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Contributors

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BOROUGH OF DARWEN.



REPORT

OF

F. G. HAWORTH,

M.B.C.M., L.R.C.S., D.P.H.,

MEDICAL OFFICER OF HEALTH,

Medical Officer to the Education Committee,

POLICE SURGEON,

FOR THE

Year ending December 31st, 1920.

DARWEN :

J. J. RILEY, Printer, Bookbinder, &c., "News Office."

MCMXXI.



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"BROOKLYN," DARWEN,

FEBRUARY, 1921.

**TO THE CHAIRMAN AND MEMBERS OF THE
HEALTH COMMITTEE.**

GENTLEMEN,

I have the honour to present to you my Twenty-Sixth Annual Report, being for the year ending December 31st, 1920.

I am, Gentlemen,

Your obedient servant,

F. C. HAWORTH,

Medical Officer of Health,

Darwen Urban Sanitary Authority.

Members of the Health Committee.

1920-1921.

COUNCILLOR T. DUXBURY, J.P., MAYOR.

Chairman :

ALDERMAN W. WORTH, J.P.

Vice-Chairman :

ALDERMAN G. P. HOLDEN, J.P.

| | |
|--------------------------------|-------------------------------------|
| ALDERMAN J. COCKER, J.P. | COUNCILLOR T. W. A. FORREST, M.B.E. |
| „ F. HINDLE, C.C. | J.P., C.C. |
| „ H. C. JEPSON. | „ T. E. HOLGATE, J.P. |
| „ J. PICKUP, J.P. | „ G. HUNT. |
| COUNCILLOR WM. AINSWORTH, J.P. | „ W. KNOWLES. |
| „ CROSSLEY ST. JOHN BROAD- | „ T. LIGHTBOWN. |
| „ BENT. | „ R. MARSDEN. |
| „ E. L. CARUS, J.P. | „ J. W. MASON. |
| „ G. BUTTERWORTH, J.P. | „ J. PARKINGTON, J.P. |
| „ T. DUXBURY, J.P. | „ G. PICKUP, J.P. |
| „ F. C. DUCKWORTH. | „ JOHN B. THORNLEY, J.P. |
| „ H. B. ECCLES, J.P. | „ L. TOMLINSON. |

| | |
|---|---------------------------------|
| TOWN CLERK | WILLIAM P. HALLIWELL, B.A. |
| ASSISTANT TOWN CLERK..... | JOHN DERBYSHIRE. |
| NUISANCE INSPECTORS..... | (South Division)—W. E. MARSDEN. |
| | (North Division)—C. R. WALSH. |
| SUPERINTENDENT OF SCAVENGING..... | JOSEPH NICCOLL. |
| SLAUGHTER HOUSE AND MEAT INSPECTOR..... | C. R. WALSH. |
| SHOPS' INSPECTOR..... | W. E. MARSDEN. |
| MEDICAL OFFICER OF INFECTIOUS DISEASES HOSPITAL | F. G. HAWORTH. |
| MATRON, INFECTIOUS DISEASES HOSPITAL | MISS E. B. NORRIS. |
| SCHOOL NURSE | MISS E. MYCOCK. |
| LADY HEALTH VISITOR..... | MRS. H. H. SHAWCROSS. |
| MATRON, DAY NURSERY..... | MISS E. A. BRUCE. |

REPORT.

Natural and Social Conditions of the District.

Population.

The population, based on the Registrar General's return, is estimated for the middle of 1920 at 39,182.

The following has been received from the Office of the Registrar-General, Somerset House :

“ The Annual distribution of his Returns of Births and Deaths, and Estimates of Population for the past year affords the Registrar-General an opportunity of directing the attention of Medical Officers of Health and others using the returns, to some points upon which experience has shown that misunderstandings tend to arise.

1. The number of births and deaths are those registered during the calendar year and are corrected for inward and outward transfers ; they will differ therefore from uncorrected figures compiled locally either for the calendar year or for a period of fifty-two or fifty-three weeks.

2. In 1920 demobilisation had reached a stage at which it is felt that the distinction between “ birth-rate populations ” and “ death-rate populations ” made during the period when a large part of the male population were under arms, might in general be discontinued. For most districts, therefore, a single estimate of population is shown, and this is applicable to both births and deaths. For a few areas which contain an appreciable non-civilian population, however, two estimates of population, one for calculation of the birth-rate, and one for the civilian death-rate, are given, as in recent years.

The ‘ Birth-rate (and Marriage-rate) Population,’ on the other hand, is intended to include all the elements of the population contributing to the Birth and Marriage Rates. It consists, therefore, of the Death-rate or civilian population plus all non-civilians enlisted from this country, whether serving at home or abroad. This non-civilian element has been distributed over all the districts in the country in proportion to their estimated civilian population.

3. The classification of some deaths is modified in the light of fuller information obtained from the certifying practitioner in response to special

enquiries. The principal subjects of these enquiries are indicated in a table published in Yearly Reports of the Registrar-General, and this possible source of discrepancy between the returns of the Registrar-General and those compiled locally should be borne in mind particularly in the cause of death dealt with in that Table."

Estimated Civil Population is 39,182.

| Wards. | Census, 1911. | Estimated for Middle of 1919. | | Estimated for 1920. |
|-----------------------|------------------|----------------------------------|---------------|------------------------|
| | | Death Rate. | Birth Rate. | |
| CENTRAL | 6,698 | 6,086 | 6,338 | 6,329 |
| WEST CENTRAL ... | 3,947 | 3,700 | 3,802 | 3,847 |
| NORTH EAST | 9,181 | 8,456 | 8,821 | 8,793 |
| NORTH WEST | 7,055 | 7,083 | 7,392 | 7,365 |
| SOUTH EAST | 6,882 | 6,422 | 6,704 | 6,678 |
| SOUTH WEST | 6,569 | 5,934 | 6,195 | 6,170 |
| BOROUGH | 40,332 | 37,681 | 39,252 | 39,182 |

The Census Returns for 1911 give the following figures regarding Families or Separate Occupiers :—

| Wards. | 1911. |
|--------------------|-------------|
| CENTRAL | 1668 |
| WEST CENTRAL | 912 |
| NORTH EAST | 2165 |
| NORTH WEST | 1758 |
| SOUTH EAST | 1607 |
| SOUTH WEST | 1564 |
| TOTAL | 9674 |

PHYSICAL FEATURES AND GENERAL CHARACTER OF THE DISTRICT.

The town of Darwen is situated in a valley, Latitude 53° 41' 25" N. and Longitude 2° 28' 32" W., and runs almost due north and south, being about five miles in extent, on the highway between Blackburn on the North and Bolton on the South. The centre of the town stands 500 feet above the sea level, the higher parts of the town reaching over 800 feet above sea level, its situation favouring the free circulation of air and free exposure to sunlight.

Generally speaking the main streets run north and south, making the town a very long one in comparison with its size and area. This is an

advantage, as the sun shines alternately on the front and back, as the case may be, thus influencing to a certain extent local currents of air by causing them to move first in one direction and then in the other according to the position of the sun. The front streets are 12 yards wide and the back streets are 4 yards wide. This latter is unfortunate. I have had occasion in a previous report to describe a venture on the part of a builder to give much more air space at the rear of the cottages by making the back yards in the form of gardens, much more than 12 yards wide to do away with intervening walls, and substituted privet hedges. The pleasure the occupants derive from these gardens is unbounded. They are more beautiful to look upon and do away with the depressing, monotonous old-fashioned back yards we are so accustomed to look upon, that the lives of the people are bettered, lengthened, and rendered more cheerful. The innovation certainly deserves the thanks of the community.

The minimum amount of yard space is 150 square feet.

The streets are all paved with setts. The side walks of the front streets are flagged and are 7ft. 6in. wide.

The soil on which the town is built consists of boulder clay overlaying the sandstone or shale of the coal measures. In the middle of the valley along the riverside, gravel and sand form the subsoil, the land rises up on each side of the moorland, that on the West side forming the gathering ground.

There is only one outlying district of any importance, viz. : Hoddlesden, situate at a distance of two miles to the east, with a population of about 731.

The town is well supplied with open spaces in spite of the fact that there is in no part of it any overcrowding of dwelling houses and practically no slum property. There are three large, well arranged, and beautifully laid out parks.

SUNNYHURST WOOD, situated at the north end of the town, consists of about 80 acres of well wooded land. This in its original state was really a natural park, open to the public by means of a footpath running through a valley bounded on both sides by well wooded slopes. Its acquisition was determined upon by Alderman Tomlinson, who secured, by subscriptions and donations, sufficient to buy the land for the town. It has been laid out, tended, planted, and set out without sacrificing any of its natural beauties, and yet brought well within the meaning of a park. Such are its attractions that it has become a source of great pleasure to crowds of people, who come from Blackburn to spend a few hours in its glades. It is the reason for excursion trains from many towns within a radius of thirty miles.

BOLD VENTURE PARK occupies a part of West Central Ward, being reached by way of Belgrave Road and Borough Road, reaching right up to the edge of the moors, covers $22\frac{1}{2}$ acres of beautifully laid out gardens. A lake or pond for water fowl lies just within its gates, kept well supplied with water by means of a stream of pure water falling from the moors and uplands over cascades of nature's structure. The first part of this park ends in a cul-de-sac of rock, from which in former years much of the stone with which the town is built has been gathered. In front of this face of rock has been erected a fountain to the memory of the late James Huntington, subscribed by the workpeople at the paper works controlled by the said James Huntington. On a height to the north of this fountain stands the Gillibrand Meteorological Observatory, a station of the second class, the whole cost of the Observatory and Instruments being defrayed by a late Mayor. The park has been extended and now stretches to the foot of the Moor.

WHITEHALL PARK, at the southern end of the town and abutting on the Cemetery, consists of $16\frac{1}{2}$ acres. This, one of nature's beauty spots, has year by year been improved by artificial means until it is now the focus of a large number of detached villas occupied by the wealthier citizens of the borough. The land slopes upwards to the moors. Just within its gates has been constructed a MUNICIPAL BOWLING GREEN, which appears to appeal to the public taste, as it is very popular and much used. This seems to me a step in the right direction, because it gets those who use it into the fresh air, supplies the exercise so necessary for the development of the body, without the contra attractions of the public house so often associated with this form of amusement. The first MUNICIPAL BOWLING GREEN to be established was in Everton Street, on the site of a public playground. This playground, representative of others in Olive Lane and Hanover Street, was a railed-in plot of land, the ground being of well trodden ashes, was principally used by young men, or immature men, for purposes of a rough kind of football in winter, nay very often throughout the year, although cricket was sometimes played in summer. The games played never appeared to be, even in practice, of such a nature as to develop scientific football, nor to bring forward promising young players to the attention of the football authorities, it was simply "horse-play," and its retention as a playground was not advisable.

The success of the Everton Street Bowling Green was such as to encourage the formation of the one at Whitehall and also on the Olive Lane site. The appearance in all cases is such as to form a great attraction to the public, and apart from the games played thereon they are invaluable as breathing spaces now retained permanently for the public good.

HANOVER STREET RECREATION GROUND.—This was made and furnished with swings for boys and girls under 12 years of age, but it is often invaded by men and older boys, who play at football, or at least kick it about in an inconsequential way, to the interference of the younger ones. I recommend in the place of these playgrounds that a few fields be taken in different parts of the borough to be used as playing-fields, say four or five schools to use the one field in the afternoon once a week, playing cricket in summer and football and hockey in winter under the supervision and tuition of the teachers.

The inhabitants are chiefly of the artizan and labouring classes, and are employed chiefly in cotton and paper mills.

Much has been said of the effect of weaving on the health of the people. As an industry it is innocuous. In many mills steam is introduced into the weaving shed. Some years ago I carried out some experiments on this matter in conjunction with Mr. F. Scarisbrick, and we were both called to give evidence before the Royal Commission on Steaming in Cotton Mills. The result of our enquiries was to show that within certain limits no harm was done. These limits are not exceeded in Darwen mills.

Area of town, 5,919 acres. Rateable value, end of the year to the Borough Rate, £189,588 10s. 0d. Assessable Value to the District Rate, £175,687 15s. 3d.

The town is divided into six Wards :—Central, West Central, North East, North West, South East and South West.

Marriages.

The number of Marriages solemnized in Darwen during the year ending December 31st, 1920, was as follows :—

| | |
|---------------------------------------|-----|
| Church of England | 296 |
| Nonconformist Places of Worship. | 238 |
| Total | 534 |

This means that 1,068 people were united in the bonds of wedlock, and is at the rate of 27.25 per 1,000 of the population, as compared with 25.32 per 1,000 in the previous year.

| Year. | Births. | | Deaths. | | Marriages. | |
|---------------------|---------|-------|---------|-------|------------|-------|
| | Number. | Rate. | Number | Rate. | Number. | Rate. |
| 1883 | 1057 | 34.39 | 518 | 16.85 | 478 | 15.5 |
| 1884 | 978 | 31.18 | 595 | 18.97 | 444 | 14.1 |
| 1885 | 1015 | 31.99 | 489 | 15.41 | 480 | 15.1 |
| 1886 | 965 | 29.98 | 641 | 19.91 | 540 | 16.7 |
| 1887 | 1000 | 30.77 | 716 | 22.03 | 558 | 16.6 |
| 1888 | 994 | 29.67 | 600 | 17.90 | 616 | 18.2 |
| 1889 | 972 | 28.17 | 544 | 15.76 | 570 | 16.5 |
| 1890 | 1075 | 29.45 | 673 | 18.43 | 586 | 16.0 |
| 1891 | 1115 | 32.60 | 660 | 19.30 | 648 | 18.7 |
| 1892 | 1057 | 30.20 | 641 | 18.31 | 670 | 19.1 |
| 1893 | 955 | 26.90 | 677 | 19.07 | 592 | 16.7 |
| 1894 | 1039 | 28.86 | 542 | 15.05 | 640 | 17.7 |
| 1895 | 1128 | 31.33 | 640 | 17.77 | 676 | 18.7 |
| 1896 | 1032 | 28.15 | 627 | 17.10 | 696 | 18.9 |
| 1897 | 1114 | 29.70 | 651 | 17.36 | 688 | 18.3 |
| 1898 | 1131 | 30.16 | 632 | 16.85 | 700 | 18.6 |
| 1899 | 1062 | 28.02 | 647 | 17.07 | 666 | 17.5 |
| 1900 | 980 | 25.38 | 789 | 20.44 | 532 | 13.7 |
| 1901 | 858 | 22.45 | 620 | 16.22 | 576 | 15.0 |
| 1902 | 891 | 23.01 | 569 | 14.69 | 606 | 15.6 |
| 1903 | 941 | 24.05 | 501 | 12.80 | 612 | 15.6 |
| 1904 | 820 | 20.75 | 606 | 15.33 | 606 | 15.3 |
| 1905 | 818 | 20.49 | 562 | 14.07 | 578 | 14.4 |
| 1906 | 811 | 19.70 | 540 | 13.11 | 744 | 18.0 |
| 1907 | 876 | 20.92 | 527 | 12.58 | 702 | 16.7 |
| 1908 | 895 | 21.17 | 550 | 13.01 | 636 | 15.1 |
| 1909 | 816 | 19.12 | 616 | 14.44 | 684 | 16.0 |
| 1910 | 776 | 18.05 | 573 | 13.33 | 610 | 14.2 |
| 1911 | 754 | 18.66 | 641 | 15.87 | 598 | 14.8 |
| 1912 | 690 | 16.99 | 563 | 13.86 | 710 | 17.5 |
| 1913 | 738 | 18.08 | 579 | 14.18 | 716 | 17.5 |
| 1914 | 765 | 18.64 | 595 | 14.49 | 594 | 14.4 |
| 1915 | 666 | 16.23 | 590 | 15.21 | 742 | 19.1 |
| 1916 | 562 | 13.91 | 545 | 14.68 | 510 | 13.7 |
| 1917 | 427 | 11.18 | 490 | 14.29 | 390 | 21.3 |
| 1918 | 353 | 9.58 | 692 | 21.08 | 472 | 12.8 |
| 1919 | 495 | 12.61 | 520 | 13.80 | 994 | 25.3 |
| 1920 | 845 | 21.56 | 510 | 13.01 | 1068 | 27.2 |
| Average 39 Years... | 858 | 23.20 | 581 | 15.73 | 613 | 16.5 |

Marriage has created a record for Darwen, 1,068 persons were united in matrimony. We should have something tangible in return for these in the year following the one under consideration. It is interesting to go back to 1883, practically forty years ago, when the marriages were 478 and the births were 978, which looks as if figures might be made to prove anything.

Births.

The number of Children Born during the year was : Males 419, females 426, making a total of 845 ; being 350 more than in the previous twelve months, and at the rate of 8.95 per 1,000 higher than in 1919.

The Birth Rate for the year was 21.56 per 1,000. In January there was the highest birth rate, viz. : 30.11 per 1,000 ; and in November it was the lowest, the figure being 13.78 per 1,000.

Births numbered 845, the largest number since 1908, and the highest rate since 1903.

This is a matter for self-congratulation, because it appears to be the only way in which the population can grow in numbers. I am of the opinion a rapidly growing town in this respect is the most prosperous, and it would pay, as I have frequently insisted, to offer to large employers of labour facilities, such as free land, to open up works here. This would increase our population by the number of employees and create another figure for the natural increase.

TABLE showing the Estimated Populations, Number of Births, and the Birth-Rates for the Darwen Sanitary District since 1882 inclusive.

| Year. | Estimated Population at the Middle of Each Year. | Total Births | Birth-Rate |
|-------|--|--------------|------------|
| 1801 | 3,587 | .. | ... |
| 1811 | 4,411 | .. | ... |
| 1821 | 6,711 | ... | ... |
| 1831 | 6,972 | ... | ... |
| 1841 | 9,348 | ... | ... |
| 1851 | 11,702 | ... | ... |
| 1861 | 16,492 | ... | ... |
| 1871 | 21,277 | ... | ... |
| 1881 | 27,589 | ... | ... |
| 1882 | 30,295 | 987 | 32.57 |
| 1883 | 30,733 | 1057 | 34.39 |
| 1884 | 31,360 | 978 | 31.18 |
| 1885 | 31,720 | 1015 | 31.99 |
| 1886 | 32,185 | 965 | 29.98 |
| 1887 | 32,491 | 1000 | 30.77 |
| 1888 | 33,500 | 994 | 29.67 |
| 1889 | 34,500 | 972 | 28.17 |
| 1890 | 36,500 | 1075 | 29.45 |
| 1891 | 34,192 | 1115 | 32.60 |
| 1892 | 35,000 | 1057 | 30.20 |
| 1893 | 35,500 | 955 | 26.90 |
| 1894 | 36,000 | 1039 | 28.86 |
| 1895 | 36,000 | 1128 | 31.33 |
| 1896 | 36,652 | 1032 | 28.15 |
| 1897 | 37,500 | 1114 | 29.70 |
| 1898 | 37,500 | 1131 | 30.16 |
| 1899 | 37,900 | 1062 | 28.02 |
| 1900 | 38,600 | 980 | 25.38 |
| 1901 | 38,212 | 858 | 22.45 |
| 1902 | 38,712 | 891 | 23.01 |
| 1903 | 39,114 | 941 | 24.05 |
| 1904 | 39,516 | 820 | 20.75 |
| 1905 | 39,918 | 818 | 20.49 |
| 1906 | 41,164 | 811 | 19.70 |
| 1907 | 41,864 | 876 | 20.92 |
| 1908 | 42,266 | 895 | 21.17 |
| 1909 | 42,668 | 816 | 19.12 |
| 1910 | 43,000 | 776 | 18.05 |
| 1911 | 40,398 | 756 | 18.71 |
| 1912 | 40,611 | 690 | 16.99 |
| 1913 | 40,824 | 738 | 18.08 |
| 1914 | 41,038 | 765 | 18.64 |
| 1915 | 41,038 | 666 | 16.23 |
| 1916 | 40,381 | 562 | 13.91 |
| 1917 | 38,210 | 447 | 11.18 |
| 1918 | 36,814 | 353 | 9.58 |
| 1919 | 39,252 | 495 | 12.61 |
| 1920 | 39,182 | 845 | 21.56 |

Average for the last 39 years, 24.02.

