

**[Report 1920] / Medical Officer of Health, Ulverston U.D.C.**

**Contributors**

Ulverston (England). Urban District Council.

**Publication/Creation**

1920

**Persistent URL**

<https://wellcomecollection.org/works/jgseg6fu>

**License and attribution**

You have permission to make copies of this work under a Creative Commons, Attribution license.

This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>

Urban District Council  
of Ulverston.

---

# ANNUAL REPORT

OF THE

Medical Officer of Health.



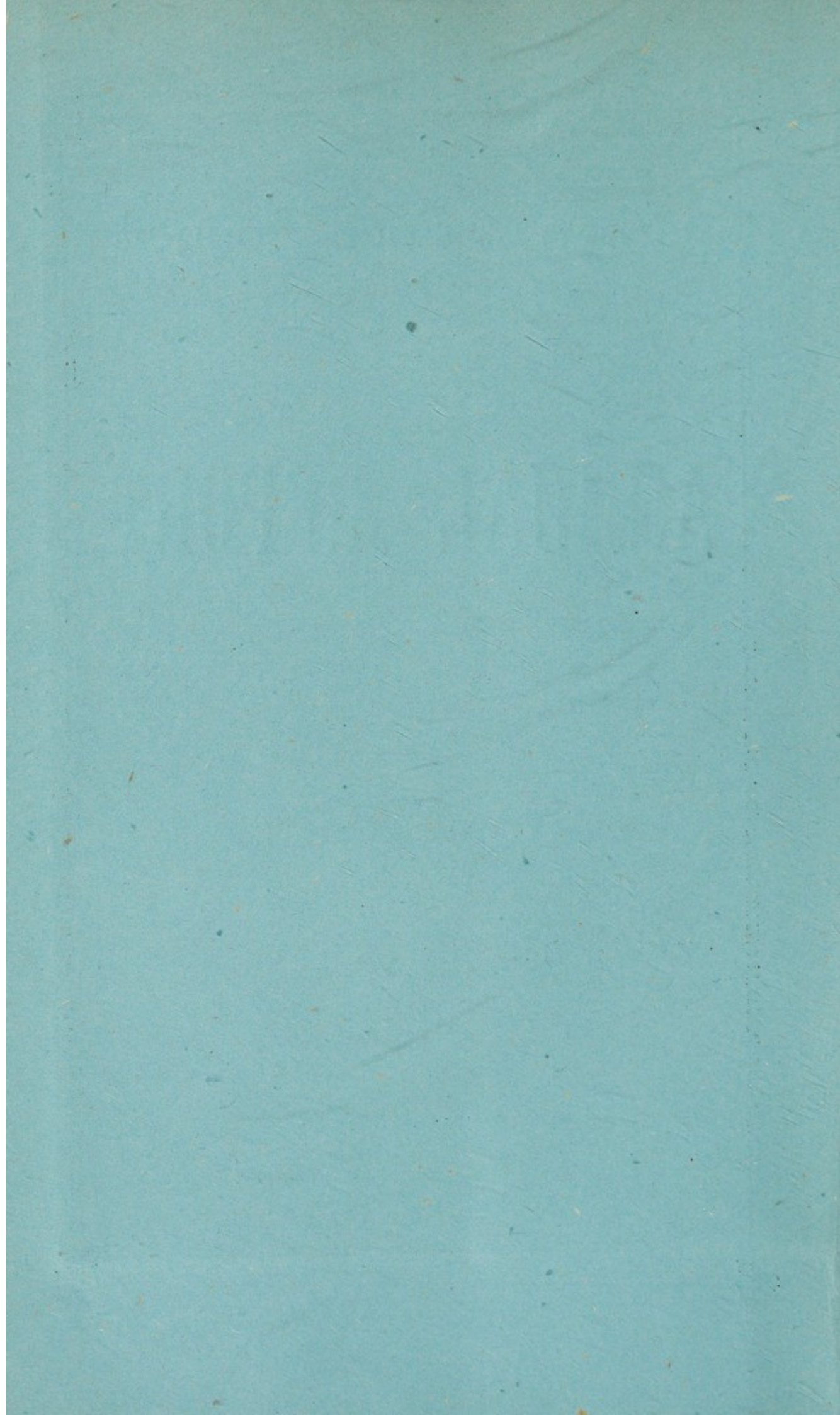
**Year ending December 31st, 1920**

---

ULVERSTON :

FLETCHER & ROBINSON, QUEEN STREET.





