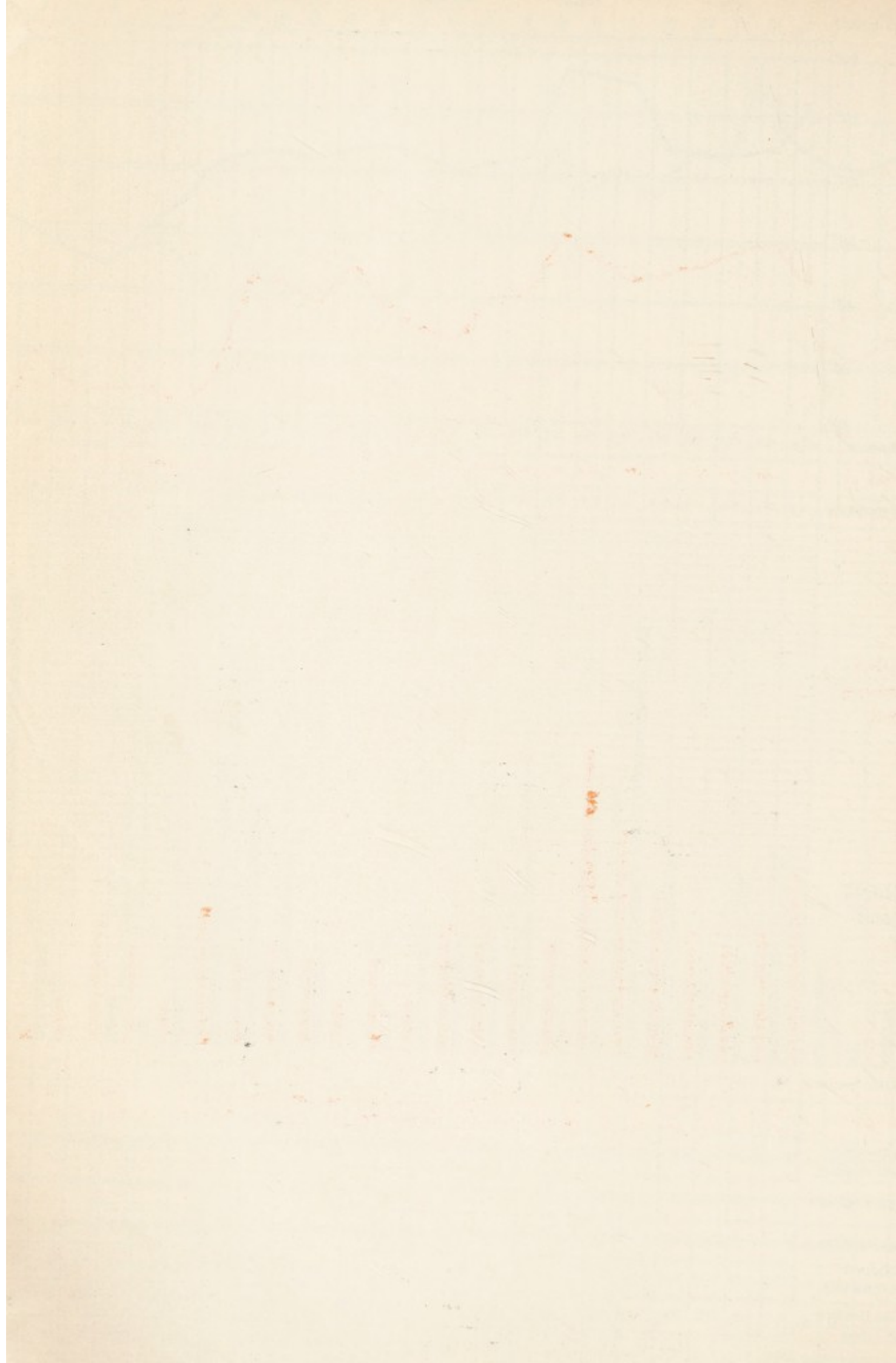
Highest Solar Reading

Lowest Reading on Grass

Mean of Four Feet

Mean Relative Humidity

35h	25h	22h	24h	28h	42h	57h	21h	17h	21h	24h	9h	18h	8h	16h	18h	17h	27h	7h	18h	23h	7h	1h	1h	3h	7h
5m	25m	45m	14m	19m	0m	10m	45m	46m	25m	45m	47m	0m	25m	35m	58m	58m	10m	51m	25m	30m	45m	37m	50m	30m	26m
30.225	30.032	30.059	30.635	29.869	30.268	30.306	30.089	30.198	30.170	30.186	30.396	30.156	30.265	30.100	29.943	30.612	30.014	30.271	30.417	30.262	30.401	29.616	30.273	30.532	29.615
29.878	29.596	29.755	29.439	29.419	30.041	30.095	29.468	29.672	29.989	29.561	30.044	29.893	29.653	29.220	29.408	29.548	29.543	30.034	29.636	29.690	29.878	28.477	29.074	29.391	28.864
30.059	29.816	29.977	30.015	29.715	30.179	30.173	29.759	29.859	29.949	29.928	30.199	30.054	29.963	29.604	29.696	29.732	29.778	30.131	30.037	30.083	30.181	29.120	29.629	30.128	29.342
122.0	124.0	125.0	119.0	125.0	130.0	127.0	125.0	119.0	116.0	120.0	103.0	115.0	105.0	104.0	108.0	100.0	92.0	89.0	86.0	77.0	67.0	57.0	67.0	68.0	68.0
34.0	46.0	39.0	38.0	41.0	38.0	45.0	50.2	36.2	34.4	29.5	27.0	29.4	37.2	38.5	38.0	30.0	18.0	12.0	14.8	14.5	17.0	23.0	10.0	25.5	12.0
50.9	52.0	52.6	53.1	53.3	53.4	54.1	55.2	55.0	54.4	53.6	51.9	52.2	52.0	52.0	51.8	51.3	50.8	48.6	47.8	46.5	44.2	43.2	42.6	42.0	41.9
77.8	77.3	82.8	80.4	85.2	72.7	77.7	84.3	84.0	81.6	80.7	83.4	86.5	88.6	86.7	82.0	87.7	77.7	91.1	83.7	82.6	85.6	88.8	88.3	89.2	92.4



INFANTILE MORTALITY.

EMPLOYMENT OF MARRIED WOMEN.

Infantile
Mortality.

The following facts and figures are given as a contribution to an enquiry into this subject which is being carried out by the Home Office. A copy of the summaries asked for by the Home Office are also given with some notes and explanation of the figures.

Total born during 1908.....	2925
Illegitimate	151
Not visited	189
Not found, or left town during the year.....	145
Total deaths within a year of birth of those born during 1908	529
Deaths of illegitimate children	51
Number of twin births	26