BIRTH-RATES IN THE VARIOUS WARDS.

| Year. | C. | W. C. | N. E. | N. W. | S. E. | S. W. | Borough. |
|---------------------------|-------|-------|-------|-------|-------|-------|----------|
| 1901 | 22.45 | 22.25 | 19.94 | 24.78 | 20.26 | 23.53 | 21.54 |
| 1902 | 24.8 | 19.1 | 24.2 | 21.4 | 20.9 | 24.6 | 23.0 |
| 1903 | 26.2 | 21.4 | 26.3 | 19.9 | 23.8 | 23.3 | 24.0 |
| 1904 | 19.3 | 18.8 | 22.4 | 25.4 | 19.8 | 18.4 | 20.7 |
| 1905 | 17.8 | 23.1 | 23.5 | 20.4 | 18.0 | 19.8 | 20.4 |
| 1906 | 19.23 | 19.25 | 21.11 | 19.82 | 17.47 | 20.53 | 19.70 |
| 1907 | 16.18 | 23.63 | 22.14 | 23.63 | 20.58 | 20.92 | 20.92 |
| 1908 | 17.72 | 20.65 | 22.89 | 23.41 | 23.34 | 18.97 | 21.17 |
| 1909 | 17.82 | 21.85 | 18.74 | 21.25 | 19.60 | 17.44 | 19.12 |
| 1910 | 14.76 | 20.35 | 20.57 | 22.61 | 17.77 | 13.63 | 18.05 |
| 1911 | 16.29 | 20.76 | 20.02 | 16.60 | 18.86 | 20.26 | 18.71 |
| 1912 | 16.49 | 17.94 | 18.69 | 16.00 | 14.86 | 17.90 | 16.99 |
| 1913 | 17.15 | 17.14 | 20.95 | 15.16 | 18.22 | 18.75 | 18.08 |
| 1914 | 19.91 | 19.62 | 18.65 | 16.43 | 19.26 | 18.68 | 18.64 |
| 1915 | 16.59 | 13.33 | 18.65 | 12.93 | 19.98 | 15.13 | 16.23 |
| 1916 | 14.10 | 9.97 | 14.98 | 11.05 | 14.64 | 17.26 | 13.91 |
| 1917 | 11.82 | 10.54 | 13.74 | 8.75 | 10.27 | 11.11 | 11.18 |
| 1918 | 8.74 | 9.81 | 10.15 | 9.08 | 9.54 | 10.17 | 9.58 |
| 1919 | 12.30 | 12.36 | 14.74 | 9.39 | 14.17 | 12.27 | 12.61 |
| 1920 | 22.43 | 18.71 | 24.90 | 17.51 | 22.76 | 21.23 | 21.56 |
| Averages for 20 Years. | 17.60 | 18.02 | 19.86 | 17.73 | 18.20 | 18.19 | 18.30 |

ILLEGITIMATE BIRTHS.

35 Children were born out of wedlock during the year. This gives a rate of 4.14 per cent. of total births of erroneously called "Love Babies." Since 1901 the average annual number is 23.

The rate per cent. of Births averages 3.30, and 1916 is the highest with 4.80.

The Infantile Mortality Rate of Illegitimates for the year was 171 and the average for the last 16 years was 195. The highest rate of Mortality was in 1911, when it was 348 per 1,000 births; this was a particularly fatal year for infant life.

TABLE showing number of Illegitimate Births, etc., during the past twenty years.

| Year. | Number of Births. | Rate % of Total Births. | No. of Deaths under 1 Year. | Death-rate per 1,000 Births. |
|---------------|-------------------|-------------------------|-----------------------------|------------------------------|
| 1901 | 21 | 2.45 | ... | ... |
| 1902 | 22 | 2.47 | ... | ... |
| 1903 | 23 | 2.44 | ... | ... |
| 1904 | 33 | 4.02 | ... | ... |
| 1905 | 25 | 3.06 | 8 | 320 |
| 1906 | 28 | 3.45 | 6 | 214 |
| 1907 | 29 | 3.31 | 5 | 172 |
| 1908 | 18 | 2.01 | 6 | 333 |
| 1909 | 29 | 3.55 | 4 | 138 |
| 1910 | 16 | 2.06 | 5 | 313 |
| 1911 | 25 | 3.31 | 8 | 348 |
| 1912 | 18 | 2.61 | 3 | 167 |
| 1913 | 21 | 2.85 | 5 | 238 |
| 1914 | 28 | 3.66 | 2 | 71 |
| 1915 | 20 | 3.00 | 2 | 100 |
| 1916 | 27 | 4.80 | 0 | 0 |
| 1917 | 17 | 3.96 | 2 | 118 |
| 1918 | 16 | 4.53 | 3 | 188 |
| 1919 | 22 | 4.44 | 5 | 227 |
| 1920 | 35 | 4.14 | 6 | 171 |
| Average | 23 | 3.30 | 4 | 195 |

ILLEGITIMATE BIRTHS.

| | Number. | Percentage of Births. |
|----------------|---------|-----------------------|
| JANUARY..... | 3 | 3.00 |
| FEBRUARY..... | 1 | 1.81 |
| MARCH..... | 3 | 3.00 |
| APRIL..... | 4 | 6.15 |
| MAY..... | 3 | 3.45 |
| JUNE..... | 2 | 3.28 |
| JULY..... | 2 | 2.63 |
| AUGUST..... | 1 | 1.43 |
| SEPTEMBER..... | 1 | 1.59 |
| OCTOBER..... | 1 | 1.47 |
| NOVEMBER..... | 2 | 4.44 |
| DECEMBER..... | 12 | 15.58 |
| | 35 | 4.14 |

BIRTHS IN WARDS, 1920.

| | Central. | | West-Central. | | North-East. | | North-West. | | South-East. | | South-West. | | Total. | | Rate per 1,000 estimated Population |
|-------------------|--------------|----|---------------|----|-------------|-----|-------------|----|-------------|----|-------------|----|--------|-----|-------------------------------------|
| | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | |
| | January..... | 7 | 6 | 2 | 8 | 19 | 11 | 7 | 7 | 7 | 6 | 11 | 9 | 53 | |
| February | 6 | 5 | 3 | 2 | 4 | 10 | 1 | 5 | 5 | 9 | 2 | 3 | 21 | 34 | 16.84 |
| March..... | 10 | 3 | ... | 2 | 13 | 11 | 5 | 9 | 7 | 6 | 3 | 6 | 38 | 37 | 22.97 |
| April | 6 | 4 | ... | 4 | 11 | 7 | 4 | 7 | 4 | 9 | 4 | 5 | 29 | 36 | 19.90 |
| May | 5 | 11 | 4 | 4 | 15 | 11 | 9 | 6 | 3 | 7 | 9 | 3 | 45 | 42 | 26.64 |
| June | 9 | 6 | 5 | 2 | 12 | 5 | 2 | 4 | 8 | 3 | 2 | 6 | 38 | 26 | 19.60 |
| July | 5 | 9 | 4 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 4 | 7 | 34 | 42 | 23.27 |
| August | 4 | 6 | 2 | 1 | 8 | 10 | 9 | 8 | 7 | 4 | 5 | 6 | 35 | 35 | 21.43 |
| September..... | 6 | 3 | 2 | 2 | 6 | 11 | 5 | 4 | 9 | 6 | 5 | 4 | 33 | 30 | 19.29 |
| October | 6 | 4 | 2 | 3 | 7 | 8 | 2 | 4 | 9 | 8 | 11 | 4 | 37 | 31 | 20.82 |
| November | 5 | 3 | 1 | 1 | 5 | 3 | 6 | 4 | 3 | 11 | 2 | 1 | 22 | 23 | 13.78 |
| December | 7 | 6 | 4 | 7 | 8 | 10 | 3 | 4 | 3 | 6 | 9 | 10 | 34 | 43 | 23.57 |
| | 76 | 66 | 29 | 43 | 115 | 104 | 60 | 69 | 72 | 80 | 67 | 64 | 419 | 426 | 21.56 |
| TOTAL..... | 142 | | 72 | | 219 | | 129 | | 152 | | 131 | | 845 | | |
| Population | 6,329 | | 3,847 | | 8,793 | | 7,365 | | 6,678 | | 6,170 | | 39,182 | | |
| Birth-rate | 22.43 | | 18.71 | | 24.90 | | 17.51 | | 22.76 | | 21.23 | | 21.56 | | |

The following Table shows the number of Births and the percentage of these attended by Medical Men during the last twenty years :—

| Years | No. of Births | Attended by Medical Men | |
|-------|---------------|-------------------------|------------|
| | | Number | Percentage |
| 1901 | 858 | 420 | 48.95 |
| 1902 | 891 | 401 | 45.00 |
| 1903 | 941 | 461 | 48.99 |
| 1904 | 820 | 421 | 51.34 |
| 1905 | 818 | 411 | 50.24 |
| 1906 | 811 | 376 | 46.36 |
| 1907 | 876 | 394 | 44.97 |
| 1908 | 895 | 427 | 47.71 |
| 1909 | 816 | 389 | 47.67 |
| 1910 | 776 | 352 | 45.36 |
| 1911 | 756 | 350 | 46.30 |
| 1912 | 690 | 288 | 41.74 |
| 1913 | 738 | 363 | 49.19 |
| 1914 | 765 | 337 | 44.05 |
| 1915 | 666 | 269 | 40.39 |
| 1916 | 562 | 243 | 43.24 |
| 1917 | 427 | 173 | 40.51 |
| 1918 | 353 | 156 | 44.19 |
| 1919 | 495 | 211 | 42.63 |
| 1920 | 845 | 403 | 47.69 |

Deaths.

The total number of Deaths during the year was 510 ; males 219, females 291 ; being a decrease of 10 on the previous year.

The Death Rate for the year is 13.01, a decrease of 0.79 on the previous year.

The number of Deaths of Residents in Institutions outside the district was 97, which has been added to the 413 deaths registered within the district, making a total of 510.

These Deaths are reported to me quarterly by the Registrar General, through the County Medical Officer of Health.

| | |
|---|----|
| The number of Deaths in the Union Workhouse, Blackburn, was ... | 32 |
| „ „ „ Royal Infirmary, Blackburn | 36 |
| „ „ „ other Institutions and Places | 29 |

Fourteen Deaths of Non-Residents occurred in the town during the year.

INQUESTS. There were 40 Inquests held during the year, compared with 26 during 1919. The following were the verdicts :—

| | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 |
|---------------------|------|------|------|------|------|------|------|------|------|------|
| Accidental Death... | 9 | 18 | 17 | 14 | 22 | 20 | 15 | 16 | 12 | 17 |
| Natural Cause..... | 7 | 6 | 24 | 8 | 7 | 6 | 3 | 8 | 12 | 14 |
| Suicide | 11 | 4 | 4 | 8 | 9 | 4 | 4 | 2 | 2 | 9 |
| | 27 | 28 | 45 | 30 | 38 | 30 | 22 | 26 | 26 | 40 |

Death-Rates per 1,000 of the Population in the various Wards of the Borough.

| WARDS Population | Central 6329 | West- Central 3847 | North- East 8793 | North- West 7365 | South- East 6678 | South- West 6170 | Death- Rate per month |
|---------------------|-----------------|--------------------------|------------------------|------------------------|------------------------|------------------------|-----------------------------|
| 1920 | | | | | | | |
| January..... | 22.75 | 12.47 | 15.01 | 4.88 | 5.39 | 11.66 | 11.94 |
| February | 15.17 | 6.24 | 10.91 | 13.03 | 12.42 | 11.66 | 11.94 |
| March | 15.17 | 9.36 | 9.55 | 13.03 | 10.78 | 19.45 | 12.86 |
| April..... | 17.06 | 9.36 | 17.74 | 11.40 | 10.78 | 35.01 | 17.15 |
| May | 15.17 | 15.59 | 16.37 | 4.88 | 12.42 | 17.50 | 13.47 |
| June | 17.06 | 6.24 | 16.37 | 4.88 | 12.42 | 7.78 | 11.33 |
| July | 5.68 | 15.59 | 2.74 | 4.88 | 12.42 | 1.94 | 6.43 |
| August | 7.58 | 9.36 | 4.09 | 6.51 | 7.18 | 7.78 | 6.73 |
| September ... | 11.37 | 3.12 | 4.09 | 14.66 | 8.99 | 7.78 | 8.57 |
| October..... | 9.48 | 6.24 | 8.18 | 9.77 | 12.42 | 1.94 | 8.26 |
| November... .. | 7.58 | 12.47 | 10.91 | 8.14 | 16.17 | 7.78 | 10.41 |
| December..... | 13.27 | 3.12 | 10.91 | 4.88 | 5.39 | 3.89 | 7.35 |
| Transfers..... | 17.06 | 43.72 | 32.75 | 39.10 | 28.75 | 19.45 | 29.71 |
| Rate for year... | 14.53 | 12.73 | 13.30 | 11.40 | 13.01 | 12.80 | 13.01 |

Death-Rates in the Various Wards for the past 27 Years.

| Year | C. | W.C. | N.E. | N.W. | S.E. | S.W. | Borough. |
|------------|-------|-------|-------|-------|-------|-------|----------|
| 1894 | 14.66 | 15.22 | 15.54 | 13.04 | 16.96 | 14.63 | 15.0 |
| 1895 | 17.0 | 17.39 | 20.6 | 12.33 | 17.65 | 19.82 | 17.7 |
| 1896 | 12.8 | 17.8 | 16.4 | 17.5 | 19.8 | 19.2 | 17.1 |
| 1897 | 17.52 | 15.22 | 18.16 | 16.14 | 18.37 | 18.64 | 17.3 |
| 1898 | 16.09 | 18.58 | 17.82 | 14.99 | 15.51 | 18.0 | 16.8 |
| 1899 | 18.45 | 15.80 | 15.38 | 12.50 | 20.85 | 18.05 | 17.0 |
| 1900 | 20.78 | 17.28 | 21.40 | 21.09 | 20.03 | 20.50 | 20.4 |
| 1901 | 17.92 | 17.36 | 14.21 | 17.05 | 18.46 | 13.83 | 20.8 |
| 1902 | 13.13 | 15.78 | 14.13 | 13.60 | 14.11 | 17.34 | 14.6 |
| 1903 | 14.13 | 13.95 | 11.67 | 12.97 | 11.85 | 13.17 | 12.8 |
| 1904 | 14.12 | 15.21 | 14.52 | 20.50 | 14.54 | 14.54 | 15.2 |
| 1905 | 13.30 | 14.15 | 13.24 | 16.67 | 15.41 | 12.84 | 14.0 |
| 1906 | 11.40 | 12.83 | 14.66 | 11.68 | 12.52 | 14.64 | 13.11 |
| 1907 | 12.79 | 12.55 | 12.27 | 15.69 | 10.86 | 12.07 | 12.58 |
| 1908 | 11.77 | 13.28 | 13.46 | 15.31 | 11.32 | 13.39 | 13.01 |
| 1909 | 12.58 | 13.16 | 11.22 | 17.74 | 15.26 | 15.47 | 14.44 |
| 1910 | 15.02 | 16.18 | 11.67 | 14.37 | 11.51 | 13.24 | 13.33 |
| 1911 | 17.93 | 18.23 | 16.32 | 13.23 | 12.47 | 18.13 | 15.87 |
| 1912 | 14.09 | 15.92 | 12.83 | 12.99 | 13.99 | 14.69 | 13.86 |
| 1913 | 12.33 | 15.12 | 14.22 | 14.76 | 14.79 | 14.14 | 14.18 |
| 1914 | 13.73 | 10.31 | 16.15 | 13.19 | 15.12 | 16.37 | 14.49 |
| 1915 | 17.56 | 15.49 | 15.17 | 14.54 | 13.01 | 15.72 | 15.21 |
| 1916 | 17.34 | 13.99 | 15.85 | 15.48 | 12.01 | 12.66 | 14.68 |
| 1917 | 15.35 | 9.80 | 17.68 | 12.88 | 13.01 | 14.26 | 14.29 |
| 1918 | 21.67 | 20.46 | 23.60 | 16.19 | 21.25 | 22.81 | 21.08 |
| 1919 | 14.13 | 11.89 | 16.31 | 12.14 | 12.58 | 14.32 | 13.80 |
| 1920 | 14.53 | 12.73 | 13.30 | 11.40 | 13.01 | 12.80 | 13.01 |
| Average... | 15.26 | 15.21 | 15.47 | 14.81 | 15.04 | 15.75 | 15.39 |

CAUSES OF DEATH IN DARWEN, M.B., 1920.

| Causes of Death (Civilians only). | Males. | Females. |
|--|--------|----------|
| All Causes. | 219 | 291 |
| 1. Enteric Fever | ... | ... |
| 2. Small Pox | ... | ... |
| 3. Measles | ... | 2 |
| 4. Scarlet Fever | ... | ... |
| 5. Whooping Cough | ... | ... |
| 6. Diphtheria and Croup | 2 | ... |
| 7. Influenza | 6 | 7 |
| 8. Erysipelas | ... | ... |
| 9. Pulmonary Tuberculosis | 14 | 9 |
| 10. Tubercular Meningitis | 3 | 2 |
| 11. Other Tuberculous Diseases | 4 | 3 |
| 12. Cancer, Malignant Disease | 14 | 39 |
| 13. Rheumatic Fever | 1 | ... |
| 14. Meningitis | 2 | ... |
| 15. Organic Heart Disease | 22 | 49 |
| 16. Bronchitis | 15 | 28 |
| 17. Pneumonia (all forms) | 20 | 13 |
| 18. Other Respiratory Diseases | 1 | ... |
| 19. Diarrhoea, etc. (under 2 years) | 4 | 1 |
| 20. Appendicitis and Typhlitis | 2 | 2 |
| 21. Cirrhosis of Liver | 1 | ... |
| 21a. Alcoholism | ... | ... |
| 22. Nephritis and Bright's Disease | 10 | 6 |
| 23. Puerperal Fever | ... | 4 |
| 24. Parturition (apart from Puerperal Fever) | ... | 2 |
| 25. Congenital Debility, etc. | 19 | 24 |
| 26. Violence (apart from Suicide) | 10 | 5 |
| 27. Suicide | 7 | 2 |
| 28. Other Defined Diseases | 58 | 93 |
| 29. Causes Ill-Defined or Unknown | 4 | ... |
| Special Causes (included above)— | | |
| Cerebro-Spinal Fever | ... | ... |
| Poliomyelitis | ... | ... |
| Deaths of Infants under 1 year of age— | | |
| Total | 44 | 35 |
| Illegitimate | 2 | 4 |
| Total Births | | |
| Legitimate | 405 | 405 |
| Illegitimate | 14 | 21 |
| Population—For Births and Deaths ... 39,182 | | |

The death-rate for the year was 13.01 per 1,000, the same as in 1908. It has been lower on only two occasions, viz., in 1903 and 1907.

The highest was in 1918, when it was 21.08 per 1,000, due to an extraordinary epidemic of Influenza ; also in the years 1900 and 1901, when the rates were 20.4 and 20.8.

The average for the last 27 years was 15.39 per 1,000, and very nearly the same as in 1894, when it was 15.0 per 1,000 for the year.

There is a decided improvement in the death-rate, for which we may congratulate ourselves.

The causes of death were :—Measles 2, Influenza 13, Consumption 23, other Tubercular Diseases 12, Cancer 53, Heart Disease 71, Diarrhoea (under 2 years) 5, Pneumonia 33, Bronchitis 43.

POOR LAW ADMINISTRATION

Comes under the Blackburn Union, which consists of sixty members, of which eight are sent from and represent Darwen.

MEDICAL RELIEF.