*To the Chairman and Members of the Urban  
District Council of Ulverston*

---

## Annual Report of the Medical Officer of Health.

---

ULVERSTON,

March, 1921.

GENTLEMEN,

In accordance with an Order of the Ministry of Health, I beg to present to you my Annual Report which deals with the health and sanitary condition of your district.

### SANITARY INSPECTION OF DISTRICT.

The Sanitary Staff consists of a part time Inspector of Nuisances and an Inspector of Dairies and Cowsheds. I am satisfied that the work of inspection in both of these departments is efficiently performed. The district is subject to systematic inspection and, in addition to this every case of infectious disease is visited and no trouble is spared to discover the origin of epidemic outbreaks.

### NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT.

Ulverston is situated near the shores of Morecambe Bay and stands in a hollow open towards the sea and at the foot of hills of the Upper Silurian System partly upon the rocks of this system and partly upon the Magnesian Limestone, and the surface soil is drifted gravel and sand, and alluvial deposit

The population of the town is not variable to any great extent, although, during the progress of the war, there was an increase, due to the advent of men desirous of engaging in war work at the Barrow works of Messrs. Vickers, Limited.



Many of these have returned to their homes, but with the return of the demobilized soldiers I should say that any decrease thus entailed has been pretty nearly balanced. I estimate the population as being 9,960, distributed according to the the various Wards as under :—

			1911	1921
North Ward	...	...	2248	2270
South Ward	...	...	1848	1900
East Ward	...	...	1975	2250
West Ward	...	...	2085	2110
Central Ward	...	...	1396	1430
			<hr/>	<hr/>
Totals	...		9552	9960
			<hr/>	<hr/>

OCCUPATIONS.—Blast Furnaces, Iron Foundries Iron Ore Mining, Paper Making, Chemical Works, Tannery, Agriculture and a considerable number of men are employed at the works of Vickers Ltd., Barrow-in-Furness. None of the occupations named have any injurious influence on public health.

DAIRIES AND COWSHEDS.—The unsatisfactory condition of many of the Cowsheds in your district has been the subject of frequent report by me, to the Health Committee. As I mentioned in my last Annual Report there are 15 cowsheds which provide an air space of less than 400 cubic feet per animal, and in many other respects these sheds are very unsatisfactory. The complacency with which the present serious situation with regard to the production of milk is viewed by the people is, to me, an extraordinary example of the tolerance of avoidable injury. In season and out of season I have urged the necessity of improvement, but practically nothing has been done, and what ought to be the cleanest and most wholesome of all our foods remains the most unsatisfactory and may be responsible to some extent, for the present high mortality amongst infants and children. It is hopeless.



to discuss the subject with Farmers, who, with very few exceptions, are hidebound by erroneous traditions with regard to the Housing of Cows, and completely indifferent to the need for all round cleanliness. They firmly believe that a high yield of milk can best be secured by keeping their cows in as nearly as possible hermetically sealed sheds, and it would be a waste of time to inform them that experiments on a large scale, which have been made, prove that milk cows kept in the open air throughout the winter, day and night, gave more and better milk, and an increase in live weight as compared with a herd that is housed, and only turned out during the day. These results were so entirely contrary to ordinary opinion that the trials were repeated, year after year. In each of the years of the trials there were extremes in the climatic conditions during the time the cows were out of doors, the temperature on one occasion falling to 25 degrees of frost. I fear it is a waste of time to labour these points; the milk seller believes what it suits his pocket to believe, and the landlord is in much the same position. I was surprised to read, the other day, that there were 2,000,000 Tuberculous Milk cows in the country, and it is impossible to over estimate the advantage of the housing of milk cattle under conditions, as nearly as possible, approaching those of the open air. In this connection I am very ready to admit that the Council, and especially the Health Committee, have displayed a commendable anxiety to do all that is practicable to bring about an amendment in these conditions, but in the existing uncertain state of the law, and the continued high price of labour and materials it is not easy to adopt any drastic measures.