Number of first-born children.....	640
Number of legitimate children enquired into.....	2453
Number of illegitimate children enquired into....	138
Total.....	<u>2591</u>
Number of deaths of legitimate children.....	478
Number of deaths of illegitimate children.....	51
Total.....	<u>529</u>

Infantile death rate of total children enquired into 204 per 1000 births.

„	„	legitimate	„	194	„
„	„	illegitimate	„	369	„

Occupation of Parents.—The occupations of 2565 mothers have been enquired into. The disparity between this number and the one given above is accounted for by there being 26 twin births.

In the following table the mothers who are shewn as engaged in some occupation outside the home are those who have been engaged in that occupation during pregnancy ; the rest are called housewives. The “ other occupations ” given in the table include laundresses, hawkers, rag sorters, charwomen, and domestic servants.

Infantile
Mortality.

The occupation of the fathers are taken from the birth sheets supplied by the registrar.

MOTHER—

Weavers.....Cotton Weaving Industry	839
Winders and Factory Hands „ „ ...	304
Dressmakers.....	6
Other occupations	80
Total No. of working Mothers	1229
Total No. of Housewives	1336
Total.....	<u>2565</u>

Percentage of Mothers working	44
Percentage of Mothers at home	56
Total.....	<u>100</u>

FATHER—

Textile Operatives (Cotton)	797
Labourers (Navvies, &c.)	370
Miners (Coal)	364
Iron Workers (Mechanics)	179
Outside Trades (Masons, &c.)	71
Office or Shop	168
Other occupations	478
Not stated.....(Illegitimate)	138
Total.....	<u>2565</u>

The period of time during which the 1229 mothers left work before confinement is given approximately as follows :—

Under one week.....	37
One week to one month.....	101
One to two months.....	211
Two to three months.....	205
Three to four months.....	204
Four to five months.....	145
Over five months.....	209
Not stated.....	117
Total.....	<u>1229</u>

Infantile
Mortality.