The Darwen District Nursing Association was instituted in 1890, under the auspices of the late Lady Huntington. It is carried on by voluntary contributions collected in the Mills, Churches, Chapels and from private sources, under a Management Committee, consisting of thirty-one ladies and gentlemen. There is a General Committee of ninety-six ladies and gentlemen.

| Amount Collected. | | | | Amount Expended. | | | |
|-------------------|------|----|----|------------------|------|----|----|
| Year. | £. | s. | d. | Year. | £. | s. | d. |
| 1911 | 1286 | 0 | 0 | 1911 | 1051 | 0 | 0 |
| 1912 | 665 | 0 | 0 | 1912 | 722 | 0 | 0 |
| 1913 | 990 | 16 | 4 | 1913 | 930 | 18 | 11 |
| 1914 | 1070 | 2 | 5 | 1914 | 891 | 15 | 1 |
| 1915 | 759 | 13 | 11 | 1915 | 688 | 13 | 11 |
| 1916 | 670 | 17 | 1 | 1916 | 607 | 11 | 5 |
| 1917 | 559 | 8 | 4 | 1917 | 615 | 12 | 0 |
| 1918 | 799 | 0 | 9 | 1918 | 751 | 16 | 4 |
| 1919 | 1435 | 15 | 11 | 1919 | 1070 | 16 | 6 |
| 1920 | 2131 | 12 | 1 | 1920 | 1552 | 9 | 5 |

There are about six Nurses, including those doing Maternity Work. The work is done under the close supervision of the local medical men and is of a very high character.

CHARGES. Maternity cases : 15s., 21s. and 25s. for cases outside but bordering on the borough boundary.

Ordinary nursing cases : No charge made, but patients are encouraged to give a donation. Cases which can afford are not nursed (except occasionally, and then only until a resident or other nurse can be obtained).

During the year the following additional work has been undertaken by the Association :—An Orthopædic Clinic for treatment of ex-Service men has been opened ; the Nursing of Measles, etc., for the Corporation ; taken trained nurses as pupils for practical work for C.M.B. Certificates.

THE BLACKBURN AND EAST LANCASHIRE ROYAL INFIRMARY

Is an Institution standing at the Southern end of the neighbouring County Borough of Blackburn.

Darwen has not a particular number of beds at its disposal ; every case sent from here is admitted without question.

In the majority of mills and workshops of the district the workpeople contribute under a scheme of weekly contributions, known as the East Lancashire Workpeople's Hospital Fund. The Committee governing this fund allocate the nett contributions between the Royal Infirmary and other kindred Charitable Organisations. In addition to this, collections are periodically made in the various Churches and Chapels, and other sources also contribute.

The Secretary, Mr. Nathan A. Smith, supplied the following information of patients from Darwen treated in the Institution.

| | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 |
|--------------------|------|------|------|------|------|------|------|------|------|------|
| In-Patients..... | 225 | 221 | 242 | 242 | 259 | 281 | 247 | 276 | 345 | 356 |
| Out-Patients | 402 | 449 | 460 | 498 | 565 | 621 | 623 | 663 | 722 | 700 |

Based upon the ordinary expenditure for the year, the Cost of Treatment of these Patients was £3,300.

SANITARY CIRCUMSTANCES OF THE DISTRICT.

WATER SUPPLY

Is obtained from two reservoirs, the Sunnyhurst Hey and Dean. In both cases it is passed through sand filters. Where land on the gathering ground is under cultivation, it is not manured nearer the edge of a reservoir than 100 yards.

The water is collected mostly from Moorland. Many years ago some cases of lead poisoning were discovered in the town, so the water was tested in its action on lead by Prof. Frankland, who found it had a solvent action on lead pipes. He recommended lime to be added to the water in certain proportions, and plumbism has not been diagnosed since.

By agreement with Bolton Corporation, under an Act obtained in 1905, we receive 300,000 gallons per day. This is piped from a reservoir on Turton Moor,, along the main highway, to an underground reservoir situate at Bull Hill, made of reinforced concrete, ventilated on the top by a number of 6 inch drain pipes fixed in openings. To prevent dust being blown in, these pipes are covered with hoods made of sanitary ware and perforated with a number of small openings.

The pipe line passes the boundary of Bull Hill Isolation Hospital. From this point it is pumped to a tank within the grounds on a higher level than the buildings, so that it commands these in case of fire, and is used for domestic purposes.

The following sample was taken from a well at Bull Hill which supplies the neighbouring householders. Since this was done, town's water has been put in to the property :—

COUNTY ANALYST'S REPORT.

To Inspector W. E. Marsden, Sanitary Inspector, Darwen.

I have analysed the Sample of Water received from Insp. Marsden, per rail on the 9th day of March, 1920, with the following results expressed in parts per 100,000—

Mark or denomination of Sample, None.
Total Solids in Solution, 12.4.
Oxygen absorbed from Permanganate in 15 mins., .008.
Oxygen absorbed from Permanganate in 3 hours, .016.
Ammonia, Nil.
Albuminoid Ammonia, .005.
Nitrogen as Nitrates, .218.
 ,, as Nitrites, Nil.
Combined Chlorine, 1.3.

The sample had a stagnant odour and the well probably requires cleaning out.

There is no evidence of sewage pollution, and apart from the smell above mentioned, the water is fit for drinking and domestic use.

W. COLLINGWOOD WILLIAMS, B.Sc., F.I.C.,
County Analyst.

The water is of sufficient quantity, and of good quality.

The amount used during the year was 354,571,000 gallons ; 54,249,000 being for trade purposes, the remainder for domestic use at the rate of 20.9 gallons per head per day.

The total Rainfall for the year on the Watershed was 50.61 inches, and in Bold Venture Park 56.06 inches. We had rain on 231 days.

The heaviest Rainfall was in May, with 8.04 inches, and the lowest in October, with 1.72 inches.

RIVERS AND STREAMS.

The River Darwen runs northward through the valley.

River Pollution continues to a certain extent from mills and paper works. Occasionally steam is thrown in from mills when the steam boilers are being blown off and emptied. This escapes into the air at points where the river is not covered-in, causing somewhat of a nuisance. No doubt a great improvement would be made if the bed of the river were paved and the stream itself arched over.

DRAINAGE AND SEWERAGE.

I consider the sewers are of the first order in regard to structure and maintenance. In some of the old parts of the town the drains may not be up-to-date in the form of construction ; this is occasionally revealed during alterations, etc. These are re-constructed as soon as possible.

At the Sewage Disposal Works the Bacteriological Treatment is in vogue and appears to be very satisfactory.

CLOSET ACCOMMODATION.

The following constitutes the accommodation in this respect at the end of the year in question :—

| | | |
|--|--------|----|
| Pails | 1729 | |
| Water Closets | 6458 | |
| Waste Water Closets | 2471 | |
| Privies | 2 | |
| | | |
| Total | 10,660 | |
| New Water Closets fixed | | 24 |
| Water Closets dismantled | | 0 |
| Premises with one New Closet fixed | | 18 |
| Premises with more than one New Closet fixed | | 2 |
| Pails converted to Water Closets | | 30 |
| Waste Water Closets converted to Water Closets | | 4 |
| Baths installed during the year | | 22 |

SCAVENCING.

The Scavenging of the town and the Removal of Refuse is carried out by the Corporation. Refuse from houses, shops, etc., is regularly collected and conveyed in covered carts to the Destructor and there burnt in a Meldrum's Destructor.

— There are 12 Dry Ashpits and 10,450 portable refuse receptacles, the majority of which are ashes tubs and placed under covered sheds in the yards.

SANITARY INSPECTION OF DISTRICTS.

The following Tables give a list of inspections, notices served and result, as required to be furnished to the Medical Officer under Article 20, Sec. 16 of Sanitary Officers' Order of 1910 :—

SOUTHERN DISTRICT.

| Nature of Inspections. | Number of Inspections. | Number of Notices Served. | | Result of Service of Notices. | | | |
|----------------------------------|------------------------|---------------------------|--------------|-------------------------------|----------------------|---------------|---------|
| | | Legal. | Preliminary. | Nuisances abated. | Remain- ing in hand. | Prosecutions. | |
| | | | | | | Instituted. | Pending |
| Dwelling Houses..... | 2127 | 262 | 324 | 398 | 48 | | |
| Houses under Housing, &c., Act | 94 | ... | ... | ... | ... | ... | ... |
| Factories and Workshops | 334 | 4 | ... | 4 | ... | 1 | ... |
| Bakehouses | 121 | 2 | .. | 2 | ... | ... | ... |
| Dairies and Cowsheds | 147 | 23 | 7 | 25 | 3 | ... | ... |
| Smoke Observations | 59 | 1 | ... | ... | ... | 1 | ... |
| Infectious Diseases..... | 74 | ... | ... | ... | ... | ... | ... |
| NUISANCES— | | | | | | | |
| Defective Drains..... | 56 | 9 | 50 | 53 | 3 | ... | ... |
| Defective Slop Gullies..... | 29 | 13 | 20 | 25 | 4 | ... | ... |
| Defective W.C.'s..... | 15 | 10 | 13 | 14 | 1 | ... | ... |
| Defective Easing Troughs, &c.... | 98 | 24 | 67 | 86 | 12 | ... | ... |
| Insanitary Yards | 12 | 6 | 12 | 11 | 1 | ... | ... |
| Dirty Premises..... | 29 | 20 | 20 | 27 | 2 | ... | ... |
| Dilapidated Closets..... | 23 | 15 | 14 | 20 | 3 | ... | ... |
| Accumulations of Refuse | 60 | 21 | 38 | 54 | 6 | ... | ... |
| Nuisances from Animals..... | 8 | 2 | 8 | 7 | 1 | ... | ... |
| Nuisances from Manure Pits | 2 | 2 | 2 | 1 | 1 | ... | ... |
| Ashtubs without Covers..... | 7 | 6 | 6 | 7 | ... | ... | ... |
| Broken Slop Pipes | 29 | 15 | 27 | 27 | 2 | ... | ... |
| Choked W.W.C.'s | 19 | 13 | 12 | 18 | 1 | ... | ... |
| Broken Ashtubs | 9 | 7 | 8 | 9 | ... | ... | ... |
| Dangerous Closet Walls, &c..... | 3 | 3 | 3 | 3 | ... | ... | ... |
| Insanitary Pails | 14 | 12 | 10 | 14 | ... | ... | ... |
| Defective Roofage | 5 | 3 | 5 | 4 | 1 | ... | ... |
| Defective Windows..... | 7 | 4 | 6 | 6 | 1 | ... | ... |
| Defective Closet Recep. Doors... | 21 | 13 | 8 | 12 | 9 | ... | ... |

WILLIAM E. MARSDEN,

Cert. Royal San. Ins.

NORTHERN DISTRICT.

| Number and Nature of Inspections made. | Number Inspections. | Notices Served. | | Nuisances Abated. | Nuisances remaining in hand. |
|--|---------------------|-----------------|-------------|-------------------|------------------------------|
| | | Legal. | Preliminary | | |
| Dwelling Houses | 2522 | ... | ... | ... | ... |
| Dwelling Houses (under Town Planning Act | 60 | ... | ... | ... | ... |
| Schools and Public Buildings... | 60 | ... | ... | ... | ... |
| Factories and Workshops | 200 | 2 | 13 | 13 | ... |
| Dairies and Cowsheds..... | 60 | 21 | 21 | 20 | 1 |
| Smoke Observations | 57 | 3 | 3 | 3 | ... |
| Bakehouses..... | 123 | 2 | 2 | 2 | ... |
| Lodging House | 56 | ... | ... | ... | ... |
| Refuse Tips | 74 | ... | ... | ... | ... |
| INFECTIOUS DISEASES— | | | | | |
| Cases Visited..... | 135 | ... | ... | ... | ... |
| Rooms Disinfected..... | 43 | ... | ... | ... | ... |
| Loads of Bedding Removed... | 36 | ... | ... | ... | ... |
| NUISANCES— | | | | | |
| | Discovered | | | | |
| Defective Drains | 50 | 15 | 45 | 38 | 12 |
| „ Slop Gullies..... | 18 | 7 | 12 | 12 | 6 |
| „ Soil Pipes, W.C.'s, etc. | 18 | 6 | 12 | 15 | 3 |
| „ Troughs & Downspouts | 154 | 25 | 124 | 109 | 19 |
| Insanitary Yards | 18 | 3 | 15 | 14 | 4 |
| Dirty Houses, etc. | 18 | 18 | 16 | 16 | 2 |
| Dirty Closets | 15 | 2 | 14 | 11 | 4 |
| Accumulation of Refuse | 31 | 2 | 27 | 29 | 2 |
| Nuisance from Animals..... | 10 | 0 | 7 | 10 | 0 |
| Dangerous Buildings..... | 19 | 0 | 15 | 13 | 6 |
| Ashtubs without Covers | 15 | 0 | 11 | 9 | 6 |
| Broken Slop Pipes..... | 49 | 2 | 40 | 40 | 9 |
| Choked Waste Water Closets ... | 25 | 8 | 20 | 21 | 4 |
| Insufficient Ventilation of Rooms | 9 | 9 | 6 | 7 | 2 |
| Dirty Bedding | 4 | 4 | 4 | 4 | 0 |
| Choked Sewers | 3 | 0 | 3 | 3 | 0 |
| Burst Water Pipes | 10 | 0 | 10 | 7 | 3 |
| Defective Gas Pipes | 5 | 0 | 5 | 5 | 0 |

C. R. WALSH, M. R. San. Ins.,

Inspector of Nuisances.

BYE-LAWS IN REGARD TO PREMISES AND OCCUPATION.

LODGING HOUSES.—The Municipal Model Lodging House is the only common lodging house in the town, and is frequently visited and inspected by Inspector Walsh.

The average daily number of lodgers for the year was 90.02, including women, as compared with 66.97 for the previous year, an increase of 23.05.

OFFENSIVE TRADES.

Gut-scraping is carried out by one firm in a satisfactory manner in premises at the Public Slaughter House.

Two private firms rent premises from the Corporation which they use for Tripe preparing and boiling.

These are the only offensive trades in the Borough and are kept under constant supervision.

OTHER SANITARY CONDITIONS REQUIRING NOTICE.

No sanitary improvements worthy of special note have been carried out during the year under review.

The chief sanitary requirement of the district, which is urgently needed, is the conversion of the remaining pail closets to the water carriage system where sewers are available.

SCHOOLS.

The whole of the 21 Elementary Day Schools were regularly visited by me as School Medical Officer, and during each vacation the Inspectors of Nuisances visited the premises in their respective districts to examine the sanitary arrangements and see that the Schools had been cleansed in accordance with my instructions. All walls are swept down; floors, desks, and other woodwork thoroughly scrubbed and washed with a solution of disinfectants. The caretakers have done their best during the short vacations, and generally speaking, the buildings have been fairly satisfactory.

In a few instances the surface of the playgrounds is in need of repair.

The whole of the Schools are supplied with town's water, and the lighting and ventilation is efficient.

During the year there have been the following cases notified at School Age :—Diphtheria 13 ; Erysipelas 1 ; Tuberculosis 3 ; Pneumonia 3 ; Scarlet Fever 28 ; Measles 79 ; and it was not found necessary to close any School on this account.

Food.

MILK SUPPLY

Is fairly satisfactory. The supervision of this article of food, with other foods, is in the hands of the County Police and the Sanitary Inspectors.

It is not difficult to ascertain the character of a farm if one looks at the conveyance in which the farmer retails his milk. If the vehicle and the milk appliances are dirty, not in order, and lacking in polish, if the animal in the shafts is, or appears to be, untended and showing an absence of grooming ; if the harness and clothing of the milk vendor are untidy one may assume that things at home are not in a satisfactory condition. I do not think the fault lies in the quality of the milk being below its required value so much as in an absence of perfect cleanliness. One may look through a cotton mill and come to the conclusion it is clean ; whilst an isolation hospital when compared with the cotton mill would be classed as decidedly unsatisfactory in regard to scientific cleanliness, so it is with farms and dairies ; they should be looked upon from the standpoint of a hospital, and not from that of a cotton mill. We want our milk to show an absence of the collection of particles of dirt at the bottom of the milk vessel after standing a few hours. To arrive at this, acting under the instructions of the Health Committee, I have issued the following instructions.

THE COWS should be healthy, and to that end should be kept as much as possible in the open-air. Farmers are advised to buy only cows about the health of which they have no doubt, and to keep cows which may happen to fall ill, isolated from other cows ; they must be kept clean, and for this purpose plenty of good bedding must be provided and renewed as often as necessary.

UDDERS AND TEATS.—As the source of contamination is either dirty or diseased udders, these must be cleaned with a damp cloth before milking. If the udder is soiled so that it cannot be cleaned in this way, it should be washed with warm water and soap and then care-

fully dried with a clean dry cloth. Many farmers object to do this, under the impression that it will curtail the supply of milk. This appears to me a mistake, as the cows lie on the ground in the open-air in all states of the weather, the udder coming into close contact with the cold wet ground, which is more likely to influence the flow of milk than is the method of cleansing above suggested.

The farmers should be instructed to examine the cow's udders and teats after every milking for any unusual lump or swelling, as these are the more readily recognised after milking than before.

If anything suspicious is found or there is obvious disease of udder or teats, the milk must not be sold for human consumption until the advice of a Veterinary Surgeon has been obtained and his decision given that it is safe to so use it.

THE MILKER.—The sources of contamination is in the clothes, the hands, or through the illness of the milker. To prevent danger he or she must wash his or her hands before milking, using a stiff brush to cleanse underneath the nails.

Soap, towels and clean water must be provided in a convenient place for this purpose. The absence of suitable provision for this will be taken as evidence that these instructions are not being carried out. Clean linen overalls or smocks should be worn when, and only when, milking. Persons who are ill or have sickness at home should in no way have anything to do with the cows until the sanction of a medical man has been obtained that it is safe to do so.

THE COW SHED should be so lighted that every part is easily visible in the day time, when the doors are closed ; should be so ventilated that the air in it will not feel close, or have a disagreeable smell when the cows are housed and the doors are shut. Cows, like ourselves, will not suffer from free ventilation if it is steadily maintained throughout the year.

It should be kept free from dust, especially during milking.

The manure must be removed from the cowshed as often as required, this being not less than twice a day ; the liquid manure channels must be cleansed frequently with water.

The milk must not be left standing in the cowshed, but immediately removed as occasion requires to a suitably clean place, strained and cooled.

UTENSILS.—All milk vessels should be so constructed that all parts can be thoroughly and easily cleaned, the lids should be close fitting and dust-proof. All cloths used for cleaning milk vessels must be frequently wrung out of clean water and boiled at least once a day. These utensils should be kept for milk alone, and not used for any other purpose. An efficient sieve must be provided for straining milk and must be maintained in a thoroughly clean condition ; muslin or other similar material must be used with the sieve, then washed and scalded after each operation.

In summer time special precautions must be taken to prevent house flies from getting to the milk.

ALL VEHICLES used for distributing the milk must be kept as clean as possible and provided with special receptacles for the measures, &c., with a lid attached to keep out dust, &c.

The condition of milk carts, utensils, gears, horses, &c. will be taken as an indication of the state of all the other parts appertaining to the milk industry.

Yours truly,

F. G. HAWORTH,

Medical Officer of Health.

The Bye-Laws in regard to the cubic area for each beast state this must be 600 c.f. ; the Model Bye-Laws require 800 c.f.

Until the cows are groomed as carefully as are horses in the best stables, we shall not see our cowsheds in that sanitary state of cleanliness necessary for the production and supply of a pure milk. The two must go together.

The total number of Cowkeepers on the register is 103, and 4 other Purveyors of Milk. There are also a number of farmers residing outside the confines of the Borough who retail their milk in Darwen ; their farms, of course, are under the supervision of other authorities.

The total number of Inspections made during the year to the various farms by the Sanitary Inspectors was 207.

Many repairs and improvements in the lighting, ventilation and drainage of cowsheds were effected.

The Inspectors periodically take samples for analysis. One was found slightly deficient in cream fat, but the Analyst advised us not to prosecute.

Three contained appreciable amounts of cow-dung. Obviously these pointed to pollution from dirty hands, dirty animals, or dirty utensils. The Inspectors follow up all these cases by visiting the farms and making an examination in each case for the probable source. Copies of the Regulations are left and instructions are given as to the best course for avoiding pollution and infection.

The Borough Veterinary Inspector is called in as occasion requires.

