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Cumberland County Council.

ANNUAL REPORT

OF THE

**Medical Officer of Health,
F. H. MORISON, M.D., D.P.H.**

WITH A

Summary of the Annual Reports of the
District Medical Officers of Health,

FOR THE YEAR 1913.

CARLISLE :
JAMES BEATY & SONS, PRINTERS, LONSDALE STREET
1914.

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COUNTY COUNCIL OF CUMBERLAND.

TO THE CHAIRMAN AND MEMBERS OF THE
HEALTH COMMITTEE.

GENTLEMEN,

I have the honour to present to you my Sixth Annual Report on the Health and Sanitary Condition of the Administrative County of Cumberland, together with a summary of the reports of the District Medical Officers of Health.

My thanks are again due to the Committee for their continued consideration, and also to the officials of the various districts for the readiness with which they have given me any information desired.

To my Senior Assistant (Dr. Kenneth Fraser), I am greatly indebted for his valuable help in drawing the line diagrams, which will be found in the Report.

To the staff of my department I am indebted for many hours voluntarily given of overtime, without which it would have been impossible to carry on the work as it has been done.

I am,

Mr. Chairman and Gentlemen,

Your obedient Servant,

F. H. MORISON.

48 Warwick Road,
Carlisle,

October, 1914.

PRINCIPAL VITAL STATISTICS.

<i>England & Wales.</i>				<i>Administrative County.</i>			
1913.				1913.		1912.	
Birth-rate	..	..	23.9	....	23.5	....	23.9
Death-rate	..	..	13.4	....	14.3 (corrected 13.6)	....	15.1 (corrected 14.4)
Zymotic Death-rate	..	—	....	0.7	....	1.4	
Phthisis	..	..	—	....	0.9	....	0.9
Total Tuberculosis Death-rate	—	....	1.3	....	1.3		
Respiratory Diseases Death-rate—	....	2.0	....	2.3			
Cancer Death-rate	..	—	....	1.1	....	1.28	
Infant Mortality Rate	..	109	....	108	....	110	

AREA AND POPULATION.

Cumberland is the only County in England and Wales of which it can be said that the ancient County is co-extensive with the Administrative and with the Registration County.

The Administrative County contains an area, exclusive of that covered by water of 973,086 acres, and a population estimated to the middle of the year 1913 of 267,470.

At the census of 1911, the population of the County was 265,780, therefore it is estimated that since 1911 the population has increased 1,690.

Personally, I think the population is over-estimated, for it is unlikely that a population which decreased 1,153 between the census of 1901 and that of 1911 would, without some very definite cause, not only make up the loss sustained during 10 years, but actually during the next two years increase, as the estimate suggests it has increased, by 1,690.

The population at the census of 1911, and the estimated population of 1913, are shown, for each Urban and Rural district, in Table I., columns 3 and 4.

The increase in the City of Carlisle, and the decrease in the Carlisle Rural District, are, of course, due to the extension of the City.

BIRTHS.

The births registered in the County during 1913 numbered 6,304, six of these, however, belonged to districts not in the County, leaving the net number of births 6,298, giving a birth-rate of 23.5 per 1,000 of population, compared with 6,371, and a rate of 23.9 per 1,000 in 1912.

In the Urban Districts there were 4,217 births, giving a birth-rate of 24.5, and in the Rural districts 2,081, giving a rate of 21.7 per 1,000 of population.

The corresponding figures for the previous year are :—

Urban districts, 4,154 births, and a rate of 25.1.

Rural districts, 2,217 births, and a rate of 21.9 per 1,000 of population.

The following table and chart show for comparison the birth-rates for the County, and for its Urban and Rural districts for the past ten years, with those for England and Wales.

	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
England & Wales..	27.9	27.2	27.0	26.3	26.5	25.6	24.8	24.4	23.8	23.9
Admin'tive County	27.4	26.6	26.2	25.0	26.04	25.0	24.1	24.7	23.9	23.5
Urban Districts ..	29.1	27.6	27.3	26.3	27.5	25.8	24.8	25.9	25.1	24.5
Rural Districts ..	24.7	25.2	24.2	22.8	23.4	23.8	22.9	22.7	21.9	21.7

CHART I.

This birth-rate of 23.5, it will be noticed, is the lowest recorded in the Administrative County during the last 10 years, as a matter of fact it is the lowest birth-rate ever recorded.

A glance at the chart shows that the birth-rate has steadily declined from 27.4 in 1904 to the present rate, but it will also be noticed that this County is not exceptional in this respect, for the general birth-rate throughout England and Wales has decreased in practically the same ratio.

Arranged in the order of their birth-rates, the Urban districts stand thus :—

Maryport	30.0	Carlisle City	22.1
Egremont	29.6	Penrith	21.5
Cleator Moor	29.5	Wigton	21.4
Harrington	28.9	Cockermouth	20.9
Whitehaven	28.5	Holme Cultram	20.7
Arledon & Frizington	27.4	Millom	20.2
Aspatria	26.0	Keswick	15.8
Workington	25.5		

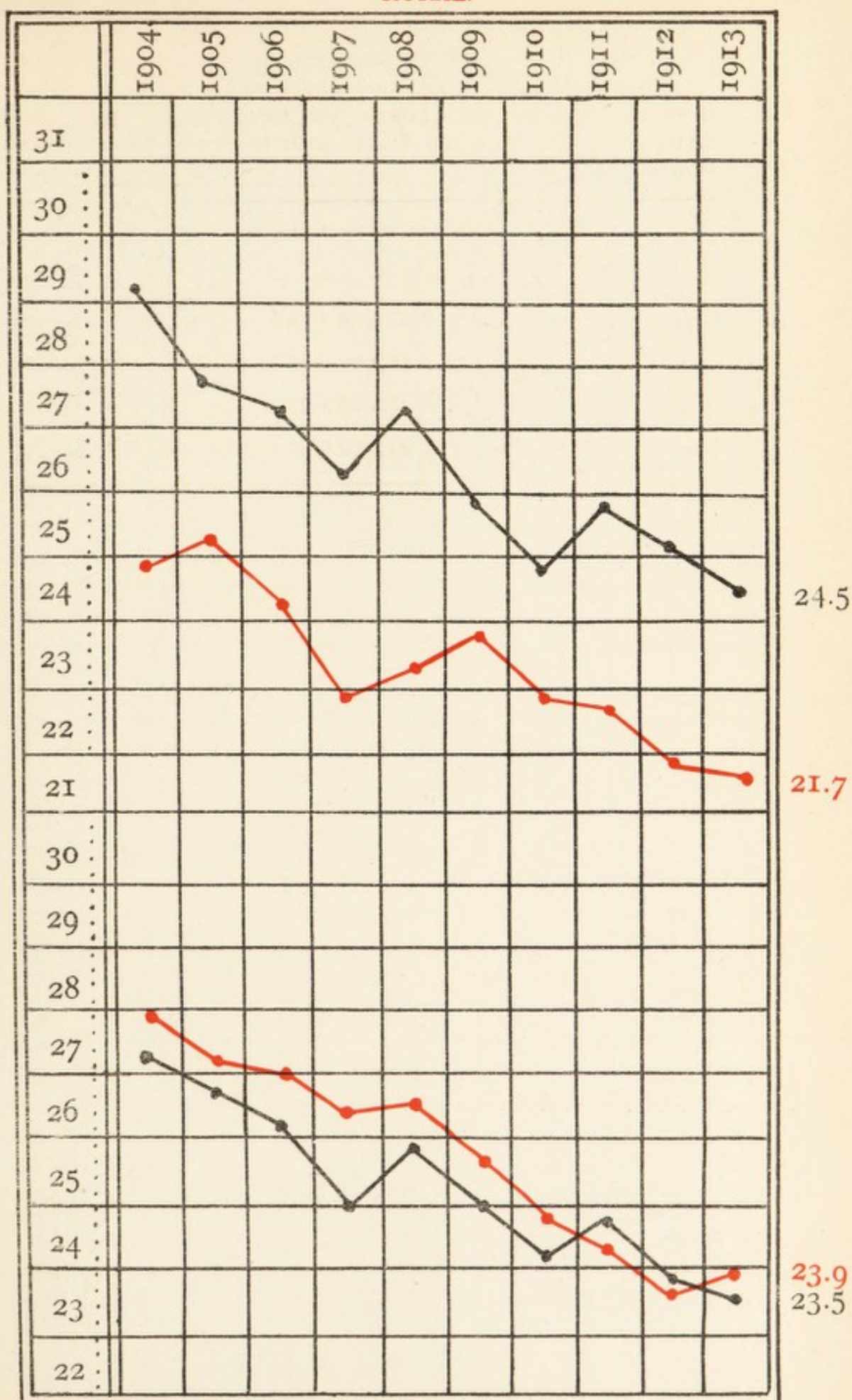
And the Rural districts thus :—

Cockermouth	26.7	Penrith	19.3
Whitehaven	25.5	Alston	17.7
Wigton	23.1	Carlisle	16.9
Longtown	22.0	Brampton	13.6
Bootle	21.0		

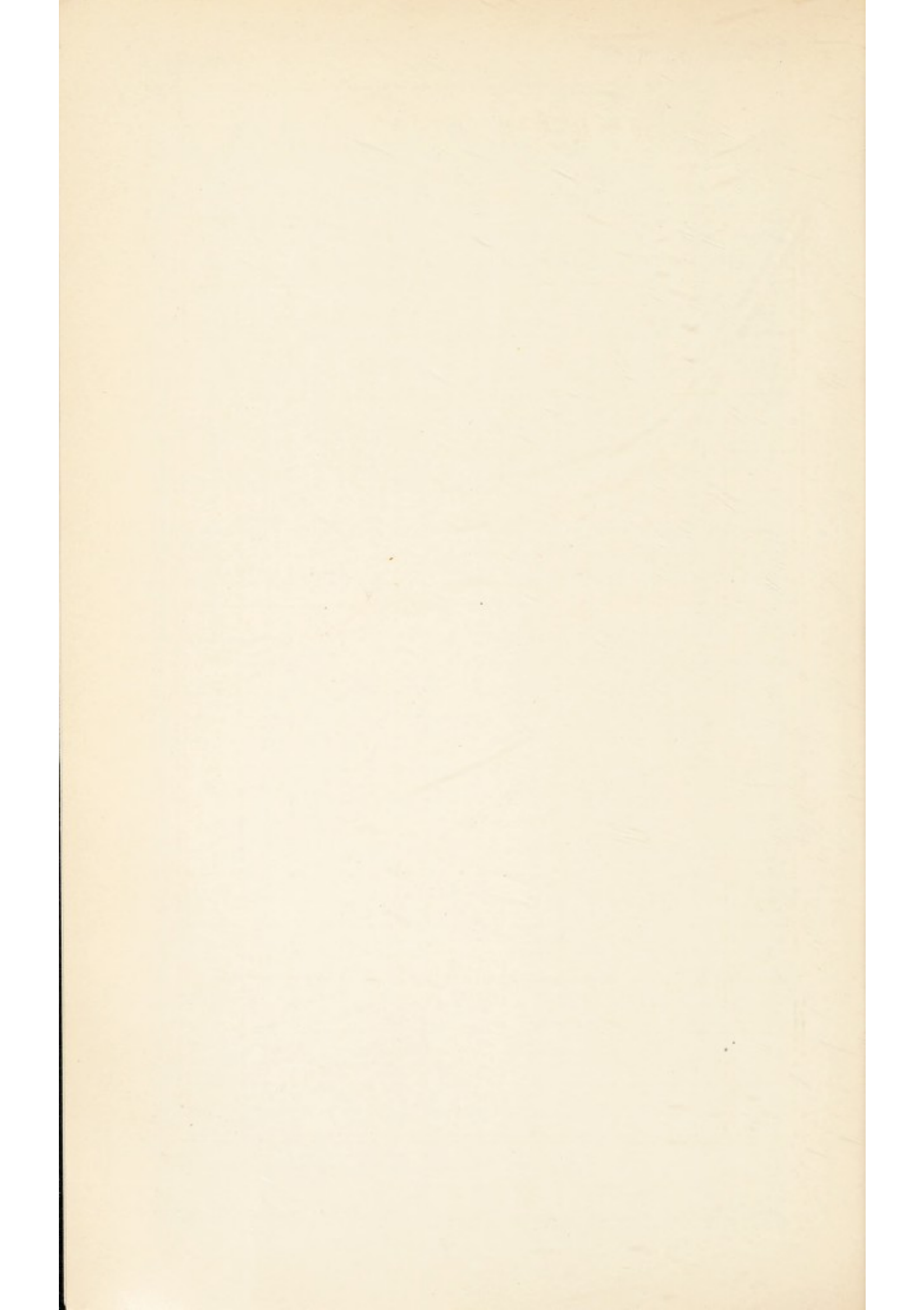
BIRTH RATES.

URBAN.
RURAL.

CHART I.



COUNTY OF CUMBERLAND.
ENGLAND AND WALES.

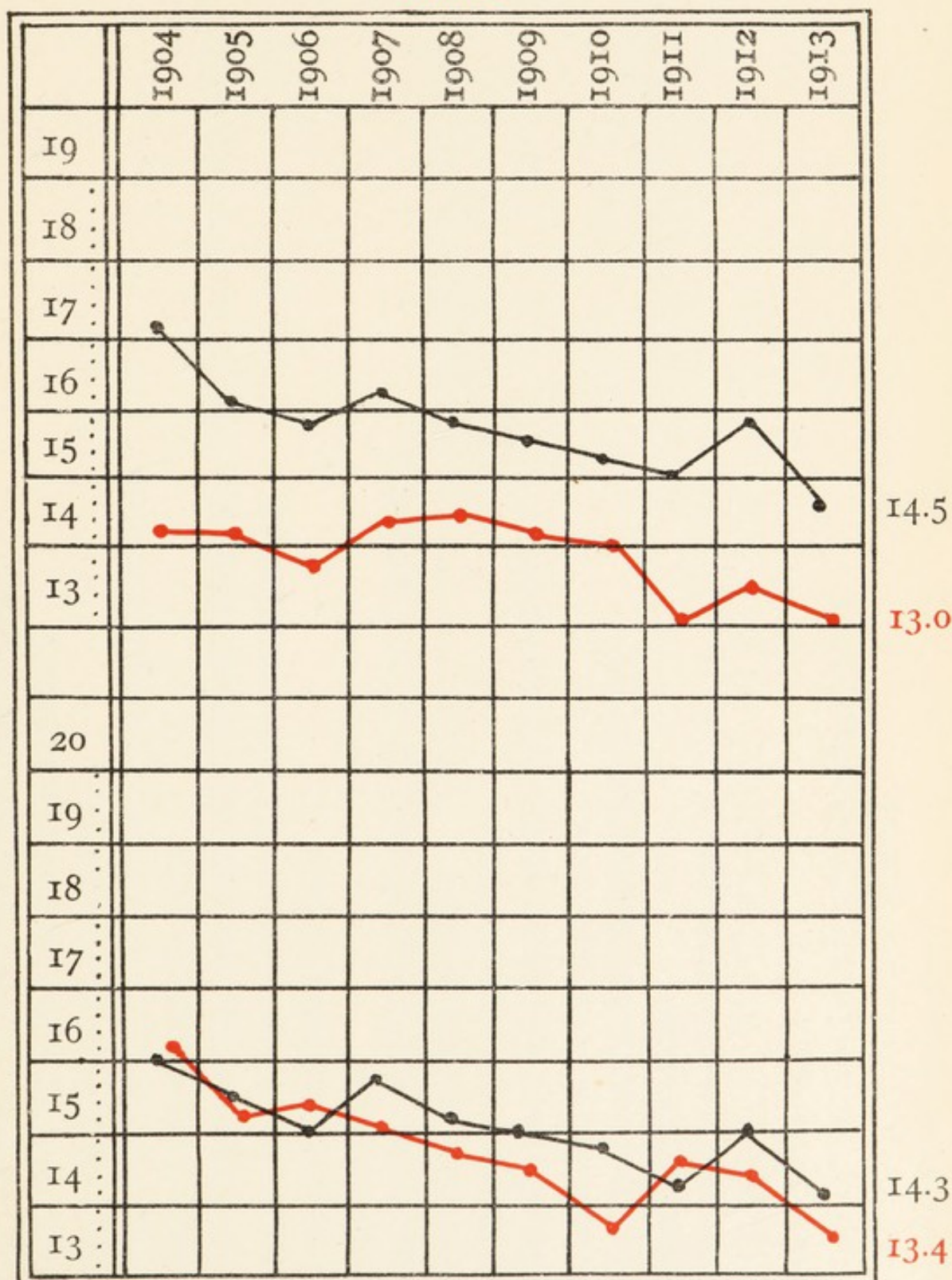


DEATH RATES.

CHART II.


URBAN.

RURAL.



COUNTY OF CUMBERLAND.

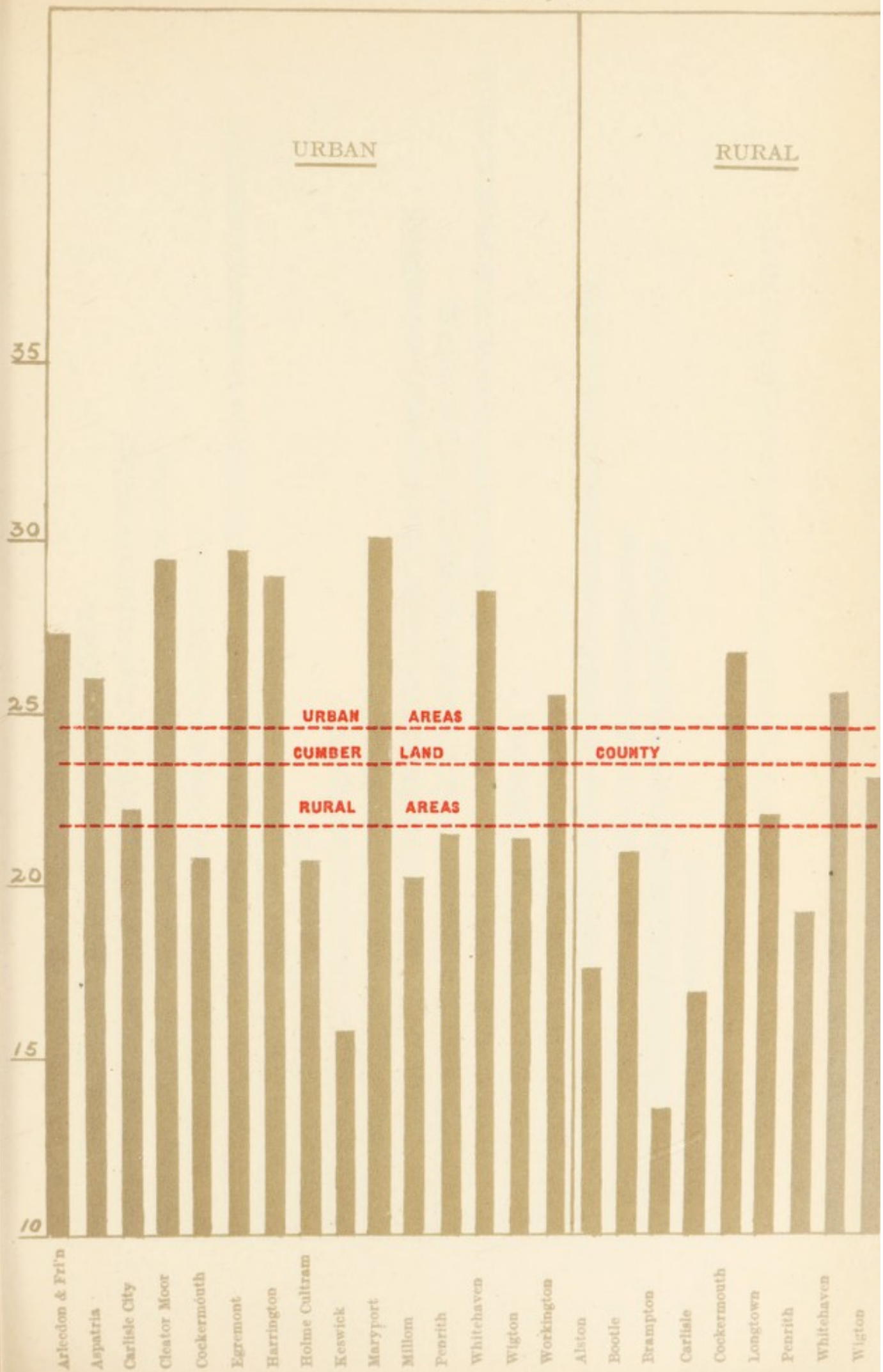
ENGLAND AND WALES.



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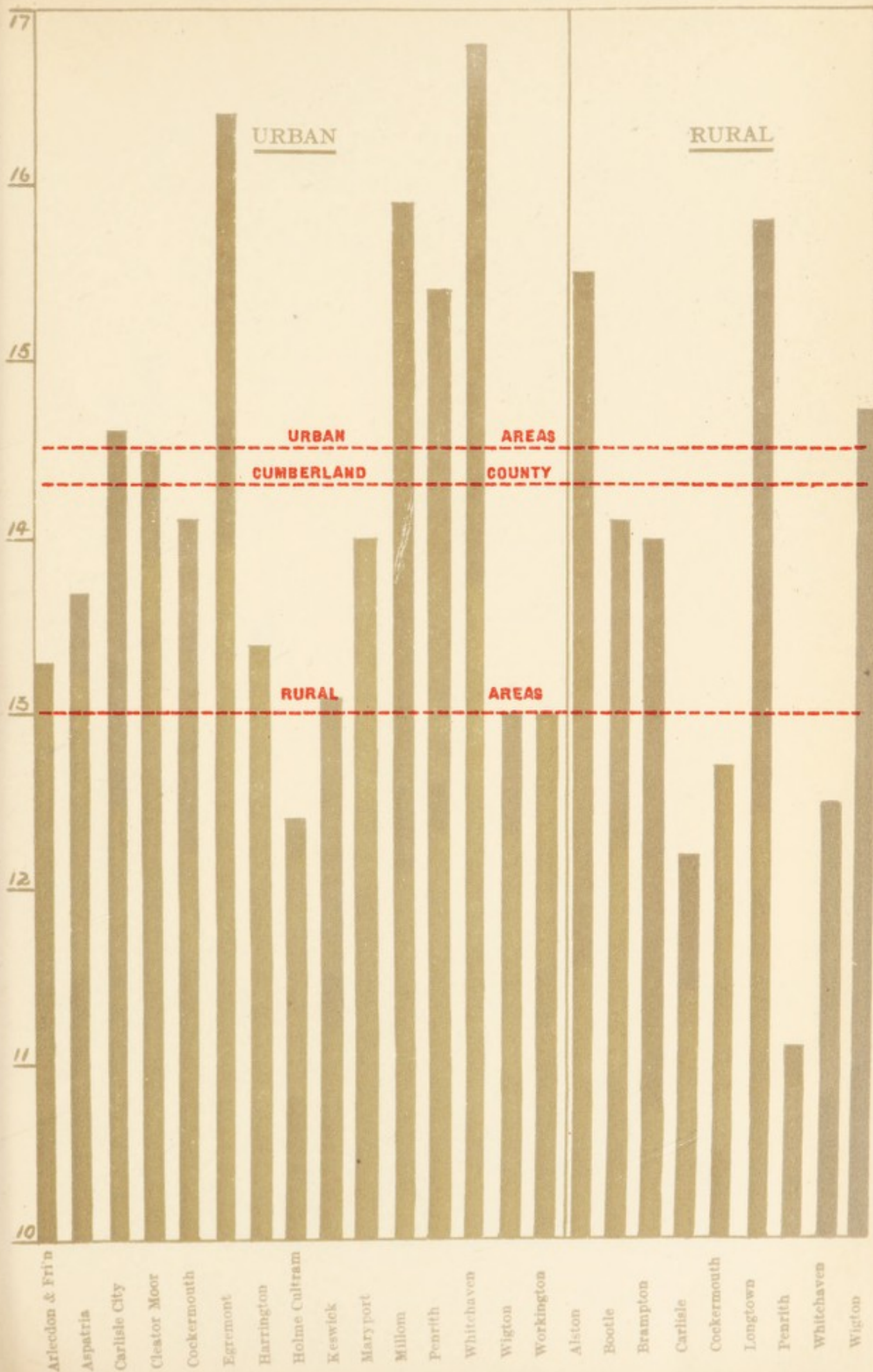
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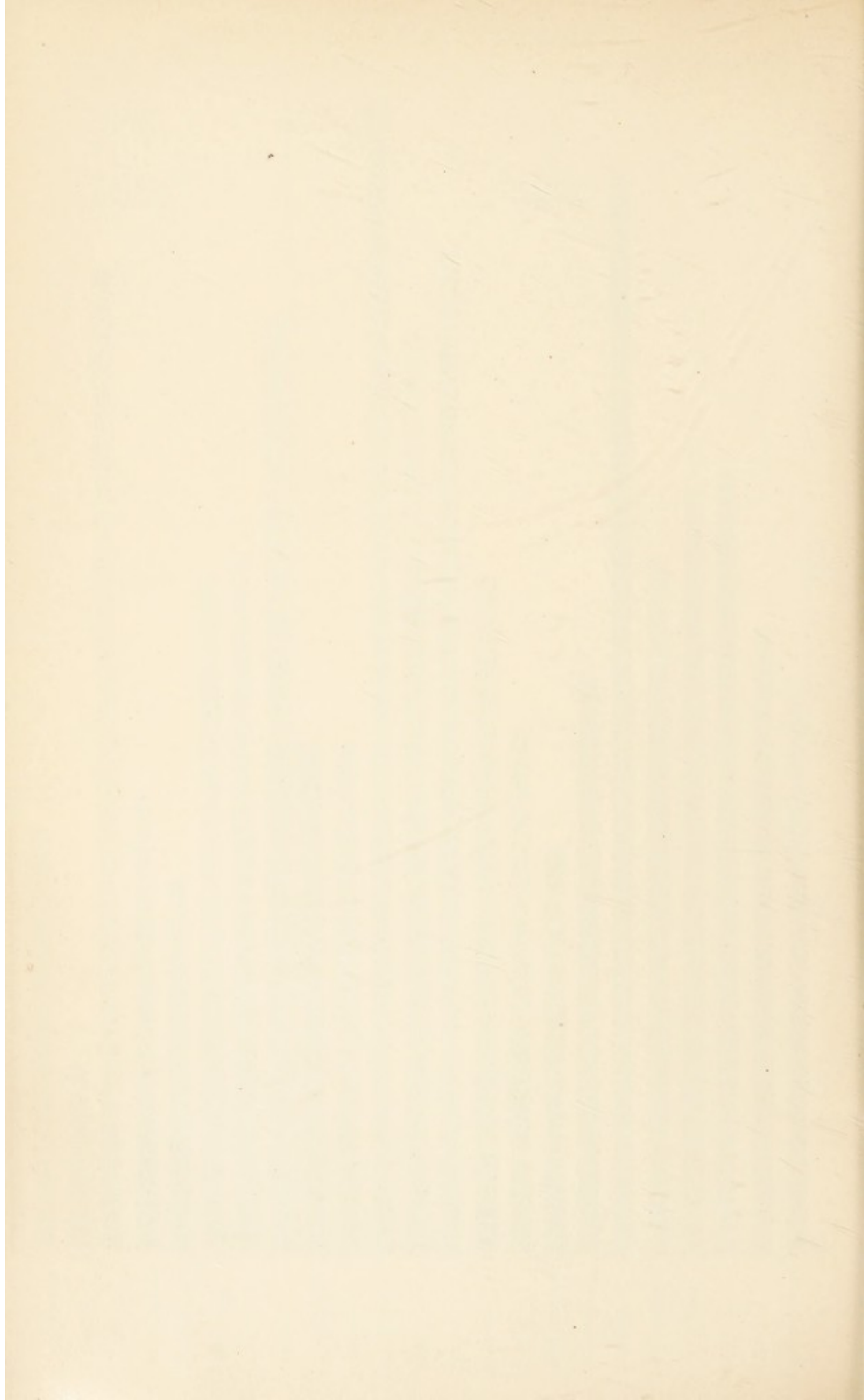
BIRTH RATE, 1913.