#### MILK (MOTHERS & CHILDREN) ORDER 1918 —

Under the provisions of this Order, milk has been supplied free or at less than cost price in necessitous cases, to Nursing and Expectant Mothers and children under five years old.



SCHOOLS.—I think the condition of the Elementary Day Schools in your district may be characterised as fairly satisfactory.

SCAVENGING.—The Inspector's report shows that considerable activity has been displayed in carrying out the important work of House Refuse Removal, and I am satisfied that the work is efficiently and regularly performed.

WATER SUPPLY.—I have previously stated that the water supply to the district is gathered from the upland surface, and is collected in a storage reservoir in the Township of Pennington (Ulverston Rural Area). It is filtered through sand and discharged into storage reservoirs from which it is distributed to the district. The supply is on the constant system, and frequent analyses have shown it to be quite pure and there has been no complaint of shortage, but there has been some complaint of want of pressure in some of the higher reaches of the town. With a view to improving the pressure nearly two miles of the mains have been scraped, and generally speaking, a very considerable improvement has been effected thereby, but it must be remembered that certain dwellings in the town are 200 ft. above ordnance datum, and it cannot be expected that, at such a level, the pressure will be satisfactory.

SEWERAGE AND DRAINAGE.—A reference to the Surveyor's Report will show that a length 379 yards of 6 inch sewer have been laid in Rake Lane, discharging into Levy Beck, this should relieve the Low Mill and Outcast Sewers of some of their storm water, these sewers being overcharged in times of heavy rainfall. It has been quite impossible, on account of the excessive prices of labour and material to think of going on with the suggested scheme for the improvement of the outfall.

CLOSET ACCOMMODATION.—There are 2,271 W.C's in your district, 141 privy middens, 10 waste water closets and 7 pail closets.



HOUSING.—In my last Annual Report I said that the Council had come to the decision to build 80 houses for the working classes, and, as a first instalment, tenders had been let for the erection of 18 of these on a site in Lund Road, satisfactory progress is being made with the building, and the dwellings should be ready for occupation before the end of the Summer. I understand that, including taxes, a rent of 16/- per week will have to be charged, to my mind such a rent is prohibitive, so far as the ordinary working-man is concerned, and I cannot see any object in proceeding with the erection of further houses until the capital outlay can be brought down to a figure which admits of a rent being charged that is within the means of the class of tenant for whom houses are most urgently needed.

## VITAL STATISTICS.

BIRTHS.—The births registered in your district during the past year have numbered 250, which is equal to a birth-rate of 25·0 per 1000. In the year 1919, 218 births were registered, the birth-rate then being 21·8 per 1000.

There were 130 male children Born and 120 Females.

Twenty illegitimate children have been born, 9 Males and 11 Females.

DEATHS.—The number of deaths registered as actually occurring in your district has been 134, of this number, 22 must be deducted as arising in non-residents, and 7 added of residents who have died outside the district, the nett number of deaths has thus been 119, equal to a death-rate of 11·9 per 1000. In the year 1919 there were 144 deaths, the death rate being 14·4 per 1000.