The period of time that the working mothers stayed at home after confinement is approximately as follows :—

Under two months.....	147
Two to three months.....	109
Three to four months.....	83
Four to five months.....	58
Five to six months.....	46
Not commenced work at six months' end.....	492
Not stated	294
Total.....	<u>1229</u>

FEEDING.—The following figures shew how the children were fed, from enquiries made at the end of six months :—

Breast fed	1092
Mixed	833
Artificial	580
Not stated	86
Total.....	<u>2591</u>

ATTENDANT AT BIRTH.

Medical Men	1176
Midwives and other women	1380
Not stated	9
Total.....	<u>2565</u>

HOUSES.—The majority of the houses in Burnley are substantially built, consisting of four rooms, and are self-contained. During this period it is estimated that there were in Burnley :—

Single rooms.....	107
Back-to-back	2209
Other dwellings.....	21286
Total.....	<u>23602</u>

The following is a list of the different classes of houses in which these children were born :—

Single rooms (Houses Let in Lodgings).....	32
Back-to-back	477
Other dwellings	2044
Not stated	12
Total.....	<u>2565</u>

**Infantile
Mortality.**

DEATHS of children who were born during the year 1908, and who died before they were a year old.

Number born.	Number died.	Rate per thousand born.
2591	529	204

The rates for the Calendar Years 1907 and 1908 were 156 and 201, which gives an average of 179.

The diseases from which these children died are:—

Diarrhoea	131
Bronchitis	85
Premature Birth.....	69
Debility.....	62
Congenital Defects	37
Convulsions	25
Pneumonia	13
Tabes Mesenterica	8
Whooping Cough	7
Suffocated	11
Meningitis	8
Syphilis.....	7
General Tuberculosis.....	5
Measles.....	3
Want of Breast Milk.....	1
Accidental Death	1
Tubercular Meningitis	7
Natural Causes	2
Teething	10
Gastritis.....	12
Nephritis	4
Rickets	1
Injury at Birth.....	5
Jaundice	2
Diphtheria.....	1
Ear Disease	2
Epilepsy	1
Infantile Paralysis	1
Vaccinia.....	1
Uncertified	7
Total.....	<u>529</u>

Infantile
Mortality.

Inquests were held on fourteen of the above, and seven were uncertified, the causes of death being given as shewn on the registration returns.

The ages at which these children died are :—

Under 1 month	152
Between 1 and 2 months.....	66
„ 2 and 3 „	72
„ 3 and 4 „	44
„ 4 and 5 „	34
„ 5 and 6 „	35
„ 6 and 7 „	30
„ 7 and 8 „	31
„ 8 and 9 „	26
„ 9 and 10 „	16
„ 10 and 11 „	13
„ 11 and 12 „	10
Total.....	<u>529</u>

Number of twin children born 52, Males 24, Females 28

„ „ died 19, „ 13, „ 6

Number of first children—births 640

„ „ deaths 128

Total number of children who were not visited 189.

Number of children who died who had not been visited, 21.

Occupation of Mothers—

Textile operatives.....	275
Dressmakers	2
Other occupations	27
Total.....	<u>304</u>
Housewives	218
Total.....	<u>522</u>

The disparity between the 522 and 529 is owing to the 26 twin births.

Infantile
Mortality.**Occupation of Fathers—**

Textile operatives.....	135
Labourers (Navvies, &c.).....	104
Miners (Coal)	77
Iron Workers (Mechanics).....	36
Outside Trades (Masons, &c.)	15
Office or Shop.....	19
Other occupations	85
Not stated.....(Illegitimate)	51
Total.....	<u>522</u>

The period of time during which the 304 mothers left work before the confinement :—

Under 1 week.....	18
1 week to 1 month	34
1 to 2 months.....	52
2 to 3 ,, 	54
3 to 4 ,, 	32
4 to 5 ,, 	36
Over 5 months	45
Not stated	33
Total.....	<u>304</u>

The period of time that the working mother stayed at home after confinement :—

Under 2 months.....	40
2 to 3 months.....	16
3 to 4 ,, 	8
4 to 5 ,, 	5
5 to 6 ,, 	5
Not commenced work at six months' end.....	30
Not stated	200
Total.....	<u>304</u>

Infantile
Mortality.