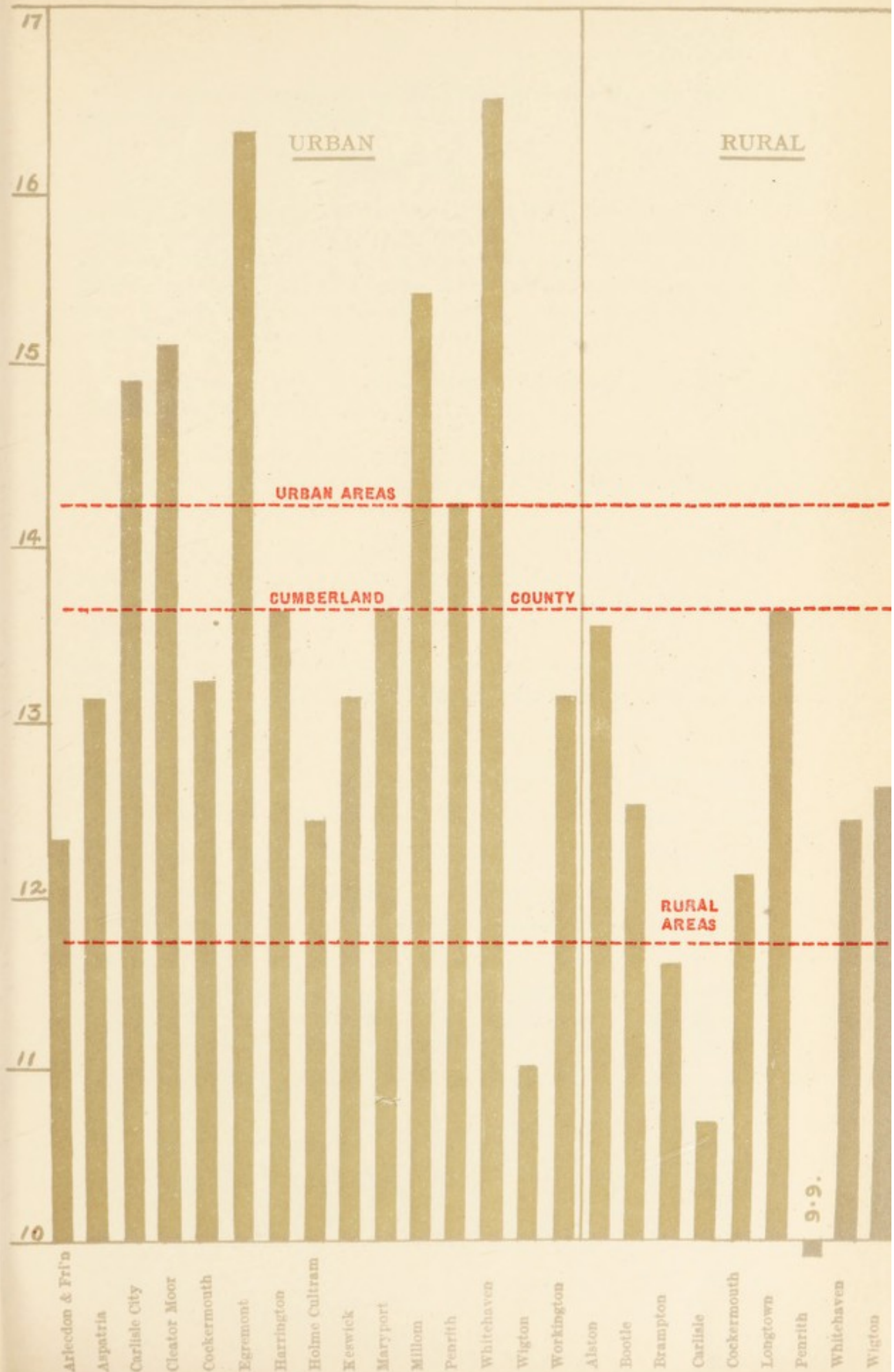


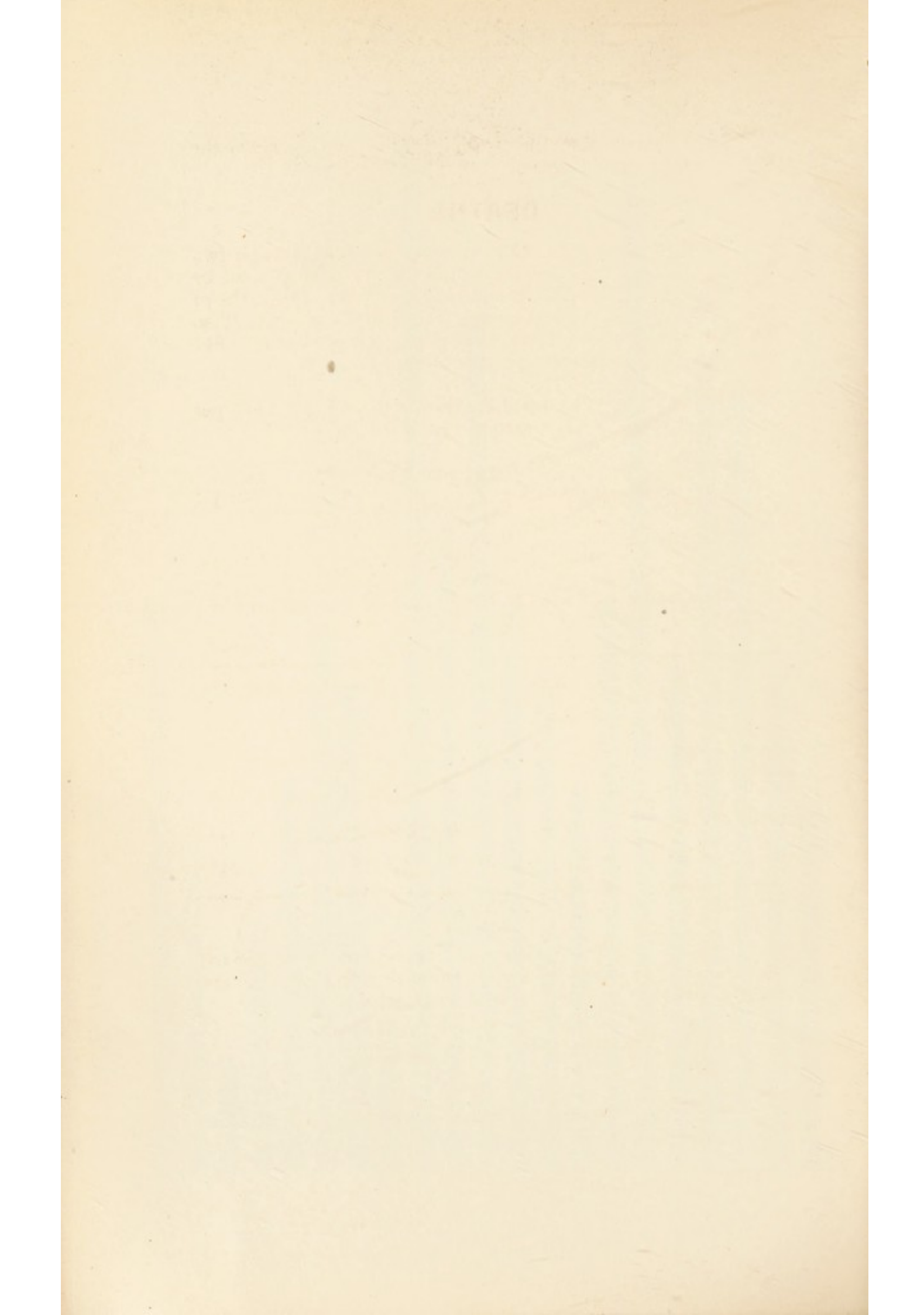
" Recorded " DEATH RATE, 1913.





"Corrected" DEATH RATE, 1913.





Their relationship one to the other is well shown in the accompanying line diagram.

DEATHS.

The deaths in the County numbered 3,821, of these two were of persons not belonging to the County, and so must be deducted from the total, in addition there were 28 deaths of persons belonging to the County, who died elsewhere, and so must be added to the total, thus giving a net total of 3,847 deaths of persons belonging to the County in the year.

This gives us a recorded death-rate of 14.3 per 1,000 per annum, compared with a rate of 15.1 in 1912.

In the Urban districts there were 2,506 deaths registered, giving a recorded death-rate of 14.5, and in the Rural districts 1,250 deaths and a rate of 13.0.

The following table and chart show the death-rate for the County, and for its Urban and Rural districts during the past ten years, and those for England and Wales during the same period :—

	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
England & Wales..	16.2	15.2	15.4	15.0	14.7	14.5	13.4	14.6	13.3	13.4
Admin'tive County	16.1	15.5	14.9	15.8	15.3	15.0	14.8	14.3	15.1	14.3
Urban Districts ..	17.2	16.2	15.6	16.5	15.8	15.6	15.2	15.0	16.1	14.5
Rural Districts ..	14.3	14.3	13.7	14.5	14.6	14.03	14.0	13.0	13.4	13.0

CHART II.

The corrected death-rate, *i.e.*, the death-rate corrected for age and sex distribution, is found by multiplying the recorded death-rate by a "factor of correction," is :—

In the County 13.6 per 1,000 of population.

„ Urban districts 14.2 „ „

„ Rural „ 11.7 „ „

Arranged in the order of their "corrected" death-rates the Urban districts stand thus :.

Whitehaven	16.5	Cockermouth ..	13.2
Egremont	16.3	Aspatria	13.1
Millom	15.4	Keswick	13.1
Cleator Moor	15.1	Workington ..	13.08
Carlisle	14.9	Holme Cultram ..	12.4
Penrith	14.2	Arledon & Frizington	12.3
Harrington	13.6	Wigton	11.0
Maryport	13.6		

And the Rural districts thus :—

Longtown	13.6	Cockermouth ..	12.1
Alston	13.5	Brampton	11.6
Wigton	12.6	Carlisle	10.7
Bootle	12.5	Penrith	9.9
Whitehaven	12.4		

INFANTILE MORTALITY.

The term infant mortality is used to express the number of children who die before reaching the age of one year, and is generally shown as being so many per 1,000 births registered. 6,304 births were registered. Six (6) of these births, however, did not belong to the County, and, therefore, must be deducted, leaving the net number of births 6,298.

There were in the year 685 deaths of children under one year of age, so that the infant mortality was at the rate of 108 per 1,000 births, being 2 per 1,000 lower than in the previous year.

In the Urban districts there were 4,217 births, and 497 deaths of infants, so that the infant mortality in Urban districts was 117 per 1,000 births, and in Rural districts 2,081 births, 188 deaths of infants, giving an infant mortality rate in Rural districts of 90 per 1,000 births.

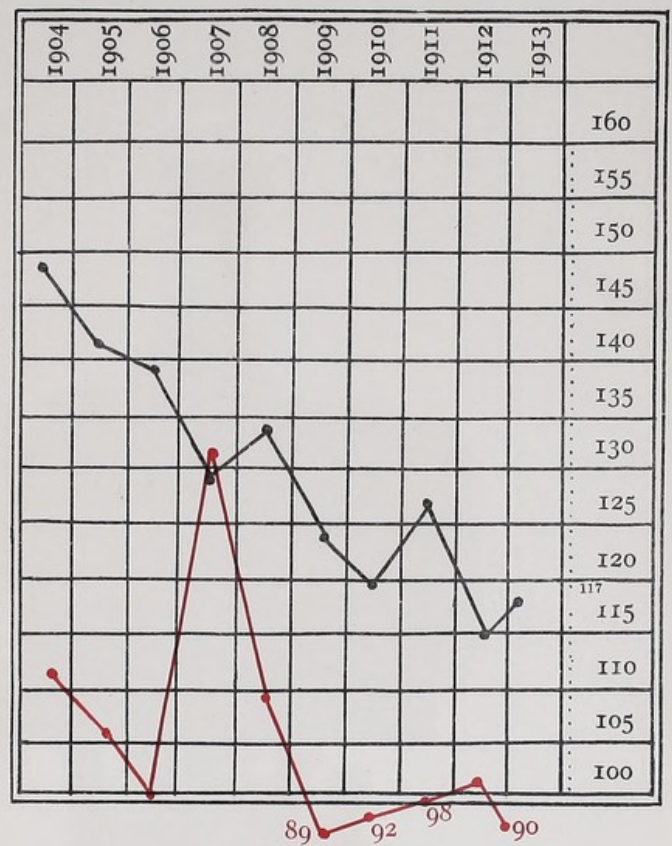
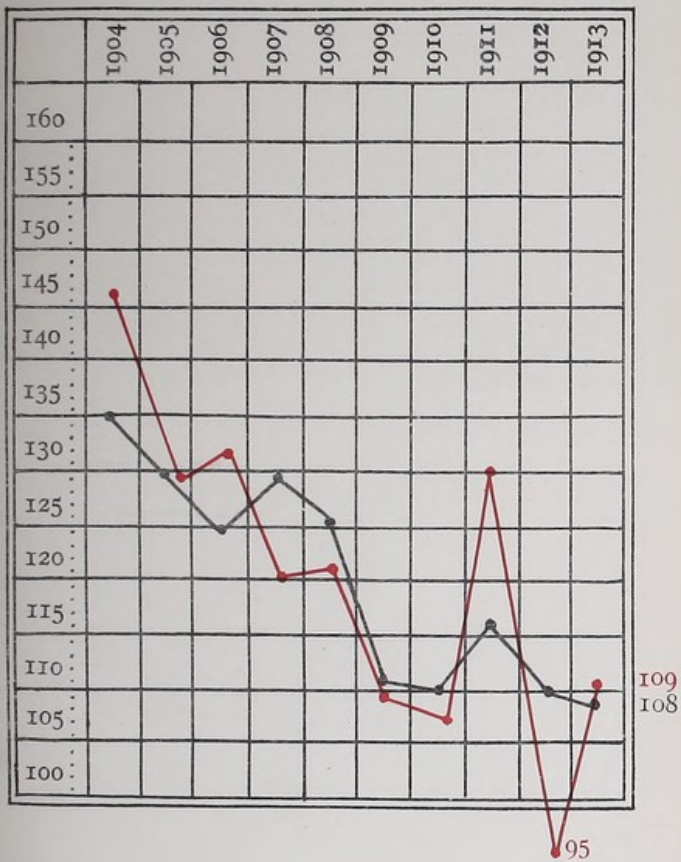
The following table and charts show the infant mortality in the County, and in its Urban and Rural districts, compared with that of England and Wales for the past 10 years.

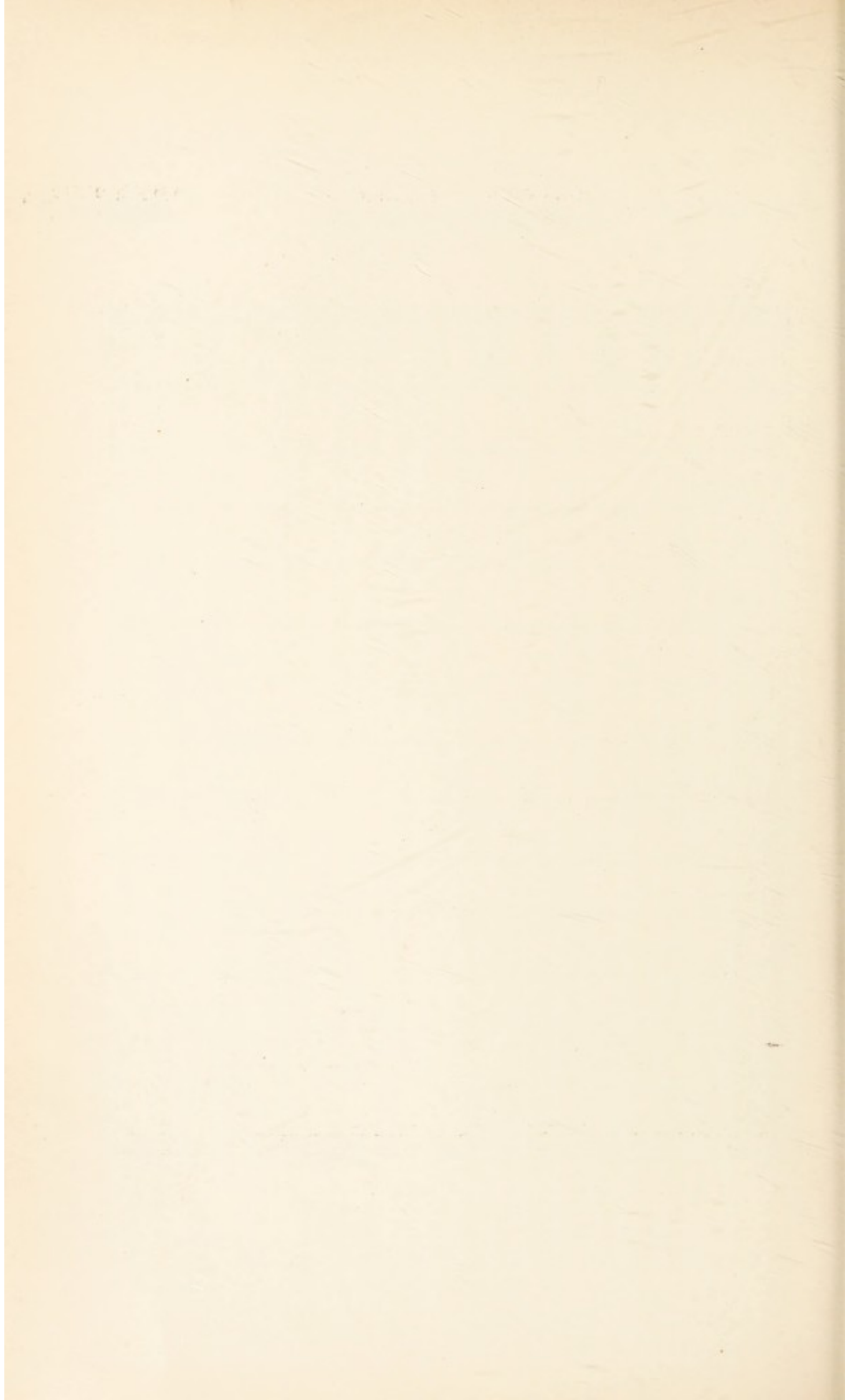
COUNTY OF CUMBERLAND.
ENGLAND AND WALES.

INFANTILE MORTALITY.

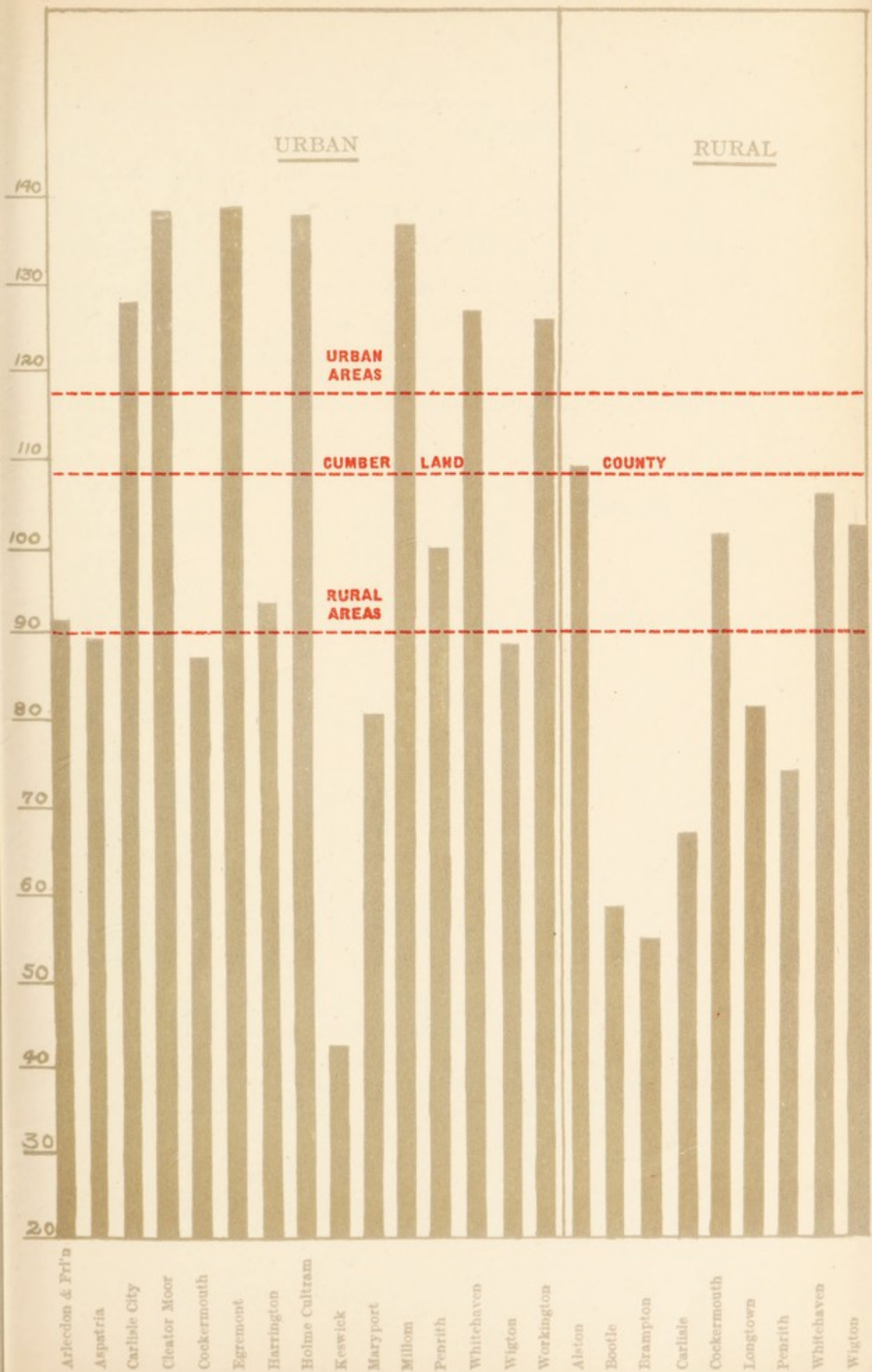
URBAN.
RURAL.

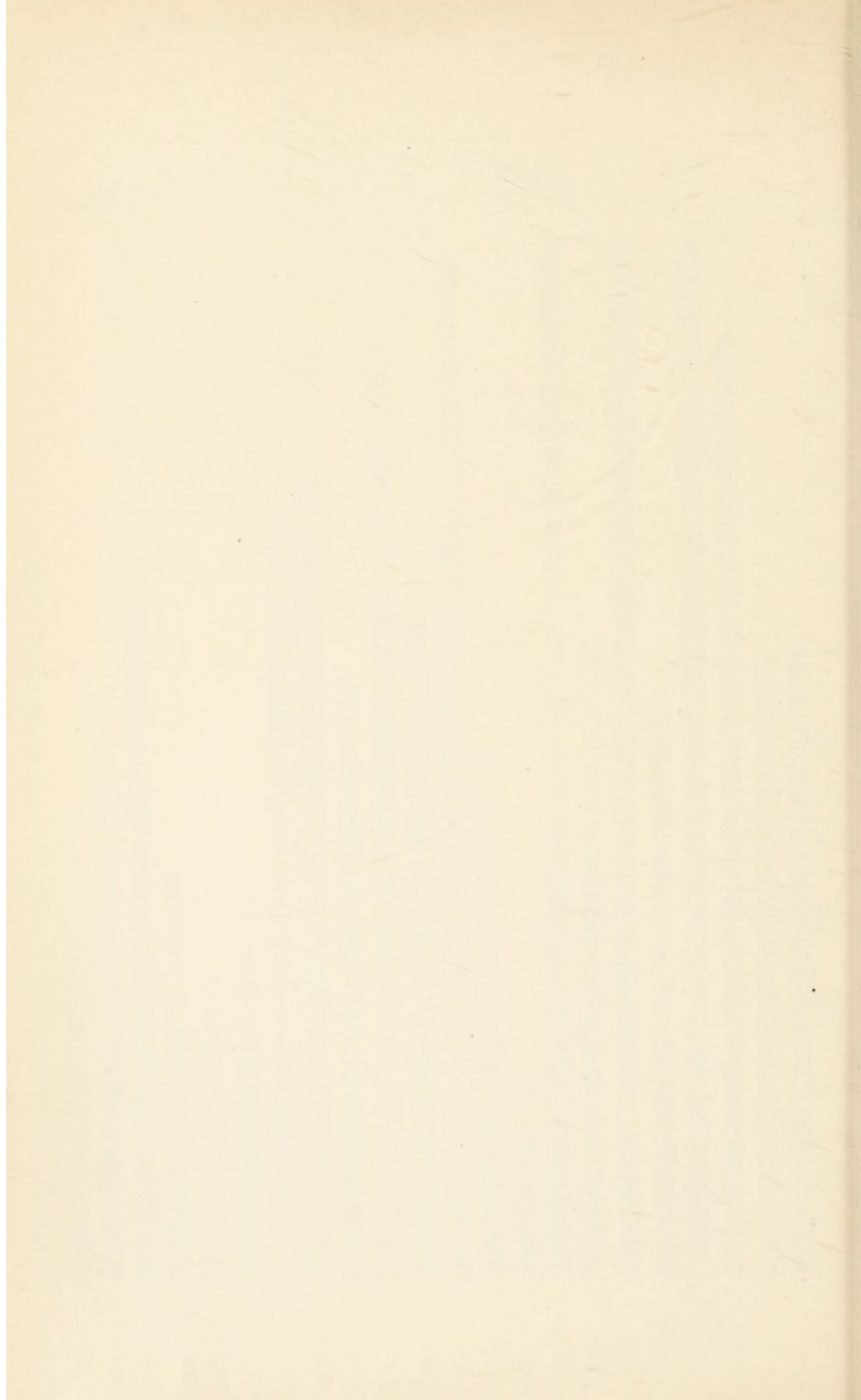
CHART III.





INFANTILE MORTALITY RATE, 1913.





	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
England & Wales ..	146	128	133	118	121	108	106	130	95	109
Admin'tive County	136	129	124	129	126	111	110	117	110	108
Urban Districts ..	149	141	139	128	134	123	119	127	115	117
Rural Districts ..	112	106	99	132	109	89	92	98	101	90

Arranged in the order of their infant mortality the Urban districts stand thus :—

Egremont ..	..	139	Harrington ..	..	93
Cleator Moor ..	..	138	Arlecdon & Frizington	..	91
Holme Cultram ..	..	138	Aspatria ..	..	89
Millom ..	..	137	Wigton ..	..	88
Carlisle City ..	..	127	Cockermouth ..	..	86
Whitehaven ..	..	127	Maryport ..	..	80
Workington ..	..	126	Keswick ..	..	42
Penrith ..	..	99			

And the Rural districts thus :—

Alston ..	..	109	Penrith ..	..	74
Whitehaven ..	..	106	Carlisle ..	..	67
Cockermouth ..	..	102	Bootle ..	..	59
Wigton ..	..	102	Brampton ..	..	55
Longtown ..	..	81			

The accompanying line diagram shows in a graphic way the infant mortality in each Urban and Rural district of the County.

It will be noticed that seven of the 15 Urban districts have a higher infant mortality than the average for the County.

The following table shows the deaths classified for causes and under age groups occurring in the County during 1913 :—

INFANT MORTALITY.

1913. Nett Deaths from stated causes at various Ages under 1 Year of Age.

CAUSES OF DEATH.		Under 1 Week		1-2 Weeks		2-3 Weeks		3-4 Weeks		Total under 4 Weeks		4 Weeks and under 3 Months		3 Months and under 6 Months		6 Months and under 9 Months		9 Months and under 12 Months		Total Deaths under 1 Year.	
All causes {	Certified Uncertified	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Smallpox
Chickenpox
Measles	2	1	3	3	2	..	7	4	..
Scarlet Fever	1	..	1	..	..	..	..	2	..	..	..
Whooping Cough	1	..	1	..	1	..	..	1	2	1	..	4	2	..	..
Diphtheria and Croup	1	..	3	4	..	..	..
Erysipelas
Tuberculous Meningitis	1	2	1	3	..	2	1	7	3	..
Abdominal Tuberculosis	2	1	1	..	1	5	1	8	3	..
Other Tuberculous Diseases	2	..	7	1	3	..	1	13	2	..
Meningitis (not Tuberculous)	1	..	1	1	3	..	3	8	2	..
Convulsions		10	..	2	2	4	4	1	..	17	6	6	5	10	7	7	2	2	42	22	..
Laryngitis	1	1	1	1	1	1	..	3	3	..
Bronchitis	2	1	3	..	1	..	5	2	8	4	12	5	6	3	13	44	16	..
Pneumonia (all forms)	2	..	..	..	2	..	9	2	14	9	14	6	9	48	20	..
Diarrhoea	2	..	1	..	1	..	3	1	4	2	4	1	3	1	3	17	6	..
Enteritis	2	..	1	1	3	1	7	1	17	4	6	3	2	35	11	..
Gastritis		1	..	..	..	1	..	..	..	2	..	2	..	2	1	3	1	1	10	2	..
Syphilis	1	1	..	2	..	3	1	3	..	2	..	..	..	..	8	1	..
Rickets	1	..	..	..	1	..	..
Suffocation, overlying	2	..	..	..	..	2	..	..	..	..	..	..	..	..	2	..	..
Injury at Birth		7	2	..	..	..	..	..	..	7	2	..	..	..	..	..	..	..	7	2	..
Atelectasis		6	..	..	..	..	..	..	..	6	..	..	..	..	..	..	..	..	6	..	..
Congenital Malformations		9	4	..	2	1	..	1	..	11	6	2	1	..	..	1	..	1	15	7	..
Premature Birth		67	29	11	3	7	5	2	4	87	41	7	3	2	..	1	..	1	98	44	..
Atrophy, Debility and Marasmus		16	9	6	1	3	..	3	2	28	12	28	4	9	2	6	1	2	73	22	..
Other Causes		8	5	1	..	2	2	3	1	14	8	4	3	12	2	4	2	1	35	16	..
Totals		124	49	24	10	29	11	14	10	191	80	87	28	99	37	68	25	52	497	188	..
		173	49	40	24	271	115	136	93	70	685										

Nett Births in the year.				Nett Deaths in the year of—			
{	Legitimate	{ Urban .. 4010	} 5939	{	Legitimate infants	Urban .. 442	} 610
		{ Rural .. 1929				Rural .. 168	
{	Illegitimate	{ Urban .. 207	} 359	{	Illegitimate Infants.	Urban .. 55	} 75
		{ Rural .. 152				Rural .. 20	

This table reveals some rather startling facts. 173 equal to 25% of the children born died before they reached the age of one week, and that about 80% of these died from some cause which, with a little care and more knowledge, and probably some care of the mother before the child is born, could have been prevented.