The deaths have been distributed in the different Wards as follows: —



	1920		1919	
	Deaths.	Death-Rate	Deaths.	Death-rate.
North Ward	27	11·8	46	20·2
South Ward	23	12·1	25	13·1
East Ward	26	11·5	21	9·3
West Ward	23	10·9	26	12·3
Central Ward	20	13·9	26	18·1
Totals	119	11·9	144	14·4

In the 1st quarter of year there were 32 deaths

„ 2nd	„	„	„ 30	„
„ 3rd	„	„	„ 28	„
„ 4th	„	„	„ 29	„

---

119

---

**INFANTILE DEATHS**—In the year 1920 there were 19 deaths in infants under one year old, equal to an Infantile Death-rate of exactly 75 per 1000 births. In the year 1919 there were 14 deaths at the same age period, equal to 64·2 per 1000 births.

			North Ward.	South Ward.	East Ward.	West Ward.	Central Ward.	Total
Premature Births	...	...	1	—	—	1	1	3
Diarrhœa	...	...	—	1	1	—	1	3
Congenital Defects	...	...	—	1	—	2	1	4
Bronchitis...	...	...	1	—	—	2	—	3
Tuberculosis	...	...	—	—	—	1	—	1
Pneumonia	...	...	1	1	1	—	—	3
Measles	...	...	—	—	1	—	—	1
Meningitis...	...	...	—	—	1	—	—	1
Totals	...	...	3	3	4	6	3	19

There has been one death of an illegitimate infant.

The Infantile Death-Rate is not, altogether, unsatisfactory although it shows a slight increase over the previous year I am convinced that with increasing knowledge and greater care the number could be reduced by 50 per cent.

I have remarked in previous reports that an Infant Welfare Centre has been established in Ulverston, and is under the care of a Medical Officer and Nurse from the County Council. That the work is becoming more popular, and is looked upon with less suspicion, I think, is amply proved by the subjoined table of attendance at the Centre.

			1918	1919	1920.
Under 1 year	...	...	209	378	522
„ 2 years	...	...	32	58	136
Over 2 years	...	...	39	84	182
Totals			280	520	840

SENILE DEATHS.—There have been 45 deaths in persons of 65 years of age and upwards as compared with 66 in the year 1919.

ZYMOTIC DEATHS.—From diseases which come under this heading there have been 5 deaths, giving a death-rate of .50 per 1000. The Deaths have been due to diarrhœa 3, and Measles 2. In the year 1919 there were 3 Zymotic Deaths, giving a Death-rate of .30 per 1000.

#### NOTIFICATION OF INFECTIOUS DISEASES.

				Erysip- elas.	Diphth- eria.	Scarlet Fever.	Total
North Ward ...	...	...	...	—	—	4	4
South Ward ...	...	...	...	—	2	1	3
East Ward ...	...	...	...	—	—	1	1
West Ward ...	...	...	...	—	3	—	3
Central Ward	...	...	...	1	—	1	2
Totals				1	5	7	13



**DIPHTHERIA.**—There has been no approach to an epidemic outbreak of Diphtheria in your district, the cases notified, being confined to two of the wards into which the Town is divided.

**SCARLET FEVER.**—Although, I fear, that during the the last three months of the year there was a number of cases of Scarlet Fever which escaped notification the cases usually occurred in a sporadic form and caused very little anxiety.

**TYPHOID FEVER.**—It is most satisfactory to note that not a single case of Typhoid Fever was reported, because of all infectious diseases Typhoid may truly be said to be the one which, above all others, is an evidence of the sanitary intelligence of a community. How different is this from the experience of a few years back, when it might be said that the disease was endemic in the Town.