The feeding of the children who died :—

Breast fed	120
Breast and Artificial	161
Artificial	164
Not stated	84
Total.....	<u>529</u>

The 522 mothers were attended at the birth of the children by :—

Medical men	220
Midwives and other women	296
Not stated	6
	<u>522</u>

The housing of the children who died :—

No. of Rooms in Houses.

One room (Two furnished dwellings).....	10
Two or three.....	129
Four or over	376
Not stated	7
Total.....	<u>522</u>

Enquiry as to Industrial Employment of Married Women, and Infant Mortality (1908).

SUMMARY.

Area—BURNLEY.

I.—CASES UNDER ENQUIRY.

	In case of Mothers industrially employed.				In case of Mothers not industrially employed.
	At Home.	In Factory or Work- shop.		Elsewhere	
		In Lead.	Otherwise		
Children born alive, and surviving first year ..	2	..	913	36	1111
Children born alive, and dying in first year....	1	..	280	23	225
Miscarriages, Still Births, Premature Births ..	..	..	..	..	..
Age of Mother—					
25 years.....	..	..	425	14	105
35 years.....	..	..	371	18	381
Over 35 years .....	..	..	59	8	170
Not ascertained	2	..	338	19	680
Previous Confinements—					
Miscarriages, Still Births.....	Not obtained.				
Children born alive.....	1	..	1902	174	4614
Children now living .....	..	..	988	110	3338
Children died in first year.....	Not ascertained.				
No previous confinement	2	..	461	8	165
Not ascertained .....	..	..	..	..	4
Status of Mother—					
Living with Husband.....	*6	..	*1163	*86	*1336
Living apart.....	Not ascertainable.				
Widowed	Not ascertainable.				
Single.....	*2	..	*109	*19	*8
Reason for industrial employment of Mother—					
A—as sole or main source of income.....	Not obtained.				
B—to supplement small income.....					
C—preference for industrial work					
Households (No. of) .....	..	..	..	..	..
Average—					
No. of Rooms per household	4	..	3.62	3.2	3.95
No. of Persons per room (including lodgers)	1.3	..	1.62	1.8	1.34
Rental .....	..	..	..	..	..
Average weekly earnings of Mother—					
Before confinement.....	..	..	16/-	..	..
After confinement .....	..	..	16/-	..	..
Average total weekly income of family.....	..	..	38/-	..	25/-

* The figures in these lines are those for legitimate and illegitimate children respectively.

NOTES ON SUMMARY.

Infantile
Mortality.

Age of Mothers.—It is not always possible to get this information for queries of this kind can not be pushed, and unless information is freely offered, the visitors are instructed not to press for answers.

Miscarriages.—The information regarding these was thought to be so scanty and unreliable that no figures are given, questions on this subject can not always be asked with a possibility of getting a correct answer.

Status of Mother.—To ask the mothers questions that will furnish correct figures under this heading would in many cases be looked upon as impertinent. The questions also are somewhat difficult to answer intelligibly, for out of 151 illegitimate births only 61 were firstborn children, in fact above half the illegitimate children were born in the same surroundings as the legitimate children, the only difference being that the father and mother of the child were not legally man and wife. Many of these mothers would have to be therefore shown as single women.

Reasons for Industrial Employment of Mothers.—In most cases the mother goes to work to supplement the income, not always what may be described as small. There will be very few who come under A or C.

Earnings.—Accurate information on this subject is not obtainable, more especially where the amount of employment is of a varying quantity.

The majority of the fathers and mothers in Burnley are engaged in the cotton trade, and as that trade was not good during the year 1908, wages were in consequence much less than normal.

An approximate average wage for a woman weaver may be put down at 22s. 6d. per week, but during the year under review it would be about 17s.; that of a winder in normal times 20s., but in 1908 probably about 15s. Fathers who were weavers would earn an average of 25s. per week during ordinary times, but perhaps about 20s. during this year.

A labourer's wage might be put down at 21s., taking the year round. This refers to regular labourers like navvies; a casual labourer would of course earn less.

**Infantile
Mortality.**

Miners I believe during this year were pretty fully occupied, but as the wages earned appear to vary very greatly it is difficult to give an approximate average. The average wage at one colliery was 7s. per day. Perhaps 30s. will be a correct estimate of the weekly average earnings.