We find further that 271 or 39% died before they were one month old, 115 or 16% between one and three months, 136 or 19% between three and six months, 93 or 13% between six and nine months, and 70 or 10% between nine and twelve months.

The causes of infant mortality have been pointed out repeatedly in various reports, and although general statements may do a certain amount of good, it is far better to deal with each individual parent. This, of course, can only be done by house-to-house visits, under the Notification of Births Act, by Health Visitors.

Although the Notification of Births Act was not in force during the time covered by this report, it has now been adopted for the whole County, with the exceptions of the City of Carlisle, the Boroughs of Workington and Whitehaven, and the Urban district of Penrith, in which districts the administration is in the hands of the local Council, as from the 1st July, 1914.

CANCER.

Under this heading are included deaths registered as due to Cancer, Malignant Diseases, Scirrhus, Epithelioma, Sarcoma, &c.

The following table gives in order the death-rate from Cancer in the Urban and Rural districts :—

<i>Urban.</i>				<i>Rural.</i>			
Keswick	..	..	1.8	Longtown	..	..	2.1
Harrington	..	..	1.7	Brampton	..	..	1.8
Penrith	..	..	1.7	Wigton	..	..	1.6
Holme Cultram	..	..	1.3	Bootle	..	..	1.2
Wigton	..	..	1.3	Whitehaven	..	..	1.1
Carlisle	..	..	1.2	Penrith	..	..	1.0
Workington	..	..	0.9	Cockermouth	..	..	0.8
Arlecdon & Frizington	..	..	0.9	Carlisle	..	..	0.7
Cockermouth	..	..	0.9	Alston	..	..	0.6
Maryport	..	..	0.9				
Whitehaven	..	..	0.7				
Cleator Moor	..	..	0.7				
Aspatria	..	..	0.5				
Millom	..	..	0.5				
Egremont	..	..	0.4				

The Cancer death-rate in the combined Urban districts was 1.0, in the Rural districts 1.1, and in the Administrative County 1.1 per 1,000 of population.

The corresponding figures last year were 1.3, 1.0 and 1.28 respectively.

The accompanying line diagram shows the death-rates in the various districts in the County.

ZYMOTIC DISEASES.

The diseases usually included under this heading are :— Smallpox, Scarlet Fever, Diphtheria, including Membraneous Croup, Fevers (Enteric, continued, &c.), Measles, Whooping Cough and Diarrhœa.

They were responsible for 203 deaths, equal to a death-rate of 0.7 per 1,000 of population, compared to 399 deaths, and a rate of 1.4 per 1,000 in 1912.

In the Urban districts the death-rate was 0.8, and in the Rural districts 0.5 per 1,000, compared with 1.4 and 0.6 in 1912.

Arranged in the order of their Zymotic death-rates, the Urban districts stand thus :—

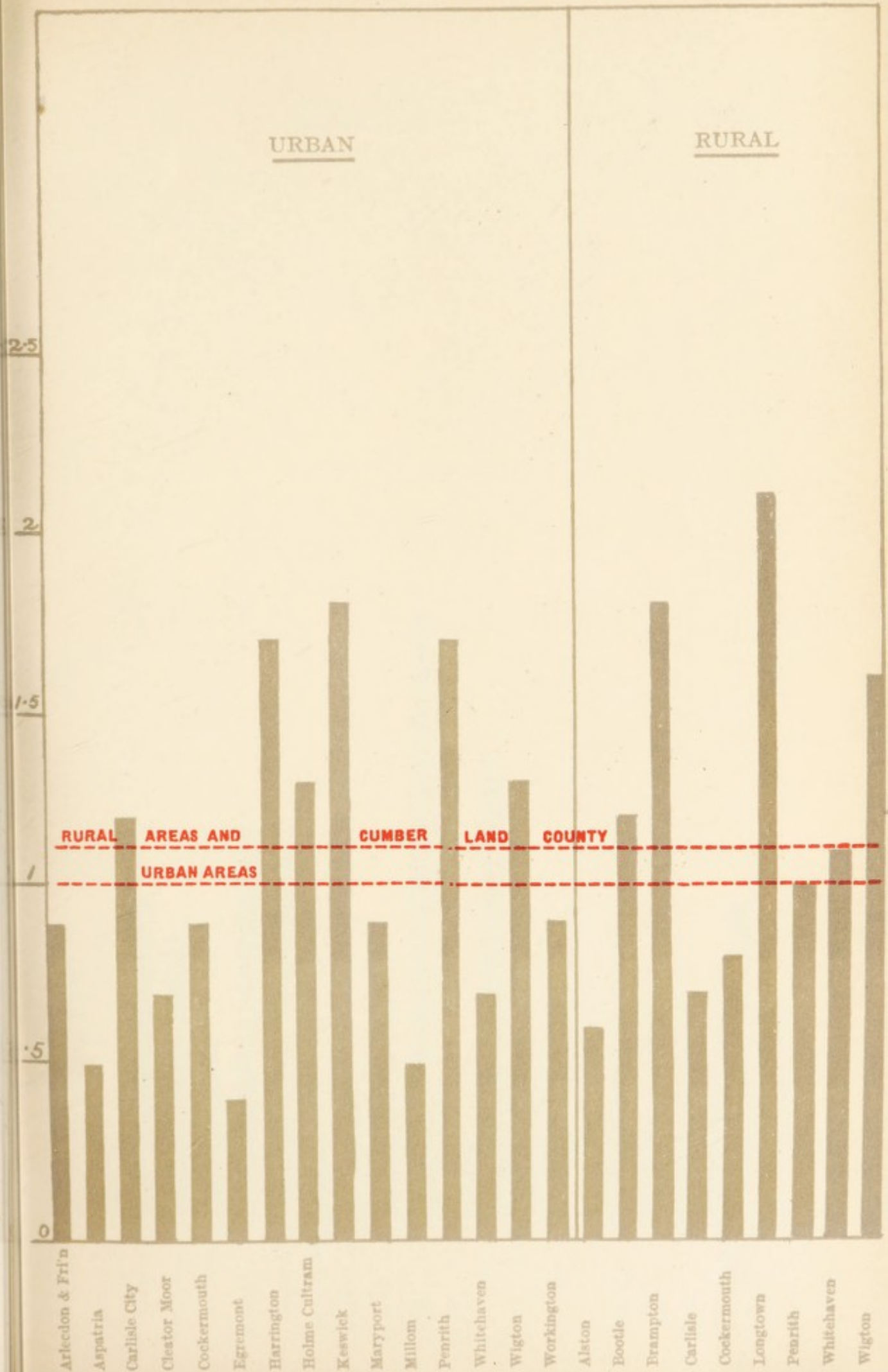
Millom	1.7	Maryport	0.7
Whitehaven	1.3	Cockermouth	0.5
Egremont	1.1	Wigton	0.5
Harrington	1.1	Keswick	0.4
Carlisle	0.9	Aspatria	0.2
Cleator Moor	0.8	Holme Cultram	0.2
Workington	0.7	Penrith	0.2
Arlecdon & Frizington	0.7		

And the Rural districts thus :—

Cockermouth	0.9	Penrith	0.3
Whitehaven	0.9	Wigton	0.3
Longtown	0.6	Brampton	0.2
Alston	0.3	Bootle	Nil.
Carlisle	0.3		

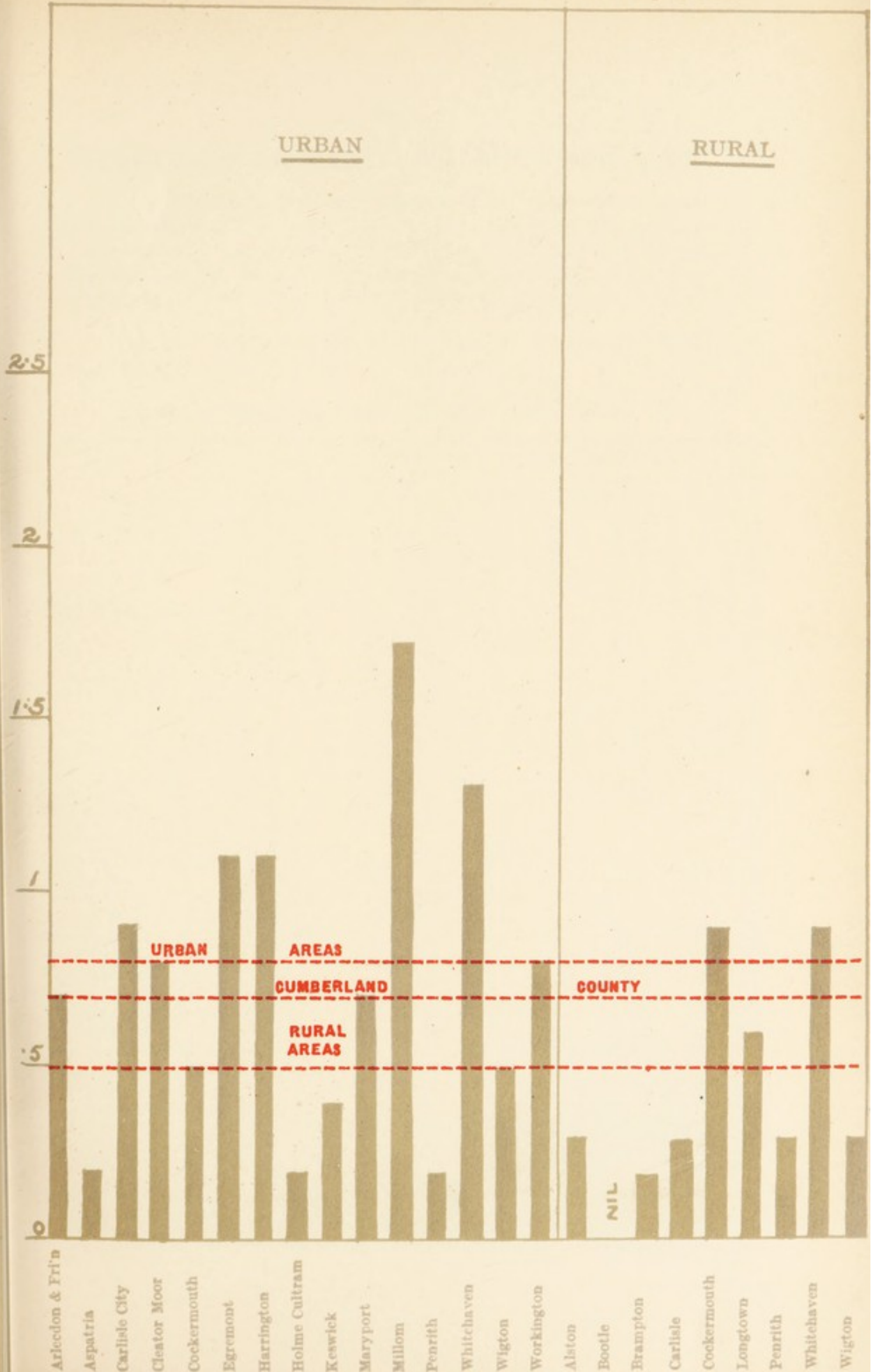
The accompanying line diagram shows for comparison the Zymotic death-rates in the various districts of the County.

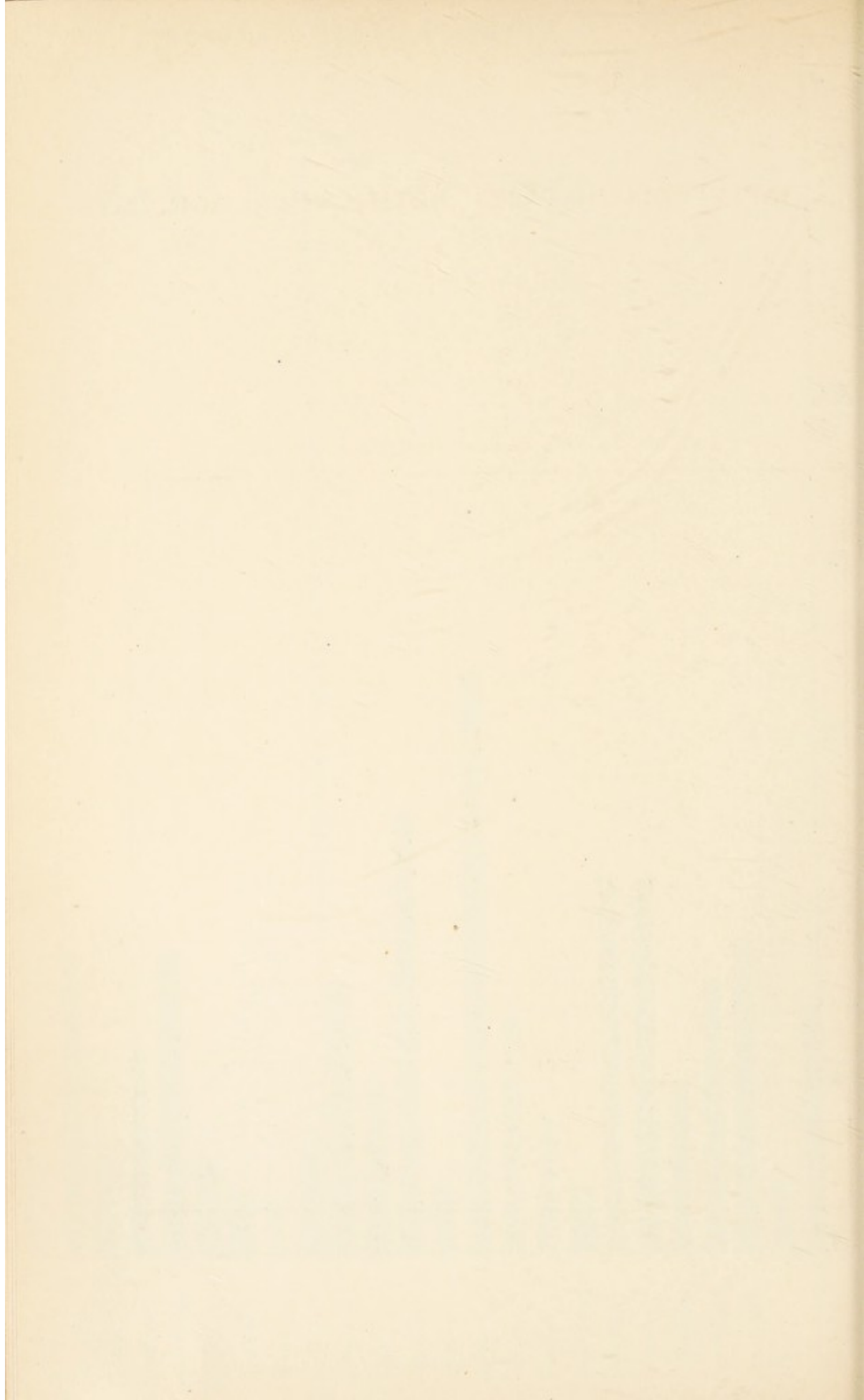
CANCER DEATH RATE, 1913.





ZYMOTIC DISEASES DEATH RATE, 1913.





INFECTIOUS DISEASES (NOTIFICATION) ACT.

Of notifiable infectious diseases there were 1,956 cases notified during the year, 745 of these being of Pulmonary Tuberculosis, compared with 2,217 (914 of which were of Tuberculosis) in 1912, so that apart from tuberculosis there is a reduction of 92 in the notifications received during the year.

The following table shows the number of cases notified, and the ages at notification.

Cases of Infectious Disease Notified during 1913.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.															
	AT AGES - YEARS.															
	At all ages.		Under 1													
			1 and under 5 years		5 and under 15 years		15 and under 25 years		25 and under 45 years		45 and under 65 years		65 and upwards			
Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	
Smallpox .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera (C) Plague (P) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membraneous croup)	146	66	5	..	37	14	78	37	16	3	8	3	2	3	..	
Erysipelas.. ..	140	48	2	1	4	2	6	4	13	4	41	14	56	16	18	
Scarlet fever	325	183	11	4	81	39	201	95	20	29	10	4	2	1	..	
Typhus fever .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric fever	36	4	..	..	1	..	10	1	12	2	8	..	3	1	2
Relapsing fever (R) Continued fever (C) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal fever	2	5	..	..	..	..	..	..	1	2	..	..	..	..	..
Cerebro-spinal Meningitis ..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..
Poliomyelitis	6	..	1	..	5	..	..	..	..	..	..	..	..	..	..
Pulmonary Tuberculosis ..	597	148	3	1	30	..	251	37	111	28	134	46	61	20	7	
Other forms of Tuberculosis ..	211	38	13	1	42	5	81	11	40	9	23	5	10	3	2	
Totals	1363	493	35	7	200	60	627	186	212	76	226	72	134	44	29	
	1956	42	260	813	288	298	178	37								

The ages of the 40 cases in the Longtown Rural District were not given, so the totals "At Ages" and "At all Ages" do not tally.

SMALLPOX.

No case was notified during the year.

From statistics compiled during the medical inspection of School children, it is evident that somewhere between 35 and 40 per cent. of the children now in our elementary schools are unvaccinated, and, therefore, totally unprotected against Smallpox.

This, of course, has arisen owing to the "conscience clause" in the Vaccination Acts.

It is not claimed, nor so far as I know, has it ever, at any rate in recent years, been claimed that vaccination in childhood is a protection for life against an attack of Smallpox.

What is claimed, and justly claimed, is that vaccination in childhood, and re-vaccination at the age of 12 or 13, or sooner if there is probable danger of actual exposure to infections, will prevent Smallpox. Further than this, it may safely be said that vaccination in childhood alone will in the vast majority of cases prevent death from Smallpox, even if the individual does get an attack in early adult life.

Had compulsory vaccination been continued and efficiently carried out, there would never have been any fear of a serious epidemic of Smallpox in this country.

At the present time, what is the condition as regards Smallpox? :—

"At the present time an outbreak of Smallpox would be especially serious, and as there are possibilities of importation of Smallpox, it behoves all Sanitary Authorities to see that all preparations for dealing with this disease are in working order."—(*Memorandum from the Local Government Board to Sanitary Authorities, August, 1914*).

Up till 1898 primary vaccination was compulsory. In that year the so-called "conscience clause" was introduced into the Vaccination Acts, and in 1907 the Act was further amended, making it still easier to get a certificate of exemption from vaccination, until at the present time compulsory vaccination is for all practical purposes a dead letter.

At the present time, therefore, the whole population comes under one of three headings as regards vaccination.

- I. Those persons who were vaccinated in infancy, and who were re-vaccinated in early adult life, comprising almost all medical men, and nurses, those in the navy and army, and, I believe, all members of police forces.
- II. The great majority of persons born before 1898, *i.e.*, most persons above the age of 16 who benefitted by compulsory vaccination. and were vaccinated in infancy.
- III. Those under 16 years of age, whose parents have taken advantage of the "conscience clause," and who have never been vaccinated at all, somewhere approaching 50% of the rising generation.

Of those in the first class it is unnecessary to say more than that, provided the two vaccinations have been efficiently done, they are immune from Smallpox.

With regard to the others, it is far otherwise, because they are both in danger of an attack if exposed to infection.

Although those who have been efficiently vaccinated in infancy are in the vast majority of cases protected from a serious attack of Smallpox, yet they constitute a serious menace to the general public, and they are the class amongst whom the initial cases in recent outbreaks have started. They are, as stated, above 16 years of age, and although they were vaccinated in infancy, they are not immune from attack, but should they be attacked they constitute a special danger from the facts that they have the disease mildly, so mildly in some cases as to cause almost no symptoms, and thus such a person is able to go about mixing or even working with others, and spreading infection wholesale. I have known such a case with only one pock on the whole body, and yet 11 other cases, most of them serious, were traced to direct infection from this mild one. They are also the most difficult cases to diagnose, and from the fact that they are the most migratory part of the population, not only in this country but abroad, from whence they often bring the infection, they are most liable to come in contact with infection, and having probably a mild attack, which may even never be recognised

they constitute a special danger, not so much to themselves, as to those they come in contact with.

As to the third class, it is unnecessary to say more than that they are the victims of their parents' misguided "conscience," and probably nothing will convince them of the efficacy of vaccination except a bad epidemic of Smallpox.

I wonder how many opponents of vaccination, who had never been vaccinated, we could get to volunteer to go into a Smallpox hospital and nurse cases through an epidemic, and I wonder, too, if we succeeded in getting any, how many of them would survive the ordeal, and yet it is practically unknown for a nurse, who has been recently successfully vaccinated to contract the disease.

It is clear then that we cannot rely on the general public to take steps to protect themselves against Smallpox, it therefore becomes the duty of all Sanitary Authorities to make what provision they can in the way of providing hospital accommodation to prevent the spread of the disease once a case is introduced into their district.

Experience has shown over and over again that it is only those Authorities who have had a hospital in readiness, who have been able to prevent an epidemic by isolating the first cases. Those Authorities who have only provided hospital accommodation on compulsion, when an outbreak had gained some ground, have in the past had to pay heavily for their neglect.

Now, at the present time, with nearly 50% of the children unvaccinated, and a large proportion of the adult population insufficiently protected, Isolation Hospitals for the treatment of early cases become an absolute necessity. Further, in order to combat successfully with an outbreak in its early stages, it is necessary to have some place in which contacts can be housed, and kept under observation, whilst the incubation period lasts, and whilst the house from which the patient was removed to hospital is being disinfected.

The following extract, from a circular letter accompanying the memorandum previously quoted from, is appropriate:—

"Under present conditions, the introduction of the disease is not unlikely, and the prevention of the

spread of the disease, if it should appear, will depend almost entirely on the efficiency of the arrangements made previously for dealing with and following up early cases."

The hospital accommodation at present available in this County for isolating Smallpox cases is as follows :—

City of Carlisle	12 beds
Penrith Urban and Rural Districts ..	10 „
Millom Smallpox Hospital	10 „
At the Derwent Joint Hospital	6 „

38 beds to serve a population of 267,470, and of this number *probably about a quarter is totally unprotected against an attack of Smallpox*, and of the remainder only about half will be partially protected.

So serious a view do I take of this matter, that I do not think it is too much to suggest that a joint meeting of representatives of all the Sanitary Authorities in the County, along with their respective Medical Officers of Health should be held at an early date, to consider what steps should be taken.

SCARLET FEVER.

Although not so many cases of this disease have been notified as in the previous year, Scarlet Fever has been present in all the districts of the County, although in some districts only a few cases were notified.

508 cases were notified, 325 in Urban and 183 in Rural districts ; compared with 811 cases, 564 in Urban and 247 in Rural districts the previous year.

Only two deaths were certified as due to Scarlet Fever, one in Egremont Urban and one in Carlisle Rural districts.

The cases were generally of a mild type, and as has been previously pointed out, this very mildness increases the difficulty of control.

Many cases are not recognised until "peeling" occurs, but many parents are wilfully negligent in allowing other children to be exposed to infection, not only allowing notified cases to run about the streets, but even having other children into their own infected houses to play with infected children.

DIPHTHERIA AND MEMBRANOUS GROUP.

212 cases were notified, 146 in Urban and 66 in Rural districts, exactly the same numbers as in the previous year.

The only two districts in which no cases were notified were the Cleator Moor and Wigton Urban districts.

There were 33 deaths from Diphtheria, a case mortality of 15 per cent.

TYPHUS FEVER.

No cases were notified.

ENTERIC FEVER.

40 cases were notified, an increase of 20 on the previous year.

In no district was the disease seriously prevalent.

Eight deaths are registered as due to Enteric Fever.

PUERPERAL FEVER.

Seven cases were notified, against 13 the previous year. Two in Urban and five in Rural districts ; four of the latter in Longtown.

Six deaths are registered as due to Puerperal Fever.

Carlisle City	..	..	..	..	1
Workington Borough	..	..	..	..	2
Cleator Moor Urban	..	..	..	..	1
Holme Cultram Urban	..	..	..	..	1
Whitehaven Rural	..	..	..	..	1

Neither of the fatal cases in the Borough of Workington, nor the one in Holme Cultram, appear to have been notified.

MEASLES.

Measles is not one of the diseases coming under the Infectious Diseases (Notification) Act, and therefore, it is only from the number of deaths from this disease that we can judge of its prevalence.

During the year 56 deaths were certified as due to Measles, compared with 235 in the previous year. As was to be expected, the disease was not so prevalent as in the previous year, only those districts which escaped the severe epidemic of 1912 appear to have been affected in the present year.

WHOOPING COUGH.

Fifteen deaths were registered as due to Whooping Cough, against 66 in the previous year.

DIARRHŒA.

From Diarrhœa and Enteritis 89 deaths were registered, compared with 53 the previous year.

69 of these deaths were of children under one year of age.

Dirt and insanitary conditions favour the spread of epidemic Diarrhœa ; large midden privies, and collections of stable manure are the most favourable breeding places for flies, which contaminate the food of children and infants. It is, therefore, of the utmost importance that these places should be emptied frequently.

In some villages it is not unusual for middens to be emptied only once in six months, and I know of instances in which the period has been considerably extended.

ERYSIPELAS.

188 cases notified, compared with 225 the previous year. Only three deaths are registered as due to Erysipelas.

TUBERCULOSIS.

258 deaths were registered as due to Pulmonary Tuberculosis (Consumption), 183 in Urban, and 75 in Rural districts, compared with 259 deaths, 183 in Urban, and 76 in Rural districts in 1912.

This gives a death-rate for the County from Pulmonary Tuberculosis of 0.9 per 1,000 of population, for the Urban districts 1.0, and for the Rural districts 0.7, exactly corresponding to the figures of the last two years.

In addition to these 258 deaths, there were 107 registered as due to other forms of Tuberculosis, 85 in Urban and 22 in Rural districts.

Compared with the previous year, the figures for which were in the County 101, Urban districts 81, Rural districts 20.

The following notifications of Tuberculosis have been received :—

			<i>Urban.</i>	<i>Rural.</i>	<i>Total.</i>
Pulmonary	..	..	597	148	745
Other Forms	..	..	211	38	249

It is obvious that all cases of Tuberculosis are not notified, for instance, in the Arlecdon and Frizington Urban district, 7 notifications only were received, but 8 deaths are registered as due to Pulmonary Tuberculosis.

Similarly in Aspatria, 5 cases were notified and 5 deaths registered. In Cockermouth Urban district 7 cases were notified and 8 deaths registered, and in Brampton Rural district 5 cases were notified and 6 deaths registered, and 3 cases other than Pulmonary Tuberculosis were notified, but there were 6 deaths.