**PHTHISIS.**—Only 8 deaths have been registered as arising from Tubercular Disease. Three from Phthisis (Pulmonary Tuberculosis) and five from Tubercular Disease of other organs. In 1919 there were eight deaths from Phthisis and one from Tuberculosis of the Intestine. During the year 30 certificates have been received notifying Pulmonary Tuberculosis, and four notifying Tuberculosis of other organs. In 1919, there were fifteen notifications of Pulmonary Phthisis. The increase in the number of notifications of Pulmonary Tuberculosis would appear to indicate that the disease is on the increase, but I think this is more apparent than real, rather indicating that Medical Practitioners, realising that treatment is available, feel the necessity of notifying their cases on the very earliest onset of suspicious symptoms. There is no doubt that the war has been responsible for a large increase in the number of cases of Tuberculosis. Men whose resistance to the disease under normal conditions might have enabled them to go through life without manifesting any symptoms, broke down under the strain of war conditions. As to treatment



there can be little doubt, but that the Sanatorium offers possibilities beyond what have been reached up to the present, but to secure a result which can be regarded as a definite cure, treatment must be commenced at the very earliest onset of the disease, and must be prolonged beyond the time which experience, so far has found to be practicable. If treatment is to be extended more accommodation will be necessary; and what is, probably, a greater difficulty, financial provision must be secured for dependents in the case of male sufferers, for there is little doubt but that the mental unrest which arises out of the feeling that the Wife and Family are living in straitened circumstances, on account of the absence of the wage earner, prevents or delays recovery. In addition to this, there is another important consideration, convalescents have to return to an environment which cannot, by any stretch of imagination be called satisfactory, and when this is the case, there can be little wonder that any improvement which has been attained by residence in the Sanatorium, is not maintained. From this we arrive at three conclusions, First—That more accommodation will have to be provided to make prolongation of treatment possible, Second—That financial provision must be secured for dependents, where this is necessary, and Third,—Care must be taken that patients return to decent sanitary surroundings.

CANCER.—There have been 17 deaths from Cancer of various organs during the year, as compared with 12 in the previous twelve months. It is frequently hinted at the meetings of the Health Committee that Cancer is unduly prevalent in your district, and I have been, at considerable pains from time to time to prove that this is not so. Cancer is essentially a disease of middle life and old age and Ulverston being to a great extent a non-industrial town, the younger, male or non-susceptible, members of the population emigrate to industrial centres leaving behind a large proportion of females and males beyond middle life, and it is a well-known fact that females are especially prone to malignancy. In the administrative County



of Lancashire the death-rate from Cancer is .81 per 1000, in the Ulverston Registration District it is .83 per 1000, so that taking into consideration what I have said as to the age distribution in your area I do not think we can say that the death rate from Cancer is unduly high.

INFLUENZA—There were only 3 deaths from Influenza the ages at death being respectively 31, 36 and 60. One death occurred in January, one in May, one in June.

TREATMENT OF INFECTIOUS DISEASES.—Provision is made by the Ulverston Joint Hospital Board for the isolation of the ordinary Infectious Diseases at the High Carley Infectious Hospital which is situated in the Parish of Pennington, Ulverston Rural District. I find that generally speaking, there is little difficulty in prevailing upon parents and guardians to take advantage of the provision. Arrangements have been made with the Barrow Corporation to provide for the isolation of Small Pox, should the necessity, unfortunately, arise.

In concluding my report, I beg to thank all my Colleagues and the Health Committee for their hearty co-operation and support at all times.

I am, Gentlemen,

Yours obediently,

G. H. PATTERSON,

L.R.C.P., Lond., M.R.C.S., Eng., D.P.H., Lond.  
Medical Officer of Health

March 31st, 1921.

# ANNUAL REPORT.

## SURVEYOR AND INSPECTORS DEPT.

TOWN HALL,

ULVERSTON,

April 1921.

*To the Chairman and Members of the Health Committtee.*

GENTLEMEN,

I herewith beg to submit my Report on the work carried out during the year ended December 31st, 1920, relating to Public Health Administration.

### NUISANCES &c.

Number of Cases reported upon ...	...	48
„ „ Statutory Notices served ...	...	11
„ „ Intimations given ...	...	89
„ „ Cases unabated ...	...	6

### CLASSIFICATION OF DEFECTS &c.

Insanitary and Insufficient Refuse accommodation, affecting 15 Houses. 11

Result of action taken : 11 ashbins provided.