The average total weekly earnings given are worked out on these figures.

Enquiry as to Industrial Employment of Married Women, and Infantile Mortality (1908).

II.—EMPLOYMENT OF MOTHER IN RELATION TO HEALTH OF CHILD.

A.—CHILDREN SURVIVING FIRST YEAR.

SUMMARY.

Area—BURNLEY.

	In case of Mothers industrially employed.				In cases of Mothers <i>not</i> industr'ly employed.
	At Home.	In Factory or Workshop.		Elsewhere	
		In Lead.	Otherwise.		
Industrial work discontinued before confinement—					
1 week .....	..	..	10	..	..
2 weeks .....	..	..	..	..	..
3 weeks .....	..	..	9	7	..
4 weeks .....	..	..	24	5	..
8 weeks .....	..	..	128	5	..
12 weeks .....	..	..	128	2	..
26 weeks	2	..	292	1	..
Over 26 weeks . . . . .	..	..	322	16	..
Industrial work resumed after confinement, within—					
4 weeks .....	..	..	..	1	..
6 weeks .....	..	..	23	1	..
8 weeks .....	..	..	44	4	..
12 weeks .....	..	..	84	4	..
26 weeks .....	..	..	175	2	..
Not within 6 months	2	..	587	24	..
Nursed (at last visit)—					
At home by Mother	2	..	566	24	1111
At home by other person .....	..	..	63	..	..
Put out .....	..	..	284	12	..
Feeding, breast alone —					
1 month .....	..	..	12	1	9
2 months .....	..	..	93	2	50
3 months .....	..	..	148	3	75
6 months	1	..	439	18	741
Feeding, breast partly—					
1 month .....	..	..	36	..	19
2 months .....	..	..	4	..	2
3 months .....	..	..	1	..	..
6 months .....	..	..	7	..	2
Artificial entirely	1	..	173	12	213

Enquiry as to Industrial Employment of Married Women, and Infant Mortality (1908).

II.—EMPLOYMENT OF MOTHER IN RELATION TO HEALTH OF CHILD.

B.—CHILDREN DYING IN FIRST YEAR.

SUMMARY.

Area—BURNLEY.

	In case of Mothers industrially employed.				In case Mothers not industr'ly employed.
	At Home.	In Factory or Work- shop.		Elsewhere	
		In Lead.	Otherwise.		
Industrial work discontinued before confine- ment—					
1 week .....	..	..	17	1	..
2 weeks .....	..	..	14	1	..
3 weeks .....	..	..	19	2	..
4 weeks .....	..	..	9	1	..
8 weeks .....	..	..	46	4	..
12 weeks .....	..	..	48	1	..
26 weeks .....	..	..	69	3	..
Over 26 weeks .....	..	..	37	2	..
Not ascertained .....	..	..	21	8	..
Industrial work resumed after confinement, within—					
4 weeks .....	..	..	..	..	..
6 weeks .....	..	..	20	4	..
8 weeks .....	..	..	20	..	..
12 weeks .....	..	..	17	2	..
26 weeks .....	..	..	17	1	..
Not within 6 months .....	..	..	22	2	..
Not ascertained .....	..	..	184	14	..
Nursed (at last visit)—					
At home, by Mother .....	..	..	211	18	225
At home, by other person	1	..	31	5	..
Put out .....	..	..	38	..	..
Feeding, breast alone—					
1 month .....	..	..	40	3	36
2 months .....	..	..	40	4	22
3 months .....	..	..	23	1	23
6 months .....	..	..	30	5	38
Feeding, breast partly—					
1 month .....	..	..	5	..	2
2 months .....	..	..	4	..	1
3 months .....	..	..	..	..	..
6 months .....	..	..	6	2	6
Feeding, artificial entirely	1	..	96	6	51
Not ascertained .....	..	..	36	2	46
Age at death—					
1 month .....	..	..	80	4	65
2 months	1	..	33	3	28
3 months .....	..	..	41	1	28
6 months .....	..	..	58	7	47
12 months .....	..	..	68	8	57
Cause of death—					
Infectious diseases	1	..	77	7	54
Wasting diseases (including premature birth) .....	..	..	88	4	77
Other diseases .....	..	..	115	12	94
Mean age at death (in weeks)	20	..	14.0	14.9	15.7