Arranged in the order of their mortality from Pulmonary Tuberculosis, the Urban districts stand thus :—

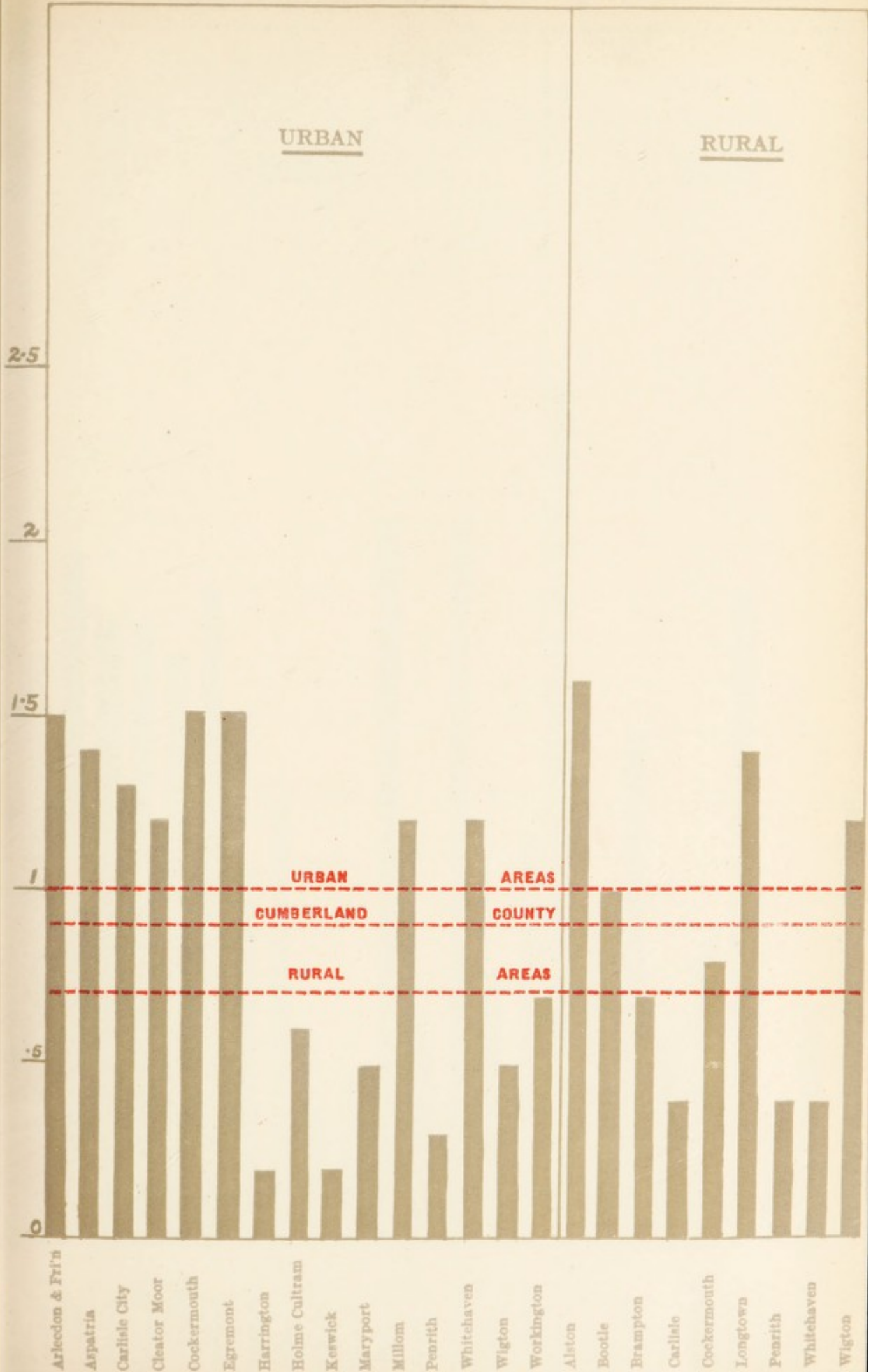
Arlecdon & Frizington	..	1.5	Workington	..	0.7
Cockermouth	..	1.5	Holme Cultram	..	0.6
Egremont	..	1.5	Maryport	..	0.5
Aspatria	..	1.4	Wigton	..	0.5
Carlisle	..	1.3	Penrith	..	0.3
Whitehaven	..	1.2	Harrington	..	0.2
Cleator Moor	..	1.2	Keswick	..	0.2
Millom	..	1.2			

And the Rural districts thus :—

Alston	..	1.6	Brampton	..	0.7
Longtown	..	1.4	Carlisle	..	0.4
Wigton	..	1.2	Penrith	..	0.4
Bootle	..	1.0	Whitehaven	..	0.4
Cockermouth	..	0.8			

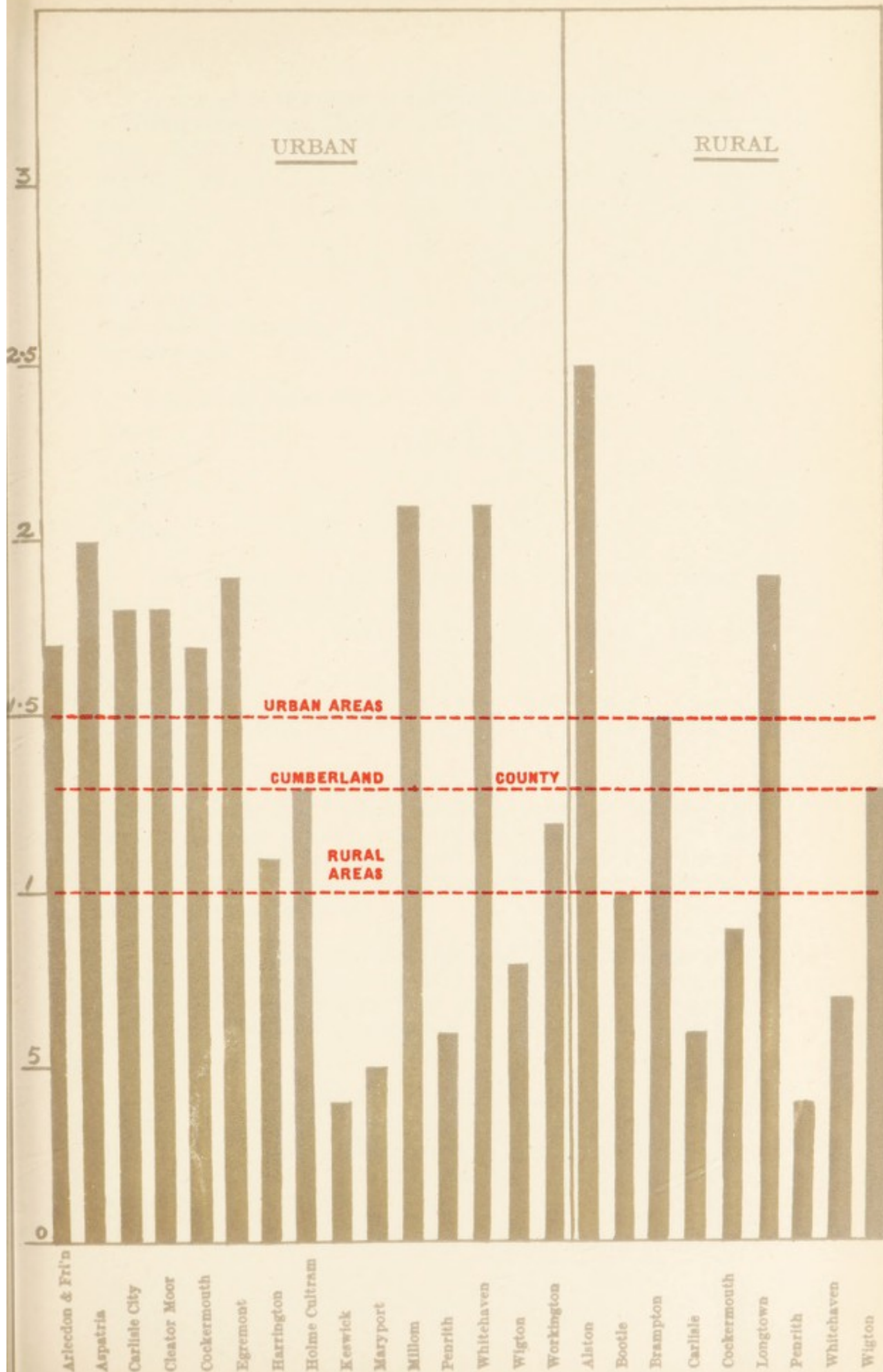
The accompanying line diagram shows for comparison the death-rates from Pulmonary Tuberculosis in the various districts of the County :—

PHTHISIS DEATH RATE, 1913.





TUBERCULOSIS DEATH RATE, 1913.





Arranged in the order of their death-rates from all forms of Tuberculosis (including Pulmonary), the Urban districts stand thus :—

Whitehaven	2.1	Holme Cultram ..	1.3
Millom	2.1	Workington ..	1.2
Aspatria	2.0	Harrington ..	1.1
Egremont	1.9	Wigton ..	0.8
Carlisle	1.8	Penrith ..	0.6
Cleator Moor	1.8	Maryport ..	0.5
Arlecdon & Frizington ..	1.7	Keswick ..	0.4
Cockermouth	1.7		

And in the Rural districts :—

Alston	2.5	Cockermouth ..	0.9
Longtown	1.9	Whitehaven ..	0.7
Brampton	1.5	Carlisle ..	0.6
Wigton	1.3	Penrith ..	0.4
Bootle	1.0		

The death-rates from all forms of Tuberculosis during the last five years were :—

	1909.	1910.	1911.	1912.	1913.
Urban Districts ..	1.6	1.7	1.6	1.6	1.5
Rural Districts ..	1.1	1.1	0.9	0.9	1.0
Administrative County	1.4	1.4	1.3	1.3	1.3

During the past year the scheme for the treatment of Tuberculosis in the County has been gradually developed. In such a large County, and with such sparsely populated areas in it, many serious difficulties have presented themselves to delay the progress of the scheme, these, however, are being overcome gradually.

One of the main difficulties has been in obtaining suitable premises for the establishment of dispensaries. In some areas it has up to the present time been impossible to secure suitable premises, and it may be necessary in these areas to build for ourselves.

Although many sites have been inspected with a view to building a hospital for tuberculous patients, and although one or two of those seen would have done admirably for the purpose, for one reason or another we have as yet been unable to secure a suitable one.

Although it has not been possible to offer treatment to all tuberculous patients, owing to these difficulties, the general scheme has been fully organised, and treatment has been granted to all suitable insured persons, and their dependents who have applied for sanatorium benefit.

TABLE SHOWING CASES TREATED DURING 1913.

Class of Applicant	Sex.	No. of Applications	No Treatment offered	Withdrawn or refused treatment.	Died before examination	Incomplete.	Sanatorium Treatment.					Domiciliary Treatment.				
							No.	Imp	I.S.Q.	Worse	D'ad	No.	Imp	I.S.Q.	Worse	D'ad
Insured ..	Male	68	—	9	5	22	15	12	1	—	2	17	—	2	3	15
Persons ..	Female	37	—	7	1	12	12	10	1	—	1	5	—	1	—	4
Dependents over 16 ..	Female	26	3	2	3	14	2	2	—	—	—	2	1	—	—	1
D'pendants	Male	29	2	4	1	17	3	2	—	1	—	2	—	1	—	1
under 16	Female	37	2	1	2	27	3	3	—	—	—	2	—	1	—	1

During the year under review 197 persons have taken advantage of the provisions made for the treatment of tuberculosis, thus :—

		<i>Male.</i>		<i>Female.</i>
Insured persons	..	68	..	37
Dependents over 16	..	—	..	26
„ under 16	..	29	..	37
		<hr/> 97		<hr/> 100

In 63 of these cases the treatment was completed during the year, while 92 were still under treatment on December 31st, 1913. In 7 cases no treatment was offered, 23 persons withdrew their applications for Sanatorium Benefit, and 12 died before they could be examined.

Of the 63 cases whose treatment was completed, 35 were sent to a sanatorium, and 28 were treated at home, with the following results :—

			<i>Sanatorium Treatment.</i>		<i>Domiciliary Treatment.</i>
Improved	..	..	29	..	1
In Statu Quo	..	..	2	..	5
Worse	..	..	1	..	3
Died	..	..	3	..	19

An analysis of the result of treatment of these 63 cases shows that 29 or 83% of those who went to a Sanatorium improved, 2 cases returned home in practically the same condition, 1 got worse, and 3 died after their return home.

Many of the 29 cases, classed as improved, on leaving the Sanatorium, appeared to be perfectly well, and to hold out prospects of ultimate cure, but it would be dangerous to say that any of these cases are cures until at least 12 months have gone since they left the Sanatorium. If, however, they continue to live an open-air life, such as they were made to live at the Sanatorium, there is in the majority of these cases every hope of a permanent cure, but it is very doubtful whether they will or can live such an open-air life with housing conditions such as prevail in some of our districts.

The results of domiciliary treatment are, as one would expect, in no way encouraging—19 of the 28 cases died during the year.

Most of these cases, however, were in such an advanced stage when application was made for treatment, that they were hopeless from the first, and no prospect was ever held out of cure or even of relief.

These cases are exceedingly difficult to deal with, often living in houses, overcrowded and unventilated, it is no wonder that the disease spreads when it is remembered that it is from these advanced cases that most of the infection arises.

Until it can be impressed upon all people that tuberculosis can only be cured when treatment is commenced, while the disease is in the early stages, we cannot expect to obtain much better results whatever method of treatment is adopted.

An exaggerated dread of the infection of the disease is one of the great obstacles which has to be faced in fighting against the ravages of consumption.

It is now common knowledge that consumption is infectious, and it is, therefore, classed in the lay mind along with smallpox, and the other ordinary infectious diseases, and it is no doubt for this reason that many people who are suffering from the disease try to hide it as much as possible, even going the length of neglecting to seek advice for fear of being told that they have consumption.

The knowledge cannot be too widely known, however, that a consumptive, even an advanced, and, therefore, the most infectious case, who has been educated at a sanatorium, has been taught not only to look after his own health, but to take such precautions that there is practically no risk of infection to other people who come into ordinary contact with him.

With the establishment of Dispensaries, we may hope for better days, and better results from treatment, as two of the main functions of dispensaries are to spread knowledge and to examine from time to time contacts of patients who already have the disease, and so get them in a very early stage. In this way these cases will be prevented from reaching a stage in which they are infectious, or should the disease, in spite of treatment, progress, they will be taught how to prevent the infection spreading to others.

In addition to those persons who received only domiciliary treatment, all the cases who were sent to a sanatorium received domiciliary treatment before being admitted if, as frequently happened, they had to wait some considerable time for a bed, or again, some were given the same treatment after they had left the sanatorium.

After all the fact must be recognised that housing and environment are the most potent factors in the spread of consumption, until, therefore, housing is improved, and more attention given to environment by the people themselves, Insurance Committees will have untold difficulties in administering their sanatorium benefits, and the greatest benefit will not be derived from the money expended.

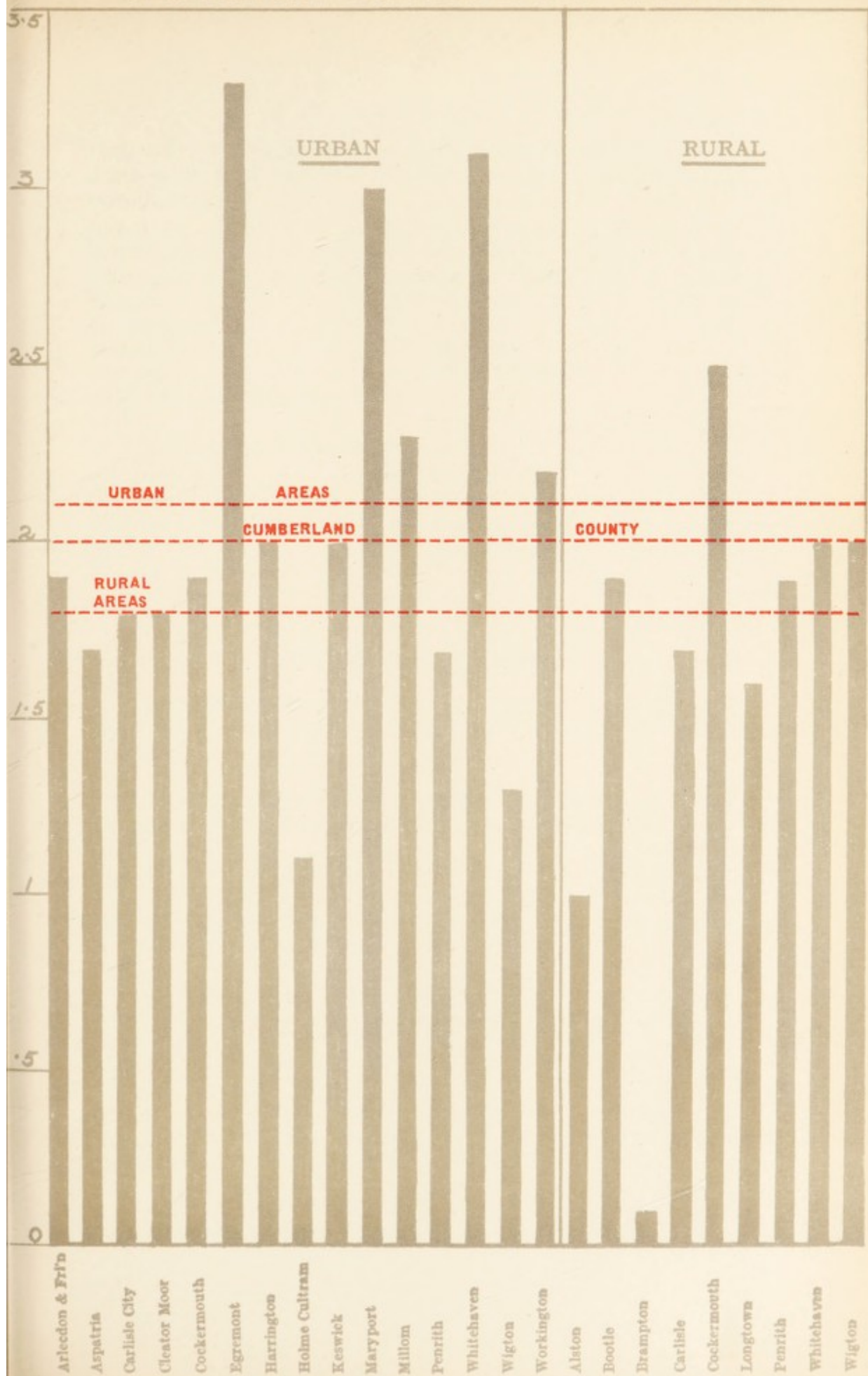
A grave responsibility rests with Sanitary Authorities in this matter.

RESPIRATORY DISEASES.

During the year 555 deaths were registered as due to Respiratory Diseases (excluding Phthisis), compared with 619 in 1912. Of these 376 occurred in Urban districts, and 179 in Rural districts; these give respectively rates per 1,000 of population of 2.1 and 1.8 compared with 2.6 and 1.8 in the previous year.

The rate for the Administrative County is 2.0 compared

RESPIRATORY DISEASES DEATH RATE, 1913.





with 2.3 the previous year. Arranged in the order of their death-rates from Respiratory Diseases, the Urban districts stand thus :—

Egremont 3.3	Cockermouth 1.9
Whitehaven 3.1	Carlisle 1.8
Maryport 3.0	Cleator Moor 1.8
Millom 2.3	Aspatria 1.7
Workington 2.2	Penrith 1.7
Harrington 2.0	Wigton 1.3
Keswick 2.0	Holme Cultram .. 1.1
Arlecdon and Frizington 1.9	

And the Rural districts thus :—

Cockermouth 2.5	Carlisle 1.7
Whitehaven 2.0	Longtown 1.6
Wigton 2.0	Alston 1.0
Bootle 1.9	Brampton 0.1
Penrith 1.9	

(See the line diagram).

RIVER POLLUTION.

In my last Annual Report, river pollution was fairly fully dealt with, more particularly pollution affecting the River Derwent.

Although many of the sources of pollution then drawn attention to have been removed, many still remain.

The serious pollution of the River Greta, a tributary of the Derwent, from the Threlkeld Lead Mines is still unabated, and no provision has been made to prevent pollution of the stream when the mines again start working.

The disposal of sewage from Threlkeld village is now much more satisfactory, and the settling tank and irrigation land have been much better looked after, thus removing this source of pollution.

At Keswick, the sources of pollution to the Derwent, previously referred to are being or have been dealt with, and are reported on by Dr. Burnett, as follows :—

“ 1.—*Closets at Low Briery.*—This pollution is now stopped. Good earth closets have been erected.

2.—*Refuse from dye used at the bobbin mills*.—This was not of a harmful nature, and no longer enters the river.

3. *Pencil Works at Greta side*.—W.C. discharging into the river. A new sewer is to be laid almost immediately in this part of the town, and when completed the W.C. will be at once connected.

4. *Waste from Laundry and Electric Light Works*.—It is impossible to sewer these, but some process of purification might be adopted.

5. *Solid refuse thrown into the river*.—Offenders in this respect should be reminded that they are liable to be proceeded against under the Rivers Pollution Prevention Act, 1876, and action should certainly be taken whenever called for."

Part of the sewage from Keswick still enters the river untreated, as the filter beds are too small to deal with the whole of it.

Several sources of pollution in the Cockermouth Rural District have been, or are being, dealt with, but many of the villages are polluting the river by receiving the whole of the slop water and sewage untreated into the river.

Two of the main sources of pollution, viz., the sewage from Great Clifton and the "black water" from the William Pit, in close proximity to the village, have been removed, the former by a satisfactory sewage system, and the latter by means of settling tanks, which have proved highly efficient.

The pollution of the rivers Derwent and Cocker, the Tom Rudd Beck and Bittern Beck taking place in the Cockermouth Urban District, is much the same as it was when first reported on, except that in places the river bed has been cleared of a lot of rubbish, and warning notices have been posted up.

The pollution to the river from the sewage disposal works of the Cockermouth Urban District is much the same, although some little attention has been given to the settling tanks, and to the irrigation land.

After considerable pressure, the Urban Council has taken expert advice on their system of sewage disposal, and it is to be hoped the much needed improvement will not be long delayed.

A large number of sources of pollution from private houses have been removed, and it is to be hoped that the pollution from coal washing at the Camerton Colliery will be removed in the same way as has been done across the river by the Allerdale Coal Co. at William Pit.

WATER SUPPLY.

In my last report, I said : " All the Urban districts in the County seem to have abundant and satisfactory water supplies, with the exception of Egremont and Maryport."

The water supply to Egremont appears to have been augmented by a supply from Wormgill, which from analysis and bacteriological examination would seem to be a satisfactory one.

No change has taken place in the position as regards Maryport.

In his Report for the year 1912, Dr. Stoney drew the attention of the Millom District Council to the fact that there was a possible source of contamination to their water supply from a farm on the gathering ground. In his last report he says : " I understand the Council have lately bought the farm from which the greatest part of our water supply is drawn. This will be of the greatest possible benefit, as now the only possible source of contamination will be in their own lands, and will no doubt in time be so arranged that all possibility of harm will be removed."

In some of the Rural districts, the matter of water supply is a very serious question, and I regret to have to report that no very marked progress has been made in any Rural district to remedy the conditions, for instance, in Alston, Dr. Carson again draws attention to defects in the supplies to Nenthall School, Leadgate, North Parkside and Nenthead.

In Bootle, although the greater part of the district is supplied by gravitation schemes, parts of the district are

very badly off, and Eskdale Green and part of Bootle Parish are again referred to as badly in want of water.

Several much needed improvements have been carried out in the Brampton district, but the village of Cumwhitton is again referred to as being badly in need of a satisfactory supply.

In the Carlisle Rural district a special Committee has been considering a proposed scheme to supply the whole district with water by gravitation.

As roughly only about one-half of the present population of this area is at present adequately supplied with water, it is to be hoped that some scheme will be carried out with as little delay as possible.

Some parts, particularly the more populous parts, of the Cockermouth Rural area are well supplied, either from Crummock Lake, from the Maryport scheme, or from Overwater, many other parts are supplied from springs or rivulets on the fells, but some districts, which are specified in Dr. McLeish's report, are badly in need of a water supply.

In the Longtown Rural district, no steps have yet been taken to remedy the inadequate supplies to many parts of the district.

Both the Penrith and Whitehaven Rural districts appear to be well supplied from public sources.

In the Wigton Rural district, nothing has been done to remedy the conditions so frequently reported on, and which are so well known to all members of this district council, as Dr. Briggs says :—" There remain many villages in the North-Western area of the district which are very badly in want of water, being dependent on shallow wells ; these form very unsatisfactory, and in many instances, dangerous sources of supply. The surface water from surrounding houses gains access to them, and cannot fail to cause serious pollution. Moreover, the subsoil water from which they largely drain is frequently polluted by neighbouring drains and cesspools. Many of these villages are on a gravel subsoil, and are low-lying, very little above sea-level, with the result that subsoil water is not far distant from the surface, and readily polluted.

The requirements of the districts in regard to water are well known to your Council, as is also the polluted character of the water derived from a large number of the wells; analysis having been conducted in many instances.

Nothing has been done by your Council during the present year to remove this menace to health. The *laissez faire* policy has been markedly the rule, and the needs of these villages, claimant and indisputable, ignored. True, a little vernal activity has of late appeared. May it in due course fructify."

The three Rural Districts which are most urgently in need of good water supplies are the Carlisle, Longtown and Wigton districts, and to this should be added part of the Holme Cultram Urban District, which is essentially rural in character, and which like the rural districts mentioned, is entirely dependent on wells for its water supply.

It is not necessary to point out the advantages of a good water supply, nor is it necessary to point out to the Councils of the districts concerned that their districts are badly in need of a supply. This has been done time and time again in monthly, quarterly and special, as well as in Annual Reports, but so far without practical result.

In the case of the Carlisle Rural District, the Council has appointed a Special Committee to enquire into a new gravitation scheme for the whole district, and I understand their deliberations have now reached the stage of making an application for a loan to carry out this scheme.

It is sincerely to be hoped that a satisfactory water supply for this district will soon be provided; it is urgently required. I am informed that in one village during the summer, water was being carted round, and sold for 1d. a bucketful, because all the wells had run dry. This village is within a few hundred yards of at least one water main of another authority.

With regard to Longtown Rural district, it would seem that the Bolton Fell district is rather farther off getting its water supply. After various discussions, and after taking the opinion of an expert engineer, I understand, the suggested scheme for supplying this part of the district has fallen through, but for what reason I am unable to say.

Rural District Councils do not seem to realise that they are the Sanitary Authority, and on them devolves the duty of seeing that the whole of their district is adequately supplied with good and wholesome water.

They seem to content themselves with a discussion of the matter from time to time, but do not come to any definite decision. The matter is then referred to the various Parish Councils for their opinion, who after more discussion either suggest another, and cheaper scheme, or resolve that their present supply is adequate on the ground that what was good enough for their forefathers is good enough for them, totally ignoring the fact, which has been pointed out to them, that they were, in many cases, drinking water which was only slightly filtered sewage.

I don't suppose any new water scheme has ever yet been instituted where there was before completion, no grumbling on account of the cost ; equally, after completion, and when the users had come to realise the benefits, one only hears the one opinion, whatever the cost has been : " it is worth it."

During 1912 and 1913, various districts in the County were visited by Dr. Farrar, of the Local Government Board, and delay in receipt of his Report has served as a further pretext for postponing any action.

As, however, his Report is now published, and in it he speaks with no uncertain voice, it may be well to lay before you what he says as regards the districts visited.

Speaking of the Wigton Rural District, after detailing several villages, which have a good supply, situated mostly in the valleys that intersect the high fells in the southern portion of the district, he goes on to say :—

" The northern portion of the district is flat, and slopes gradually downwards towards the Solway Firth. Practically all the villages in this portion of the district depends for their water on shallow wells sunk in the alluvial deposit, which are not only liable in greater or less degree to contamination by soakage, but many of them also, in dry summers, to insufficiency of supply.

" During the dry summer of 1913, the supply of water has been very short in this part of the district, particularly

in Bowness. Many houses are without any water supply save for rain water caught and stored in cisterns, and ordinarily have to borrow from their neighbours.

“ The lack of water is detrimental not only to domestic, but also to agricultural interests, as the sale of milk and dairy produce is an important industry in the district, and an adequate supply of water is essential for dairying purposes, and for cleansing of cowsheds.

“ For several years past the Medical Officer of Health, in his Annual Reports, has drawn the attention of his Council to the inadequacy and unsatisfactory character of the water supplies in many parts of the district, particularly in the northern portion.....

“ During my inspection of the district I visited most of the villages in this area, and in several of them, particularly in Kirkbride and Bowness, I noted wells which were obviously open to soakage contamination from the proximity of middens, privies or pigsties.....

“ As the result of the representations of their Medical Officer of Health, the District Council directed their Surveyor to prepare a scheme for a gravitation supply for the portions of the Rural district above referred to. This officer submitted a scheme, known as the ‘Overwater’ scheme, from the principal source of supply, for supplying by gravitation from the mains of the Aspatria, Silloth and District Joint Water Board the following parishes :—

Westnewton (hamlets of Howrigg and Crossrigg),

Langrigg and Mealrigg,

Bromfield,

Blencogo,

Dundraw,

Waverton (hamlet of Lesson Hall),

Oulton,

Aikton (hamlets of Laythes, Wampool and Whit-rigglees),

Kirkbride,

and Bowness (including the villages of Port Carlisle, Glasson, Drumburgh and Easton).

“ This scheme would supply with good water practically all the villages in the northern and western portions of the district which are at present without proper supply.

" The scheme was formally adopted at a meeting of the Council, held on December 12th, 1911, and was then submitted with detailed particulars to each parish Council concerned. It met with considerable opposition from the Parish Councils, chiefly, it would appear, on the ground of its cost, and at a subsequent meeting of the District Council, held on 16th April, 1912, the former resolution adopting the scheme was rescinded. (At this meeting of the Council 16 out of 31 representatives were present when the vote was taken; 11 voted for rescinding the resolution, 4 against and 1 councillor did not vote). The Chairman pointed out that the parishes must adopt some method of obtaining water, and that it would be open to any one to re-open the question after six months. When I visited the district in October and November, 1912, I found that the Overwater scheme was locally regarded as 'knocked on the head.'

" It does not fall within my province to advocate one scheme of water supply rather than another, but as it is indisputable that the parishes in question are in urgent need of water, which can only be furnished by means of a gravitation scheme, and as no alternative scheme has been seriously brought forward, it will be necessary to consider some of the objections which have led to the Overwater scheme being dropped. Objections has been chiefly urged against the Overwater scheme on the score of expense."

Dr. Farrar, in his report, has given details of the suggested expenditure, and then continues :—

" The cost of this scheme, indeed of any gravitation scheme, would, necessarily, be high, but having regard to the urgent need of water in this area, an expenditure of the order indicated in the Surveyor's estimates can hardly be called prohibitive or out of proportion to the benefit which this large area is likely to receive from it..... It is maintained by some of those who oppose a gravitation scheme that if the wells are cleaned out a public supply will not be necessary. This contention has little value. In a highly porous soil, the cleaning out of shallow wells, of which a large proportion are from their position, obviously open to contamination by soakage, can only be regarded as, at the best, a temporary expedient. Moreover, the supply from wells in this area is not only in most instances impure, but in dry summers, as has been said already, is often seriously deficient in amount.