MILK (MOTHERS' AND CHILDREN'S) ORDER, 1919.

My Committee made arrangements for the supply of milk for expectant and nursing mothers, and of milk for children under 5 years of age, according to the terms of the Order.

Applications were made for milk at the office of the Health Visitor. After enquiries have been made of the circumstances and total income of each family, and corroborated at the mills and workshops where the applicants were employed, it was found absolutely necessary for me to make grants in 159 of the cases.

The approximate cost of supplying milk to these cases during the year was £460.

MEAT.

Animals brought to the Abattoirs are carefully examined both before and after slaughter by the Meat Inspector. There was a distinct improvement noticeable in the quality after the Food Control Regulations were removed.

The Public Abattoirs situated off Police Street, and the Pig Slaughter-houses in James Street West afford ample accommodation both in regard to lairages and slaughter-houses. Improvements in the buildings have been effected during the year.

There is only one Licensed Private Slaughter-house in the Borough occupied by a wholesale butcher. The work of the Inspector is therefore greatly facilitated, and better oversight is ensured.

It was found necessary to prosecute one farmer for killing a pig in unregistered premises. A fine of 10s. was imposed.

TUBERCULOSIS.—Twenty-five carcasses were found to be affected in varying degrees with this disease. The total weight of meat condemned and destroyed for this reason amounted to 2,148lbs.

FOR OTHER CAUSES.—4,403lbs. of meat were condemned and destroyed.

NUMBER OF SLAUGHTER-HOUSES IN USE IN THE DISTRICT.

| | In 1914. | | In January, 1920. | | In December, 1920. |
|------------------|-------------|-------|----------------------|-------|-----------------------|
| Registered | 2 | | 2 | | 2 |
| Licensed | 1 | | 1 | | 1 |
| Total | 3 | | 3 | | 3 |

OTHER FOODS.

Oversight is constantly exercised over all premises where food is prepared and retailed, and it was found necessary to condemn and destroy 20 stones of fish, 160lbs. of pears, 18 tins of condensed milk, 10 bags of tripe, 15lbs. of butter.

There are 90 Bakehouses in the Borough, 9 of these are owned and worked by persons carrying on a wholesale trade. These premises are regularly visited and the regulations regarding these workshops were enforced. Defects of a structural nature were remedied, and the lighting and ventilation appeared to be efficient.

There were four Underground Bakehouses in use at the end of the year.

SALE OF FOOD AND DRUGS ACTS.

There were 23 samples of milk purchased for purposes of analysis. Unfortunately 2 bottles containing the samples were broken in transit to the Analyst. Upon examination, 20 were declared to be genuine samples of milk. In one instance the Analyst made the following comment: "Very slightly deficient in cream; fat 2.92 per cent; contained cowdung 2 parts per 100,000 by volume." Two other samples contained cowdung. In one case 2.5 parts per 100,000, and in another 3 parts per 100,000 by volume. The Analyst did not recommend legal proceedings. The remaining samples were clean and free from preservatives.

Notification of Infectious Diseases.

The following were reported to me during the year :—

| | |
|----------------------------------|-----|
| Diphtheria | 18 |
| Erysipelas | 9 |
| Scarlet Fever | 37 |
| Typhoid Fever | 2 |
| Ophthalmia Neonatorum | 3 |
| Puerperal Fever | 3 |
| Pneumonia | 10 |
| Malaria | 5 |
| Measles and German Measles | 126 |
| Tuberculosis | 32 |
| Total | 245 |

CASES REPORTED IN—

| Year. | Diphtheria and Croup | Erysipelas | Scarlet Fever | Typhoid Fever | Continued Fever | Puerperal Fever | Smallpox | Chicken-pox | Tuberculosis | Ophthalmia Neonatorum | Cerebro Spn. Meningitis | Measles and G. Measles | Pneumonia | Malaria | Trench Fever | Total. |
|-------|----------------------|------------|---------------|---------------|-----------------|-----------------|----------|-------------|--------------|-----------------------|-------------------------|------------------------|-----------|---------|--------------|--------|
| 1888 | .. | .. | 225 | 39 | .. | .. | 19 | .. | .. | .. | .. | .. | .. | .. | .. | 283 |
| 1889 | .. | .. | 158 | 20 | .. | .. | 2 | .. | .. | .. | .. | .. | .. | .. | .. | 180 |
| 1890 | 3 | .. | 78 | 26 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 107 |
| 1891 | 1 | .. | 39 | 50 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 90 |
| 1892 | .. | .. | 257 | 53 | .. | .. | 1 | .. | .. | .. | .. | .. | .. | .. | .. | 311 |
| 1893 | 5 | 5 | 242 | 29 | .. | .. | 6 | .. | .. | .. | .. | .. | .. | .. | .. | 287 |
| 1894 | 7 | 5 | 126 | 40 | 1 | 2 | 5 | .. | .. | .. | .. | .. | .. | .. | .. | 186 |
| 1895 | 11 | 27 | 46 | 36 | 2 | 8 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 130 |
| 1896 | 12 | 70 | 139 | 33 | 3 | 9 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 266 |
| 1897 | 5 | 56 | 101 | 41 | 1 | 12 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 216 |
| 1898 | 8 | 35 | 93 | 43 | 3 | 10 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 192 |
| 1899 | 12 | 31 | 400 | 55 | .. | 7 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 505 |
| 1900 | 190 | 27 | 276 | 33 | 1 | 4 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 531 |
| 1901 | 207 | 34 | 231 | 21 | 3 | 1 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 497 |
| 1902 | 144 | 15 | 137 | 34 | 1 | 3 | 3 | .. | .. | .. | .. | .. | .. | .. | .. | 337 |
| 1903 | 21 | 17 | 30 | 15 | .. | 2 | 27 | 32 | .. | .. | .. | .. | .. | .. | .. | 144 |
| 1904 | 34 | 35 | 89 | 20 | .. | 5 | 2 | .. | .. | .. | .. | .. | .. | .. | .. | 785 |
| 1905 | 29 | 49 | 456 | 28 | .. | 5 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 567 |
| 1906 | 18 | 17 | 50 | 17 | .. | 4 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 106 |
| 1907 | 22 | 14 | 26 | 21 | .. | .. | 1 | .. | .. | .. | .. | .. | .. | .. | .. | 84 |
| 1908 | 14 | 14 | 22 | 23 | .. | 4 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 77 |
| 1909 | 11 | 7 | 149 | 15 | .. | 3 | .. | .. | 11 | .. | .. | .. | .. | .. | .. | 196 |
| 1910 | 18 | 32 | 123 | 12 | .. | 4 | .. | 5 | .. | .. | .. | .. | .. | .. | .. | 194 |
| 1911 | 32 | 16 | 39 | 9 | .. | 2 | .. | 3 | .. | .. | .. | .. | .. | .. | .. | 101 |
| 1912 | 19 | 31 | 9 | 3 | .. | 2 | .. | 53 | .. | .. | .. | .. | .. | .. | .. | 117 |
| 1913 | 26 | 15 | 28 | 2 | .. | 1 | .. | 91 | .. | .. | .. | .. | .. | .. | .. | 163 |
| 1914 | 20 | 27 | 206 | 10 | .. | 1 | .. | 88 | 4 | .. | .. | .. | .. | .. | .. | 356 |
| 1915 | 16 | 18 | 108 | 6 | .. | 2 | .. | 84 | 7 | 1 | .. | .. | .. | .. | .. | 292 |
| 1916 | 13 | 19 | 54 | 5 | .. | 1 | .. | 69 | 5 | 1 | 215 | .. | .. | .. | .. | 382 |
| 1917 | 5 | 11 | 55 | 5 | .. | 1 | .. | 59 | 2 | .. | 127 | .. | .. | .. | .. | 265 |
| 1918 | 8 | 12 | 33 | 1 | .. | 2 | .. | 51 | 1 | 1 | 807 | .. | .. | .. | .. | 916 |
| 1919 | 14 | 6 | 17 | 1 | .. | 2 | .. | 27 | 2 | .. | 69 | 18 | 22 | 1 | .. | 179 |
| 1920 | 18 | 9 | 37 | 2 | .. | 3 | .. | 32 | 3 | .. | 126 | 10 | 5 | .. | .. | 245 |

DIPHTHERIA AND CROUP. Of these diseases 18 cases were notified, as compared with 14 the year before ; in 11 of these 13 swabs were taken and sent to Manchester University for examination.

In 7 cases the reaction was positive, in 5 negative, and in 1 doubtful.

A supply of Anti-Diphtheretic Serum is kept at the Health Office, and during the year 30,000 units were issued to medical practitioners.

SCARLET FEVER.

| | |
|--------------------------------------|----|
| Number of houses with one case | 31 |
| " " two cases | 3 |

The distribution was as follows :—

| | Central | West Central | North East | North West | South East | South West |
|------------------|---------|--------------|------------|------------|------------|------------|
| Population | 6329 | 3847 | 8793 | 7365 | 6678 | 6170 |
| Number | 5 | 2 | 12 | 3 | 10 | 5 |

Table showing susceptible period :—

| Under 1 Year | 1 to 5 | 5 to 15 | 15 to 25 | 25 to 65 | Total |
|--------------|--------|---------|----------|----------|-------|
| 0 | 7 | 28 | 1 | 1 | 37 |

Fourteen of these cases were removed to Bull Hill Isolation Hospital. There were no return cases. The remainder were nursed at the homes, as they had sufficient accommodation for isolation.

TYPHOID FEVER. There were 2 cases notified during the year, as compared with one case in the previous year.

One of the patients was a nurse who had attended a person suffering from the disease in Carnforth. She was removed to an Isolation Hospital.

OPHTHALMIA NEONATORUM. Three cases were notified. The County Authorities were at once informed.

PUERPERAL FEVER. Three cases were notified, one proving fatal. All these cases were reported to the County Authority.

ERYSIPELAS. There were 9 cases, as compared with 6 in the previous year.

SMALL POX. None.

There were 10 cases of Pneumonia and 5 cases of Malaria notified, the latter being men who had been on military service abroad, where the disease was contracted.

TUBERCULOSIS. Under the regulations 32 cases were notified, as compared with 27 in the previous year. The following Table gives detailed particulars of them.

Table showing Age Periods and Localisation of Tuberculosis Cases notified during 1920.

| DISEASES. | Under 1 year | | 1 to 2 | | 2 to 5 | | 5 to 15 | | 15 to 25 | | 25 to 35 | | 35 to 45 | | 45 to 65 | | 65 and upwards | | Total. | | |
|-----------------------|------------------------|-----|--------|-----|--------|-----|---------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------------|-----|--------|-----|-----|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | |
| | Bones, Lower Jaw | | | | | | | | | | | | | | | | 1 | ... | ... | ... | 1 |
| Bowels | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... |
| Cervical Glands | | | | | | | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 |
| Glands of Neck | | | | | | | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... |
| Lungs..... | | | | | | | 4 | 2 | 1 | 4 | 2 | 2 | 6 | 1 | ... | ... | ... | ... | 13 | 9 | |
| Meninges | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | |
| Right Hip Joint | | | | | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 |
| Right Knee Joint... | | | | | | | | | | | | 1 | ... | ... | ... | ... | ... | ... | ... | 1 | 1 |
| Spine | | | | | | | | | | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | |
| | 2 | ... | 1 | ... | 1 | ... | 1 | 6 | 2 | 2 | 4 | 2 | 3 | 6 | 2 | ... | ... | ... | 18 | 14 | |
| | 2 | | 1 | | 1 | | 1 | 8 | 6 | 5 | 8 | | | | | ... | ... | | 32 | | |

Thirty-five deaths took place from Tuberculosis of one kind or another, being 6 more than in the previous year.

Pulmonary Tuberculosis headed the list with 23, Meningitis 5, other tuberculous diseases 7.

Twenty-two cases of Pulmonary Tuberculosis were sent to various sanatoria. Twenty of these were discharged before the end of the year, with the following results :—

- In 1 case—No report.
- „ 6 cases Improvement.
- „ 5 „ No change.
- „ 2 „ Worse.
- „ 6 „ Dead.
- „ 0 „ Fit for full work.
- „ 7 „ Not fit for work.
- „ 6 „ Fit for light work.

The Consumptive Patients from Darwen were sent to the following institutions :—

- Elswick Sanatorium, Elswick.
- Heath Charnock Sanatorium, nr. Chorley.
- Burnley Sanatorium, Burnley.
- High Carley Sanatorium, Ulverston.
- Bull Hill Sanatorium, Darwen.

Luneside Sanatorium, Lancaster.
 Meathop Sanatorium, Grange.
 Aitken Sanatorium, Holcombe Brook.
 Shelf Sanatorium, Halifax.

During the year 69 patients were sent by the County Committee to Bull Hill Sanatorium.

Table showing the number of Pathological Specimens which have been sent for examination to Professor Delépine, Public Health Laboratory, Victoria University, Manchester.

| YEAR. | Diphtheria. | | | | Typhoid Fever. | | | | Tuberculosis Sputum. | | | Cerebro-Spinal Fever. | | | | | |
|-----------|----------------|----------------|---------------|-------|----------------|----------------|---------------|-------|----------------------|----------------|-------|-----------------------|----------------|-------|----------------|----------------|-------|
| | | | | | | | | | | | | Spinal fluid | | | Swabs. | | |
| | Posi- tive. | Nega- tive. | Doubt ful. | Total | Posi- tive. | Nega- tive. | Doubt ful. | Total | Posi- tive. | Nega- tive. | Total | Posi- tive. | Nega- tive. | Total | Posi- tive. | Nega- tive. | Total |
| 1911..... | 6 | 8 | ... | 14 | 4 | 3 | ... | 11 | 2 | 9 | 11 | ... | ... | ... | ... | ... | ... |
| 1912..... | 7 | 4 | ... | 11 | ... | 7 | ... | ... | 7 | 11 | 18 | ... | ... | ... | ... | ... | ... |
| 1913..... | 8 | 8 | ... | 16 | 1 | ... | ... | 8 | 28 | 33 | 61 | ... | ... | ... | ... | ... | ... |
| 1914..... | 4 | 9 | 1 | 14 | 6 | 7 | ... | 8 | 65 | 57 | 122 | ... | ... | ... | ... | ... | ... |
| 1915..... | ... | 12 | ... | 12 | 2 | 2 | ... | 6 | 58 | 60 | 118 | 1 | ... | 1 | ... | 2 | 2 |
| 1916..... | 6 | 7 | ... | 13 | 1 | 4 | 1 | 6 | 74 | 50 | 124 | ... | 1 | 1 | ... | 3 | 3 |
| 1917..... | 8 | 16 | 1 | 25 | 1 | 8 | ... | 9 | 56 | 64 | 120 | ... | ... | ... | ... | ... | ... |
| 1918..... | 4 | 4 | 1 | 9 | 2 | 1 | ... | 3 | 42 | 76 | 118 | ... | ... | ... | ... | ... | ... |
| 1919..... | 7 | 8 | 1 | 16 | ... | ... | ... | ... | 34 | 59 | 93 | ... | ... | ... | ... | ... | ... |
| 1920..... | 8 | 11 | 1 | 20 | 2 | ... | ... | 2 | 38 | 48 | 86 | ... | ... | ... | ... | ... | ... |

ZYMOTIC DEATH RATE.

| | | | | | | | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1887 | 1888 | 1889 | 1890 | 1891 | 1892 | 1893 | 1894 | 1895 | 1896 | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 |
| 3.0 | 1.9 | 2.0 | 1.2 | 1.7 | 1.9 | 2.2 | 1.1 | 2.1 | 2.2 | 1.6 | 2.08 | 2.34 | 2.90 | 2.14 | 1.03 | 0.76 | 2.07 | 1.00 |
| 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | | | | |
| 1.14 | 0.69 | 0.76 | 1.10 | 0.51 | 1.51 | 0.86 | 0.27 | 0.44 | 1.42 | 0.54 | 0.32 | 0.42 | 0.19 | 0.12 | | | | |

RETURN OF VACCINATION FOR DARWEN, 1920.

| MONTHS. | Successful Vaccination. | Died Unvaccinated. | Insusceptible. | Ex-empted. | Post-poned. | Re-moved out of Town and Traced | Re-moved and Cannot Trace. | Unac-counted for. | Success-fully vaccinated each quarter. |
|---------------|-------------------------|--------------------|----------------|------------|-------------|---------------------------------|----------------------------|-------------------|--|
| January ... | 26 | 9 | 0 | 64 | 1 | 0 | 0 | 0 | |
| February ... | 21 | 3 | 0 | 33 | 0 | 0 | 0 | 0 | |
| March | 17 | 11 | 1 | 45 | 1 | 0 | 0 | 0 | 64 |
| April | 25 | 6 | 0 | 33 | 1 | 0 | 0 | 0 | |
| May | 27 | 9 | 0 | 50 | 0 | 0 | 0 | 1 | |
| June | 18 | 1 | 0 | 44 | 0 | 0 | 0 | 1 | 70 |
| July | 21 | 4 | 0 | 48 | 1 | 0 | 0 | 1 | |
| August | 16 | 3 | 0 | 46 | 0 | 1 | 0 | 4 | |
| September.. | 15 | 2 | 0 | 44 | 0 | 0 | 0 | 2 | 52 |
| October | 8 | 1 | 0 | 43 | 0 | 0 | 0 | 16 | |
| November.. | 1 | 2 | 0 | 17 | 0 | 0 | 0 | 25 | |
| December... | 0 | 1 | 0 | 9 | 0 | 0 | 0 | 51 | 9 |
| | 195 | 52 | 1 | 476 | 4 | 1 | 0 | 101 | 195 |

VACCINATION.

| Year | Births | Successfully Vaccinated | Rate per cent. Vaccinated |
|------|--------|-------------------------|---------------------------|
| 1900 | 980 | 705 | 71.9 |
| 1901 | 858 | 651 | 75.9 |
| 1902 | 891 | 765 | 85.9 |
| 1903 | 941 | 750 | 79.7 |
| 1904 | 820 | 662 | 80.7 |
| 1905 | 818 | 618 | 75.6 |
| 1906 | 811 | 593 | 73.1 |
| 1907 | 876 | 597 | 68.2 |
| 1908 | 895 | 447 | 49.9 |
| 1909 | 816 | 294 | 36.0 |
| 1910 | 776 | 275 | 35.4 |
| 1911 | 754 | 280 | 37.1 |
| 1912 | 690 | 204 | 29.57 |
| 1913 | 738 | 232 | 31.44 |
| 1914 | 765 | 271 | 35.42 |
| 1915 | 666 | 209 | 31.38 |
| 1916 | 562 | 200 | 35.58 |
| 1917 | 427 | 153 | 34.43 |
| 1918 | 353 | 116 | 32.86 |
| 1919 | 495 | 134 | 27.07 |
| 1920 | 845 | 195 | 23.07 |

When a case of infection is notified attending a Public Elementary School this is at once visited by the School Nurse and myself. The children are all examined and any suspects are sent home. In the case of Diphtheria swabs are taken and sent to Professor Delépine for examination. Close watch is kept to check any spread.

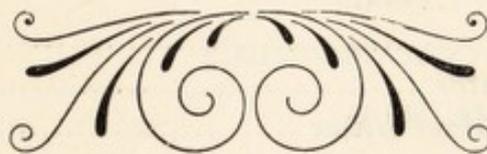
Cases of Measles and Mumps are reported sometimes by teachers and are at once examined by me.

DISINFECTION.

During the year infected bedding was removed from 86 houses for disinfection, and 96 rooms were fumigated.

LIST OF BEDDING DISINFECTED DURING 1920.

| Beds | Mattresses | Bolsters | Pillows | Quilts | Blankets | Sheets | Suits of Clothes | Carpets | Rugs | Curtains | Cushions | Shawls | Sundries |
|------|------------|----------|---------|--------|----------|--------|---------------------|---------|------|----------|----------|--------|----------|
| 114 | 19 | 71 | 122 | 59 | 72 | 31 | 2 | 1 | 1 | 0 | 3 | 8 | 168 |



Maternity and Child Welfare.