Water Closets with defective flushing apparatus, affecting 6 Houses. 6

Result of action taken : all put in order.

Water Closets defective and insanitary, affecting 23 Houses. 12

Yard and House Drains, blockages or other defects affecting 20 Houses. 7

Result of action taken : All put in order.



Insanitary and Insufficient Closet Accommodation  
affecting 15 Houses. 4

Result of action taken : 1 Privy Closet abolished  
and 4 New Water Closets built.

Insufficient Closet accommodation relating to  
Factories and Workshops. 3

Result of action taken : 3 New Water Closets  
provided.

Defective Floors.—Repairs carried out.

Dampness including Defective Roofs, Gutters etc,  
affecting 7 houses. 7

Result of action taken : Defects renewed.

Defective Water Supply (faulty pipes and fittings)  
affecting 6 Houses. 6

All put in order.

Overcrowding, affecting one House and one Work-  
room. Two abated.

Premises in a dirty condition. One House, Two  
Workshops. 3

Result of action taken : Premises cleansed.

Offensive Accumulations. 2

Nuisances abated.

Tents and Caravans without Sanitary accommo-  
dation. 3

All removed.

## HOUSING, TOWN PLANNING &c., ACT, 1909-1919.

Work under the above Acts has practically been in abey-  
ance during the past year. As mentioned in my last annual  
report, the information obtained during the survey for particu-  
lars required by Form D 89, showed that there are over 1000  
houses let at rentals ranging from 2/- to 5/6 per week, and a

large percentage of this property is in the hands of trustees and small owners, the rent constituting the main or sole source of income. In view of the abnormal costs, and special need for discretion in enforcing the standard requirements the Committee, feel that the difficulties and circumstances of owners could not be overlooked, therefore, the standard of mere fitness has been accepted, which implies only that a house is free from defects such as can be regarded as rendering it unfit for habitation. Inspections are made for sanitary defects which are dealt with under The Public Health Acts, internal and external detail inspections of dwellings are made on the instructions of the Medical Officer of Health. Nine dwellings have been inspected, and five Statutory Notices served under Section 28 of the Housing, Town Planning, &c, Act, 1919. Two notices affecting three houses have been complied with providing a water closet in lieu of an insanitary privy closet, ashbins for house refuse, yard paving and drainage. sinks, windows made to open, and repairs to roofs, walls, and floors. There are two notices out standing relating to 1919, in premises

Kitchin's Yard, Nos. 1 and 2.

Quay Street, Nos. 12, 14, 16, 18.

Three Notices out standing relating to 1920.

Southergate, Nos. 64, 66, 68, 75, and 79.

Union Lane, No. 9.

The Council are erecting 18 semi-detached houses in a plot of land of about  $1\frac{3}{4}$  acres, situate in Lund Road. The subsoil is gravel, and the site is well above the road level, and faces south. Five pairs are being built in brickwork, 11ins. cavity walls, portions coated with cement rough cast, and the roofs are slated. These houses contain a parlour, 12ft. x 9ft. 6ins.; living room, 13ft. 4ins. x 11ft.; scullery, 10ft. x 11ft.; pantry, coal store, and water closet on the ground floor, and three bedrooms, 15ft. 6ins. x 11ft.; 10ft. x 11ft.; 12ft. x 9ft. 6ins., and a bathroom on the first floor. Four pairs are