"Another objection made is that Kirkbride Parish could separately obtain an independent water supply at a cheaper rate from the Silloth mains, and that the northern villages along the Solway Firth, Bowness, Port Carlisle, Glasson, Drumburgh and Easton, could be more cheaply supplied from the Carlisle City mains.

"On these suggestions in their financial aspect, I can express no opinion, neither must I be taken as an advocate for the Overwater scheme in its entirety, but I may point out that the district council have a duty to provide pure and sufficient water for the whole of their district, and that in the opinion of their Medical Officer of Health a public supply is urgently needed in all the parishes scheduled under the scheme."

Dr. Farrar then points out that it might be possible to include villages in other districts, which are badly in need of water, in one comprehensive scheme.

As it is evidently the intention at any rate of the Wigton and Longtown Rural district Councils to do nothing with regard to this, the most important of their duties, I would strongly urge upon your Committee, and through you, the County Council, the advisability of exercising all the powers you have under the Public Health Acts, to compel them to carry out their obvious and necessary duties without further delay.

ISOLATION HOSPITAL ACCOMMODATION.

(a) FOR ORDINARY INFECTIOUS DISEASES.

As I have previously stated, the hospital accommodation in the County is totally inadequate, and no additions have been made during the year.

The Urban districts of Aspatria, Cockermouth, Holme Cultram and Wigton, and the Rural districts of Alston, Brampton, Longtown and Wigton, have no accommodation whatever.

The Urban districts of Arlecdon and Frizington, Cleator Moor, Egremont and Harrington, and the Rural districts of Whitehaven, are all served by one hospital, containing about 20 beds.

The attention of the District Councils concerned has repeatedly been drawn (in the reports of the Medical Officer of Health) to the want of hospital accommodation, but no action has been taken.

(b) SMALLPOX HOSPITALS.

No extra accommodation has been provided during the year.

MIDWIVES' ACT.

Each midwife is visited at least once every three months, but several have had to be visited more frequently by Miss March, the County Midwives' Inspector, and she presents a Report of her work to me quarterly.

A very marked improvement in the cleanliness and efficiency of the midwives is now to be noted.

The number of midwives who notified their intention to practise during 1913 was 108, being a decrease of 3 on the number practising in the previous year.

Of the 108, 39 were *bona fide* midwives, having practised before the Act came into force, and 69 were certificated.

The number of births attended by certified midwives during 1913 was 2,446, equivalent to a fraction over 38 per cent. of the total registered births. Thus midwives have attended 3 per cent. more of the total births than in the previous year.

The number of intimations received by me of midwives sending for medical help was 33, the number of still-births reported in the practices of midwives 31. One notification of death was received, and in addition 25 notifications of having prepared or assisted to prepare a dead body for burial were received.

I have good reason to suppose that a large amount of unqualified practice still goes on, and I have written to many women whom I have heard of, warning them, but owing to the words in the Act: "habitually and for gain," it is exceedingly difficult to get sufficient evidence. The people attended by these unqualified women are very reluctant to "get them into trouble."

DRAINAGE AND SEWERAGE.

In the Urban districts the drainage and sewerage systems generally are described as satisfactory.

In Aspatria the new system is now nearly completed.

The great fault in Rural districts is the direct running of all drains into watercourses. Water supplies are bound to suffer, and there are many isolated cottages which get their only water supply from these streams.

The condemnation of the midden privy continues to be general, but the action following on the condemnation is not so vigorous as one would like to see.

It is no uncommon thing to see a large midden, which is only emptied once in six months or even once in twelve months, within a few yards of the back door of a cottage.

The conversion of these privies into good earth-closets is such a small matter as regards expense, that there does not seem to be any reason why it should not be universally adopted.

It is no exaggeration to say that the dry earth-closet is as great an advance on the ordinary midden privy as the water-closet is on the earth-closet, and for isolated houses and small villages the dry earth-closet is to be much preferred to the insanitary cesspool, with open sides, and which overflows freely over the surrounding ground, which one so commonly sees.

The dry earth-closet, when well constructed and properly managed, is a very satisfactory substitute for the water-closet. The mistake nearly always made is to have the receptacle too large, and in consequence difficult to remove and empty, and as a result not emptied often enough. The disposal of the contents of these pails is not a difficult matter if proper methods are employed.

As a rule a hole is dug a foot or two deep, into which the pails are emptied, and then the hole is filled up. If this is again dug up at the end of several weeks, or even several months, it is found in pretty much the same condition as when buried, but if the contents of the pails are only covered with a light layer of soil an inch or two deep, after three or four

days it is impossible to distinguish between the contents of the pail and the earth.

I do not wish it to be supposed, however, that I am advocating the dry closet in preference to the water-closet. The former is only recommended when it is impossible to make satisfactory arrangements for the latter.

Scavenging and the removal and disposal of house refuse has now, in the light of our increased knowledge of the part that flies play in the spread of disease, assumed an important place in sanitation.

It would appear that the City of Carlisle is the only district in the County in which refuse is disposed of by burning in a destructor, and even here only part of the refuse is so disposed of.

In the Borough of Whitehaven the refuse is collected two or three times a week, and is taken out to sea in hoppers.

In the Urban district of Maryport house refuse is collected daily in covered carts, and is carted to the shore, and deposited below high-water mark to be washed away by the incoming tide.

With these three exceptions all the other districts get rid of their refuse at tips, generally situated some distance away.

The nuisance and danger to health arising from these tips is serious enough when composed only of house refuse, but when in addition to this the contents of many midden privies is added, the seriousness of the danger cannot be overstated.

MILK SUPPLY.

A large amount of milk produced in this County is sent into the City of Newcastle-on-Tyne.

It is much to be regretted that the Milk and Dairies Bill has not yet become law. Its provisions would go far towards securing a purer and better milk supply.

A summary of the reports on the Dairies, Cowsheds, and Milkshops is given in the second part of this report.

SLAUGHTER HOUSES.

In the district reports these premises are as a rule commented on favourably. Attention, however, is again drawn to the difficulty of adequate supervision over the meat supply, owing to the impossibility of inspection, and several of the Medical Officers of Health advocate the erection of a public abattoir.

HOUSING.

The following is a short resumé of the housing conditions prevalent in the County, and the work done by the various responsible authorities.

In some districts it is evidently the intention of the Councils to do nothing to remedy the disgraceful conditions in which many people are compelled to live. As the subject of housing is one of such great importance, not only to local health, but to national welfare, it is evident that the County Council will have to exercise all the powers conferred on them by the various Housing Acts, in order to stimulate into activity those who are reluctant, for one reason or another, to carry out the obligations imposed on them.

In Workington the Medical Officer states that "there is no insufficiency of houses..... In connection with the whole subject of housing steady work is being accomplished, and it is necessary."

In the Borough of Whitehaven it is gratifying to know that the Council has now decided that a housing scheme is necessary, and that some progress has been made.

A site, the area of which is a little over six acres has been purchased for the purpose of building houses for the working classes.

Although a considerable amount of work has been done in the Borough under the Housing (Inspection of District) Regulations, it is evident, as Dr. Fisher says: "That some thing more than this requires to be done," and continues:—"The course is one that I think must commend itself to anyone who knows the circumstances of the town. To pick out a house or two here and there, and close and demolish it, would produce a maximum of inconvenience, and a minimum of improvement. An area was, therefore, selected, which was

one of the very worst for narrow, unhealthy courts, and for overcrowding of houses on area. The Borough Surveyor and myself made a thorough and minute inspection of every house and tenement in the courts in this area. The Surveyor prepared a plan showing every house and tenement that would have to be either demolished or re-constructed.

The re-construction in many cases meant that where a house originally fit for habitation had been divided into two and sometimes three tenements that were absolutely unfit, the former condition must be restored.

In all cases the plan showed exactly what required to be done in order that when it was completed every house would be reasonably fit for human habitation. It would not produce a garden city, it might not be a thing of beauty, but every house in the area would have either through ventilation or cross-ventilation, no house would be so hemmed in that it was deprived altogether of fresh air and sunlight, as so many are at present, and there would be no chance for many years to come of any further demands being made on the owners of the property to make further improvements or alterations. The carrying out of this plan required the provision of some eighty houses in substitution for those that would be either demolished or lost as separate dwellings, where two or three tenements became one house.

A suitable site for these houses was selected, and has received the sanction of the Local Government Board. It now remains to proceed with the building of the houses as expeditiously as may be, and as soon as they are ready for occupation, to deal with the houses in the area planned out.

No formal notices or representations as to the making of Closing Orders under the Housing, Town Planning, &c., Act, have been made during the year, as these could serve no useful purpose in the meantime. As soon as provision is made for the people who have to leave, the plan can be proceeded with, and a much needed improvement effected."

I take this opportunity to acknowledge to Mr. Stiven, the Borough Surveyor, my indebtedness for allowing me to see the excellent and comprehensive plans which he has drawn, not only of the proposed new houses, but also of the alterations to the present crowded area to be first dealt with.

If these alterations and improvements as suggested are carried out, it will go a long way to, if it does not entirely remove, the overcrowding of houses on area, and the bad housing conditions which at the present time exist in that area.

It is to be hoped, however, that the Borough Council will not rest satisfied when they have dealt with this area, but will at once proceed to deal with various other parts of the Borough in a similar manner.

In the Arlecdon and Frizington Urban District, 113 houses have been inspected, but no table is given in the Annual Report showing how many of these houses were defective. Evidently little in the way of improvement has been accomplished, for Dr. Clark in his Report says :—" I am not satisfied with the way in which our notices have been responded to ; no doubt a considerable number of our recommendations have been carried out, but a much larger number have been ignored," and he continues, " on no less than three occasions Mr. Ashbridge and myself have visited and reported on a series of houses, and even to-day nothing has been done."

Again, later in the same Report, Dr. Clark says :—" The tuberculosis death-rate is too high, and very probably the insanitary condition of many of our houses is largely to blame for it, and no doubt one of our most urgent duties is to remedy as soon as possible this pressing defect."

In Aspatria there has been for some time a pressing need for more houses, and now 20 new houses are being erected by the Council, but in the opinion of Dr. Briggs this number will not be nearly sufficient, and he expresses the hope that when the 20 are finished they will be followed by more, and goes on to say :—" No doubt the difficulties of providing healthy houses, especially for the artisan and working classes, are very great, but earnest efforts are now being made in many directions, and with the intelligent co-operation of the people themselves, we can hopefully look forward to a gradual abatement of preventable suffering, and a progressive development of the natural physique, and of every influence which tends to improve the public health, and promote human happiness."

In Cleator Moor the housing question is a very serious and urgent one, there are many back-to-back houses, over-

crowding exists to a marked extent, and crowding of houses on area exists to an extraordinary extent in some parts of the town ; on this point Dr. Clark says :—" But we have not only excess of inhabitants per house, we have also in some places overcrowding of houses in a given area. If you take the block of houses situated between Birks Road and Aldby Street, you will find that we have 102 houses situated on two acres of land, which is more than double the amount permissible."

In May, 1910, I made enquiry into the housing conditions in Cleator Moor, and reported to your Committee in the following July. A special Report, dated 25th July, 1910, on housing was issued by the Medical Officer of the district, and other special Reports have been submitted to the District Council from time to time by him.

Reference has also been made in each Annual Report of Dr. Clark to the unsatisfactory housing conditions, and in his latest Report he says :—

" Our average of 5.1 inhabitants per house is too high for the general class of houses in the district, and should not exceed 4 or 4.5 at the most, and the only way to meet the difficulty is to exercise your powers under Part III. of the Housing of the Working Classes Act, 1890, as amended by the Housing, Town Planning Act, 1909. I understand that such a scheme is having your consideration, and in my opinion the erection of a number of good-class workmen's houses is the only remedy that can relieve our present congestion, as we cannot turn people out of bad houses if there are no better ones available for them."

Considerable discussion has taken place from time to time on the matter, but so far no steps have been taken to remedy the conditions.

During the year, as an outcome of the inspection of houses, under the Regulations, representations were made in 63 cases that houses were so dangerous or injurious to health as to be unfit for human habitation. but no Closing Orders were made by the Local Authority in any of these cases.

The Inspector reports that he inspected 1,516 houses during the year, but that the defects in only 30 of them were remedied without the making of a Closing Order, and we can

only conclude that the defects in the remainder are still unremedied. On this point Dr. Clark says:—"I also feel it my duty to remark that although our official acting under the Housing and Town Planning Act reports having inspected 1,516 houses, I am of opinion that these inspections (at least many of them) would not meet the requirements of the said Act, and I would advise the Council to make an enquiry into this matter."

In Cockermouth no work has been done under the Housing (Inspection of District) Regulations during the year, but I have no doubt that this much-needed work will now soon be taken in hand.

In the Egremont Urban District there is still a great scarcity of houses, and much overcrowding exists, but Dr. Braithwaite's report does not contain any information under the Housing Regulations.

I understand the erection of some workmen's dwellings is under the consideration of this Council,

In the Harrington Urban District 49 out of the 51 houses inspected have been put into order, and there seems to be some prospect of the Colliery Company building houses for their workmen.

In Maryport, of the 379 houses inspected 74 of them are back-to-back houses, and have no through circulation of air. 18 representations were made to the District Council that houses were in such a state as to be unfit for human habitation, but no Closing Orders were made.

In the Wigton Urban District the accommodation for the artisan class is described as being for the most part sufficient and satisfactory." This statement I am afraid I cannot agree with. In my last Annual Report, I gave full details of my enquiry into the conditions in Wigton, and nothing has yet been done to remedy the conditions then mentioned.

As an excuse for this delay, it has been said that the report of Dr. Farrar, of the Local Government Board, had not been received, as, however, it has now been issued, there can be no possible excuse, especially as in the report Dr. Farrar speaks so emphatically of the conditions found.

"Wigton was formerly a hand-loom weaving town, and in those days the weaving sheds were excavated about two feet below the ground level, in order to obtain the degree of Moisture requisite for weaving ; the sheds were crowded into narrow yards between the houses. Since the hand-loom weaving has become obsolete, many of the old weaving sheds have been occupied as dwellings. They are let at a low rent, in some cases not more than 1 - a week, but they are obviously not suited for dwellings, being damp, ill-lighted, ill-ventilated, of flimsy structure, and grossly over-crowded on area. The prevalence of casual labour, and the deficiency of well-paid regular occupations for men have discouraged building, and fostered the demand for houses of low rental ; the deplorable tendency to buy up old house property at low prices for speculative profit has created a vested interest in slums ; while the inertia of the District Council has perpetuated conditions which seem by no means creditable to that body. In few towns in England, within my experience, are the housing conditions so wretched as in the central parts of Wigton."

It is true that many minor improvements have been carried out in many of the houses, but in my opinion it is simply a waste of money to try to patch up houses of such a nature. Nothing short of improvement schemes under Part I., and reconstruction schemes under Part II. of the Housing of the Working Classes Act of 1890 will make any appreciable difference.

In the Alston Rural District I believe the advisability of the Council building houses has been under consideration, but owing to uncertainty as to the mining in the district, it was not considered advisable to enter upon any scheme.

In the Bootle Rural District a good deal of work has been done in the way of improving houses, more especially replacing the old fixed windows by modern sash ones.

In the Brampton district, the housing conditions are described as fairly good, and a fair amount has been done in remedying defects found on inspection, but Dr. Symington remarks :—" As many houses are of old construction, with no courses, it is often found that by removal of soil above floor level, and draining the surroundings, the remedy is only partial, and a certain amount of dampness remains.

Considerable activity has been shown in the Carlisle

Rural District, in the matter of housing, several houses have been closed as unfit for habitation, and many cottages have been much improved, and Dr. Macdonald makes the encouraging observation that :—" There are also indications on the part of landowners to erect cottages on their properties for farm servants who are married."

Up to the present year nothing has been done in the Cockermouth Rural District to improve the housing conditions. It is true a certain number of houses have been inspected, but no action was taken, and as Dr. McLeish says this work will all have to be done again because housing inspection records are useless unless acted upon within a short period of the inspection.

In the Longtown Rural District there has been a considerable amount of work done in the way of inspection, and notices being sent out, but in a great many instances nothing further has been done.

In the town of Longtown itself are several houses which are totally unfit for human habitation, and which should be closed.

Steady progress is being made in the Penrith Rural, as well as the Whitehaven Rural Districts.

In the Wigton Rural Districts there does not appear to be much shortage of houses. The improvements and alterations of houses suggested as an outcome of the inspections, do not appear to be carried out as quickly as one would wish to see.

The following table gives the number of houses erected in the Administrative County during 1913, together with a summary of work done under the Housing (Inspection of District) Regulations, 1910 :—

	Number of new houses erected.	Number of dwellings inspected.	Number of dwellings unfit for habitation.	Number of representations made.	Number of closing orders made.	Number of dwellings in which the defects were remedied without making of closing orders.	Number of dwellings made habitable after closing orders.
Carlisle ..	18 ..	674 ..	103 ..	58 ..	58 ..	— ..	—
Workington ..	— ..	112 ..	5 ..	5 ..	5 ..	— ..	—
Whitehaven ..	32 ..	479 ..	— ..	— ..	— ..	— ..	3
Arlecdon and Frizington ..	2 ..	113 ..	Information not given.				
Aspatria ..	2 ..	152 ..	1 ..	1 ..	— ..	23 ..	—
Cleator Moor ..	— ..	1516 ..	63 ..	63 ..	— ..	30 ..	—
Cockermouth ..	— ..	No returns.					
Egremont ..	— ..	No information given.					
Harrington ..	— ..	51 ..	13 ..	— ..	— ..	49 ..	—
Holme Cultram ..	— ..	37 ..	1 ..	1 ..	1 ..	36 ..	—
Keswick ..	— ..	95 ..	10 ..	10 ..	10 ..	32 ..	—
Maryport ..	— ..	379 ..	— ..	18 ..	— ..	— ..	—
Millom ..	No information given.						—
Penrith ..	— ..	399 ..	3 ..	3 ..	3 ..	133 ..	2
Wigton ..	— ..	50 ..	1 ..	— ..	— ..	40 ..	—
Alston ..	4 ..	52 ..	5 ..	3 ..	2 ..	1 ..	—
Bootle ..	— ..	36 ..	19 ..	1 ..	1 ..	19 ..	1
Brampton ..	— ..	78 ..	2 ..	— ..	— ..	11 ..	—
Carlisle ..	15 ..	171 ..	4 ..	4 ..	4 ..	— ..	2
Cockermouth ..	— ..	354 ..	22 ..	22 ..	22 ..	— ..	1
Longtown ..	— ..	111 ..	Information not given.				
Penrith ..	— ..	660 ..	2 ..	2 ..	2 ..	301 ..	—
Whitehaven ..	— ..	576 ..	— ..	— ..	— ..	— ..	—
Wigton ..	— ..	219 ..	— ..	— ..	— ..	129 ..	—

FACTORIES AND WORKSHOPS.

These appear to have been regularly inspected in all the districts.

In some cases the statistical tables issued by the Secretary of State for inclusion in the Annual Reports are not included in the Reports.

SALE OF FOOD AND DRUGS ACTS.

These Acts are carried out by the Police, the following Report being given by the County Analyst :—

40 LOWTHER STREET, WHITEHAVEN,

6th January, 1914.

GENTLEMEN,

During the year 1913, your Food Inspectors have submitted to me for analysis under these Acts 301 samples. I found 22 of these to be adulterated, that is 7.3 per cent., and is a slight improvement on the previous year, when the total adulteration was 7.9 per cent.

The articles adulterated were milk, spirit and vinegar.

Milk.—172 samples of milk were analysed, and of these 20 were found to be below the standard fixed by the Board of Agriculture for genuine milk. The percentage of abnormal samples is, therefore, 11.6, and is slightly worse than in 1912, when it was 10.8. In 12 of the samples which fell below the Board of Agriculture's standard, the deficiency was either small or was shown by the "appeal to the cow" to be due to natural causes, and no legal proceedings were taken.

In addition to the above-mentioned 172 samples, 8 samples of milk were analysed, which had been taken as "appeals to the cow." The total number of samples of milk submitted for analysis during 1913 was, therefore, 180.

The average composition of these 180 samples was :—

Milk-fat	3.52
Non-fatty Solids	8.88
Water	87.60
	<hr/>
	100.00

The average for each Quarter of 1913, is :—

	<i>Jan. to Mar.</i> 40 samples.	<i>April to June</i> 46 samples.	<i>July to Sept.</i> 49 samples.	<i>Oct. to Dec.</i> 45 samples.
Milk-fat ..	3.42	3.40	3.60	3.70
Non-fatty Solids ..	9.01	8.90	8.70	8.90
Water ..	87.57	87.70	87.70	87.40
	<hr/>	<hr/>	<hr/>	<hr/>
	100.00	100.00	100.00	100.00

A milk seller was prosecuted under Section 17 of the Act of 1875 for refusing to sell a sample to the Food Inspector, and was ordered to pay the costs, which amounted to £2 16s. 0d.

Spirits.—Twenty-one samples of spirits were submitted for analysis during the year. One was found to be diluted 13 degrees below the legal limit, and the vendor was fined £6 4s.

Vinegar.—Four samples were analysed, and one was found somewhat weak in acetic acid—the vendor was cautioned.

I append a list of all the articles analysed during the year under the Sale of Food and Drugs Acts.

I am, Gentlemen,

Your obedient Servant,

ROBERT HELLON, Ph.D., F.I.C.,
County Analyst.

ARTICLES.

Examined under the Sale of Food and Drugs Acts during the year 1913.

Milk	..	..	..	..	..	..	172	samples
Spirits	..	..	..	..	..	..	21	"
Butter	..	..	..	..	..	..	12	"
Pepper	..	..	..	..	..	..	12	"
Sugar	..	..	..	..	..	..	11	"
Coffee	..	..	..	..	..	..	10	"
Lard	..	..	..	..	..	..	8	"
Confectionery and Jam	..	..	..	..	..	..	7	"
Cheese	..	..	..	..	..	..	7	"
Bread	..	..	..	..	..	..	6	"
Tea	..	..	..	..	..	..	5	"
Tapioca	..	..	..	..	..	..	5	"
Vinegar	..	..	..	..	..	..	4	"
Flour	..	..	..	..	..	..	3	"
Oatmeal	..	..	..	..	..	..	3	"
Cocoa	..	..	..	..	..	..	2	"
Sago	..	..	..	..	..	..	2	"
Ground Rice	..	..	..	..	..	..	2	"
Cornflour	..	..	..	..	..	..	2	"
Baking Powder	..	..	..	..	..	..	2	"
Preserved Cream	..	..	..	..	..	..	2	"
Rice	..	..	..	..	..	..	1	sample
Cream of Tartar	..	..	..	..	..	..	1	"
Semolina	..	..	..	..	..	..	1	"

CITY OF CARLISLE.

J. BEARD, F.R.C.S., EDIN., D.P.H., &c.,

MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>				<i>Infectious Diseases Cases (and Deaths)</i>			
		1913.	1912.			1913.	1912.
Population .. ..	..	52,497	46,420	Total notifications ..	..	718	639
Birth-rate .. ..	..	22.1	24.6	Smallpox .. ..	..	Nil.	Nil.
Death-rate .. ..	..	14.6	16.6	Scarlet Fever .. ..	..	159	110
Zymotic death-rate ..	..	0.9	1.7	Diphtheria .. ..	..	52	47
Phthisis death-rate ..	..	1.3	1.5	Fevers (Enteric, &c.) ..	..	5	12
Total Tuberculosis				Puerperal Fever .. ..	..	1	7
death-rate .. ..	..	1.8	1.6	Pulmonary Tubercu-			
Respiratory diseases				losis .. ..	..	351	385
death-rate .. ..	..	1.8	2.6	Cases treated in hospital	..	177	150
Infant Mortality rate				Measles .. ..	..	(3)	(39)
per 1,000 births ..	..	127	102	Whooping Cough ..	..	(7)	(18)
				Diarrhœa .. ..	..	(30)	(14)

WATER SUPPLY—

Samples were taken regularly from a domestic tap, and submitted to chemical and bacteriological examination. The quality of the water has been uniformly good.

The report of Dr. Beard contains the results of both chemical and bacteriological examinations, which show that the water is of a high standard of purity.

The average supply during the year was 32.53 gallons per head of population per day.

OFFENSIVE TRADES—

The premises where these are carried on have received attention. All were conducted satisfactorily.

SCHOOLS—

Only one school was closed during the year owing to infectious disease, viz., Whooping Cough.

FOOD—(a) MILK SUPPLY—

Most of the milk supply is that from byers within the City. There are 59 byers, accommodating about 440 cows.

The cows are under the supervision of the Veterinary Inspector, and the dairy buildings and places from which milk is sold are regularly inspected by the staff of the Health Department.

Samples of milk have been purchased and tested for the presence or absence of tubercle bacilli, all the reports were negative.

Stringent precautions are taken to safeguard the milk supply.

(b) OTHER FOODS—

22,931 animals were slaughtered at the public abattoir.

82 carcasses were specially examined, 64 were condemned as unfit for food, portions of 18 were pronounced unfit for human food, and 44 oxen were found affected with tuberculosis.

46 bakehouses, 4 of which are underground, have been carefully supervised.

SALE OF FOOD AND DRUGS ACT—

147 samples were taken for analysis, 131 were found to be genuine, and 16 adulterated.

HOUSING—

The type of house predominating is the modern through ventilated house, but there are back-to-back houses in the older parts of the city.

674 houses were inspected, 58 of these, comprising 103 dwellings, were of the tenement type, and were considered to be in a state so dangerous to health as to be unfit for human habitation.

FACTORIES, WORKSHOPS AND WORKPLACES—

232. All have been inspected.

ACUTE INFECTIOUS DISEASES.

The number of cases notified was 271, an increase of 17 on the previous year.

177 cases were removed to the isolation hospital, where there is ample accommodation.

TUBERCULOSIS—

546 cases notified.

WORKINGTON (BOROUGH).

CHARLES S. THOMSON, M.D., D.P.H.,

MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>				<i>Infectious Diseases Cases (and Deaths)</i>			
		1913.	1912.		1913.	1912.	
Population	25,600	25,110	Total notifications ..	140	232		
Birth-rate	25.5	25.5	Smallpox	Nil.	Nil.		
Death-rate	13.08	16.1	Scarlet Fever	32	100		
Zymotic death-rate ..	0.77	2.5	Diphtheria	25	16		
Phthisis death-rate ..	0.7	1.1	Fevers (Enteric, &c.) ..	9	4		
Total Tuberculosis			Puerperal Fever	Nil.	1		
death-rate	1.2	2.3	Pulmonary Tubercu-				
Respiratory diseases			losis	37	75		
death-rate	2.2	2.4	Cases treated in Hospital	44	80		
Infant mortality rate			Measles	(1)	(43)		
per 1,000 births ..	126	140	Whooping Cough ..	(Nil.)	(9)		
			Diarrhoea	(11)	(9)		

WATER SUPPLY—

Is derived from Crummock Lake, 16 miles distant. The whole town is supplied from this source, with the exception of 26 cottages in Flimby Place, which are supplied from the river Derwent, after the water has filtered through some gravel into a well.

Dr. Thomson is not satisfied that this river water is a satisfactory supply.

With this exception the water supply is abundant and pure.

SEWERAGE—

Sewerage is conveyed to the sea by six main outlets.

Some six years ago attention was drawn to the fact that the sewerage system should be thoroughly overhauled. Six sections of the sewers have up to the present received attention.

Dr. Thomson draws attention to occasional flooding in part of the area served by the sewer discharging at St. John's Pier, owing to the sea rising considerably above the outlet.

SCAVENGING—

Dr. Thomson again draws attention to the unsatisfactory receptacles in which refuse is placed, and advocates galvanised iron pails with lids. He also advocates covers for the dust carts.

Attention is also drawn to the difficulty of satisfactory scavenging of cobble-paved back streets, and the substitution of 4 inch granite cubes, jointed with cement, is advocated. Ashbins are emptied by Corporation workmen daily. All the refuse is carted to the Cloffocks, a large railed-in space within the Borough.

HOUSING—

Dwellings inspected (112) considered unfit for human habitation (5), closing orders made (5), dwellings improved without closing orders (5).

No new houses for the working classes have been built. There is a sufficiency of houses, a fair number of empty houses being still available.

Further action is to be taken with respect to 102 houses in the northside, but nothing can be done with them until the sewers are laid.

NUISANCES—

The number of nuisances discovered and dealt with was 570, and in respect of these 280 informal and 36 statutory notices were served. Amongst the nuisances abated were the following :—In connection with water closets, 140 ; defective and choked gullies, 130 ; keeping of poultry, 18 ; accumulation of ashes and unclean backyards, 97 ; overcrowding, 7.

COMMON LODGING HOUSES (6)—

Strict supervision is kept over these, because, as Dr. Thomson says :—" I consider that migratory people are of the class amongst which diseases such as Smallpox have been found."

DAIRIES, COWSHEDS AND MILKSHOPS—

There are 20 registered cowkeepers, 6 purveyors of milk, and 15 vendors of milk over counters. All the byres have been visited, and Dr. Thomson finds " that there are many conditions which must be changed before these can be pronounced satisfactory." A beginning has been made at two farms where unsatisfactory conditions were found, and notices have been served.