The following is Mrs. Shawcross's (Health Visitor) Report :—

HEALTH VISITOR'S OFFICE,
43, BOLTON ROAD, DARWEN.

Dr. F. G. Haworth,
Medical Officer of Health.

Sir,—

The following is a brief report of my work as Health Visitor during the year 1920—

| | |
|---|-------------|
| Notifications of Births received | 880 |
| First visits paid | 709 |
| Second and subsequent visits | 1054 |
| Visits paid to children over 1 year and under 5 years | 217 |
| " " suffering from Ophthalmia Neonatorum | 26 |
| " " expectant mothers | 162 |
| Total | <u>2168</u> |

The following statistics were obtained on first visit—

| Feeding. | 1920. | 1919. |
|-------------------------|------------|------------|
| Breast | 360 | 221 |
| Bottle | 196 | 109 |
| Breast and Bottle | 153 | 112 |
| | <u>709</u> | <u>442</u> |

| Types of Bottles used. | 1920. | 1919. |
|------------------------------|------------|------------|
| Bottles without tubes | 193 | 127 |
| " with glass tubes | 82 | 41 |
| " " rubber tubes | 74 | 53 |
| | <u>349</u> | <u>221</u> |

| Foods. | 1920 | 1919. |
|-----------------------------------|------------|------------|
| Cow's Milk | 84 | 45 |
| " " and Water | 44 | 51 |
| " " and Barley Water | 46 | 35 |
| " " Citrated | 14 | 5 |
| Nestle's Milk | 40 | 24 |
| Glaxo and other dried milks | 82 | 37 |
| Prepared food | 39 | 24 |
| | <u>349</u> | <u>221</u> |

Maternity and Child Welfare Centres.—

| Number of Names on Register. | 1920. | 1919 |
|--|-------|-------|
| School Street Branch | 740 | 460 |
| Hanover Street Branch | 71 | 37 |
| | <hr/> | <hr/> |
| | 811 | 497 |
| | <hr/> | <hr/> |
| | 1920. | 1919. |
| Babies specially examined by Medical Officer of Health | 441 | 352 |
| Babies referred to family medical man | 132 | 97 |
| Average weekly attendance of expectant mothers— | | |
| School Street Branch | 10 | |
| Hanover Street Branch | 2 | |
| | <hr/> | |
| | 12 | |
| | <hr/> | |
| Average weekly attendance of Mothers. | 1920. | 1919. |
| School Street | 95 | 75 |
| Hanover Street | 20 | 11 |
| | <hr/> | <hr/> |
| | 115 | 86 |
| | <hr/> | <hr/> |
| Average weekly attendance of Children. | 1920. | 1919. |
| School Street | 105 | 85 |
| Hanover Street | 22 | 11 |
| | <hr/> | <hr/> |
| | 127 | 96 |
| | <hr/> | <hr/> |

Number of Babies weighed at Health Visitor's Office, 1920 63

On December 18th, the Mayoress (Mrs. Duxbury) provided tea, and afterwards an entertainment, in the Lecture Hall, Free Library, for all mothers and babies attending the Centres and Day Nursery.

I am, Sir,

Yours obediently,

H. H. SHAWCROSS,

Health Visitor.

NOTIFICATION OF BIRTHS ACTS.

Table showing the number of Births Notified during 1920.

| | Male. | Female. | Total. | Stillborn: |
|-----------------|-------|---------|--------|------------|
| JANUARY | 52 | 40 | 92 | 6 |
| FEBRUARY | 27 | 43 | 70 | 7 |
| MARCH | 42 | 30 | 72 | 4 |
| APRIL | 34 | 46 | 80 | 7 |
| MAY | 48 | 37 | 85 | 7 |
| JUNE | 42 | 29 | 71 | 4 |
| JULY | 37 | 42 | 79 | 4 |
| AUGUST | 37 | 39 | 76 | 5 |
| SEPTEMBER | 39 | 36 | 75 | 5 |
| OCTOBER | 31 | 26 | 57 | 0 |
| NOVEMBER | 25 | 34 | 59 | 7 |
| DECEMBER | 34 | 30 | 64 | 2 |
| | 448 | 432 | 880 | 58 |

| | |
|--|-----|
| Births Notified by Midwives | 795 |
| " " Medical Men | 25 |
| " " Parents | 10 |
| " " Midwives and Medical Men | 38 |
| " " Parents and Medical Men | 6 |
| " " " " Midwives | 4 |
| " " Others | 2 |
| Total | 880 |

All Births were notified with the exception of 6, or 0.68 per cent. of the total.

| | |
|---|------|
| Births visited after receipt of Notifications | 709 |
| Births re-visited " " " | 1054 |
| Visits to expectant mothers | 162 |

Table showing Births Notified, Visits, etc.

| Year. | Births Notified. | | | | Births not Notified. | | Births Visited. | | Births Revisited |
|-------|------------------|---------|--------|-------------|----------------------|----------------|-----------------|------------|------------------|
| | Males. | Females | Total. | Still-born. | No. | Prose-cutions. | No. | % of Total | |
| 1912 | 373 | 336 | 709 | 45 | 10 | 0 | 465 | 65.6 | 587 |
| 1913 | 407 | 366 | 773 | 46 | 12 | 0 | 351 | 45.4 | 560 |
| 1914 | 390 | 404 | 794 | 41 | 9 | 0 | 428 | 54.2 | 537 |
| 1915 | 343 | 338 | 681 | 33 | 12 | 0 | 432 | 63.4 | 576 |
| 1916 | 272 | 292 | 564 | 27 | 9 | 0 | 421 | 78.2 | 596 |
| 1917 | 224 | 204 | 428 | 20 | 8 | 0 | 397 | 92.8 | 1370 |
| 1918 | 180 | 168 | 348 | 19 | 11 | 0 | 320 | 91.9 | 1477 |
| 1919 | 266 | 273 | 539 | 34 | 3 | 0 | 442 | 82.0 | 1294 |
| 1920 | 448 | 432 | 880 | 58 | 6 | 0 | 709 | 80.5 | 1054 |

DEATHS UNDER ONE YEAR OF AGE.

| Year | Premature Birth | Convulsions | Bronchitis & Pneumonia | Diarrhoeal Diseases | Whooping Cough | Measles | Inanition | Congenital Defects | Other Causes | Total | Rate per 1,000 Births. |
|------|-----------------|-------------|------------------------|---------------------|----------------|---------|-----------|--------------------|--------------|-------|------------------------|
| 1892 | 15 | 36 | 37 | 5 | 11 | ... | 13 | ... | 60 | 177 | 167 |
| 1893 | 24 | 22 | 49 | 16 | 2 | 9 | 12 | ... | 50 | 184 | 193 |
| 1894 | 21 | 17 | 30 | 6 | 10 | ... | 8 | ... | 38 | 130 | 125 |
| 1895 | 16 | 17 | 33 | 41 | 3 | 13 | 27 | 6 | 36 | 179 | 158 |
| 1896 | 25 | 14 | 44 | 35 | 15 | 3 | 18 | 6 | 30 | 187 | 181 |
| 1897 | 27 | 11 | 39 | 35 | 4 | 13 | 22 | 8 | 36 | 182 | 163 |
| 1898 | 33 | 6 | 33 | 58 | ... | 11 | 12 | 9 | 48 | 199 | 175 |
| 1899 | 22 | 18 | 41 | 43 | 7 | 1 | 9 | 12 | 48 | 200 | 188 |
| 1900 | 36 | 16 | 38 | 27 | 4 | 9 | 18 | 5 | 44 | 188 | 191 |
| 1901 | 20 | 8 | 35 | 24 | 6 | 3 | 15 | 7 | 30 | 145 | 169 |
| 1902 | 23 | 6 | 35 | 16 | 6 | 1 | 7 | 7 | 35 | 135 | 151 |
| 1903 | 21 | 2 | 25 | 16 | 7 | 2 | 17 | 4 | 5 | 117 | 124 |
| 1904 | 15 | 2 | 21 | 29 | 13 | 8 | 13 | 5 | 25 | 123 | 150 |
| 1905 | 31 | 5 | 27 | 11 | ... | 1 | 17 | 3 | 24 | 118 | 144 |
| 1906 | 18 | 5 | 27 | 19 | ... | 4 | 9 | 3 | 30 | 111 | 136 |
| 1907 | 18 | 9 | 34 | 11 | 4 | ... | 7 | 4 | 17 | 104 | 118 |
| 1908 | 27 | 3 | 12 | 26 | 1 | ... | 10 | 4 | 24 | 107 | 120 |
| 1909 | 21 | 1 | 34 | 10 | 8 | 7 | 6 | 5 | 12 | 104 | 127 |
| 1910 | 19 | 11 | 17 | 12 | 3 | ... | 5 | 3 | 25 | 95 | 122 |
| 1911 | 22 | 2 | 14 | 23 | ... | 9 | 18 | 1 | 27 | 116 | 153 |
| 1912 | 13 | 4 | 20 | 6 | 10 | 3 | 9 | 4 | 19 | 88 | 127 |
| 1913 | 17 | 1 | 20 | 12 | 1 | 2 | 18 | 6 | 17 | 94 | 127 |
| 1914 | 16 | 6 | 21 | 10 | 2 | ... | 14 | 5 | 17 | 91 | 119 |
| 1915 | 14 | 3 | 18 | 7 | 6 | 4 | 5 | 1 | 17 | 75 | 112 |
| 1916 | 13 | 2 | 9 | 2 | 2 | 1 | 4 | 3 | 15 | 51 | 91 |
| 1917 | 9 | 1 | 14 | 5 | 1 | ... | 4 | ... | 16 | 40 | 89 |
| 1918 | 3 | ... | 4 | 2 | ... | 3 | 1 | 1 | 12 | 26 | 74 |
| 1919 | 15 | 2 | 11 | 1 | 1 | ... | 8 | 8 | 11 | 57 | 115 |
| 1920 | 18 | 1 | 12 | 1 | ... | ... | 15 | 3 | 29 | 79 | 93 |

Table showing Infantile Mortality in the Various Wards.

| Year. | C. | W.C. | N.E. | N.W. | S.E. | S.W. | Boro. |
|--------------------|-----|------|------|------|------|------|-------|
| 1912 | 82 | 155 | 110 | 102 | 165 | 128 | 127 |
| 1913 | 105 | 162 | 135 | 145 | 157 | 90 | 127 |
| 1914 | 98 | 128 | 122 | 123 | 170 | 99 | 119 |
| 1915 | 127 | 151 | 128 | 94 | 57 | 112 | 112 |
| 1916 | 109 | 25 | 140 | 107 | 59 | 55 | 91 |
| 1917 | 164 | 77 | 76 | 79 | 59 | 104 | 89 |
| 1918 | 38 | 57 | 95 | 63 | 133 | 34 | 74 |
| 1919 | 154 | 42 | 108 | 185 | 73 | 131 | 115 |
| Average for 8 yrs. | 109 | 99 | 114 | 112 | 109 | 94 | 107 |
| 1920 | 84 | 111 | 114 | 77 | 98 | 68 | 93 |

We have one Health Visitor (Nurse Shawcross), whose report of the work done is included. There are two Welfare Centres, one at the Lecture Hall, Free Library, held every Wednesday afternoon, the average attendance is probably from eighty to one hundred. Every child is weighed, and in the event of any loss of weight I am in attendance to give advice on the probable cause and the treatment.

A Ladies' Voluntary Committee has been appointed, of which a certain number attend each week by rota, make tea and supply it with cakes to the mothers. Frequent committee meetings are held to discuss the business.

A second Welfare Centre is held in the Day Nursery, Hanover Street, on the Tuesday afternoon, where the average attendance is from twenty to thirty. The babies are weighed, and I also attend to give advice. As both these Centres are unsuitable on account of the want of accommodation for weighing and consultations, we are on the look-out for better premises.

The number on the books at School Street is 740, and Hanover Street 71, total 811, which is an indication that the work is appreciated, and since Mrs. Shawcross was appointed the numbers have increased. Sixty-three children are also taken to the School Clinic to be weighed, and as many as possible are seen by me in case advice is needed.

A children's hospital has not been opened. Many expectant mothers attend for advice, and some are supplied with Glaxo to secure a supply of breast milk. This is the main purpose, and everything is done for this purpose. There is an inclination with some medical men to give up the breast feeding, or on too slight an excuse, we try to counteract this inclination.

During the winter there has been much distress and in consequence we have supplied free milk. Before this is done full enquiries are made into the family income. Milk is not allowed if this reached 10s. per head per week except in certain exceptional cases. When cases of Puerperal Fever and Ophthalmia Neonatorum are notified the County Authorities are communicated with and they take action.

The Council has made arrangements with the local Nursing Association to undertake the nursing of cases of Measles.

TABLE (C).

COUNTY OF LANCASTER.

SUMMARY OF

Medical Officer's Report for 1920.

URBAN DISTRICT OF DARWEN.

Medical Officer of Health—FREDERIC GEORGE HAWORTH.

Salary as M.O.H.—£250 ; Bonus—Nil.

Is he a whole-time Officer?—Yes.

Inspectors of Nuisances—William E. Marsden and C. R. Walsh.

Salary—W. E. Marsden, £160 ; C. R. Walsh, £150. Bonus—

W. E. Marsden, £109 12s. ; C. R. Walsh, £132.

Are they whole-time Officers?—Yes.

What is the character of the Hospital Accommodation?—For Small-pox : Farm House, 2 Beds. For other Infectious Diseases : For Scarlet Fever and Typhoid Fever, 1 Block, 20 Beds, good ; 1 Block, 8 Beds, very good.

Is it Joint or otherwise?—Our own.

No. of Beds available—For Small-pox, 2. For other Infectious Diseases, 28.

DISINFECTION.

No. of Houses disinfected?—96. Method?—Sulphur and Formalin. Are Houses disinfected after Phthisis?—Yes. Measles?—Occasionally. Apparatus used for Clothing, Bedding, etc. (steam or otherwise)?—Washington Lyons Superheated Steam Disinfector. No. of Articles disinfected?—671. Where is Apparatus situated?—Bull Hill Hospital. If Apparatus at Hospital is available, is it used for the disinfection of Clothing, Bedding, etc., of Patients not removed to the Hospital?—Yes.

Are any Diseases notifiable other than those which are compulsorily notifiable (for instance Measles, Whooping Cough, Diarrhœa, Chicken Pox, etc.)—Yes. If so, what are they?—Measles.

Diseases specially prevalent?—Measles. Period?—February, March, April.

No. of times School Closure adopted for Scarlet Fever?—None. Diphtheria?—None. Measles?—None. Whooping Cough?—None. Chicken-pox?—None. Influenza?—None. Any other Diseases?—None.

No. of Special Reports made under Art. XIX. (15 and 16) Sanitary Officers' Order, 1910?—None.

Bacteriological Examinations. Specimens examined : Blood, 4 ; Throat Swabs, 20 ; Sputum, 86 ; others, 2.

Diphtheria Anti-Toxin Order, 1910. Is a supply of Anti-toxin kept within the district?—Yes. Where?—Health Office. Amount used during 1920?—30,000 units.

“ THE HOUSING ACTS, 1890 to 1919.”

Has your Authority determined the procedure to be adopted for the inspection of your District as required by Article I. of the Regulations of 2nd September, 1910?—Yes.

Has your Authority prepared, as required by Article I. (3) a list of dwelling-houses, the “ early inspection of which is, in the opinion of the M.O.H., desirable ”?—Yes.

Has your Authority designated an officer to undertake the special inspection of houses and to keep the records stipulated by Articles (II.) and (III.). If so, what officer?—Inspectors of Nuisances.

Have the necessary books, forms, etc., for keeping the required records been obtained?—Yes. Are these kept up-to-date?—Yes.

Action taken in 1920 under the Housing Acts :—

(a) No. of Dwelling-houses specially inspected during 1920 under Sec. 17 of the Act of 1909, with a view to ascertaining whether any dwelling-houses are unfit for human habitation?—154.

Have the particulars of these inspections, as specified in Article II. (1) to (8), and Article III. (1) to (8) of the Housing (Inspection of District) Regulations, 1910, been fully recorded?—Yes.

No. of Dwelling-houses considered unfit for human habitation?—52.

No. of Representations to Authority with a view to making Closing Orders?—52

No. of Closing Orders made?—0.

No. of Dwelling-houses in which defects were remedied without making Closing Orders?—4.

No. of Dwelling-houses put into a fit state of habitation after making Closing Orders?—0.

No. of Dwelling-houses demolished?—2.

General character of defects found to exist?—Want of ventilation, want of air space, no through ventilation. Drainage bad and cannot be remedied owing to surroundings.

Total number of Dwelling-houses inspected for purposes of the Housing Acts (other than those inspected under (a) above)?—3.

If your Authority has a Housing Scheme, state what stage had been reached on December 31st, 1920, giving information under the following headings :—

| No. of Schemes Submitted. | No. of Lay-outs. | | No. of Houses included in House Plans. | | No. of Houses | |
|---------------------------|------------------|-----------|--|-----------|------------------------------|------------|
| | Submitted. | Approved. | Submitted. | Approved. | On which Work has commenced. | Completed. |
| 2 | 2 | 2 | 242 | 242 | Nil. | Nil. |

No. of houses built during 1920 by private enterprise?—None.

SOURCE OF WATER SUPPLY.

What is its condition?—Upland surface, good.

Possibilities of contamination?—Not in vicinity of dwelling-houses.

Any insufficiency, and where?—None.

Nature of extensions (if any) during the year?—None.

SCAVENGING AND REMOVAL OF HOUSE REFUSE.

Are Scavenging and Removal of House Refuse carried out satisfactorily for whole of district?—Yes.

How performed (state whether by Sanitary Authority, Contract, or Occupiers of Houses)?—Sanitary Authority.

If Privy Middens exist, are they emptied by day or night?—None.

How is the Refuse disposed of?—Burnt in Destructor.

Has a Destructor been provided?—Yes, Meldrum's.

If so, where?—Shorey Bank, near Electricity Works.

SEWAGE DISPOSAL WORKS.

Method of Treatment?—Bacteriological.

What is the character of the Drainage System? Any developments during year?—Combined System.

Areas, or Townships, without proper drainage system?—None.

Action taken—Drain Testing, Flushing, etc?—Water, Smoke, Periodic Flushing.

Action taken with regard to the Pollution of Streams?—No legal action.

Canal Boats. Number Inspected?—None.

What is the condition of the Bakehouses?—Fairly Good. No.?—90.

What is the condition of Slaughter-houses?—Fairly good. No.?—3. No Registered?—2. No. Licensed?—1.

Has a Public Abattoir been provided?—Yes.

What is the condition of Lodging Houses?—One only—Municipal.

What is the Sanitary condition of the Schools?—Good.

DAIRIES, COWSHEDS AND MILKSHOPS.

Are they periodically inspected?—Yes.

What is their condition?—Fairly good.

Have Regulations been made under the Order of the L.G.B.?—Yes.

Are they enforced?—Yes.

Amount of air space in cubic feet required for each cow?—(a) Where cows are habitually grazed?—600 cubic feet. (b) Where cows are not habitually grazed?—600 cubic feet.

Total No. of Cowkeepers?—103. No. on Register?—103.

No. of Inspections during year?—207.

Total No. of Dairymen or Milk Purveyors (other than Cowkeepers)?—4. No. on Register?—4.

Any arrangements for veterinary inspection of dairy cows?—Veterinary Surgeon called in if occasion requires.

Action taken (if any) as to tuberculous milk?—None.

INSPECTION OF FOOD.

Amount condemned or surrendered as unfit for human consumption :—

- (a) Tuberculous carcasses and parts?—25. Total weight 2,148lbs.
- (b) Diseases, unsound, or unwholesome meat (other than above)?—
Total weight, 4,403lbs.
- (c) Other foodstuffs?—20stns. Fish ; 160lbs. Pears ; 18 Tins Condensed Milk ; 15lbs. Butter ; 10 Bags Tripe.

No. of Legal Proceedings, and result?—Slaughtering Pig in unregistered Slaughter-house. Fined 10s.

DEPARTMENT OF INSPECTORS OF NUISANCES.