being constructed of cement concrete blocks on the winjet system, and roofed with slates. These houses contain a parlour, 11ft. 6ins. x 9ft. 9ins.; living room, 16ft. 6ins. x 11ft.; scullery, 14ft. 4ins. x 6ft. 9ins.; pantry, coal store, and water closet on ground floor; and three bedrooms, 15ft. x 11ft.; 9ft. 9ins. x 11ft.; 11ft. x 9ft. 9ins., and a bathroom on the first floor. The accepted tender for the five of brick houses amount to £10,250, and for the four pairs of concrete block houses, £7,572; these figures do not include land and Architect's charges. Fortunately the site abutts upon a public highway, with sewer, gas and water mains ready laid, which is a considerable saving to the cost of the scheme. Until the houses are completed and all charges met, it is of little use to attempt to arrive at the cost per house. The Council fixed the Rent at 10/- per week, plus rates, but the Housing Commissioner would not agree to this figure, and required, at least, 12/6 per week, and at this figure it was estimated that there would be a deficit of £1 per week per house. The Council have fixed an inclusive charge of 16/- per week for the first year. What the demand will be for houses of this type at the rent proposed, the class of tenant, and how it will effect the existing Housing Conditions we must "Wait and See".

#### REFUSE REMOVAL.

The collection of the refuse is carried out by the Council's employees, ashbins being emptied weekly, ashpits, privies &c., emptied on receipt of notice.

Returns are made weekly, and the following is a summary of the years work :—

Number of ashbins emptied	...	77,180
„ „ Ashpits „	...	447
„ „ Privies „	...	333
„ „ Pails „	...	351
„ „ Loads of Refuse removed		2415

The whole of the house refuse is disposed of within the Council's district by tipping on low lying ground north of the Canal adjoining the Railway Bridge. The refuse is soiled over as the work proceeds.

### INFECTIOUS DISEASES AND DISINFECTION OF INFECTED PREMISES.

Number of Notifications received ... 12.

In all cases of Infectious Disease a personal visit is made to the premises, in the endeavour to trace the origin, inspect the sanitary conditions of the premises, and give general instructions of precautions to be taken to prevent its spread. Unless satisfactory accommodation and arrangements can be made for isolation and treatment at home, the sufferer is removed to the Infectious Hospital. On the termination of the disease, or when the patient has been removed to the Hospital as the case may be, the rooms and contents are aerielly fumigated with formalin.

Rooms of Dwelling houses disinfected after Scarlet Fever	7
" " " " Diphtheria	5
" " " " Cancer	1
" " " " Phthisis	18
" " " " Other Reasons	2

Disinfectants are supplied free in all cases of Infectious Disease.

### SLAUGHTER HOUSES.

Number of Slaughter Houses on Register 8

The slaughter houses are regularly inspected and with the exception of a few occasions when it has been necessary to call the occupiers attention to the limewashing, they have been maintained in good order.

### COMMON LODGING HOUSES.

Number of Common Lodging Houses on Register 3



Only one of these houses now take in lodgers, and this to no great extent. Inspections are made periodically and have been found clean and well kept.

### FACTORIES AND WORKSHOPS.

The Number of Factories and Workshops on Register are as follows :—

Factories	...	...	...	42
Workshops	...	...	...	76

Two new water closets have been provided and several minor defects, chiefly relating to limewashing have been remedied.

### NEW BUILDINGS.

No. of Plans submitted for approval	...	35
Do. approved	...	32

The approved Plans are for :

3 Houses.

18 Houses. (Housing Scheme).

Conversion of Springfield House into Hotel.

Office and Saleroom.

Foundry Extension—North Lonsdale Iron and Steel Works.

23 Miscellaneous Buildings, Alterations and Additions.

No new houses have been completed during the year.

### INSPECTION OF PRIVATE DRAINS.

All new drains are tested before the trench is filled in, if practicable with water, where not with smoke, and in the case of new dwellings again with smoke, before the certificate for habitation is given.

During the year a number of inspections and tests with smoke have been made in connection with extensions and connections to existing drains, alterations to new water closets,&c.



## SEWERAGE AND SEWAGE DISPOSAL.

A new 6ins. Surface water drain 379 lin. yds. in length has been laid in Rake Lane with the outlet into Levy Beck and 3 Inspections and Detritus Chambers provided.