No action has been taken to discover tuberculous milk. No complaints have been received as to the wholesomeness of the milk.

SLAUGHTER HOUSES—

One public one in Harrington Road, and one private one in Elizabeth Street. In the former 10,022, and in the latter 979 animals have been slaughtered.

None of the recommendations made by the Medical Officer last year have been carried out. Suggestions are made for improving the walls, and for cleansing the yards.

Four carcasses of beef were surrendered or condemned, as well as two pigs.

OFFENSIVE TRADES—

No complaint in connection with these has been made.

FACTORIES AND WORKSHOPS—

220 inspections have been made, and 12 notices served.

The defects found were :—want of cleanliness 18, want of ventilation 6, unsatisfactory floors 2.

WHITEHAVEN (BOROUGH).

J. B. FISHER, M.D., D.P.H., MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics,</i>			<i>Infectious Diseases Cases (and Deaths)</i>		
	1913.	1912.		1913.	1912.
Population	19,200	19,100	Total notification ..	141	82
Birth-rate	28.5	29.6	Smallpox	Nil.	Nil.
Death-rate	16.8	16.4	Scarlet Fever ..	16	23
Zymotic death-rate ..	1.3	1.0	Diphtheria	1	2
Phthisis death-rate ..	1.3	0.8	Fevers (Enteric, &c.)	12	3
Total Tuberculosis			Puerperal Fever ..	Nil.	2
death-rate.. ..	2.1	1.4	Pulmonary Tubercu-		
Respiratory diseases			losis	63	40
death-rate.. ..	3.1	3.8	Cases treated in Hospital	25	23
Infant mortality rate			Measles	(10)	(12)
per 1,000 births ..	127	118	Whooping Cough ..	(Nil.)	(2)
			Diarrhœa	(14)	(4)

No mention is made in this report of the water supply, sewerage, scavenging and offensive trades.

HOUSING—

32 new houses, mostly of the better class of dwellings for working men, have been certified as fit for occupation during the year.

479 houses have been inspected, 217 notices served to remedy defects found, 90 notices have been complied with, and 3 houses have been put in order after the making of a closing order.

The defects found include the following :—In connection with closet accommodation 130, defects of drainage 66, defects of lighting and ventilation 374, dampness 31.

NUISANCES—

196 informal notices were served, and 194 complied with ; 23 statutory notices were served, and 21 complied with.

COMMON LODGING HOUSES (4)—

Have been inspected regularly, and found satisfactory.

DAIRIES, COWSHEDS, AND MILK-SHOPS—

12 owners of dairy cattle supplying milk chiefly from carts. The cows are regularly inspected by a veterinary surgeon.

The cowsheds have been found in a generally satisfactory condition.

SLAUGHTER HOUSES (11)—

10 are private and 1 consisting of 12 separate stalls let to different butchers.

All are regularly visited by the Sanitary Inspector, but Dr. Fisher points out that it is impossible for him to visit them all at the time of killing, situated as they are in different parts of the town.

Five whole carcasses of beef, and portions of three others, were condemned as unfit for food.

FACTORIES AND WORKSHOPS—

117 inspections have been made, and 2 written notices served.

Seven defects were found and remedied.

Complaint is again made that lists of outworkers are not gularly sent in.

ARLECDON AND FRIZINGTON.

JOHN CLARK, M.D., F.R.C.S., Ed.,

MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>				<i>Infectious Diseases Cases (and Deaths).</i>			
		1913.	1912.			1913.	1912.
Population		5,180	5,180	Total notifications ..		49	40
Birth-rate		27.4	27.02	Smallpox		Nil.	Nil.
Death-rate		13.3	18.3	Scarlet Fever		18	17
Zymotic death-rate ..		0.7	1.9	Diphtheria		7	3
Phthisis death-rate ..		1.5	1.3	Fevers (Enteric, &c.) ..		2	Nil.
Total Tuberculosis				Puerperal Fever		Nil.	Nil.
death-rate.. ..		1.7	1.5	Pulmonary Tubercu-			
Respiratory diseases				losis		7	16
death-rate.. ..		1.9	3.0	Cases treated in Hospital		4	3
Infant mortality rate				Measles		(Nil.)	(8)
per 1,000 births ..		91	171	Whooping Cough		(Nil.)	(Nil.)
				Diarrhoea		(3)	(1)

WATER SUPPLY—

Is a constant one from springs in Cogra Valley. Is abundant in quantity, and wholesome in quality, and "well adapted generally for domestic purposes."

SEWERAGE—

Is stated to be satisfactory. The method of disposal is by means of settling tanks and broad irrigation, about 50 acres of land being used for the purpose.

SCAVENGING—

Is carried out by the District Council. Refuse is carted to tips some distance from the town.

HOUSING—

From the Sanitary Inspectors report it would appear that 113 inspections of property have been made, and in his report on work under the Housing, Town Planning, &c., Act, Dr. Clark says :—" I am not satisfied with the way in which our notices have been responded to ; no doubt a considerable number of our recommendations have been carried out, but a much larger number have been ignored, and on no less than three occasions Mr. Ashbridge and myself have visited and reported on a series of houses, and even to-day nothing has been done. Although I hear the work is to be commenced soon—seeing would be preferable to hearing."

NUISANCES—

41 notices have been served to abate nuisances, but the Sanitary Inspector does not state how many of these notices were complied with.

COMMON LODGING HOUSES—

None in the district.

DAIRIES, COWSHEDS, AND MILK-SHOPS—

38 visits have been paid to these, and a Special Report on them submitted.

Most of the cowsheds and dairies are well kept, and are fairly satisfactory. There are, however, a few where light and ventilation, and in one case drainage, are deficient.

The milk supply of the district is good.

There are no milk-shops.

SLAUGHTER HOUSES—

A Special Report on the Slaughter Houses was submitted.

Dr. Clark remarks :—" The slaughter houses in our district are all situated too near dwelling houses. As a rule the lighting and ventilation are moderately good, and in all cases the floors slope to gullies placed outside. They are generally clean, well kept, and well lime washed."

One is mentioned as being " too small for the work carried on, and ought to be made bigger, and better lighted and ventilated, the same remarks apply to the lairs."

Another, situated in Mawbray, "is situated far too near a cowshed, and although there is no direct communication between the two, the buildings are old, and the walls unsatisfactory, which conditions are not to be desired."

OFFENSIVE TRADES—

None in the district.

FACTORIES AND WORKSHOPS—

61 visits to these have been paid, but no defects found.

ASPATRIA.

W. PERRY BRIGGS, L.R.C.P., &c.

MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>				<i>Infectious Diseases Cases (and deaths)</i>			
		1913.	1912.			1913.	1912.
Population		3,420	3,410	Total notifications ..		38	130
Birth-rate		26.0	23.4	Smallpox		Nil.	Nil.
Death-rate		13.7	11.4	Scarlet Fever		28	115
Zymotic death-rate ..		0.2	0.5	Diphtheria		1	1
Phthisis death-rate ..		1.4	0.5	Fevers (Enteric, &c.)		Nil.	Nil.
Total Tuberculosis				Puerperal Fever ..		Nil.	Nil.
death-rate		2.0	0.8	Pulmonary Tuberculosis		5	11
Respiratory diseases				Cases treated in Hospital			
death-rate		1.6	0.5	.. .. (no hospital)			
Infant mortality rate				Measles		(1)	(Nil.)
per 1,000 births ..		89	75	Whooping Cough ..		(Nil.)	(Nil.)
				Diarrhœa		(Nil.)	(1)

WATER SUPPLY—

Is obtained from Overwater, is excellent in quality, and abundant. Almost every house is connected with it.

SEWERAGE—

Dr. Briggs remarks :—"We are nearing the completion of a modern sewage system, which has been a very pressing need in the district for many years. It will become an incalculable benefit to the wholesomeness of the town and the public health.

SCAVENGING—

Domestic refuse is collected twice a week during the day, and is conveyed to tips outside.

Pail closets are now almost universal, and are emptied twice weekly late at night or in the early morning. This is done by a contractor, and the contents conveyed to tips.

HOUSING—

Housing generally is good, but there is a great scarcity of houses.

There is considerable overcrowding, especially in the older houses ; many of these houses have been improved under the Housing Acts.

The Council has decided to build 20 houses, and plans have been approved by the Local Government Board.

152 inspections have been made, and 28 houses were found defective, chiefly by insufficient ventilation.

One house, condemned as unfit for human habitation is still occupied.

NUISANCES—

Not mentioned in the report.

COMMON LODGING HOUSES—

None.

DAIRIES, COWSHEDS, AND MILK-SHOPS—

Five registered dairies supply almost the whole district. Dr. Briggs reports as follows :—" The cowsheds, upon which I have reported in detail, are still most undesirable structures for the housing of cattle if they are to remain healthy. Lighting defects, inefficient ventilation and air space, are common to most. The drainage is bad, and the floors so constructed and of such material that they become saturated with filth. These have been leniently dealt with in the past, but when the drainage scheme is completed drastic steps must be taken to bring about a better state of things, and one which will act as a safeguard to the healthiness of the cattle from which we derive our milk supply."

SLAUGHTER HOUSES—

(5). All have been visited as frequently as possible. All are kept clean, and the regulations and bye-laws well observed. Two carcasses were condemned during the year.

OFFENSIVE TRADES—

None.

FABRICATORIES AND WORKSHOPS—

(30). All have been visited, and there is no complaint about any, except in the matter of drainage of some, which Dr. Briggs says will be remedied when the sewerage system is complete.

CLEATOR MOOR.

JOHN CLARK, M.D., F.R.C.S., ED.,
MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>			<i>Infectious Diseases Cases (and deaths).</i>		
	1913.	1912.		1913.	1912.
Population	8,300	8,300	Total notifications ..	61	50
Birth-rate	29.5	31.4	Smallpox	Nil.	Nil.
Death-rate	14.5	17.3	Scarlet Fever	4	7
Zymotic death-rate ..	0.8	3.3	Diphtheria	Nil.	6
Phthisis death-rate ..	1.2	1.0	Fevers (Enteric, &c.) ..	1	1
Total Tuberculosis			Puerperal Fever	1	1
death-rate.. ..	1.8	1.3	Pulmonary Tubercu-		
Respiratory diseases			losis	25	30
death-rate.. ..	1.8	3.0	Cases treated in Hospital	1	3
Infant mortality rate			Measles	4	16
per 1,000 births ..	138	144	Whooping Cough ..	(1)	(9)
			Diarrhoea	(2)	(1)

WATER SUPPLY—

The supply of the district is derived from springs, and a collecting area among the Cumberland Fells, from districts practically uninhabited, and largely uncultivated, and at a higher level than any inhabited house from which any contamination can take place. The water is of good quality, and abundant.

SEWERAGE—

The drainage and sewerage is stated to be satisfactory. The system for disposal being by means of settling tanks, and treatment with lime.

SCAVENGING—

House refuse is daily removed by the Council's carts, and carted to suitable tips at a distance. No ashpits, and no cesspools, in the district.

HOUSING—

A detailed report on house-to-house inspection is given by the Sanitary Inspector, and in referring to this Dr. Clark says:—"I feel sure that you will agree that our houses merit a considerable amount of attention, and that things are not well with us in this respect."

Two years ago Dr. Clark "condemned all back-to-back houses as such, and made recommendations by which those houses might be made 'reasonably fit for human habitation.'"

It would appear, however, that very little has been done, and that the greater part of these houses are as they were when reported on two years ago.

There is considerable overcrowding of houses, as well as crowding of houses on area.

NUISANCES—

165 nuisances have been dealt with and remedied, these arose mainly from :—defective water closet cisterns 60, choked water closets 46, insanitary yards 10.

COMMON LODGING HOUSES—

(1). Daily inspected by the Lodging House Inspector.

DAIRIES, COWSHEDS AND MILK-SHOPS—

Have been inspected, and found generally in a satisfactory condition.

The milk supply of the district is good—it is conveyed direct to the consumer.

SLAUGHTER HOUSES—

All these are well-lighted and ventilated, and have an abundant supply of cold water. They were all found clean, tidy and well kept, but with two exceptions they are too near dwelling houses.

OFFENSIVE TRADES—

No mention in the report.

FACTORIES AND WORKSHOPS—

120 inspections appear to have been made, and 3 written notices served.

Sanitary accommodation appears to have been unsatisfactory in two cases, and has been remedied in one.

Workshops registered 32, factories 7.

COCKERMOUTH.

D. J. MCLEISH, M.A., B.Sc., M.D., D.P.H.,
MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>				<i>Infectious Diseases Cases (and deaths)</i>			
		1913.	1912.		1913.	1912.	
Population		5,167	5,205	Total notifications ..	21	15	
Birth-rate		20.9	21.1	Smallpox	Nil.	Nil.	
Death-rate		14.1	12.1	Scarlet Fever	4	7	
Zymotic death-rate ..		0.5	0.9	Diphtheria	5	5	
Phthisis death-rate ..		1.5	0.7	Fevers (Enteric, &c.) ..	Nil.	Nil.	
Total Tuberculosis				Puerperal Fever	Nil.	Nil.	
death-rate		1.7	1.1	Pulmonary Tubercu-			
Respiratory diseases				losis	7	3	
death-rate		1.9	1.9	Cases treated in Hospital			
Infant mortality rate				.. .. (no hospital)			
per 1,000 births ..		86	54	Measles	(2)	(Nil.)	
				Whooping Cough ..	(Nil.)	(1)	
				Diarrhoea	(1)	(3)	

This district was without a Medical Officer of Health from June until the beginning of December, when Dr. McLeish was appointed.

WATER SUPPLY—

By gravitation from Crummock Lake. Is ample in quantity, and very pure.

SCAVENGING—

Refuse is collected twice weekly in uncovered carts. No fixed receptacles for refuse are in use. A large number of those in use are unsuitable.

HOUSING—

No work was done under the Housing Acts during the year.

There are many old houses in the town, but there is no scarcity of houses.

NUISANCES—

153 have been reported to the Council. 48 notices have been complied with.

COMMON LODGING HOUSES—

(2). They are old buildings, but are kept reasonably clean.

DAIRIES, COWSHEDS AND MILK-SHOPS—

Dairy cattle are inspected quarterly by the Veterinary Inspector, who reports favourably.

SLAUGHTER HOUSES—

There is one small public slaughter-house, where a small amount of slaughtering is done. Most of the slaughtering is done in private slaughter houses. These are in a crowded neighbourhood, and quite close to houses.

OFFENSIVE TRADES—

Two licenced knackers and bone boilers. No nuisance from these.

Two tallow melters and 2 tanneries.

One gut scraper's business is carried on. This has given rise to considerable nuisance, but under new management has considerably improved.

EGREMONT.

E. A. BRAITHWAITE, M.B., MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>				<i>Infectious Diseases Cases (and deaths)</i>			
		1913.	1912.			1913.	1912.
Population		6,305	6,305	Total notifications ..		48	57
Birth-rate		29.6	32.0	Smallpox		Nil.	Nil.
Death-rate		16.4	17.4	Scarlet Fever		5	25
Zymotic death-rate ..		1.1	2.6	Diphtheria		4	8
Phthisis death-rate ..		1.5	1.5	Fevers (Enteric, &c.) ..		1	Nil.
Total Tuberculosis				Puerperal Fever		Nil.	Nil.
death-rate.. ..		2.0	1.5	Pulmonary Tubercu-			
Respiratory diseases				losis		18	13
death-rate.. ..		3.3	1.9	Cases treated in Hospital		3	10
Infant mortality rate				Measles		(2)	(14)
per 1,000 births ..		139	183	Whooping Cough ..		(Nil.)	(2)
				Diarrhœa		(Nil.)	(1)

WATER SUPPLY—

Is a good one, and comes from Cogra. Chemical and bacteriological examination show this water to be of exceptional purity.

A new supply is being brought from Wormgill, this also would appear to be a satisfactory supply.

SEWERAGE—

Efficient.

SCAVENGING—

Is done by the Council's men, and "the refuse is removed in ashbins of varied character."

HOUSING—

No new houses have been erected. There is still a great scarcity of houses, and considerable overcrowding.

533 notices were served, and are having attention.

167 verbal and 16 written notices have received attention.

One statutory notice was served, and is having attention.

NUISANCES—

Not mentioned.

COMMON LODGING HOUSES—

Not mentioned.

DAIRIES, COWSHEDS AND MILK-SHOPS—

The number of these is not mentioned, but they are all said to be in a clean condition, and the milk supply satisfactory.

SLAUGHTER HOUSES—

The number of these is not mentioned. They are all said on inspection to be in a clean state.

OFFENSIVE TRADES—

Not mentioned.

FACTORIES AND WORKSHOPS—

42 inspections have been made. No notices served, and apparently no defects found.

HARRINGTON.

GEORGE R. CULLIN, L.R.C.S. & P., ED., &C.

MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>			<i>Infectious Diseases Cases (and deaths).</i>		
	1913.	1912.		1913.	1912.
Population	4,460	4,400	Total notifications ..	18	22
Birth-rate	28.9	27.5	Smallpox	Nil.	Nil.
Death-rate	13.4	15.0	Scarlet Fever	5	11
Zymotic death-rate ..	1.1	2.5	Diphtheria	4	Nil.
Phthisis death-rate ..	0.2	0.6	Fevers (Enteric, &c.) ..	Nil.	Nil.
Total Tuberculosis			Puerperal Fever	Nil.	Nil.
death-rate	1.1	1.5	Pulmonary Tubercu-		
Respiratory diseases			losis	4	9
death-rate	2.0	3.4	Cases treated in Hospital	4	10
Infant mortality rate			Measles	(4)	(4)
per 1,000 births ..	93	157	Whooping Cough ..	(Nil.)	(5)
			Diarrhoea	(Nil.)	(1)

WATER SUPPLY—

Is derived from Crummock Lake, through the Workington mains to Stainburn, from whence it is pumped to various reservoirs.

Since the duplication of the High Harrington main the supply has been ample.

It is an excellent water.

The whole district is supplied from the mains, except a few outlying farm houses, which have a satisfactory private supply.

SEWERAGE—

Is quite satisfactory, the main outlet discharging into the sea. Several of the few remaining middens and earth-closets have been converted into water closets, and the Medical Officer of Health expresses the hope that:—"In a short time to be able to report that the whole district is free from these horrible abominations, the midden privy and earth-closet."

SCAVENGING—

Is done by the Council's workmen three times weekly, a covered cart now being used; the handcarts also are to be fitted with covers.

A uniform pail for each house is suggested. Refuse is tipped on the beach away from habitations.

HOUSING—

Owing to the condemnation and closing of Concrete, Lowca, and to the closing of several collieries in the neighbourhood, the demand for houses appears to have exceeded the supply.

Dr. Cullen expresses the hope that the Colliery Company will now build new houses for the workmen.

Houses inspected 51, 49 of these required some alteration or repairs. The chief defects found were:—defective closet accommodation 34, conditions as regards light, free circulation of air, dampness and cleanliness, 107.

NUISANCES—

59 nuisances appear to have been dealt with in connection with water closets 27, and in connection with water supplies 46. Some cases were remedied after verbal instructions, and others after preliminary notices were sent.

COMMON LODGING HOUSES—

None.

DAIRIES, COWSHEDS AND MILK-SHOPS—

13 persons registered under the Order. One person was found keeping cows and selling milk without being registered.

The dairies and utensils are kept clean, and the "cowsheds in as good a condition as the structure allows."

The cows are not inspected by a Veterinary Surgeon.

SLAUGHTER HOUSES—

Two private ones.

They are kept in good order.

At one farm it was found out houses were being used as a slaughter house without being licenced, a licence was subsequently refused, as the premises were not considered suitable.

OFFENSIVE TRADES—

None.

FACTORIES AND WORKSHOPS—

Workrooms (3), workshops (4), bakehouses (4), have all been inspected, and found satisfactory.

HOLME CULTRAM.

CHARLES CRERAR, M.B., C.M.,
MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>				<i>Infectious Diseases Cases (and deaths).</i>			
		1913.	1912.		1913.	1912.	
Population		4,523	4,494	Total notifications ..	22	17	
Birth-rate		20.7	18.02	Smallpox	Nil.	Nil.	
Death-rate		12.4	13.5	Scarlet Fever	2	3	
Zymotic death-rate ..		0.2	1.5	Diphtheria	3	2	
Phthisis death-rate ..		0.6	0.4	Fevers (Enteric, &c.)	Nil.	1	
Total Tuberculosis				Puerperal Fever ..	Nil.	Nil.	
death-rate.. ..		1.3	0.4	Pulmonary Tuberculosis	9	7	
Respiratory diseases				Cases treated in Hospital	2	Nil.	
death-rate.. ..		1.1	1.5	Measles	(Nil.)	(3)	
Infant mortality rate				Whooping Cough ..	(1)	(1)	
per 1,000 births ..		138	98	Diarrhoea	(Nil.)	(2)	

WATER SUPPLY—

The urban part of the district, Silloth, Green Row, Skinburness and West Silloth, is supplied from the gravita-

tion supply of the Aspatria and Silloth Water Board.

Since the opening, in May, of the reservoir and mechanical filters at Quarry Hill, the discolouration due to peat has entirely disappeared.

This supply is to be extended to Blitterlees.

The rest of Holme Low is badly in need of water. This part of the district is supplied from shallow wells, and Dr. Crerar thinks "recently the quantity of water is much diminished."

Of Holme East Waver, Dr. Crerar says:—"There are numerous wells, both in the fields and near the houses, but the wells are not in the best state of repair, and the water seems much too hard for domestic use, and, of course, it is liable to contamination. There appears to be prospects of a convenient supply being available, and it would be a pity if the opportunity were lost, but there seems a good deal of local prejudice against any expenditure in the meantime."

SEWERAGE—

No new schemes have been carried out. Silloth still remains the only part of the district which has a modern sewerage system.

SCAVENGING—

In Silloth, Skinburness, West Silloth and Green Row, covered bins are used, and the contents carted away by contract.

The report does not refer to other parts of the district, nor does it state whether what is done is satisfactory.

HOUSING—

No new houses have been built.

Very few empty houses. The demand for houses is beginning to exceed the supply. Some workmen's houses are now being built at West Silloth.

37 houses have been inspected. One was condemned as unfit for habitation, and a closing order was made. 36 houses were found to be defective, mostly as regards light, ventilation and dampness.

NUISANCES—

The Sanitary Inspector reports that no serious nuisances were observed.

COMMON LODGING HOUSES—	} Not mentioned.
OFFENSIVE TRADES—	

DAIRIES, COWSHEDS AND MILK-SHOPS—

Seven milk-sellers, no dairies. All the chief cowsheds are stated to be in a thoroughly satisfactory state as regards fabric.

SLAUGHTER HOUSES—

The slaughter houses and butchers' shops were inspected, and always found clean.

FACTORIES AND WORKSHOPS—

41 inspections have been made. No defects found.

KESWICK.

J. R. BURNETT, M.D., &C., MEDICAL OFFICER OF HEALTH

<i>Vital Statistics.</i>			<i>Infectious Diseases Cases (and deaths).</i>		
	1913.	1912.		1913.	1912.
Population	4,403	4,403	Total notifications ..	35	33
Birth-rate	15.8	17.9	Smallpox	Nil.	Nil.
Death-rate	13.1	19.0	Scarlet Fever ..	24	22
Zymotic death-rate ..	0.4	1.5	Diphtheria	4	3
Phthisis death-rate ..	0.2	0.6	Fevers (Enteric, &c.)	Nil.	Nil.
Total Tuberculosis			Puerperal Fever ..	Nil.	Nil.
death-rate.. ..	0.4	1.1	Pulmonary Tuberculosis	6	8
Respiratory diseases			Cases treated in Hospital	27	20
death-rate.. ..	2.0	4.3	Measles	(1)	(4)
Infant mortality rate			Whooping Cough ..	(Nil.)	(2)
per 1,000 births ..	43	88	Diarrhoea	(1)	(1)

WATER SUPPLY—

Continues satisfactory. Even during July, when the rainfall was only 0.93, and the population nearly doubled by the influx of visitors, the supply was ample. At High Briery temporary shortage was complained of. This was due to lack of carrying power rather than to deficiency at the source.

There has been no suspicion of contamination. It is suggested, however, that notices be fixed at the various intakes, warning visitors and others against polluting the supply.

As no recent analysis have been made, Dr. Burnett advises that an analysis be made now and periodically, if only as a precautionary measure.

SEWERAGE—

Not mentioned.

SCAVENGING—

House refuse is collected twice weekly from movable dustbins, "but there is much room for improvement in detail." Dr. Burnett points out that "firstly, the householder is largely to blame for the quantity of putrid organic matter which finds its way into the dustbin instead of being burnt indoors."

Attention is drawn to the danger of poisonous dust being blown about, owing to the unsatisfactory dustbins often used, and sanitary bins with lids are recommended. It is also pointed out that two of the refuse tips are too near the town, and "it seems probable that in the near future a destructor may be found an equally economical and infinitely more sanitary way of dealing with all refuse."

Middens have received close attention, and ten were reported as insanitary; three of these have been rebuilt, and weekly emptying is insisted on.

HOUSING—

The existing accommodation for the working classes is stated to be sufficient. 95 inspections have been made.

Five cases of overcrowding have been discovered, two were abated by statutory notice, and three by verbal notice.

NUISANCES—

32 have been discovered, and 20 have been abated. Several minor nuisances have been discovered and abated on verbal notice.

COMMON LODGING HOUSES—

(1). Has been inspected at intervals, and found fairly well kept, but, as Dr. Burnett says, "it is structurally quite unfit for its purpose, and should be closed."

The erection of a Model Lodging House, kept by the Council, has been decided upon. Accommodation will be provided for single men, single women, and married couples.

DAIRIES, COWSHEDS AND MILK-SHOPS—

The milk is conveyed direct from the dairies to the consumer.

Cleanliness of cattle and milkers is not sufficiently attended to.

The cattle and byres are inspected quarterly by the Veterinary Inspector, who reports very favourably.

SLAUGHTER HOUSES—

Have been regularly inspected. Two are unsatisfactory, one on account of its proximity to dwellings and an insanitary floor, and the other on account of a bad floor, defective drainage, and general unsuitability for the purpose.

The first is to be replaced by a new one, and in the case of the second no notice has been taken of instructions to remedy the defects.

No diseased carcase has been met with.

OFFENSIVE TRADES—

Not mentioned.

FACTORIES AND WORKSHOPS—

Workshops (41) and bakehouses (10). 53 inspections have been made.

One nuisance was discovered and remedied.

MARYPORT.

FRED PROUD, M.D., M.R.C.S.,
MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>				<i>Infectious Diseases Cases (and deaths)</i>			
		1913.	1912.			1913.	1912.
Population	11,423	11,423		Total notifications ..	45	62	
Birth-rate	30.0	25.1		Smallpox	Nil.	1	
Death-rate	14.0	15.4		Scarlet Fever	3	30	
Zymotic death-rate ..	0.7	3.7		Diphtheria	13	8	
Phthisis death-rate ..	0.5	0.4		Fevers (Enteric, &c.) ..	1	Nil.	
Total Tuberculosis				Puerperal Fever	Nil.	Nil.	
death-rate.. ..	0.5	0.6		Pulmonary Tuberculosis	19	23	
Respiratory diseases				Cases treated in Hospital	Nil.	1	
death-rate.. ..	3.0	1.4		Measles (Nil.)	(38)		
Infant mortality rate				Whooping Cough	(1)	(1)	
per 1,000 births ..	81	94		Diarrhœa (5)	(2)		

WATER SUPPLY—

Dr. Proud reports that :—" Nothing has been done during the past year in the way of improving the riparian sources of pollution."

SEWERAGE—

The water carriage system is general, with the exception of a few scattered houses in the semi-rural portion of the district.

The sewage is deposited on the shore at or near low-water mark.

SCAVENGING—

House refuse is collected daily in covered carts, is carted to the shores, and deposited below high- water mark, to be washed away by the incoming tide.

HOUSING—

379 houses have been inspected. 74 of which are back-to-back houses.

From the tabular statement under the Housing (Inspection of District) Regulations, 1910, it would appear that representation was made to the Local Authority that 18 houses appeared in such a state as to be unfit for human habitation. No closing orders were made.

The defects in 77 houses were remedied.

NUISANCES—

44 complaints have been received and investigated. 3,085 visits, exclusive of those under the Housing Act, paid. 243 preliminary and 10 statutory notices served.

A long list of visits made and work done and nuisances removed is given in the Sanitary Inspector's report.

COMMON LODGING HOUSES—

210 visits have been paid to the 5 lodging houses. Infringement of the Bye-laws was noted on 14 occasions, but no action was taken.

DAIRIES, COWSHEDS AND MILK-SHOPS—

Seven cowkeepers and 11 purveyors of milk, but most of the milk comes from outside the urban area.

A detailed report has been made by the Sanitary Inspector on these premises, but this is not contained in the annual report.

SLAUGHTER HOUSES—

121 visits were paid to these. 5,774 animals were slaughtered. 18 or nearly 2 per cent. of the cattle were affected with tuberculosis. 4,816 lbs. of diseased beef or organs were condemned.