No of Notices served?—Informal, 736 ; Statutory, 389.

No. of Nuisances abated?—786.

No. of Legal Proceedings taken, and result?—None.

CLOSETS AND ASHPITS.

Privy Middens. No. of Middens?—None.

No. of Closets attached to these Middens?—None.

No. of Pail Closets?—1,729.

No. of Dry Ashpits (excluding Middens)?—12.

No. of Fresh Water Closets?—6,458.

No. of Portable Receptacles for Refuse?—10,450.

No. of Waste Water Closets?—2,471.

No. of Privy Closets converted during 1920?—To Fresh W.C.'s, none ; To Waste W.C.'s, none ; To Pails, etc., none.

No. of Pail Closets converted to Fresh W.C.'s, 30 ; Waste W.C.'s, none.

No. of Waste W.C.'s converted to Fresh W.C.'s?—4.

Does Council contribute towards the cost of conversion?—Yes.

How much?—Half cost of conversion of Pails to W.C.'s (Fresh).

What kind of closet accommodation is being provided for new property?—
Fresh Water Closets.

SMOKF.

No. of Observation?—116.

No. of Legal Proceedings taken, and result?—One—Order to Abate.

What is the time limit allowed for the emission of black smoke per hour?—
One, two, or three boilers, 5 minutes per hour; four or more boilers,
7 minutes per hour.

Has the Authority adopted :—

“ The Infectious Disease (Prevention) Act, 1890 ”?—Yes, except 5-11
inclusive and section 15.

“ The Public Health Acts Amendment Act, 1890 ”?—Yes, except that
relating to music and dancing.

“ The Public Health Acts Amendment Act, 1907 ”?—Certain sections.
Also Darwen Corporation (1887 and 1898) Acts.

Has a Health Visitor been appointed by the Local Council? State whether
whole or part-time?—Yes, whole-time.

Qualifications of Health Visitor?—C.M.B. and Fever Training.

Has any, and if so what, action been taken by the Council respecting Child
Welfare Work?—Two Maternity and Child Welfare Centres established
and held weekly. Day Nursery. Milk granted to necessitous cases.

Has any scheme been prepared in regard to the Supply of Food and Milk for
Expectant and Nursing Mothers, and of Milk for Infants?—Yes, grants
were made in 159 cases, amounting to approximately £460.

Is there a District Nursing Association in the District?—Yes.

How many District Nurses employed?— About 6 Nurses.

Does any arrangement exist between the Council and the Association in re-
spect of Child Welfare Work?—No.

Does the Association voluntary undertake Child Welfare Work?—No.

Does the Association undertake (a) Midwifery cases?—Yes; (b) Monthly
Nursing?—No.

Notable Sanitary Improvements during 1920?—None.

Chief Sanitary requirements of District?—Completion of Conversion of Pails
to Water Carriage System.

Signed,

F. G. HAWORTH,

Medical Officer of Health.

May 12th, 1921.

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE
YEAR 1920 FOR THE BOROUGH OF DARWEN,

On the Administration of the Factory and Workshop Act, 1901, in connection with:—

FACTORIES, WORKSHOPS, WORKPLACES AND HOMEWORK.

I.—INSPECTION.

Including Inspections made by Sanitary Inspectors or
Inspectors of Nuisances.

| Premises. | Inspections. | Number of Written Notices. | Prosecu- tions. |
|---|--------------|----------------------------------|--------------------|
| Factories (including Factory Laundries)... | 270 | 15 | ... |
| Workshops (including Workshop Laundries) | 315 | 12 | ... |
| Workplaces (other than Outworkers' pre- mises included in Part 3 of this Report) | 49 | 2 | ... |
| Total | 634 | 29 | ... |

II.—DEFECTS FOUND.

Nuisances under the Public Health Acts:—

| | Found. | Remedied. | Referred to H. M. Inspector. | No. of Prosecutions. |
|----------------------------------|--------|-----------|------------------------------------|-------------------------|
| Want of cleanliness | 5 | 5 | 3 | ... |
| Want of ventilation | 1 | 1 | ... | ... |
| Overcrowding | ... | ... | ... | ... |
| Want of drainage of floors | 1 | 1 | ... | ... |
| Other nuisances | 14 | 14 | ... | ... |
| Sanitary accommodation— | | | | |
| Insufficient | 3 | 3 | 3 | ... |
| Unsuitable or defective | 5 | 5 | ... | ... |
| Not separate for sexes | 1 | 1 | ... | ... |

Offences under the Factory and Workshop Acts:—

| | | | | |
|--|-----|-----|-----|-----|
| Illegal occupation of under- ground bakehouses (s. 101) ... | ... | ... | ... | ... |
| Breach of special sanitary re- quirements for bakehouses (ss. 97 to 100) | 8 | 8 | ... | ... |
| Other offences (excluding of- fences relating to outwork which are included in Part 3 of this Report) | 4 | 4 | ... | ... |
| Total | 42 | 42 | 6 | ... |

III.—HOME WORK.

| Nature of Work. | Outworkers' Lists, Section 107. Lists received from Employers. Sending twice in the year. | | |
|-----------------------------------|---|--------------|----------|
| | Lists. | Outworkers. | |
| | | Contractors. | Workmen. |
| Wearing Apparel—Making, etc. | 4 | ... | 6 |
| Household Linen | 2 | ... | 6 |
| Total | 6 | ... | 12 |

IV.—REGISTERED WORKSHOPS.

| | Number. |
|---|---------|
| Textile Factories | 65 |
| Non-Textile Factories | 48 |
| Factory Workshops | 147 |
| Workshops | 221 |
| Workplaces | 14 |
| Total number of Workshops on Register | 495 |

V.—OTHER MATTERS.

| | Number. |
|--|---------|
| Matters notified to H.M. Inspector of Factories :— | |
| Failure to affix Abstract of the Factory and Workshop Acts (s. 133, 1901) | ... |
| Action taken in matters referred by H.M. Inspector as reme- diable under the Public Health Acts, but not under the Factory and Workshop Acts (s. 5, 1901)— | |
| Notified by H.M. Inspector | 16 |
| Reports (of action taken) sent to H.M. Inspector ... | 11 |
| Other | ... |
| Underground Bakehouses (s. 101) in use at the end of the year | 4 |

MEAN METEOROLOGICAL READINGS FOR 1919 AND 1920.

| MONTH. | Barometer Corrected | | Thermometers. | | | | | | | | | | | | Sunshine (hours). | | Rain (m.m.) | | Wind Velocity. | | Wind Direction, 1920. | | | | | | | | | | | | |
|-----------|---------------------|--------|---------------|---------------|-------|---------|---------|----------|-----------|------|-----------------------|------|------|------|-------------------|------|-------------|------|----------------|-------|-----------------------|--------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | | Earth. | | | Water. | | | Humidity. | | Wind Direction, 1920. | | | | | | | | | | | | | | | | | | | | | | |
| | 1919 | 1920 | Maxi- mum. | Mini- mum. | Mean. | 1 Foot. | 4 Feet. | 10 Feet. | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | N. | N.E. | E. | S.E. | S. | S.W. | W. | N.W. | C'm | | | | | | | | |
| | ins. | ins. | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 0 | 4 | 0 | 5 | 19 | 10 | 21 | 3 | 0 | | | | | | |
| January | 29.730 | 29.818 | ... | 43.6 | 31.3 | 36.3 | ... | 39.9 | 37.5 | 37.9 | 41.8 | 40.5 | 45.7 | 43.7 | 39.4 | 41.1 | 94 | 85 | 20.5 | 24.7 | 169.1 | 140.9 | 10 | 14 | 0 | 4 | 0 | 5 | 19 | 10 | 21 | 3 | 0 |
| February | 29.835 | 30.148 | ... | 45.8 | 29.6 | 35.8 | ... | 40.8 | 33.1 | 39.6 | 39.3 | 40.5 | 43.8 | 42.9 | 37.8 | 42.3 | 94 | 89 | 55.8 | 49.0 | 33.9 | 113.3 | 10 | 15 | 3 | 3 | 0 | 1 | 22 | 7 | 21 | 1 | 0 |
| March | 29.838 | 29.866 | ... | 48.9 | 26.1 | 35.8 | ... | 42.3 | 36.7 | 42.2 | 39.1 | 41.5 | 42.6 | 42.8 | 39.1 | 43.6 | 92 | 85 | 89.0 | 67.6 | 197.7 | 148.1 | 13 | 14 | 0 | 2 | 1 | 1 | 18 | 11 | 22 | 7 | 0 |
| April | 29.996 | 29.690 | ... | 47.9 | 36.2 | 37.8 | ... | 42.8 | 41.9 | 45.0 | 40.6 | 43.7 | 41.9 | 43.2 | 43.2 | 44.5 | 93 | 88 | 103.6 | 62.6 | 89.7 | 166.0 | 10 | 13 | 5 | 4 | 4 | 6 | 15 | 6 | 11 | 9 | 0 |
| May | 30.082 | 30.012 | 61.9 | 57.6 | 45.1 | 42.1 | 55.0 | 49.8 | 50.4 | 51.6 | 45.6 | 47.1 | 43.2 | 44.5 | 50.4 | 47.9 | 80 | 81 | 192.3 | 145.0 | 52.6 | 204.3 | 8 | 11 | 0 | 0 | 7 | 6 | 9 | 9 | 28 | 3 | 0 |
| June | 30.111 | 30.026 | 63.7 | 63.7 | 46.7 | 46.2 | 55.2 | 54.9 | 55.1 | 57.9 | 51.0 | 51.0 | 46.1 | 47.2 | 52.4 | 51.5 | 82 | 79 | 165.8 | 164.7 | 65.7 | 90.4 | 11 | 9 | 0 | 8 | 11 | 9 | 7 | 0 | 23 | 2 | 0 |
| July | 30.065 | 29.867 | 65.0 | 60.9 | 47.4 | 48.4 | 56.2 | 54.6 | 56.8 | 57.4 | 52.7 | 53.9 | 48.5 | 49.6 | 52.9 | 51.9 | 84 | 88 | 142.0 | 93.0 | 59.1 | 179.0 | 8 | 11 | 2 | 2 | 0 | 2 | 15 | 10 | 26 | 5 | 0 |
| August | 30.000 | 30.092 | 65.2 | 61.1 | 50.3 | 48.7 | 57.8 | 54.9 | 58.4 | 57.2 | 55.3 | 54.5 | 50.4 | 51.1 | 53.7 | 51.7 | 85 | 82 | 132.9 | 89.3 | 133.5 | 91.8 | 11 | 10 | 3 | 0 | 4 | 1 | 4 | 4 | 41 | 5 | 0 |
| September | 29.997 | 30.019 | 60.9 | 60.2 | 45.2 | 47.2 | 53.0 | 53.7 | 54.2 | 54.9 | 54.2 | 53.7 | 51.6 | 51.6 | 50.9 | 50.7 | 88 | 87 | 125.7 | 102.2 | 80.9 | 83.9 | 13 | 10 | 0 | 0 | 4 | 7 | 18 | 6 | 23 | 2 | 0 |
| October | 30.207 | 29.980 | 51.5 | 55.8 | 38.2 | 45.0 | 44.8 | 50.4 | 36.4 | 50.0 | 49.7 | 51.3 | 51.0 | 51.4 | 46.2 | 48.5 | 85 | 85 | 108.5 | 105.7 | 78.1 | 43.7 | 11 | 11 | 0 | 3 | 13 | 21 | 21 | 4 | 0 | 0 | 0 |
| November | 29.789 | 30.038 | 40.6 | 48.6 | 31.4 | 40.6 | 36.0 | 43.6 | 39.2 | 43.5 | 44.5 | 46.9 | 48.5 | 49.5 | 44.0 | 45.1 | 89 | 83 | 24.1 | 37.8 | 104.8 | 68.6 | 11 | 13 | 0 | 7 | 2 | 5 | 21 | 17 | 8 | 0 | 0 |
| December | 29.742 | 29.993 | 44.1 | 42.1 | 34.4 | 34.3 | 39.2 | 38.2 | 38.7 | 38.5 | 41.8 | 42.9 | 45.6 | 44.1 | 41.9 | 42.1 | 89 | 84 | 15.3 | 19.4 | 242.1 | 94.4 | 14 | 13 | 0 | 5 | 12 | 16 | 17 | 3 | 6 | 3 | 0 |
| Totals | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1175.5 | 961.0 | 1307.2 | 1424.4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Mean | 29.949 | 29.962 | ... | 53.0 | 38.4 | 41.5 | ... | 47.2 | 44.9 | 47.9 | 46.3 | 47.3 | 46.5 | 46.8 | 46.0 | 46.7 | 88 | 84 | 97.9 | 80.1 | 108.9 | 118.7 | 11 | 12 | ... | ... | ... | ... | ... | ... | ... | ... | ... |

METEOROLOGY.

The Meteorological Observatory is at Bold Venture Park in Lat. $53^{\circ} 41' 25''$ N., and Lon. $2^{\circ} 28' 32''$ W., and is at an altitude of 728 feet above mean sea level.

Observations are taken twice daily, at 9 a.m. and 9 p.m.

This station is connected with the Meteorological Office, and is called a Normal Climatological Station. A report, giving all details of readings, is sent each month to the Meteorological Office, London.

The total rainfall for the year is 1424.4 millimetres, or 56.06 inches being recorded on 231 days; the average for the last fourteen years being 54.88 inches. The greatest monthly fall was in May, 204.3 millimetres; and the lowest in October, 43.7 millimetres. The greatest daily fall was 43.5 millimetres, on August 4th.

The total sunshine registered on 270 days during the year was 961.0 hours, being below the average for the last 14 years, which is 1133.1 hours. June registered the highest monthly total, 164.7 hours; and December the lowest, 19.4 hours. The highest daily reading was 13.7 hours, on June 9th.

The mean minimum temperature in shade was 41.5° , being above the average for the last fourteen years, which was 40.4° . The lowest monthly mean was in December, 34.3° , and the lowest reading for the year 16.7° , on December 13th.

The maximum wind velocity was on December 3rd, when a south-westerly wind was blowing at the rate of 60 miles per hour.

No observations of calm were recorded, 13 observations of fog, 23 observations of snow, and 19 observations of hail, 8 observations of thunder, 3 observations of lightning, thunderstorm on 4 days, 53 observations of dew, gale on 1 day, 19 observations of hoar frost, 57 observations of mist, rainbow on 5 days, glazed frost on 1 day.

Housing.

I. The general housing conditions of the district are good. I have expressed an opinion to the Council that at least 200 are needed. To meet this, several schemes have been submitted.

II. I have not met with any cases of overcrowding, at least, not more than one has been reported to me, and that was in the course of inspection for dirty premises. But I have no doubt there are cases of overcrowding even in the better houses, where some member of a family has married, children being born, and they have to live with their parents. To what extent this applies I cannot say. During the year a larger number of people were married than has previously taken place, viz., 534; and they will need homes to live in, yet during the war there were no new houses put up, and this leeway will have to be made good. 4,803 inspections were made by the Inspectors. The major part of work done has been under the Public Health Act. By informal notices, 521 defects were found and remedied, and when legal notices have been served the work has been done without further proceedings. Many of these houses will not improve, but gradually become worse year by year, so that the time will come when many will have to be closed. Some back-to-back houses have been previously closed and then made into through dwellings, but owing to a shortage of houses, such as were not too bad have been left for future action.

III. The general standard of houses in the district is good, usually with only two bedrooms. This is not enough, because when children are born the time soon arrives when they should be separated into the sexes. The most common defect is want of cleanliness in the house on the part of tenants. Children are allowed to kick the walls, paper is torn off, and the house acquires a dilapidated appearance.

I think landlords might keep a stricter supervision over property, especially inside and in the back yard, where evidence of neglect is probably exhibited first.

During the war much work was held up, which is now being done by the owners.

IV. A scheme dealing with a block of property known as Greggs Gardens and Shorrocks Fold district was adopted after a thorough inspection and a representation to the Council that it was an unhealthy area, and was sent on to the Commissioner.

**HOUSING CONDITIONS (STATISTICS), YEAR ENDING
DECEMBER 31st, 1920.**

I.—GENERAL.

| | |
|---|--------|
| 1. Estimated Population | 39,182 |
| 2. General Death-rate | 13.01 |
| 3. Death-rate from Tuberculosis | 0.89 |
| 4. Infantile Mortality | 93 |
| 5. Number of dwelling-houses of all classes | 10,485 |
| 6. Number of working-class dwelling-houses | 9,439 |
| 7. Number of new working-class houses erected | ... |

II.—UNFIT DWELLING HOUSES.

(i.) Inspection.

| | |
|---|-------|
| 1. Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) | 4,803 |
| 2. Number of dwelling-houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910 | 146 |
| 3. Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for habitation | 52 |
| 4. Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for habitation | 3 |

(ii.) Remedy of Defects without Service of Formal Notice.

| | |
|--|-----|
| Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers | 521 |
|--|-----|

(iii.) Action under Statutory Powers.

(A)—Proceedings under Section 28 of the Housing, Town Planning, etc.,
Act, 1919—

| | |
|---|---|
| 1. Number of dwelling-houses in respect of which notices were served requiring repairs | 0 |
| 2. Number of dwelling houses which were rendered fit | |
| (a) By owners | 0 |
| (b) By Local Authority in default of owners | 0 |
| 3. Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close | 0 |

(B)—Proceedings under Public Health Acts—

| | |
|---|-----|
| 1. Number of dwelling-houses in respect of which notices were served requiring defects to be remedied | 261 |
| 2. Number of dwelling-houses in which defects were remedied | |
| (a) By owners | 195 |
| (b) By Local Authority | 0 |

(C)—Proceedings under Sections 17 and 18 of the Housing, Town Planning, etc., Acts, 1909—

| | |
|---|----|
| 1. Number of representations made with a view to making Closing Orders | 0 |
| 2. Number of dwelling-houses in respect of which Closing Orders were made | 0 |
| 3. Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit | 0 |
| 4. Number of dwelling-houses in respect of which Demolition Orders were made | 10 |
| 5. Number of dwelling-houses demolished in pursuance of Demolition Orders | 2 |

III.—UNHEALTHY AREAS.

Areas represented to the Local Authority with a view to Improvement Schemes (a) Part I., or (b) Part II., of the Act of 1890 :—

| | |
|--|-------------|
| 1. Name of Area | Part 1 |
| 2. Acreage | 0.759 Acres |
| 3. Number of working-class houses in area | 52 |
| 4. Number of working-class persons to be displaced | 124 |

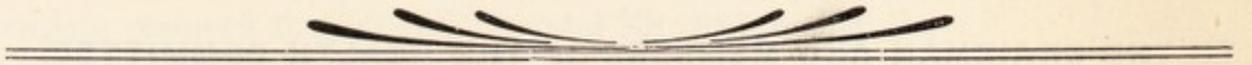
IV.

| | |
|---|---|
| Number of houses not complying with the building bye-laws erected with consent of Local Authority under Section 25 of the Housing, Town Planning, etc., Act, 1919 | 0 |
|---|---|

V.

Staff engaged on housing work, with briefly the duties of each Officer :—

One Architectural Assistant under Borough Engineer and Surveyor. The two District Sanitary Inspectors are also Inspectors appointed under the above Acts.



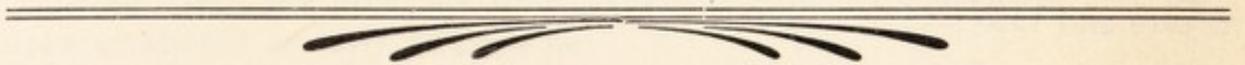
REPORT

OF THE

INSPECTORS OF NUISANCES

FOR THE

Year ending 31st December, 1920.



PUBLIC HEALTH OFFICE,
DARWEN,

MARCH 31st, 1921.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.

GENTLEMEN,

I beg to submit my Annual Report of the work carried out by me in the Health Department during the year ending December 31st, 1920.