The road gullies have been disconnected from the 9ins. Sewage Sewer and connected to the new drain, thus relieving the Rake Lane Sewer of storm water, and consequently easing the Low Mill and Outcast sewers, which are heavily worked during storms, to relieve the Dale Street, and North Lonsdale Main Sewers

The 18ins. Sewer in North Lonsdale Road that receives the paper mill effluent and the drainage from all property on the South side of the road has been thoroughly dredged, also the branch sewers in the streets adjoining. It is necessary to do this work at least once each year. The 18ins. main sewer from Canal Head to Lund Road, has also been dredged, this sewer requires perodical attention as the gradient is somewhat flat; this is aggravated by the large amount of detritus that gets into the sewer owing to the Honey Pot streets not being made up. They are at present mainly covered with ashes and during the heavy rains a quantity is washed into the gullies, and thence into the sewers. Six large carts of refuse, mainly ashes. were taken out of this length (387 lin. yds) The 9ins. Sewer in Low Lightburn Park was dredged owing to a blockage. This sewer is faulty in many respects, the gradient is bad in places, joints badly made and defective, there being projections in the invert, and a large amount of subsoil water gets into the sewer. Other minor lengths of sewers have been dredged, a number of blockages and other defects remedied, and flushing carried out when desirable. The Sewage Settling Tanks at Morecambe Road and Swarthmoor are emptied when necessary.

During the past year I have only one record of flooding on the 27th June, when the sewers in Chapel Street, Ellers,



and South Ulverston flooded during the heavy storm which occurred at high tide

### WATER SUPPLY.

To improve the supply and pressure of water particularly in the Sunderland Terrace, Ford Park, Greenbank, Town Street, Soutergate, and Town Bank areas, a quantity of water main scraping has been carried out during the year. The particulars are as follows.—Ellers 3ins. main, from the stop valve below the Fire Station to the Nursery, 300 lin. ft.; 3ins. main from Nursery, via Quebec St., and Swan St., to Sunderland Terrace, 1078 ft.; 4ins. main from Sunderland Terrace, at junction of Swan Street, along Hart Street, to junction with 6ins. main in Union Street, 1172 ft.; 3in. main (branch 4ins. Hart Street.) via back Ford Park, and Ladies' Walk, to opposite Lyndene 1255 ft.; 4 ins. main Church Walk along road adjoining west of St. Mary's Church, Greenbank to end of main at Belmont, 2285 ft.; 3 ins. main Town Street and Sea View, 850 ft.; 4 ins. main, Soutergate from King's Arms Hotel to Ure Mill Lane, 1100 ft.; 3ins. main, Ure Mill Lane, from junction with Soutergate, to end of Hoad Terrace 418 ft. The mains referred to were found to be very badly incrustated, sections cut out (which can be seen at the Offices) showing the bore of both 3 ins. and 4 ins. pipes reduced to about 1 ins. to  $1\frac{1}{2}$  ins. in the worst places. On the whole the work carried out has proved very successful, with the exception of several houses, all property in the areas dealt with have now an ample supply of water at all times of the day. A complaint has been received from Belmont, but these houses are at least 200 ft. above ordnance datum, and during the early part of the week when the call on the mains is very heavy, property at this altitude cannot fail to have a diminished supply. It is proposed to carry out further scraping of mains, and, if possible, also improve the supply to houses at high levels.

## HIGHWAYS, &amp;c.

Further Tarmacadam and Tar-spraying work has been carried out during the year (details of which have been given in the monthly reports) and the scavenging has been maintained up to the usual standard. The Committee did not consider it expedient to require the making up of Private Streets whilst costs remain so high. It is hoped that conditions will improve during the coming year and so allow the worst Private Streets to be attended to, a number need attention if only from a sanitary and health stand point.

I am, Gentlemen,

Your obedient Servant,

C. TELFORD HAGUE,

M. INST, M.C.E.









1000  
1000

1000  
1000

1000  
1000