OFFENSIVE TRADES—

24 visits appear to have been paid to offensive trade premises by the Sanitary Inspector, but beyond this no mention is made of these premises in the reports.

FACTORIES AND WORKSHOPS—

Workshops (82), work-places (9). 109 visits have been paid to these. 5 defects were found and remedied.

Many of the foregoing particulars are taken from the report of the Inspector of Nuisances.

MILLOM.

P. B. STONEY, M.R.C.S., &C., MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>			<i>Infectious Diseases Cases (and deaths).</i>		
	1913.	1912.		1913.	1912.
Population	8,654	8,612	Total notifications ..	82	171
Birth-rate	20.2	21.0	Smallpox	Nil.	Nil.
Death-rate	15.9	15.2	Scarlet Fever	20	94
Zymotic death-rate ..	1.7	1.2	Diphtheria	17	41
Phthisis death-rate ..	1.2	1.1	Fevers Enteric, &c.)	8	4
Total Tuberculosis			Puerperal Fever ..	Nil.	Nil.
death-rate.. ..	2.1	1.8	Pulmonary Tuberculosis	21	26
Respiratory diseases			Cases treated in Hospital	44	138
death-rate.. ..	2.3	3.3	Measles	(8)	(Nil).
Infant mortality rate			Whooping Cough ..	(2)	(3)
per 1,000 births ..	137	110	Diarrhoea	(2)	(2)

WATER SUPPLY—

From a reservoir on the slopes of Black Combe, about six miles distant.

It is pure, except for some earthy matter, and of ample quantity.

Dr. Stoney says :—" I understand the Council have lately bought the farm from which the greatest part of our water supply is drawn. This will be of the greatest possible benefit, as now the only possible source of contamination will be in their own lands, and will no doubt in time be so arranged that all possibility of harm will be removed."

SEWERAGE—

Complete in all parts of the district. The sewers are flushed regularly.

SCAVENGING—

House refuse is removed by the Council's men, and is satisfactorily done.

HOUSING—

There are more than sufficient houses—about 200 are empty.

The houses have plenty of air space, both back and front streets are wide and clean, and the houses have good yard space.

NUISANCES—

Are not mentioned, except to state the Sanitary Inspector "served each notice as was required to remove or abate nuisances."

COMMON LODGING HOUSES—

(3). Visited and found satisfactory.

DAIRIES, COWSHEDS AND MILK-SHOPS—

The cowsheds within the district were visited. 13 purveyors of milk.

SLAUGHTER HOUSES—

(10). Visited and found satisfactory.

OFFENSIVE TRADES—

None.

FACTORIES AND WORKSHOPS—

10 inspections were made to the 10 workshops. No defects were found.

PENRITH.

FRANCIS HASWELL, M.D., M.R.C.S., &c.,

MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>				<i>Infectious Diseases Cases (and deaths)</i>			
		1913.	1912.			1913.	1912.
Population		8,931	8,952	Total notifications ..		30	31
Birth-rate		21.5	20.2	Smallpox	Nil.	Nil.	Nil.
Death-rate		15.4	12.8	Scarlet Fever ..		2	Nil.
Zymotic death-rate ..		0.2	1.0	Diphtheria		8	3
Phthisis death-rate ..		0.3	1.4	Fevers (Enteric, &c.)	Nil.	Nil.	Nil.
Total Tuberculosis				Puerperal Fever ..	Nil.	Nil.	Nil.
death-rate		0.6	1.9	Pulmonary Tuberculosis		20	22
Respiratory diseases				Cases treated in Hospital		7	3
death-rate		1.7	1.5	Measles	(Nil.)	(6)	(6)
Infant mortality rate				Whooping Cough ..	(Nil.)	(3)	(3)
per 1,000 births ..		99	60	Diarrhoea	(Nil.)	(Nil.)	(Nil.)

WATER SUPPLY—

Is a gravitation supply from Hayeswater, a small lake at an elevation of 1,400 feet, and 14 miles from the town. The water is collected into two small service reservoirs, and is thence distributed.

Dr. Haswell draws attention to the fact that "they (the service reservoir) do not contain more than a day-and-a-half's supply, makes one rather anxious sometimes as when anything occurs on the long and exposed pipe track to necessitate the water being cut off, but it is impossible to forecast the future."

The quality is excellent. About 50 houses in outlying places have supplies from wells and other sources, all of which are reasonably good.

SEWERAGE—

The whole of the town, and the villages of Carleton and Eamont Bridge, are drained by a system of sewers to Whinfell Holme, about two miles away.

The solid matter is extracted as sludge, and the remainder treated on arable land. The result is excellent, and the effluent is quite clear when it discharges into the River Eamont.

Two or three new branch sewers have been reinstated, so that all the defective parts are now being re-laid.

House drains are now in good condition, many alterations and improvements have been made during the year.

SCAVENGING—

Is done by the Council's own men. No nuisance is caused by want of attention.

The system of house refuse removal has been re-modelled. The vessels containing the refuse are kept within the premises of the owner, instead of being set out on the street as before. Paper and bulky material are picked out and sold, a small revenue being made, as well as preventing the nuisance which is liable to occur by paper being blown about.

HOUSING—

399 houses were inspected. 242 were defective, and 133 were remedied during the year.

A Closing Order was made in respect of 3 houses in Fairer Yard, all of which were empty at the time.

With regard to overcrowding, instances of which are given by Dr. Haswell, he says:—"To my mind there is only one remedy, and that is to licence houses of a certain size for a

particular number of inmates, and to put the onus on the owner of not letting the house for a larger number."

NUISANCES—

53 orders have been issued for sanitary amendments of houses, house drains cleaned, repaired and trapped (21), water closets repaired (11), defective water supplies remedied (7).

COMMON LODGING HOUSES—

(1). Which is well managed. No complaints have been made.

DAIRIES, COWSHEDS AND MILK-SHOPS—

32 dairies and cowsheds on the register. While their condition may be regarded as fairly satisfactory, there is room for improvement, especially in the matter of air-space, and the construction of some of the older cowsheds. The cows are inspected by a Veterinary Inspector, who reports that generally the cows are healthy.

SLAUGHTER HOUSES—

Satisfactory.

OFFENSIVE TRADES—

Not mentioned.

FACTORIES AND WORKSHOPS—

133 registered workshops, 115 inspections made, 10 defects found, and 5 remedied.

WIGTON.

A. SMITH HANNAY, M.B., Ch.B.,

MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>				<i>Infectious Diseases Cases (and deaths)</i>		
		1913.	1912.		1913.	1912.
Population		3,687	3,687	Total notifications ..	15	15
Birth-rate		21.5	22.2	Smallpox	Nil.	Nil.
Death-rate		13.0	13.5	Scarlet Fever	2	Nil.
Zymotic death-rate ..		0.5	0.2	Diphtheria	Nil.	1
Phthisis death-rate ..		0.5	1.3	Fevers (Enteric, &c.) ..	Nil.	Nil.
Total Tuberculosis				Puerperal Fever	Nil.	Nil.
death-rate		0.8	1.9	Pulmonary Tuberculosis	5	7
Respiratory diseases				Cases treated in Hospital (no hos'l)		
death-rate		1.3	2.4	Measles	(Nil.)	(Nil.)
Infant mortality rate				Whooping Cough ..	(Nil.)	(Nil.)
per 1,000 births ..		88	85	Diarrhœa	(2)	(Nil.)

WATER SUPPLY—

The principal supply is from Bolton Park and Thornthwaite Springs. Is abundant, pure and free from risks of contamination.

SEWERAGE—

Satisfactory. The outfall discharges upon a sewage farm of 15 acres.

SCAVENGING—

Ordinary house refuse is removed regularly twice weekly from barrels, boxes, and other receptacles. In several instances there are moveable ashbins with proper covers.

Dr. Hannay draws the attention of the Council "to the menace to public health, especially in the poorer quarters of the town, which open ashpits constantly afford, and I should recommend that all ashpits be closed on that account."

HOUSING—

Dr. Hannay says:—"The accommodation for the artisan class is for the most part sufficient and satisfactory." One case of overcrowding is referred to.

50 houses have been inspected, 1 was considered so dangerous or injurious to health as to be unfit for habitation. No Closing Orders were made. 40 houses had the defects remedied.

The main defects noted were want of light, ventilation and cleanliness.

NUISANCES—

Not mentioned.

COMMON LODGING HOUSES—

(1) which does not appear to be satisfactorily clean.

DAIRIES, COWSHEDS AND MILK-SHOPS—

Seven cowsheds visited by the Inspector, and found satisfactory.

SLAUGHTER HOUSES—

(6). Satisfactory.

OFFENSIVE TRADES—

Not mentioned.

FABRICATORIES AND WORKSHOPS—

69 workshops. Visited monthly.

One underground bakehouse is occupied illegally.

ALSTON (RURAL).

STEWART CARSON, M.B., C.M.,

MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>				<i>Infectious Diseases Cases (and deaths).</i>			
		1913.	1912.			1913.	1912.
Population		3,095	3,110	Total notifications ..		13	33
Birth-rate		17.7	23.8	Smallpox	Nil.	Nil.	
Death-rate		15.5	17.0	Scarlet Fever ..	1	Nil.	
Zymotic death-rate ..		0.3	Nil.	Diphtheria	2	5	
Phthisis death-rate ..		1.6	2.2	Fevers (Enteric, &c.)	Nil.	Nil.	
Total Tuberculosis				Puerperal Fever ..	Nil.	Nil.	
death-rate.. ..		2.6	2.8	Pulmonary Tuberculosis	7	23	
Respiratory diseases				Cases treated in Hospital (no hos'l)			
death-rate.. ..		0.9	1.6	Measles	(Nil.)	(Nil.)	
Infant mortality rate				Whooping Cough ..	(1)	(Nil.)	
per 1,000 births ..		109	81	Diarrhœa	(Nil.)	(Nil.)	

WATER SUPPLY—

The district is in most parts supplied with good springs. The water is hard, and many of the springs contain iron.

Alston Town, and a few houses outside the town area, the villages of Nenthead and Garrigill, Clitheroe and Leadgate, are supplied from springs; the water being conveyed in cast-iron pipes. These are quite satisfactory. The following supplies are stated not to be satisfactory.

The supply to Nenthall School runs in the open, and is liable to pollution.

The substitution of iron for earthenware pipes, conveying the supply to Leadgate, is about to be carried out.

Attention was drawn to the unsatisfactory supply to Wanwood Hill and North Parkside by Dr. Carson, in 1899. A special report has been written by Dr. Carson, at the request of the Local Government Board, on the supply.

The supplies to Hilltop, Hillersden and Whitehall, have been improved.

SEWERAGE—

A new sewer for Townfoot, Alston, is again mentioned as desirable.

The Chapel Terrace sewer has been extended to meet the requirements of new houses.

The sewage from the town of Alston appears to be discharged untreated into the Mill Burn, running into the River Nent, a tributary of the South Tyne.

SCAVENGING—

The removal of house refuse in Garrigill is again advocated. More efficient cleansing of side streets and lanes in Alston is required, and it is suggested that a water cart is desirable to keep down the dust in the main streets and roads of the town.

HOUSING—

Four workmen's houses were built, and 2 re-modelled and improved during the year.

Housing accommodation at the present time seems to be ample, owing to many families having left the district.

52 houses were inspected, 49 in Alston and 3 in Garrigill, as well as 21 mining shops in Nenthead, Rotherhope and Hags.

Five houses were closed as unfit for habitation, 3 without, and 2 with a Closing Order.

NUISANCES—

5 nuisances were reported, and 5 notices served.

COMMON LODGING HOUSES—

(1). Satisfactory.

DAIRIES, COWSHEDS AND MILK-SHOPS—

No milk-shops. The cowsheds and dairies are stated to be very satisfactory.

SLAUGHTER HOUSES—

(6). Are said to have been much more satisfactory. No tuberculous meat has been observed.

OFFENSIVE TRADES—

None.

FACTORIES AND WORKSHOPS—

57 workshops. 72 inspections made. One defect found and remedied.

BOOTLE (RURAL).

W. A. JOHNSTON, L.R.C.P. & S.I.

MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>				<i>Infectious Diseases Cases (and deaths).</i>			
		1913.	1912.			1913.	1912.
Population		5,664	5,664	Total notifications ..	15	42	
Birth-rate		21.0	18.1	Smallpox	Nil.	Nil.	
Death-rate		14.1	11.1	Scarlet Fever	3	12	
Zymotic death-rate ..	Nil.		0.18	Diphtheria	2	10	
Phthisis death-rate ..	1.0		1.0	Fevers (Enteric, &c.) ..	2	Nil.	
Total Tuberculosis				Puerperal Fever	Nil.	Nil.	
death-rate.. ..	1.0		1.2	Pulmonary Tuberculosis	7	17	
Respiratory diseases				Cases treated in Hospital	5	13	
death-rate.. ..	1.9		1.5	Measles	(Nil.)	(Nil.)	
Infant mortality rate				Whooping Cough ..	(Nil.)	(Nil.)	
per 1,000 births ..	59		19	Diarrhœa	(Nil.)	(Nil.)	

WATER SUPPLY—

The greater part of this district is well supplied by gravitation schemes.

Dr. Johnston again draws attention to the fact that Eskdale Green, and that part of Bootle Parish west of the station, are still without a supply. The Sanitary Inspector reports that "the various farms below Bootle Station are still without an adequate supply—many of these farms have to cart practically every drop of water they need for considerable distances."

A supply could be obtained fairly easily from the Bootle mains.

Eskdale and Santon are still in need of a supply.

The Ladyhall scheme is well in hand.

The supply to Drigg and Seascale continues satisfactory.

SEWERAGE—

Considerable work has been carried out. The first section of sewers of the Hodgkin Park Estate, Seascale, from the shore to the main road, has been laid.

The sewer through the Town End fields at Seascale was found to be defective, and was relaid, as well as the sewer at Bootle Station. Whilst this was in progress, the house drains connecting with the sewer were seen to.

SCAVENGING—

Does not appear to be done in many parts of the district, but Dr. Johnston says:—"When the scavenging system is in force it is satisfactory."

The Sanitary Inspector is of opinion that :“ the important subject of scavenging is one which may, with advantage, be seriously considered in more of our parishes.”

HOUSING—

“ There is no overcrowding, and the character of most of the houses is good.”

36 houses inspected. 19 were considered to be in a state so dangerous or injurious to health as to be unfit for habitation.

One Closing Order was made, and the defects in 19 were remedied without making a closing order.

Three new houses have been erected, and alterations made to 14.

NUISANCES—

103 nuisances seem to have received attention.

COMMON LODGING HOUSES—

Not mentioned.

DAIRIES, COWSHEDS AND MILK-SHOPS—

The dairies are well kept, and clean. No milk-shops.

SLAUGHTER HOUSES—

Numbers not stated. Regularly inspected, and are well conducted.

OFFENSIVE TRADES—

Not mentioned.

FACTORIES AND WORKSHOPS—

(41) have been regularly inspected.

Many of the foregoing particulars are taken from the report of the Inspector of Nuisances.

BRAMPTON (RURAL).

WILLIAM SYMINGTON, M.B., C.M., ED.,

MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>				<i>Infectious Diseases Cases (and deaths)</i>		
		1913.	1912.		1913.	1912.
Population		7,982	7,982	Total notifications ..	44	20
Birth-rate		13.6	18.04	Smallpox	Nil.	Nil.
Death-rate		14.0	15.5	Scarlet Fever ..	30	4
Zymotic death-rate ..		0.2	0.2	Diphtheria	5	5
Phthisis death-rate ..		0.7	1.2	Fevers (Enteric, &c.)	Nil.	Nil.
Total Tuberculosis				Puerperal Fever ..	Nil.	Nil.
death-rate.. ..		1.5	1.6	Pulmonary Tuberculosis	5	10
Respiratory diseases				Cases treated in Hospital		
death-rate.. ..		0.1	2.0	.. .. (no hospital)		
Infant mortality rate				Measles	(Nil.)	(Nil.)
per 1,000 births ..		55	76	Whooping Cough ..	(1)	(2)
				Diarrhoea	(Nil.)	(Nil.)

WATER SUPPLY—

The greater part of the district is well supplied, either from the Glazier (or old supply), or from the Gelt (or new supply), but Dr. Symington does not consider the New Well-meadow supply to part of the town as satisfactory. This was intended to be done away with on completion of the Gelt scheme, and as it is open to suspicion, it ought to be stopped.

Talkin Village now has an ample supply from an extension of the Gelt scheme.

The unsatisfactory supply to the village of Cumwhitton is again referred to, and the question of providing a more comprehensive gravitation scheme for the village, and part of the surrounding district, is drawn attention to.

SEWERAGE—

Is still most inadequate in many parts of the district.

The villages of Hayton, Irthington, Castle Carrock, Newtown, Laversdale, Corby Hill, Cumwhitton, Milton and Hallbankgate, are urgently in need of it, and "the want of it prevents in some cases other insanitary conditions being remedied."

SCAVENGING—

Removal of house refuse is carried out daily in the town of Brampton by men appointed by the Council, and carted to a refuse tip.

Refuse tips are required in other parts of the district.

"I would much wish," says Dr. Symington, "to see some more regular and systematic emptying and cleansing of these places (privies and pail closets) instituted, as at present it is only done at considerable intervals, and so leads to most insanitary conditions in the villages, and accumulations of filth in close proximity to dwelling houses, a state of things which cannot but be prejudicial to health."

HOUSING—

The house accommodation of the working classes is fairly good, and a good deal has been done under the Housing Acts to remedy defects more especially as regards dampness and the want of ventilation. 78 houses were inspected. 17 notices served, and 11 complied with.

No Closing Orders made, but 2 houses made habitable without a Closing Order.

NUISANCES—

4 complaints received, 3 remedied.

COMMON LODGING HOUSES—

Not mentioned.

DAIRIES, COWSHEDS AND MILK-SHOPS—

Inspected and found in a fairly satisfactory condition.

SLAUGHTER HOUSES—

(7). In Brampton 4, Newby 1, Castle Carrock 1, and Walton 1.

The one at Castle Carrock should be closed, owing to its general construction, want of drainage, and surroundings.

Dr. Symington has issued a special report on those in Brampton, and reports that "though fairly well kept, they are unsuitable for the purpose."

Regret is expressed that the provision of a public abattoir has apparently been dropped.

Two carcasses affected with tuberculosis were condemned.

OFFENSIVE TRADES—

Not mentioned.

FACTORIES AND WORKSHOPS—

14 inspections were made, but no defects found

CARLISLE (RURAL).

JAMES MACDONALD, M.D., MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>				<i>Infectious Diseases Cases (and deaths)</i>			
		1913.	1912.			1913.	1912.
Population		12,216	17,736	Total notifications ..		54	77
Birth-rate		16.9	16.9	Smallpox		Nil.	Nil.
Death-rate		12.2	13.8	Scarlet Fever ..		7	31
Zymotic death-rate ..		0.3	0.3	Diphtheria		8	3
Phthisis death-rate ..		0.4	0.7	Fevers (Enteric, &c.)		Nil.	4
Total Tuberculosis				Puerperal Fever ..		Nil.	1
death-rate.. ..		0.6	0.8	Pulmonary Tuberculosis		24	22
Respiratory diseases				Cases treated in Hospital		13	21
death-rate.. ..		1.7	1.8	Measles		(1)	(3)
Infant mortality rate				Whooping Cough ..		(1)	(2)
per 1,000 births ..		67	96	Diarrhoea		(1)	(Nil.)

WATER SUPPLY—

A Special Committee of the Council has for some time been considering a proposed water scheme to supply, by gravitation, the whole of the district.

The source of the proposed supply is an abandoned mine at Raughton Gill on Caldbeck Fell. A report is to be issued shortly by the Engineer.

SEWERAGE—

Sanction has been obtained from the Local Government Board to borrow £300 for works of sewerage for the village of Blackwell.

391 yards of sewer have been constructed in minor improvements.

Arrangements for the disposal of sewage from the Garlands Asylum are nearing completion.

SCAVENGING—

"There is," says Dr. Macdonald, "no proper system of scavenging in the more populous parts of the district, nor is there any fixed arrangement for the systematic removal of house refuse or ash-pit refuse."

HOUSING—

15 new houses have been erected, and 7 others are in course of erection.

"There are also indications," says Dr. Macdonald, "on the part of landowners to erect cottages on their properties for farm servants who are married."

A proposal to develop a Garden City at Newby West raised the question of relaxing the stringency of the Council's Bye-laws, with the view to reducing the cost of building.

In this connection Dr. Macdonald remarks:—"The attitude of the Local Government Board to the Regulations relating to rural housing has altered considerably during recent years. In this connection it may be pointed out that under Section 44 of the Housing Act, it is provided that when the Board are satisfied that the erection of dwellings for the working classes in rural districts is unreasonably impeded in consequence of existing Bye-laws, they may require the Local Authority to revoke them, or to make such new bye-laws as they may consider necessary. In the present case at the request of the promoters of the scheme, the Council agreed to give way with respect to certain modifications of their bye-laws."

171 inspections have been made. 4 Closing Orders issued.

The existing conditions of many cottages have been materially improved. Several back-to-back houses have been converted into single dwellings.

NUISANCES—

Not mentioned.

COMMON LODGING HOUSES—

Not mentioned.

DAIRIES, COWSHEDS AND MILK-SHOPS—

75 persons are on the register. The cowsheds have been kept under supervision as closely as possible.

SLAUGHTER HOUSES—

Nine licenced and 1 registered. All have been visited and no exception could be taken to the way in which business is conducted.

OFFENSIVE TRADES—

One knacker's yard.

FACTORIES AND WORKSHOPS—

91 registered workshops. Inspections have been made from time to time.

COCKERMOUTH (RURAL).

D. J. McLEISH, M.A., B.Sc., M.D., D.P.H.,

MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>				<i>Infectious Diseases Cases (and deaths).</i>			
		1913.	1912.			1913.	1912.
Population	22,360	22,300	Total notifications ..	101	92		
Birth-rate	26.7	27.0	Smallpox	Nil.	Nil.		
Death-rate	12.7	13.4	Scarlet Fever	33	17		
Zymotic death-rate ..	0.9	1.6	Diphtheria	23	11		
Phthisis death-rate ..	0.8	0.4	Fevers (Enteric, &c.) ..	1	Nil.		
Total Tuberculosis			Puerperal Fever	Nil.	1		
death-rate	0.9	0.6	Pulmonary Tuberculosis	29	56		
Respiratory diseases			Cases treated in Hospital	25	14		
death-rate	2.5	1.6	Measles	(7)	(21)		
Infant mortality rate			Whooping Cough ..	(Nil.)	(3)		
per 1,000 births ..	102	121	Diarrhœa	(8)	(6)		

WATER SUPPLY—

All the more populous parts of the area are well supplied with water. The main sources of supply are Crummock Lake, the River Derwent by the Maryport scheme, and Overwater. The Crummock and Overwater supplies are good, but Dr. Mc.Leish considers the supply from the Derwent "is open to suspicion."

Three other good public supplies are to Above Derwent, Branthwaite and Dean, and to Tallantire. Other satisfactory supplies from springs on the fells to various small hamlets are mentioned.

The following districts have defective water supplies, and have been unfavourably reported on, not only by Dr. Mc.Leish, but in most instances by his predecessor as well:—

Beehive, Deanscales, Pardshaw and Pardshaw Hall, east end of Broughton Moor, Lorton, High Lorton, Bassenthwaite, Embleton, Sunderland, Greengill, Applethwaite, Eaglesfield, Grange, Redmain and Blindcrake.

SEWERAGE—

Something has been done in the way of sewerage, but it would appear that the Surveyor is not able to deal with all the matters which are referred to him.

Many places are mentioned in Dr. Mc.Leish's report as requiring sewerage.

Broughton.—The Council have resolved to sewer this district, at present slop drains open on to channels in a field, which slopes down to the Derwent.

Papcastle and Goat.—Drainage enters the Derwent untreated. Resolved to sewer.

Broughton Moor.—Application made to Local Government Board to borrow £3,000 to sewer.

Little Clifton.—Not sewered.

Stainburn.—Slop drainage opens on land near a water course. As Dr. Mc.Leish says:—"This area requires a system of sewerage, but until some of the larger schemes are finished, is not likely to be dealt with."

Borrowdale.—Rosthwaite pollutes the Derwent with its sewage. Plans of a scheme are at present with the Local Government Board.

Dearham.—Requires a system of sewers and sewage disposal. Dr. Farrar, of the Local Government Board, reports, after complaint from the County Council, that this place requires sewerage. The present Medical Officer of the district, and his two predecessors, also reported that this place required sewerage.

Blindcrake and Redmain.—Slop and farmyard drainage find their way into the Derwent, by pipes and ditches, about four miles above the intake of the Maryport water supply.

Buttermere.—The Surveyor has been asked to prepare plans for sewerage. Private properties have, after notice, improved their systems.

Seaton.—The greater part is sewered into the sea, the rest (Low Seaton) will shortly be sewered into the Workington sewer.

Oughterside is partly sewered. Application will shortly be made for a loan for further sewerage this district.

Great Clifton.—Has recently been sewered satisfactorily.

Setmurthy.—Has a small sewage disposal scheme for a number of good houses near Bassenthwaite Lake. This is being altered and improved.

Eaglesfield.—Has been recently improving its system of slop drainage.

Above Derwent, Braithwaite.—Sewered to a sewage field. Many of the best houses are not connected, but have cesspools in front of the houses.

Portinscale.—Is sewered to a sewage field. Here, too, a number of large houses have cesspools, and three houses have a small sub-irrigation system, which is not satisfactory.

Embleton and Lorton.—Not sewered.

Flimby.—Is sewered into the sea.

Brigham, Crosby and Dovenby are sewered.

SCAVENGING—

Is one of the most unsatisfactory of the sanitary conditions of the district.

"The method," says Dr. McLeish, "is one of the most unbusinesslike possible, and can only be described as absolutely haphazard. When middens are full, the individual tenants or owners try to have the refuse removed by farmers, but it is so often unsuitable for putting on land, being composed of tin cans, ashes, and often rubbish of all kinds, that the farmers often do not wish it. At other places it is carted by farmers or others having carts to a tipping place. I am strongly of opinion that in the larger villages nothing but regular public scavenging will ever be satisfactory, and it can scarcely be any more expensive than the present inefficient system, or rather want of system. Many of these receptacles are most objectionable to clean, and often they have to be entered to throw out the refuse."

Flimby has at last resolved to have an ash-cart, and regularly remove the refuse.

Great Clifton is to be publicly scavenged.

The substitution of pails for middens is recommended, and "where no ground is available for burying the contents, these could be collected by cart as well as the house refuse."

HOUSING—

No complaints of lack of houses have been received, but in many cases men have to travel miles to their work.

Four instances of overcrowding are given.

354 houses have been inspected. 22 Closing Orders have been made, 167 informal notices have been sent asking for remedial measures. The results of these notices are as follows:—Completely remedied 27, partially remedied 11, work proceeding 44, propose to begin work shortly 11, nothing done 54, not yet re-visited 20.

NUISANCES—

Complaints received 44. Nuisances detected and reported 659.

Number of informal notices 388. Number of statutory notices 229. Nuisances unabated 74.

COMMON LODGING HOUSES—

Not mentioned.

DAIRIES, COWSHEDS AND MILK-SHOPS—

69 cowsheds on the register, many are structurally unsuitable, and the milk is not obtained in a cleanly manner.

The regulations are old, and are not based on the model Bye-laws. Their re-modelling is now under consideration.

SLAUGHTER HOUSES—

(25). Owing to their number, and to their being so widely scattered, adequate inspection is impossible. A gradual improvement is stated to be taking place.

No diseased carcasses have been found.

OFFENSIVE TRADES—

Only one tannery, which gives rise to no nuisance.

FACTORIES AND WORKSHOPS—

155 registered workshops. 121 inspections have been made, and 2 defects found, one of which has been remedied.

LONGTOWN (RURAL).

J. L. RANKINE, M.R.C.S., L.R.C.P.,

MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>				<i>Infectious Diseases Cases (and deaths)</i>			
		1913.	1912.		1913.	1912.	
Population		6,167	6,167	Total notifications ..	40	43	
Birth-rate		22.0	19.2	Smallpox	Nil.	Nil.	
Death-rate		15.8	14.4	Scarlet Fever ..	11	24	
Zymotic death-rate ..		0.6	0.8	Diphtheria	6	3	
Phthisis death-rate ..		1.4	0.9	Fevers (Enteric, &c.)	Nil.	Nil.	
Total Tuberculosis				Puerperal Fever ..	4	Nil.	
death-rate.. ..		1.9	1.3	Pulmonary Tuberculosis	15	15	
Respiratory diseases				Cases treated in Hospital	3	*6	
death-rate.. ..		1.6	2.1		(no hospital)		
Infant mortality rate				Measles	(1)	(3)	
per 1,000 births ..		81	92	Whooping Cough ..	(Nil.)	(Nil.)	
				Diarrhoea	(1)	(1)	

* In Carlisle.

WATER SUPPLY—

Nothing has yet been done to improve the supply to Bolton Fell, Road Head, Scugg Gate, and Breckonhill.

A number of houses in Smithfield and district were quite inadequately supplied during the summer, and some of the present supplies are of doubtful character.