The District to which the Report refers comprises the Central, South-East, and South-West Wards of the Borough as follows :—

| | Area in Acres. | No. of Houses. | Estimated Population. |
|-----------------------|-------------------|-------------------|--------------------------|
| CENTRAL WARD | 110 | 1671 | 6329 |
| SOUTH-EAST WARD | 1900 | 1716 | 6678 |
| SOUTH-WEST WARD | 1980 | 1620 | 6170 |

INFECTIOUS DISEASES.

The total number of notifications received during 1920 was 74, as compared with 91 in 1919.

The following Table gives a list of cases notified in each of the Wards in 1919 and 1920 :—

| WARD | Scarlet Fever | | Typhoid Fever | | Diphtheria | | Erysipelas | | Puerperal Fever | | Con- sumption | | Measles | | Malaria | | Pneumonia | | Ophthalmia | |
|------------------|------------------|------|------------------|------|------------|------|------------|------|--------------------|------|------------------|------|---------|------|---------|------|-----------|------|------------|------|
| | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 |
| Central | 5 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 1 | 7 | 4 | 14 | 3 | 0 | 2 | 0 | 3 | 0 | 0 |
| South-East | 9 | 6 | 1 | 1 | 3 | 8 | 3 | 3 | 0 | 0 | 4 | 4 | 9 | 26 | 0 | 1 | 3 | 4 | 0 | 0 |
| South-West | 5 | 5 | 0 | 0 | 2 | 2 | 1 | 1 | 0 | 0 | 2 | 4 | 1 | 5 | 0 | 2 | 1 | 2 | 0 | 1 |
| | 19 | 12 | 1 | 1 | 8 | 10 | 4 | 4 | 1 | 1 | 13 | 12 | 24 | 34 | 0 | 5 | 4 | 9 | 0 | 1 |

On receipt of a notification a visit is at once paid to the premises, advice given as to best means of isolation, and subsequent visits are paid to see that isolation, etc., is carried out.

On removal or recovery of a patient the premises are disinfected, usually by means of sulphur candles or formaldehyde tablets. The bedding and other articles are removed to the Hospital and there disinfected.

During 1920 51 rooms were disinfected, and the following is a list of bedding removed to Bull Hill Hospital for disinfection :—

| | Beds | Bedding | Bolsters | Pillows | Quilts | Blankets | Sheets | Suits of Clothes | Carpets | Rugs | Cushions | Shawls | Sundries | Total |
|------------------|------|---------|----------|---------|--------|----------|--------|------------------|---------|------|----------|--------|----------|-------|
| Central | 13 | 3 | 8 | 17 | 6 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 14 | 71 |
| South-East | 30 | 4 | 23 | 34 | 12 | 13 | 8 | 0 | 0 | 0 | 0 | 4 | 31 | 159 |
| South-West | 22 | 2 | 19 | 18 | 25 | 30 | 5 | 1 | 0 | 0 | 0 | 1 | 62 | 185 |
| | 65 | 9 | 50 | 69 | 43 | 50 | 16 | 1 | 0 | 0 | 0 | 5 | 107 | 415 |

Previous years :—

| | | | | | | | | | | | | | | |
|------------|-----|----|----|-----|----|-----|----|---|---|---|---|----|-----|-----|
| 1919 | 41 | 4 | 22 | 54 | 28 | 28 | 6 | 0 | 0 | 0 | 0 | 0 | 48 | 231 |
| 1918 | 74 | 2 | 48 | 76 | 46 | 60 | 23 | 1 | 4 | 0 | 0 | 3 | 77 | 414 |
| 1917 | 55 | 12 | 38 | 64 | 52 | 58 | 16 | 1 | 0 | 1 | 5 | 2 | 71 | 375 |
| 1916 | 76 | 16 | 58 | 83 | 67 | 67 | 21 | 3 | 0 | 1 | 1 | 2 | 55 | 450 |
| 1915 | 103 | 33 | 92 | 106 | 70 | 115 | 27 | 1 | 3 | 7 | 6 | 7 | 136 | 706 |
| 1914 | 88 | 19 | 73 | 94 | 75 | 125 | 26 | 1 | 3 | 1 | 5 | 12 | 77 | 599 |
| 1913 | 45 | 18 | 30 | 49 | 22 | 21 | 9 | 0 | 6 | 8 | 2 | 6 | 15 | 227 |

NUISANCES.

The number of complaints received during the year was 169, being chiefly choked gullies, accumulation of refuse, etc.

In all cases the premises were visited as early as convenient and the nuisances abated as early as possible.

CONVERSION OF CLOSETS.

During the year the following conversions of closets were made :—

25 Pails to Water Closets.

1 W.W.C. to Water Closet.

2 Handflushed Closets to Water Closets.

Fifty-five agreement forms for alterations to drains, converting closets, opening choked W.W.C.'s etc., were signed and the work carried out by the Highways Department.

MANURE PITS.

All the manure pits in the district are frequently inspected, and in cases of large accumulations, notices are served to remove manure.

Copies of Bye-laws in force within the Borough are periodically issued to owners of horses, etc.

The following Table gives a list of Inspections, notices served, and result, as required to be furnished to the Medical Officer of Health under Article 20, Sec. 16, of the Sanitary Officer's Order of 1910 :—

| Nature of Inspections. | Number of Inspections. | Number of Notices Served. | | Result of Service of Notices. | | | |
|----------------------------------|------------------------|---------------------------|--------------|-------------------------------|----------------------|---------------|---------|
| | | Legal. | Preliminary. | Nuisances abated. | Remain- ing in hand. | Prosecutions. | |
| | | | | | | Instituted. | Pending |
| Dwelling Houses..... | 2127 | 262 | 324 | 398 | 48 | ... | ... |
| Houses under Housing, &c., Act | 94 | ... | ... | ... | ... | ... | ... |
| Factories and Workshops | 334 | 4 | ... | 4 | ... | 1 | ... |
| Bakehouses | 121 | 2 | ... | 2 | ... | ... | ... |
| Dairies and Cowsheds | 147 | 23 | 7 | 25 | 3 | ... | ... |
| Smoke Observations | 59 | 1 | ... | ... | ... | 1 | ... |
| Infectious Diseases..... | 74 | ... | ... | ... | ... | ... | ... |
| NUISANCES— | | | | | | | |
| Defective Drains..... | 56 | 9 | 50 | 53 | 3 | ... | ... |
| Defective Slop Gullies..... | 29 | 13 | 20 | 25 | 4 | ... | ... |
| Defective W.C.'s..... | 15 | 10 | 13 | 14 | 1 | ... | ... |
| Defective Easing Troughs, &c.... | 98 | 24 | 67 | 86 | 12 | ... | ... |
| Insanitary Yards | 12 | 6 | 12 | 11 | 1 | ... | ... |
| Dirty Premises..... | 29 | 20 | 20 | 27 | 2 | ... | ... |
| Dilapidated Closets..... | 23 | 15 | 14 | 20 | 3 | ... | ... |
| Accumulations of Refuse | 60 | 21 | 38 | 54 | 6 | ... | ... |
| Nuisances from Animals..... | 8 | 2 | 8 | 7 | 1 | .. | ... |
| Nuisances from Manure Pits | 2 | 2 | 2 | 1 | 1 | ... | ... |
| Ashtubs without Covers..... | 7 | 6 | 6 | 7 | ... | ... | ... |
| Broken Slop Pipes | 29 | 15 | 27 | 27 | 2 | ... | ... |
| Choked W.W.C.'s | 19 | 13 | 12 | 18 | 1 | ... | ... |
| Broken Ashtubs | 9 | 7 | 8 | 9 | ... | ... | ... |
| Dangerous Closet Walls, &c..... | 3 | 3 | 3 | 3 | ... | ... | ... |
| Insanitary Pails | 14 | 12 | 10 | 14 | ... | ... | ... |
| Defective Roofage | 5 | 3 | 5 | 4 | 1 | ... | ... |
| Defective Wind ows..... | 7 | 4 | 6 | 6 | 1 | ... | ... |
| Defective Closet Recep. Doors... | 21 | 13 | 8 | 12 | 9 | ... | ... |

FACTORIES AND WORKSHOPS.

Four hundred and fifty-five Inspections were made to Factories and Workshops under the Acts, and were found to be in a fairly sanitary condition. Several notices to abate nuisances were served, and the work in each case carried out.

The following is a summary of Inspections :—

FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES, AND
HOMEWORKERS' PREMISES.

I.—INSPECTION.

| | Inspection. | Number of Notices Written. |
|---|-------------|----------------------------|
| Factories, including Factory Laundries | 174 | 6 |
| Workshops, including Workshop Laundries | 125 | 3 |
| Workplaces, Homeworkers' Premises | 35 | 2 |

NUISANCES UNDER PUBLIC HEALTH ACT.

II.—DEFECTS FOUND.

| | Number Found. | Number of Defects Remedied. |
|----------------------------------|---------------|-----------------------------|
| Want of Cleanliness | 1 | 1 |
| Want of Ventilation | ... | ... |
| Overcrowding | ... | ... |
| Want of Drainage to Floors | ... | ... |
| Other Nuisances | 3 | 3 |
| Sanitary Accommodation— | | |
| Insufficient | ... | ... |
| Unsuitable or Defective | 2 | 2 |
| Not Separate for Sexes | 1 | 1 |

REGISTERED WORKSHOPS.

| | No. |
|-----------------------------|-----|
| Textile Factories | 33 |
| Non-Textile Factories | 12 |
| Factory Workshops | 102 |
| Workshops | 34 |
| Laundries | 3 |

OTHER MATTERS.

| | |
|--|----|
| Matters notified to H.M. Inspector of Factories | 11 |
| Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory and Workshop Act (S.5) | 4 |
| Notified by H.M. Inspector | 6 |
| Reports (of action taken) sent to H.M. Inspector | 8 |
| Underground Bakehouses (S.101) in use at end of year | 2 |

DAIRIES AND COWSHEDS.

The number of Inspections of Farms made in 1920 was 147, the whole of the Farms being situate in South-East and South-West Wards.

The general cleanliness of the cowshed premises, dairies, and cattle has been very satisfactory. 29 Notices were served to carry out various improvements, and with only 3 exceptions the Notices were complied with.

Copies of the Bye-laws and Regulations made under the Dairies and Cowsheds Order were distributed amongst the cowkeepers, etc.

The following is a summary of nuisances for which notices were served :

| | | | |
|--|---|-------------------------------|---|
| Defective Easing Troughs on Shippons | 6 | Defective Drains | 5 |
| Defective Shippon Floors | 2 | Insanitary Yards | 4 |
| Defective Roofage | 3 | To Limewash and Cleanse | 3 |
| Defective Dairy Gullies | 4 | Insanitary Closet | 1 |
| | | Provide Manure-pit | 1 |

BLACK SMOKE.

During 1920, 59 Observations, each of 60 minutes' duration, were taken, the average amount of Black Smoke per observation being $2\frac{1}{4}$ minutes per hour.

The number taken in 1919 was 56, with an average of 2 minutes.

Notice was served in 1 case, and proceedings were taken against the Sunnybank Laundry, and an order was made to abate the nuisance.

The following is a List of Observations during 1920 :—

| MILL. | No. of Obs- er- vations. | Total Black Smoke Min. Secs. | Boilers. | Apparatus. |
|--------------------|-----------------------------------|------------------------------------|----------|---------------|
| Darwen Paper | 1 | 1 15 | 8 | Hodgkinson's. |
| Sudellside | 1 | 1 30 | 1 | Procter's. |
| Progress | 1 | 1 45 | 1 | Whittaker's. |
| Vale Brook | 1 | 2 0 | 1 | Procter's. |
| Springfield | 1 | 2 0 | 1 | Hand. |
| New Bridge | 1 | 2 0 | 1 | Whittaker's. |
| Holme | 1 | 2 0 | 1 | Procter's. |

| MILL. | No of. Observations. | Total Black Smoke | | Boilers. | Apparatus. |
|-------------------------|----------------------|-------------------|-------|----------|----------------------|
| | | Min. | Secs. | | |
| Cotton Hall | 1 | 2 | 0 | 1 | Benniss's. |
| Ellenshaw | 1 | 2 | 15 | 1 | Hand. |
| Perseverance | 1 | 2 | 45 | 1 | Procter's. |
| Darwen Spinning | 1 | 3 | 15 | 3 | Hand. |
| Rose | 2 | 3 | 0 | 1 | Procter's. |
| Whitehall | 2 | 3 | 15 | 1 | Benniss's. |
| Marsh House | 2 | 3 | 15 | 1 | Hand. |
| Waterfield | 2 | 3 | 45 | 1 | Grimshaw's. |
| Tackfield | 2 | 4 | 30 | 1 | Hand. |
| Hanover Street | 2 | 4 | 30 | 2 | 1 Hand, 1 Benniss's |
| Greenfield New | 2 | 4 | 45 | 1 | Procter's. |
| India | 2 | 5 | 0 | 3 | Hand. |
| Premier | 2 | 5 | 15 | 1 | „ |
| Hope | 2 | 5 | 15 | 2 | „ |
| Hampden | 2 | 5 | 30 | 1 | Procter's. |
| Primrose | 2 | 5 | 30 | 1 | „ |
| Greenfield Old | 2 | 5 | 30 | 1 | „ |
| Bowling Green | 2 | 5 | 45 | 3 | „ |
| South End | 2 | 5 | 45 | 1 | „ |
| Albert | 2 | 6 | 0 | 2 | Hand. |
| Britannia | 2 | 6 | 15 | 2 | „ |
| Highfield | 2 | 6 | 30 | 1 | „ |
| New | 2 | 7 | 0 | 2 | 1 Hand, 1 Benniss's. |
| South Street | 2 | 7 | 30 | 2 | „ |
| Starkie Street | 3 | 7 | 30 | 1 | Hand. |
| Sunnybank Laundry | 5 | 13 | 45 | 1 | „ |

SALE OF FOOD AND DRUGS ACT, 1875 TO 1907.

As Inspector under the above Act, I purchased 4 samples of milk and submitted them for analysis. They were all found to be genuine.

One sample of water was obtained from a well supplying houses at Bull Hill and submitted for analysis. The water was found to be fit for drinking purposes, but the well was liable to pollution.

Seven houses have since been supplied with Town's Water.

Four houses are still using the well water.

HOUSING AND TOWN PLANNING ACTS.

SUMMARY UNDER ARTICLE V. OF THE HOUSING (INSPECTION OF DISTRICT) REGULATIONS, 1910.

| | |
|--|-----|
| 1. Number of Dwellings inspected under Sec. 17 | 94 |
| 2. Number of Dwelling-houses which, on inspection, were considered to be in a state so dangerous and injurious to health as to be unfit for human habitation | ... |
| 3. Number of representations made to the Local Authority with a view to the making of Closing Orders, Section 17 (2) | ... |
| 4. Number of Closing Orders made, Section 17 (2) | ... |
| 5. Number of Dwelling-houses, the defects of which were remedied without making the Closing Orders | 4 |
| 6. Number of Dwelling-houses which, after making the Closing Orders, were put in a fit state for human habitation | ... |
| 7. Number of Dwelling-houses in respect of which Demolition Orders were made | 10 |

INSPECTION OF FOOD.

Periodical inspections are made of premises where food is prepared for human consumption.

The fish and fruit markets are continually under observation.

16 stone of mackerel and 160 lbs. of pears were condemned as unfit for food.

Supplementary reports on various matters requiring attention have been submitted to the Health Committee each month during the year, along with recommendations for the serving of statutory notices, etc., under the various Public Health Acts.

I am, Gentlemen,

Your obedient servant,

WM. E. MARSDEN,

M. Inst. San. Eng.

Cert. Royal San. Inst.

PUBLIC HEALTH OFFICE,

February, 1921.

Northern District.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.

GENTLEMEN,

The following is a brief summary of the work carried out by me in the above district during the year ending December 31st, 1920. The district is comprised of North-East, North-West, and West-Central Wards.

During the year two houses were demolished in North-West Ward. No houses were erected during the year.

The following table shows the number of houses, etc. :—

| | Houses, 1920. | Persons, Census, 1911. | Families, or Separate Occupiers, 1911. | Estimated Population, 1920. |
|------------------------|------------------|---------------------------|--|-----------------------------------|
| West Central Ward..... | 940 | 3947 | 912 | 3847 |
| North-East Ward | 2324 | 9181 | 2165 | 8793 |
| North-West Ward | 1944 | 7055 | 1758 | 7365 |
| | <hr/> 5208 | <hr/> 20183 | <hr/> 4835 | <hr/> 20005 |

The average number of persons per house according to census returns, 1911, was about 4.17 persons. The average per house in 1920 averages 3.84 persons per house.

HOUSING CONDITIONS.

I.—UNFIT DWELLING HOUSES (INSPECTION).

| | |
|---|------|
| 1. Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) | 2582 |
| 2. Number inspected and recorded under Regulations, 1910 | 52 |
| 3. Number of houses found to be unfit for habitation | 52 |
| 4. Number of dwelling-houses (exclusive of above-mentioned) found not to be in all respects reasonably fit for habitation | 3 |

II.—DEFECTS REMEDIED WITHOUT SERVICE OF FORMAL NOTICE.

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority, or their Officers 261

PROCEEDINGS UNDER PUBLIC HEALTH ACTS.

1. Number of dwelling-houses in respect of which notices were served requiring defects to be remedied 127
2. Number of dwelling-houses in which defects were remedied—
 - (a) by owners 98
 - (b) by L.A. in default of owners 0

PROCEEDINGS UNDER SECTIONS 17 AND 18 OF THE HOUSING AND TOWN PLANNING ACT, 1909.

1. Number of representations made with a view to making closing orders 0
2. Number of dwelling-houses in respect of which closing orders were made 0
3. Number of dwelling-houses in respect of which closing orders were determined, the houses having been made fit 0
4. Number of demolition orders 0
5. Number of houses demolished 2

UNHEALTHY AREAS. (Improvement Scheme, Part 1 and 2, 1890 Act).

1. Name of Areas Part 1 Scheme.
2. Acreage Part 1 Scheme, .759 acres.
3. Number of working class houses in area, Part 1 52 Houses.
4. Number of working class persons to be displaced, Part 1 ... 124 Persons.

DIRTY HOUSES.

In the monthly reports submitted to the Committee, details were given of certain houses situated in William Street, Back Duckworth Street, John Street, Hutchinson Court, Bury Street, Bury Square, Dove Street, Richard Street, and Robert Street, which were found to be in a very filthy condition. Preliminary, and ultimately, statutory notices were served upon the occupiers, and the rooms, etc., were cleansed at once.

INFECTIOUS DISEASES NOTIFIED.

| WARD | Scarlet Fever | | Pneumonia | | Diphtheria | | Erysipelas | | Ophthalmia Neonatorum | | Malaria | | Consumption | | Trench Fever | | Typhoid | | Measles and German Measles | | Puerperal Fever | | Cerebro Spinal Meningitis | | Total | |
|--------------|---------------|------|-----------|------|------------|------|------------|------|-----------------------|------|---------|------|-------------|------|--------------|------|---------|------|----------------------------|------|-----------------|------|---------------------------|------|-------|------|
| | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 | 1919 | 1920 |
| West-Central | 0 | 2 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 1 | 2 | 1 | 4 | 1 | 0 | 0 | 1 | 3 | 21 | 1 | 0 | 0 | 0 | 8 | 33 |
| North-East | 1 | 12 | 3 | 2 | 2 | 3 | 2 | 1 | 0 | 2 | 10 | 0 | 7 | 6 | 0 | 0 | 0 | 0 | 9 | 32 | 0 | 1 | 0 | 0 | 34 | 59 |
| North-West | 4 | 3 | 6 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 6 | 0 | 7 | 6 | 0 | 0 | 0 | 0 | 23 | 30 | 0 | 0 | 0 | 0 | 47 | 43 |
| Total... | 5 | 17 | 9 | 4 | 4 | 6 | 2 | 3 | 0 | 2 | 17 | 2 | 15 | 16 | 1 | 0 | 0 | 1 | 35 | 83 | 1 | 1 | 0 | 0 | 89 | 135 |

Immediately upon receipt of notification of the existence of cases of Infectious Disease I visited the houses and ascertained if the patients were properly isolated. I also made a thorough examination of the premises. Any defects discovered in the drainage or sanitary arrangements I caused to be remedied as quickly as possible. Seven of the patients suffering from Scarlet Fever were removed to the Bull Hill Hospital. At the termination of each case of infectious disease, the rooms were thoroughly cleansed and disinfected, and the bedding, etc., removed to Bull Hill Hospital and disinfected in the Super-heated Steam Disinfector.

During the year 36 loads of bedding, etc., were disinfected.

GENERAL INSPECTION OF DISTRICT.

In accordance with your instructions and the General Order of the Local Government Board I have endeavoured, by systematic inspection, to keep myself informed in respect of any nuisance existing in the district, as the following summary will show :—

SUMMARY OF WORK DONE IN THE DISTRICT.

| | |
|---|------|
| Total number of Nuisances discovered in District | 471 |
| Letters written respecting Nuisances | 72 |
| Preliminary Notices served respecting Nuisances | 412 |
| Legal Notices served respecting Nuisances | 127 |
| Number of Re-Inspections | 1830 |
| ,, Nuisances abated (including outstanding Nuisances, 1919) | 388 |
| ,, Houses and Premises Inspected | 2522 |
| ,, Inspections of Refuse Tips | 74 |
| ,, Inspections of Schools and Public Buildings | 60 |
| Complaints Received and Investigated | 193 |

| | |
|--|-----|
| Number of Drains, Water Closets, &c., Tested | 38 |
| „ Smoke Observations Taken | 57 |
| „ Inspections of Factories and Workshops | 200 |
| „ „ Lodging-Houses | 56 |
| „ „ Bake-Houses | 123 |

For further particulars see Table in Medical Officer's Report.

BLACK SMOKE NUISANCE.

The nuisance arising from the emission of Black Smoke from Factory Chimneys has again received my attention. Fifty-seven observations were taken, each of one hour's duration. Several of the mills worked intermittently during the year.

The following time limit is in force in the Borough :—

| | |
|----------------------------------|----------------------------------|
| One, two, or three boilers | 5 minutes' black smoke per hour. |
| Four or more boilers | 7 „ „ „ „ |

In two instances the time limit was exceeded and statutory notices were served upon the occupiers of the respective mills.

The following Table of Analysis of Observations shows the average amount of black smoke emitted in minutes per hour during the last 12 years :

| | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|
| 1920 | 1919 | 1918 | 1917 | 1916 | 1915 | 1914 | 1913 | 1912 | 1911 | 1910 | 1909 |
| 3.40 | 3.0 | 2.70 | 2.24 | 2.36 | 2.60 | 2.08 | 2.11 | 1.91 | 2.22 | 2.12 | 2.43 |

Advantage has been taken of the opportunity afforded by the mills being closed owing to depression in trade to carry out repairs of boilers, economisers, stokers, etc. At 15 of the mills the boilers are hand fired.

At 30 of the mills mechanical stokers of various kinds are in use, and there are 68 boilers at the respective mills, etc.

FACTORIES AND WORKSHOPS.

I.—INSPECTION.

| Premises. | Inspection. | Number of Written Notices. |
|------------------|-------------|----------------------------|
| Factories | 96 | 9 |
| Workshops | 190 | 9 |
| Workplaces | 14 | 0 |
| Total | 200 | 18 |

NUISANCES UNDER PUBLIC HEALTH ACTS.

II.—DEFECTS FOUND.

| | Number of Defects. | |
|--|--------------------|-----------|
| | Found. | Remedied. |
| Want of Cleanliness | 2 | 2 |
| „ „ Ventilation | 1 | 1 |
| „ „ Drainage of Floors | 1 | 1 |
| Other Nuisances | 11 | 11 |
| Sanitary Conveniences— | | |
| Unsuitable and Defective | 3 | 3 |
| Not Separate for Sexes | 0 | 0 |
| Breach of Special Sanitary Requirements (S.S. 97 to 100) | 6 | 6 |

III.—OTHER MATTERS.

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

| | |
|---|---|
| Action taken in matters referred by H.M. Inspector, as remediable under Public Health Acts (notified by H.M. Inspector) | 5 |
| Reports of action taken sent to Inspector | 5 |
| Certified underground Bakehouses in use at end of year | 2 |

IV.—REGISTERED FACTORIES AND WORKSHOPS, ETC.

| | Number. |
|-----------------------------|---------|
| Textile Factories | 32 |
| Non-Textile Factories | 36 |
| Factory Workshops | 42 |
| Workshops | 187 |
| Workplaces | 14 |
| | 311 |

Four lists of outworkers making wearing apparel were supplied to me during the year in compliance with regulations.

LIST OF FACTORIES, FACTORY WORKSHOPS, WORKSHOPS, ETC.

| | | | |
|---------------------------------|----|-----------------------------|----|
| Textile Cotton Factories | 32 | Picture Framing | 6 |
| Joiners and Builders | 10 | Boots and Shoes | 30 |
| Paper and Paint Mills | 6 | Chipped Potatoes | 23 |
| Engineers and Foundries | 8 | Ice Cream | 1 |
| Printers | 5 | Dressmakers, etc. | 33 |
| Gas and Electricity Works | 2 | Hay and Straw Dealers | 2 |
| Waste Sorting Works | 4 | Motor Repairing | 5 |
| Rope Works | 1 | Livery Stables | 1 |
| Aerated Water Works | 2 | Tailors | 10 |
| Box Making | 2 | Baking Powder Maker | 1 |
| Reed Works | 1 | Tin Plate Works | 3 |
| Slay Makers | 1 | Scales and Weights | 2 |
| Wheelwrights | 5 | Saddlers | 3 |
| Firewood Making | 1 | Plumbers | 6 |
| Pork Butchers | 4 | Blacksmiths | 3 |
| Destructor Works | 1 | Tripe Dressing | 2 |
| Wringing Machine Works | 1 | Cabinet Makers | 2 |
| Bakers and Confectioners | 65 | Marine Stores | 3 |
| Wholesale Grocers | 3 | Stocking Knitting | 1 |
| Brush Maker | 1 | Electrical Engineers | 2 |
| Tea Mixing | 1 | Watch Repairing | 4 |
| Painters' Preparation Workshops | 6 | Flock Bed Dressing | 1 |
| Polishing Paste | 1 | Pickle Making | 1 |
| Paper Bags | 1 | Chocolate Making | 1 |
| Herb Beer Making | 1 | | |

DAIRIES, COWSHEDS, AND MILKSHOPS.

There are 36 farms, with 67 shippens, in the Northern District. No dairy cows have been kept during the year at Sniddle Hill, Holly Bank, Hawkshaw, and Lower Trees Farms. A few of the farms are used chiefly for rearing young stock. About 500 cows are stalled in the shippens, in addition to young stock and oxen. Improvements were carried out under the Dairies, Cowsheds, and Milkshops Regulations, as follows:—

| | |
|---|---|
| Shippens and Yard Pavement Relaid or Repaired | 2 |
| Lighting and Ventilation of Shippens Improved | 1 |
| Drains Reconstructed or Repaired | 1 |

| | |
|---|----|
| New Easing Troughs and Downspouts Fixed | 3 |
| Dirty Shippons Limewashed | 13 |
| Repairs to Roofage of Shippons | 2 |
| Repairs to Dairy | 1 |

Many repairs of a minor nature were also carried out.

I have continued to watch carefully the water supplies at the various farms.

Copies of the Dairies, Cowsheds, and Milkshops Regulations have again been supplied to each farmer.

During the year one grocer was found selling milk in his shop and, upon examination, the premises were found to be unsuitable. The Committee refused to register him, and the sale of milk upon the premises was prohibited.

INSPECTION OF SCHOOLS.

Many Inspections of the 13 Elementary Schools were made, particularly during the vacations, viz., Easter, Mid-Summer, and Christmas, to survey the buildings and ascertain if the cleaning had been done in accordance with your requirements, as issued prior to each vacation by Mr. W. Bretherick, Secretary of Education. I found the work done in accordance with instructions. Defects in the buildings, drainage, and pavement of yards were remedied.

TRIPERIES.

The waste material from the works is removed daily and cremated at the Destructor, and great care is exercised to avoid effluvia nuisances. I visit the works daily

There is one gut scraper in the town, and his workshop, which is well kept, is situated at the Public Slaughter-Houses.

SALE OF FOOD AND DRUGS ACTS.

During the year I purchased samples of milk and submitted them to the County Analyst, with the following results :—

| Date. 1920. | Food. | Sample Number. | Result of Analysis. |
|----------------|--------------|-------------------|---|
| Jan. 12 | ... Milk | ... 24 ... | Genuine. |
| „ 12 | ... „ | ... 25 ... | „ |
| „ 12 | ... „ | ... 26 ... | „ |
| „ 27 | ... „ | ... 27 ... | „ |
| „ 27 | ... „ | ... 28 ... | Very slightly deficient in cream. Fat 2.92 per cent. Contained cowdung 2 parts per 100,000 by volume. |
| „ 27 | ... „ | ... 29 ... | Genuine. |
| „ 27 | Skimmed Milk | ... 30 ... | Genuine Skimmed Milk. |
| „ 27 | ... Milk | ... 31 ... | Genuine. |
| „ 27 | ... „ | ... 32 ... | Genuine, contained cowdung 3 parts per 100,000 by volume. |
| Feb. 20 | ... „ | ... 33 ... | Genuine, contained cowdung 2.5 parts by volume per 100,000. |
| „ 20 | Skimmed Milk | ... 34 ... | Genuine Unskimmed Milk. |
| „ 20 | ... Milk | ... 35 ... | Genuine. |
| „ 20 | ... „ | ... 36 ... | „ |
| Jne. 10 | ... „ | ... 37 ... | „ |
| „ 10 | ... „ | ... 38 ... | „ |
| „ 10 | ... „ | ... 39 ... | „ |
| „ 11 | ... „ | ... 40 ... | „ |
| „ 11 | ... „ | ... 41 ... | Sample broken in transit. |
| „ 11 | ... „ | ... 42 ... | Sample broken in transit. |

OTHER FOODS CONDEMNED AND DESTROYED.

- 4 stones of fish (Filets of Ling).
- 18 Tins of condensed milk.
- 10 Bags of Tripe.
- 15 lbs. of Butter.

I have continued to keep a sharp outlook over the various articles of food offered for sale for human consumption in the district. The butchers' shops are regularly visited.

MODEL LODGING HOUSE.

During the year there has been an improvement in the number of lodgers, and if there had not been a depression in trade the numbers would have compared favourably with those of 1913. This is the only common lodging-house in the town, a distinct advantage from a public health standpoint. I frequently visited the house, often in the evening, after the lodgers had retired to rest, when the number of cubicles occupied were checked and the books examined.

The following Table shows the average number of occupants for each month during the last 12 years :—

| | 1909. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Jan. | 76.0 | 70.2 | 75.2 | 72.1 | 111.3 | 121.0 | 84.6 | 65.3 | 59.1 | 53.04 | 59.12 | 70.20 |
| Feb. | 74.9 | 76.2 | 64.1 | 77.1 | 125.2 | 126.6 | 86.9 | 69.1 | 61.2 | 54.82 | 57.90 | 81.30 |
| March ... | 73.2 | 70.2 | 80.4 | 95.3 | 127.2 | 125.6 | 85.5 | 67.2 | 66.3 | 53.58 | 59.90 | 79.30 |
| April | 79.5 | 79.2 | 86.5 | 102.6 | 127.4 | 129.4 | 109.2 | 67.2 | 68.2 | 57.77 | 64.27 | 91.66 |
| May | 83.2 | 79.2 | 78.0 | 96.0 | 126.2 | 127.2 | 88.2 | 53.1 | 66.9 | 54.35 | 68.70 | 93.30 |
| June | 79.2 | 78.1 | 71.5 | 86.1 | 131.8 | 122.3 | 84.1 | 50.7 | 62.2 | 55.37 | 72.00 | 101.83 |
| July | 84.1 | 78.7 | 69.2 | 77.1 | 130.1 | 124.1 | 75.7 | 53.1 | 60.0 | 51.26 | 67.24 | 100.12 |
| August ... | 81.9 | 72.1 | 70.2 | 91.5 | 132.9 | 108.1 | 73.2 | 62.1 | 57.2 | 48.00 | 69.23 | 106.00 |
| Sept. | 87.0 | 70.2 | 79.2 | 104.2 | 123.1 | 91.1 | 66.1 | 60.2 | 56.7 | 53.93 | 71.24 | 95.16 |
| October ... | 74.2 | 72.6 | 82.1 | 113.5 | 128.1 | 94.2 | 58.1 | 60.6 | 57.7 | 54.90 | 74.17 | 89.00 |
| Nov. | 74.1 | 79.6 | 79.1 | 109.1 | 124.2 | 87.2 | 61.2 | 60.0 | 54.7 | 56.47 | 71.70 | 84.63 |
| Dec. | 80.1 | 78.2 | 75.2 | 108.9 | 122.4 | 79.2 | 64.9 | 61.1 | 51.7 | 59.19 | 68.15 | 88.74 |
| Average... | 78.9 | 75.3 | 77.5 | 94.4 | 125.8 | 111.3 | 78.1 | 60.8 | 60.0 | 54.39 | 66.97 | 90.02 |

MANURE PITS.

I made an inspection during the months of June, July and August, of the 38 Midden Steads in use in the Northern District, and caused the pits to be emptied weekly. Everything possible was done to mitigate the nuisance caused by flies.

OTHER MATTERS.

At each monthly meeting of the Health Committee, in addition to the printed report, I have submitted a detailed type-written statement of the work carried on in my district.

I am pleased to say that the service of Preliminary and Legal Notices had the effect of securing the abatement of nuisances, and it was not necessary to institute legal proceedings in any case.

Agreement Forms have been signed by owners of property for the Corporation workmen to carry out repairs, etc., to back yards, drains, etc.

This work has been done under my supervision.

I am, Gentlemen,

Yours obediently,

C. R. WALSH, M. R. San. Inst., &c.,

Sanitary Inspector, &c.



ADDENDA.

The amount of Out-door Relief granted to persons resident within the Borough during the year ended 31st December, 1920, was £1,248 10s. 4d.

SLAUGHTER-HOUSE REPORT, 1920.

To the Chairman and Members of the Slaughter-House Committee.

GENTLEMEN,

During the year the various animals passing through the Public and Private Abattoirs have been carefully examined both before and after slaughter. In addition, large consignments of fresh meat have been imported from Blackburn and Birkenhead. Quantities of frozen and chilled beef, mutton, pork have been received from Liverpool, necessitating inspection in the retailers' shops.

The meat sold by retail during the first four months of the year was not equal to pre-war standard, the registered wholesale butchers had then to accept animals, carcasses, etc., which were allocated to them by the Meat Control Authorities. From May to December (when control was removed) there was a decided improvement in the quality of the meat sold.

Several animals and carcasses were examined at the farms, and many animals accidentally injured were conveyed to the Abattoirs and slaughtered under my supervision, in some cases during the evening.

NUMBER OF ANIMALS SLAUGHTERED AT THE PUBLIC AND PRIVATE ABATTOIRS.

| | BEASTS. | | SHEEP AND LAMBS | | PIGS | CALVES | | TOTAL | |
|----------------|---------|---------|-----------------|---------|------|--------|---------|--------|---------|
| | Public | Private | Public | Private | | Public | Private | Public | Private |
| January..... | 118 | 79 | 121 | 79 | 105 | 47 | — | 391 | 158 |
| February..... | 120 | 72 | 176 | 113 | 58 | 73 | — | 427 | 185 |
| March..... | 132 | 61 | 147 | 70 | 37 | 84 | — | 400 | 131 |
| April..... | 66 | 41 | 126 | 76 | 59 | 107 | — | 358 | 117 |
| May..... | 81 | 64 | 105 | 77 | 54 | 74 | — | 314 | 141 |
| June..... | 45 | 27 | 74 | 35 | 27 | 36 | — | 182 | 62 |
| July..... | 103 | 54 | 789 | 293 | 9 | 17 | — | 918 | 347 |
| August..... | 118 | 57 | 950 | 299 | 21 | 2 | — | 1091 | 356 |
| September..... | 59 | 75 | 418 | 508 | 22 | 5 | 4 | 504 | 587 |
| October..... | 112 | 50 | 790 | 333 | 54 | 9 | 6 | 965 | 389 |
| November..... | 140 | 57 | 713 | 270 | 46 | 11 | 1 | 910 | 328 |
| December..... | 140 | 69 | 797 | 313 | 203 | 4 | 4 | 1144 | 386 |
| Total 1920 | 1234 | 706 | 5206 | 2466 | 695 | 469 | 15 | 7604 | 3187 |
| Total 1919 | 1226 | 748 | 4074 | 2681 | 701 | 131 | 131 | 6132 | 3560 |

The above Table shows an increase in the Public Abattoir of 8 beasts, 1132 sheep and lambs, 338 calves, and a diminution of 6 pigs as compared with last year, and a diminution of 42 beasts, 215 sheep and lambs, and 116 calves in the Private Abattoir.

During the year 118 carcasses required special examination; 25 were affected with Tuberculosis in varying degrees. All affected parts were condemned and destroyed.

Twenty-five immature calves, 1 cow, 3 sheep, and 2 pigs were condemned and destroyed for other causes than Tuberculosis.

The total amount condemned and destroyed during the year was 6551lbs. for the following causes :—

| Number Examined. | Cause. | Weight in lbs. condemned. |
|------------------|--------------|---------------------------|
| 25 | Tuberculosis | 2148 |
| 38 | Liver Fluke | 105 |
| 8 | Cirrhosis | 88 |
| 25 | Immaturity | 1439 |
| 7 | Injured | 1418 |
| 5 | Asphyxiation | 590 |
| 3 | Unsound | 500 |
| 1 | Pneumonia | 22 |
| 3 | Abscess | 50 |
| 1 | Mastitis | 9 |
| 1 | Enteritis | 50 |
| 1 | Hydatids | 12 |
| | Other causes | 120 |
| | | 6551lbs. |

ILLICIT SLAUCHTERING.

It was found necessary on December 30th to prosecute a farmer for killing a pig in an unregistered slaughter-house. The Magistrates imposed a fine of 10s. This action will have an inhibitory influence, and prevent illicit killing of animals intended for human food.

I am, Gentlemen,

Yours respectfully,

G. R. WALSH, M. R. San. Inst.,

Certified Inspector of Meat and Other Foods.

SUPERINTENDENT'S OFFICE,

CLEANSING DEPARTMENT.

To The Chairman and Members of the Health Committee.

GENTLEMEN,

I beg to submit to you my Annual Report for the year January 1st to December 31st, 1920.

The following is a Summary of Work done from January 1st to December 31st, 1920 :—

| | Tons. | Cwts. | Qrs. |
|------------------------------------|--------------|----------|----------|
| House Refuse to Destructor | 14195 | 6 | 0 |
| Market Garbage to Destructor | 288 | 15 | 0 |
| | <u>14484</u> | <u>1</u> | <u>0</u> |

| | Tons. | Cwts. | Qrs. | |
|---|-------|-------|------|--------------------------|
| Clinkers removed by motor from Destructor | 3570 | 0 | 0... | 952 Loads. |
| Clinkers removed by carts from Destructor | 2475 | 19 | 0... | 2153 „ |
| Sweepings to various tips | | | | 2207 „ |
| Sweepings deposited by hand-carts at Destructor | | | | 2627 „ |
| Gully Wreck to various tips | | | | 976 „ |
| Street Gullies emptied | | | | 20046 „ |
| Length of Streets swept by hand | | | | 2744 $\frac{1}{4}$ Miles |
| Excreta to Sewage Works | | | | 2019 Loads. |
| Excreta Pails emptied | | | | 88732 |
| Ashes Tubs emptied | | | | 310162 |
| Ashpits emptied | | | | 847 |
| Water deposited on streets | | | | 361 Loads. |
| Snow removed from streets | | | | 29 „ |
| Ashes Tubs added during the year | | | | 7 |
| Pails brought in from closet conversions | | | | 30 |

Yours obediently,

JOSEPH NICCOLL,

Cleansing Superintendent.

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