SEWERAGE—

The village of Longtown is the only place in the district where there is a drainage system.

SCAVENGING—

In Longtown, house refuse is removed twice weekly, and carted to a tip on the bank of the River Esk, about 200 yards from the nearest house.

HOUSING—

Sufficient accommodation. In the country the type of house is not good. 111 houses inspected. 83 reported as having defects. 51 are not yet remedied.

NUISANCES—

Not mentioned.

COMMON LODGING HOUSE—

One in Longtown of a poor type, and not kept very clean.

DAIRIES, COWSHEDS AND MILK-SHOPS—

16 registered cowkeepers. All the cowsheds are kept fairly clean. Cows are not inspected by a Veterinary Inspector.

SLAUGHTER HOUSES—

Four in Longtown, regularly inspected, no complaints. Attention is again drawn to the unsatisfactory disposal of the offal.

OFFENSIVE TRADES—

Not mentioned.

FACTORIES AND WORKSHOPS—

65 workshops. 92 inspections made, 28 to factories, 30 to workshops, and 34 to workplaces. One defect found and remedied.

PENRITH (RURAL).

FRANCIS HASWELL, M.D., M.R.C.S., &c.,

MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>				<i>Infectious Diseases Cases (and deaths)</i>			
		1913.	1912.			1913.	1912
Population		12,503	12,526	Total notifications ..		25	47
Birth-rate		19.3	20.0	Smallpox		Nil.	Nil.
Death-rate		11.1	11.1	Scarlet Fever ..		3	11
Zymotic death-rate ..		0.3	0.08	Diphtheria		5	Nil.
Phthisis death-rate ..		0.4	0.4	Fevers (Enteric, &c.)		Nil.	Nil.
Total Tuberculosis				Puerperal Fever ..		Nil.	Nil.
death-rate.. ..		0.4	0.8	Pulmonary Tuberculosis		12	19
Respiratory diseases				Cases treated in Hospital		7	1
death-rate.. ..		1.9	1.2	Measles		(1)	(Nil.
Infant mortality rate				Whooping Cough ..		(Nil.)	(1)
per 1,000 births ..		74	51	Diarrhœa		(2)	Nil.

WATER SUPPLY—

The greater part of this area, about 200 square miles, is supplied with water from various gravitation schemes. Out of 35 parishes with a total population of 12,549, there are only 7, with a population of 1,993, which have not public water supplies.

Each supply is analysed at intervals, so that its character may be noted, and compared with other readings.

The Heskett supply has been somewhat short at times, and an additional spring at Ladywell has been added.

Dr. Haswell, however, says :—" There can be no doubt that the shortage is due in great part to wastage through persons allowing their taps to run when not in use...."

A loan is about to be applied for for a supply to Newbiggin (Croglin), which is much in need of a good supply.

SEWERAGE—

A large number of the villages, a list of which is given by Dr. Haswell, have sewers.

The outfalls of these sewers are inspected from time to time and are generally satisfactory. Dr. Haswell, however, draws attention to the fact that "more attention is required in some cases to the periodical alteration of the sewerage flow; land soon becomes sick, and fresh channels are required leading to a new surface.

In the village of Skirwith a large number of house drains run direct into the stream in the middle of the village, and which is almost dry in summer. An attempt is being made to remedy this.

SCAVENGING—

Is generally done by the individual. Some villages have rubbish tips, and attention is drawn to the too great handiness of the river running through Kirkoswald as a general rubbish tip for the village, although tips have been provided.

HOUSING—

Housing is sufficient, and defects are being steadily remedied.

660 inspections made, 344 defects, and 301 defects remedied.

Five cases of overcrowding are noted, and particulars are given of each case.

Four new houses have been built.

NUISANCES—

12 complaints have received attention. 840 inspections and 442 re-inspections.

COMMON LODGING HOUSES—

None.

DAIRIES, COWSHEDS AND MILK-SHOPS—

Licensed cowsheds 28, inspections to these 55. All are in good order. No complaints from outside have been received as to the condition of the milk.

SLAUGHTER HOUSES—

(14). Inspections 30. Few are ideal, but they are as good as can be expected from converted barns and such like places. The floors are now impervious, and the offal is removed without nuisance.

FACTORIES AND WORKSHOPS—

54 workshops. 83 inspections made. 7 defects found, and all remedied.

WHITEHAVEN (RURAL).

J. B. FISHER, M.D., D.P.H., MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>			<i>Infectious Diseases Cases (and deaths).</i>		
	1913.	1912.		1913.	1912.
Population	14,350	14,250	Total notifications ..	159	218
Birth-rate	25.2	26.2	Smallpox	Nil.	Nil.
Death-rate	12.5	13.6	Scarlet Fever ..	84	120
Zymotic death-rate ..	0.9	1.4	Diphtheria	12	28
Phthisis death-rate ..	0.4	0.6	Fevers (Enteric, &c.)	Nil.	Nil.
Total Tuberculosis			Puerperal Fever ..	1	Nil.
death-rate.. ..	0.7	0.9	Pulmonary Tuberculosis	32	55
Respiratory diseases			Cases treated in Hospital	60	96
death-rate.. ..	2.0	2.4	Measles	(9)	(15)
Infant mortality rate			Whooping Cough ..	(Nil.)	(Nil.)
per 1,000 births ..	106	131	Diarrhoea	(3)	(2)

WATER SUPPLY—

All the villages and populous portions of the district are now supplied with water from piped services.

Dr. Fisher publishes the following useful table, showing the water supply to the different parishes:—

<i>Parish.</i>	<i>Village or Hamlet.</i>	<i>Source of Supply.</i>	<i>By whom supplied.</i>
St. Bees	St. Bees	Springs on Dent ..	R.D.C. who purchase the water in bulk.
Rottington ..	Rottington	" "	" " "
Sandwith	Sandwith	Ennerdale Lake ..	R.D.C. who purchase in bulk.
Preston Quarter	Hut Bank and houses and works adjacent	" "	" " "
Hensingham ..	Hensingham and Keekle	" "	Whitehaven Town Council
Moresby	Scilly Banks	" "	" " "
	Moresby Parks	" "	" " "
	Howgate	Springs over Sandstone at the High, Moresby	R.D.C.
Parton	Parton	Ennerdale Lake ..	R.D.C. who purchase in bulk
Distington ..	Distington	Crummock Lake ..	" " "
	Pica	Oatlands Pit	Moresby Coal Co.
Lamplugh	Kirkland	Springs from gravel over slate rock on Owsen Fell	R.D.C.
	Crossgates		R.D.C.
	Winder	Cogra Moss	Arlecdon & Frizington Urban District Council
Ennerdale and Kinniside ..	Ennerdale Bridge ..	Ennerdale Lake ..	Whitehaven Town Council
Salter and Eskett	Salter and Eskett ..	Cogra Moss	Egremont Urban District Council
Netherwasdale ..	Strands	Springs	R.D.C.
Gosforth	Gosforth, Hall Senna ..	Springs from gravel over volcanic rock in the valleys of Scalebeck Peagill, and Bengarthgill in the hills above Gosforth	Whitehaven Rural District Council
Ponsonby	Ponsonby, Calder ..		" "
St. Bridget ..	Calderbridge, Blackbeck, and part of Beckermat		" "
St. John	Part of Beckermat, Low Mill, Cringlethwaite & Scurrgill		" "
Lowside Quarter	Low Mill, Braystones, Nethertown, Middletown, Coulderton		" "
Haile	Haile		" "

All the supplies are constant, abundant and of good quality.

SEWERAGE—

Sewerage systems already exist at Howgate, Kirkland, Cringlethwaite and Scurrigill, Parton, St. Bees, Hensingham, Keekle, Distington and Gilgarron.

Plans have been prepared for the sewerage of the villages of Beckermeth and the hamlet of Low Mill.

Plans and estimates were prepared for a system for Gosforth, but owing to special difficulties this has been deferred.

The hamlet of Middletown has also been dealt with in a manner which Dr. Fisher thinks with proper care ought to prevent further trouble.

The village of Calderbridge is again referred to as requiring a system of sewerage.

SCAVENGING—

Is done by the Council at the following places:—Distington, Pica, Moresby Park, Hensingham, Keekle, Parton, St. Bees, Kirkland, Cringlethwaite, and Scurrigill.

HOUSING—

576 houses in 14 parishes inspected. Notices served to remedy 496 defects, 214 were complied with, and 278 not fully complied with at the end of the year.

No Closing Orders made, but 4 houses voluntarily closed on receipt of notice of defects.

NUISANCES—

56 written notices served, and a large number of verbal notices given, most of them have been complied with.

COMMON LODGING HOUSES—

None.

DAIRIES, COWSHEDS AND MILK-SHOPS—

59 cowkeepers. 12 byres or cowsheds were improved on 8 farms by the laying of new pavements, providing better drainage, putting in new windows and ventilators, and provision of more air space. No dairies or milk-shops.

SLAUGHTER HOUSES—

All have been inspected, but neither their number nor their condition is referred to.

OFFENSIVE TRADES—

Not mentioned.

FACTORIES AND WORKSHOPS—

42 workshops. 79 inspections were made all were found satisfactory.

WIGTON (RURAL).

W. PERRY BRIGGS, L.R.C.P., L.R.F.P.S., &c.,

MEDICAL OFFICER OF HEALTH.

<i>Vital Statistics.</i>			<i>Infectious Diseases Cases (and deaths).</i>		
	1913.	1912.		1913.	1912.
Population	11,383	11,383	Total notifications ..	42	52
Birth-rate	23.1	22.0	Smallpox	Nil.	Nil.
Death-rate	14.7	15.2	Scarlet Fever	11	22
Zymotic death-rate ..	0.3	0.9	Diphtheria	3	1
Phthisis death-rate ..	1.2	0.6	Fevers (Enteric, &c.) ..	1	Nil.
Total Tuberculosis			Puerperal Fever	Nil.	Nil.
death-rate	1.3	0.6	Pulmonary Tuberculosis	17	22
Respiratory diseases			Cases treated in Hospital (no hos'l)		
death-rate	2.0	2.1	Measles	(1)	(6)
Infant mortality rate			Whooping Cough ..	(Nil.)	(2)
per 1,000 births ..	102	119	Diarrhoea	(3)	(2)

WATER SUPPLY—

The supply from the Overwater gravitation works to a considerable part of the district is highly satisfactory.

Many villages in the north-west part of the district are badly in want of water, being supplied from shallow wells, which Dr. Briggs remarks:—"Form very unsatisfactory, and in many instances dangerous sources of supply."

A considerable number of privy middens exist, many of which are structurally defective, and are not emptied often enough.

SEWERAGE—

Drainage improvements have been carried out at Blencogo, Hayton, Aikton, Woodside, Allonby and Waverton.

The village of Allonby is the only one in which the water carriage system is in force.

Dr. Briggs gives a list of villages which are more or less sewered, but the sewerage is untreated. No water closets discharge into these village sewers, except at Thursby, where there are two.

Oulton and Kirkbride, if possessed of a public water supply would be greatly benefitted by a system of sewers and sewage disposal.

There is no drainage system in the villages of Westnewton and Torpenhow.

Blennerhasset is partly drained, but is not satisfactory.

The sewerage of Fletchertown is in abeyance in the meantime, owing to the possible stoppage of the colliery.

SCAVENGING—

No scavenging is undertaken by the Sanitary Authority.

HOUSING—

There is no shortage of houses in this district. No. of inspections made 219. No. of notices served to abate defects 140.

No houses were found in such a condition to be in a state so dangerous or injurious to health as to be unfit for habitation, and no closing orders were made.

The most common defects of houses were want of closet accommodation (21), drainage (9), want of light and ventilation (120), dampness (30).

NUISANCES—

349 premises were inspected, and the Sanitary Inspector reports that notices were served to abate nuisances, including :—Defective eaves, gutters and downspouts, drains, yard paving, house floors, damp walls, &c., (32), defective middens (10), privies (15), most of the work being carried out without undue delay.

DAIRIES, COWSHEDS AND MILK-SHOPS—

(38). "There are four ideal cowsheds in the district; the remainder are in many instances structurally defective, and by no means sanitary."

Many of the byres appear to be totally unsuitable. Milking is done carelessly, and without any regard for cleanliness. Three byres have been markedly improved during the year.

There is no inspection of dairy cattle by a Veterinary Inspector.

SLAUGHTER HOUSES—

(12). Inspected at regular intervals. None are ideal, and adequate inspection is impossible, owing to their scattered nature.

Floors of three have been made impervious. Ventilation, lighting and water supply are good in all. Lime washing of the walls four times a year is insisted on.

Refuse has been more promptly removed during the year.

No diseased carcasses have been found during the year.

OFFENSIVE TRADES—

None.

FACTORIES AND WORKSHOPS—

Bakehouses (9), workshops (46). No defects have been reported during the year.

PRINCIPAL VITAL STATISTICS FOR 1913.

Table I.

	GENERAL STATISTICS.						STATISTICS RELATING TO BIRTHS.			STATISTICS RELATING TO DEATHS.									
	Area in Acres.	Population 1901 Census.	Population 1911 Census.	Estimated population at middle of 1913.	No. of Inhabited Houses at 1911 Census.	No. of persons per inhabited house at 1911 Census.	Total No. of Births registered during 1913.	Nett Births. *	Birth-rate.	TOTAL DEATHS.		TRANSFERABLE DEATHS.		NETT DEATHS.				DEATHS FROM ZYMOETIC DISEASES	
										Total number of Deaths registered during 1913.	"Crude" Death-rate.	Of Non-residents registered in the district.	Of Residents not registered in the district.	Under 1 year of age.		At all ages.		Total Deaths	Zymotic Death-rate.
														Number Registered.	Infantile Mortality Rate (i.e., per 1,000).	Number Registered.	"Recorded" Death-rate.		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
URBAN DISTRICTS.																			
City of Carlisle	4488	45480	46432	52497	10181	4.5	1164	1164	22.1	821	15.6	76	24	148	127	769	14.6	49	0.9
Borough of Workington .. .	2466	26143	25099	25600	5045	4.9	650	654	25.5	325	12.6	7	17	83	126	335	13.0	20	0.77
" Whitehaven .. .	1810	19324	19048	19200	3959	4.8	556	549	28.5	355	18.4	43	11	70	127	323	16.8	26	1.3
Arlecdon and Frizington .. .	5554	5341	5184	5180	1052	4.9	142	142	27.4	62	11.9	—	7	13	91	69	13.3	4	0.7
Aspatia .. .	3552	2885	3339	3420	712	4.7	89	89	26.0	48	14.03	2	1	8	89	47	13.7	1	0.2
Cleator Moor .. .	2947	8120	8302	8300	1626	5.1	245	245	29.5	104	12.5	—	17	34	138	121	14.5	7	0.8
Cockermouth .. .	2425	5355	5203	5167	1167	4.4	113	105	20.9	88	17.0	20	3	9	86	71	14.1	3	0.5
Egremont .. .	2769	5761	6305	6305	1159	5.4	187	187	29.6	104	16.4	—	—	26	139	104	16.4	7	1.1
Harrington .. .	2390	3679	4340	4460	832	5.2	128	129	28.9	62	13.9	3	1	12	93	60	13.4	5	1.1
Holme Cultram .. .	25489	4275	4494	4523	1041	4.2	91	94	20.7	56	11.1	2	10	13	138	64	14.1	1	0.2
Keswick .. .	1166	4451	4403	4403	1060	4.1	70	70	15.8	57	12.9	6	7	3	42	58	13.1	2	0.4
Maryport .. .	1515	11897	11423	11423	2480	4.5	341	343	30.0	154	13.4	3	10	28	80	161	14.0	8	0.7
Millom .. .	1463	10426	8612	8654	1986	4.3	175	175	20.2	133	15.4	1	6	24	137	138	15.9	15	1.7
Penrith .. .	7585	9182	8973	8931	2060	4.3	192	192	21.5	145	16.2	12	5	19	99	138	15.4	2	0.2
Wigton .. .	1002	3692	3687	3687	897	4.1	85	79	21.4	58	15.7	11	1	7	88	48	13.0	2	0.5
Totals for Urban Districts ..	66621	166011	164844	171750	35257	4.6	4228	4217	24.5	2572	14.9	186	120	497	117	2506	14.5	152	0.8
RURAL DISTRICTS.																			
Alston .. .	36971	3134	3075	3095	804	4.0	55	55	17.7	46	14.8	—	2	6	109	48	15.5	1	0.3
Bootle .. .	92322	5823	5664	5664	1128	5.0	120	119	21.0	72	12.7	—	8	7	59	80	14.1	0	—
Brampton .. .	97697	8785	7982	7982	2332	3.4	109	109	13.6	106	13.2	—	6	6	55	112	14.0	2	0.2
Carlisle .. .	64762	17381	17736	12216	3821	4.5	193	193	16.9	198	17.3	69	11	13	67	140	12.2	4	0.3
Cockermouth .. .	162783	21690	22233	22360	4689	4.7	593	597	26.7	269	12.0	6	22	61	102	285	12.7	19	0.9
Longtown .. .	88475	6676	6167	6167	1420	4.3	136	136	22.0	98	15.8	—	—	11	81	98	15.8	4	0.6
Penrith .. .	180706	13023	12549	12503	2773	4.5	242	242	19.3	129	10.3	5	15	18	74	139	11.1	4	0.3
Whitehaven .. .	74172	12961	14147	14350	2766	5.1	364	366	25.5	171	11.9	9	18	39	106	180	12.5	13	0.9
Wigton .. .	108577	11449	11383	11383	2599	4.3	264	264	23.1	160	14.5	5	13	27	102	168	14.7	4	0.3
Totals for Rural Districts ..	906465	100922	100336	95720	22332	4.5	2076	2081	21.7	1249	13.0	94	95	188	90	1250	13.0	51	0.5
Administrative County of Cumberland .. .	973086	266933	265780	267470	57589	4.7	6304	6298	23.5	3821	14.2	†2	†28	685	108	3847	14.3	203	0.7

* This figure, i.e., Nett Births, is got by correcting the figures in column 7 for transferable births.

† This figure represents the number of non-residents whose deaths were registered in the Administrative County.

‡ This figure represents the number of residents whose deaths were registered outside of the Administrative County.

†‡ These figures must obviously differ from the sum of the district totals.

The figures in column 16, i.e., the Nett Deaths, are got by adding the figures in column 13 to, and subtracting the figures in column 12 from the figures in column 10, i.e., the Total Deaths.

The "Crude" Death-rate is the death-rate before any correction has been made.

The "Recorded" Death-rate is the death-rate after correcting for transferable deaths.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1913. Table II.

	Smallpox.	Cholera Plague.	Diphtheria (including Membranous Group.	Erysipelas.	Scarlet Fever.	Typhus Fever.	Etiotic Fever.	Relapsing Fever, Continued Fever.	Paratyphoid Fever.	Cerebro-spinal Meningitis.	Poliomyelitis.	Pulmonary Tuberculosis.	Other Forms of Tuberculosis.	Total Cases Notified.
URBAN DISTRICTS.														
City of Carlisle	52 (42)	..	51 ..	159 (131)	..	..	5 (4)	..	..	1	..	718 (177)
Workington, Borough	25 (15)	..	18 ..	32 (21)	..	..	9 (8)	..	..	2	..	140 (44)
Whitehaven	1	..	22 ..	16 (15)	..	..	12 (10)	..	..	3	..	141 (25)
Arlecdon and Frizington	7	..	9 ..	18 (2)	..	..	2	..	..	7 (2)	..	49 (4)
Aspatria	1	..	1 ..	28	..	..	..	..	..	5	..	38
Cleator Moor	12 ..	4	..	..	1	..	..	25	..	61 (1)
Cockermouth	5	..	2 ..	4	..	..	..	..	..	7 (2)	..	21 (2)
Egremont	4 (1)	..	11 ..	5 (2)	..	..	1	..	..	18	..	48 (3)
Harrington	4 (1)	..	1 ..	5 (3)	..	..	..	..	..	4	..	18 (4)
Holme Cultram	3 (2)	..	4 ..	2	..	..	..	..	..	9	..	22 (2)
Keswick	4 (3)	..	..	24 (20)	..	..	..	..	..	6 (4)	..	35 (27)
Maryport	13	..	2 ..	3	..	..	1	..	..	19	..	45
Millon	19 (17)	..	4 ..	21 (20)	..	..	5 (5)	..	..	21	..	82 (44)
Penrith	8 (5)	..	..	12 (2)	..	..	..	..	..	20	..	30 (7)
Wigton	3 ..	12	..	..	..	..	..	5	..	15
Totals for Urban Districts	146 (86)	..	140 ..	325 (217)	..	..	36 (27)	..	..	2	..	1463 (340)
RURAL DISTRICTS.														
Alston	2	..	..	1	..	..	..	..	..	7	..	13
Booth	2 (1)	..	1 ..	3 (2)	..	..	..	..	..	7	..	15 (5)
Brampton	5	..	..	30	..	..	2 (2)	..	..	5	..	44
Carlisle	8 (7)	..	7 ..	7 (6)	..	..	..	..	1	..	..	54 (13)
Cockermouth	23	..	8 ..	33 (25)	..	..	1	..	..	24	..	101 (25)
Longtown	6 (1)	..	1 ..	11 (2)	..	..	..	..	..	15	..	40 (3)
Penrith	5 (5)	..	5 ..	3	..	..	..	..	..	12	..	25 (7)
Whitehaven	12 (1)	..	21 ..	84 (59)	..	..	..	..	..	32	..	159 (60)
Wigton	3	..	5 ..	11	..	..	1	..	..	17	..	42
Total, Rural Districts	66 (15)	..	48 ..	183 (96)	..	..	4 (2)	..	..	5	..	493 (113)
Totals for Administrative County	212 (101)	..	188 ..	508 (313)	..	..	40 (31)	..	..	7	..	1956 (453)

The figures in brackets indicate the number of cases removed to hospital.

CAUSES OF DEATH DURING THE YEAR 1913.

Table III.

	Great Birmingham, Canals, City & Ed.	Wolverhampton (Borough)	Whitehaven (Borough)	Aldershot & Frinton	Aspley	Chislehurst	Cockermouth	Egmont	Harrington	Holme Cultram	Kewick	Maryport	Millom	Pewth	Wigan	Total & means for non- metropolitan districts.	RYDAL, DISTRICT, Alston	Rosale	Strangford	Carlisle	Cockermouth	Longtown	Pewth	Whitehaven	Wigan	Total & means for non- metropolitan districts.	Total for Administration Area
1 Enteric Fever	12	12	1	—	—	—	—	1	—	—	—	—	1	—	—	7	—	—	—	—	1	—	—	—	—	1	8
2 Small-pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
3 Measles	9	1	10	—	—	4	—	—	—	—	1	—	8	—	—	36	—	—	—	1	—	—	—	—	—	56	
4 Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	2	
5 Whooping Cough	7	—	—	—	—	1	—	—	—	—	—	—	—	—	—	12	—	—	—	—	—	—	—	—	—	15	
6 Diphtheria and Croup	9	6	—	—	—	—	—	3	1	—	—	—	—	—	—	25	—	—	—	—	—	—	—	—	—	33	
7 Influenza	15	5	—	—	—	—	—	4	—	1	—	—	—	—	—	31	—	—	—	—	—	—	—	—	—	50	
8 Erysipelas	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	3	
9 Phthisis (Pulmonary Tuberculosis)	71	20	24	8	5	10	8	10	1	3	1	6	11	3	2	183	—	—	—	—	18	—	—	—	—	258	
10 Tuberculous Meningitis	14	1	6	—	—	—	—	—	—	—	—	—	—	—	—	30	—	—	—	—	—	—	—	—	—	43	
11 Other Tuberculous Diseases	11	10	11	1	5	1	2	—	—	3	1	—	6	3	—	55	—	—	—	—	1	—	—	—	—	64	
12 Cancer, malignant disease	63	25	15	5	2	6	5	3	8	6	8	11	5	16	5	183	—	—	—	—	15	—	—	—	—	296	
13 Rheumatic Fever	2	3	1	—	—	—	—	—	—	—	—	—	—	—	—	26	—	—	—	—	—	—	—	—	—	35	
14 Meningitis	8	9	2	—	—	3	1	—	—	—	—	—	—	—	—	9	—	—	—	—	—	—	—	—	—	14	
15 Organic Heart Disease	110	27	25	10	10	10	9	6	12	6	7	24	9	22	6	293	—	—	—	—	10	—	—	—	—	450	
16 Bronchitis	40	23	51	9	4	8	1	12	5	1	7	19	8	12	3	193	—	—	—	—	6	—	—	—	—	273	
17 Pneumonia (all forms)	51	32	9	1	2	7	7	4	4	—	1	16	3	7	1	158	—	—	—	—	4	—	—	—	—	238	
18 Other Diseases of Respiratory Organs	6	2	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	89	
19 Diarrhoea and Enteritis	30	11	14	3	—	2	1	—	—	—	—	—	5	12	2	71	—	—	—	—	—	—	—	—	—	19	
20 Appendicitis and Typhlitis	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11	—	—	—	—	—	—	—	—	—	3	
21 Carcinoma of Liver	4	2	4	2	—	—	—	—	—	—	—	—	—	—	—	14	—	—	—	—	—	—	—	—	—	19	
21A Alcoholism	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	3	
22 Nephritis and Bright's Disease	20	10	8	1	—	1	—	4	1	1	1	4	3	1	—	56	—	—	—	—	5	—	—	—	—	84	
23 Puerperal Fever	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	5	—	—	—	—	—	—	—	—	—	6	
24 Other Accidents and Diseases of Pregnancy and Parturition	5	3	5	—	—	—	—	1	—	—	—	1	1	—	2	18	—	—	—	—	—	—	—	—	—	27	
25 Congenital Debility and Malformation, including Premature Birth	55	26	24	5	4	15	4	13	3	10	—	14	3	13	1	190	—	—	—	—	25	—	—	—	—	264	
26 Violent Deaths, excluding Suicide	30	15	21	4	—	5	2	5	2	—	—	10	3	5	1	104	—	—	—	—	3	—	—	—	—	141	
27 Suicide	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	—	—	—	—	—	—	—	—	—	21	
28 Other Defined Diseases	204	89	56	12	13	33	22	24	15	8	20	22	44	43	20	635	—	—	—	—	87	—	—	—	—	983	
29 Diseases ill-defined or unknown	1	9	33	7	4	9	2	—	16	3	14	8	4	—	—	110	—	—	—	—	7	—	—	—	—	203	
Totals	769	335	323	69	47	121	71	104	60	63	58	161	133	130	48	2492	48	80	112	140	285	97	130	180	168	3741	
Sub-Entries (a) Cerebro-spinal Meningitis included in 28 (a) Poliomyelitis	1	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	11	—	—	—	—	—	—	
above figures (b) Lobar Pneumonia	5	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

Sub-Entries 14 (a) Cerebro-spinal Meningitis
included in 28 (a) Poliomyelitis .. 1
above figures *Lobar Pneumonia .. 5

1

1

11

INFANTILE MORTALITY DURING THE YEAR 1913.

Table IV.

	Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 1 month.	1-3 months.	3-6 months.	6-9 months.	9-12 months.	Total under one year.	Smallpox.	Chicken Pox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Comp.	Erysipelas.	Tuberculous Meningitis.	Abdominal Tuberculosis.	Other Tuberculous Diseases.	Meningitis (not Tuberculous).	Convulsions.	Laryngitis.	Tracheitis.	Pneumonia (all forms).	Dysentery.	Epilepsy.	Gastritis.	Syphilis.	Rickets.	Suffocation, overlaying.	Injury at Birth.	Atelactasis.	Congenital Malformations.	Premature Birth.	Atrophy, Debility, and Marasmus.	Other causes.	Legitimate.	Net Births in the year of	Net Deaths in the year of						
URBAN DISTRICTS.																																														
Carlisle (City of) ..	43	5	6	4	58	20	32	22	16	148	—	—	—	—	4	3	—	6	1	5	3	8	—	12	10	6	16	—	3	—	—	2	4	3	33	16	13	1107	57	132	16					
Workington (Borough) ..	16	2	8	3	29	17	19	9	9	83	—	—	—	—	—	—	—	—	1	7	3	4	1	11	14	2	7	3	1	—	—	—	—	—	5	13	8	3	629	25	74	9				
Whitehaven do. ..	16	3	5	1	25	15	14	10	6	70	—	—	2	—	—	—	—	—	—	—	1	16	2	5	3	5	5	1	1	—	—	—	—	—	—	1	9	14	4	521	28	64	6			
Arlecdon and Frizington ..	—	2	—	—	2	4	2	4	1	13	—	—	—	—	—	—	—	—	—	—	—	—	—	3	1	1	2	—	—	—	—	—	—	—	—	—	—	5	1	136	6	12	1			
Aspatria ..	2	1	1	—	4	—	—	3	1	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Cleator Moor ..	8	3	2	—	13	9	6	4	2	34	—	—	—	—	—	—	—	—	2	—	1	5	—	1	4	1	1	—	—	—	—	—	—	—	—	—	—	4	1	85	4	7	1			
Cockermouth ..	1	—	1	—	2	3	1	1	2	9	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Egremont ..	4	1	1	2	8	2	6	5	5	26	—	—	2	—	—	1	—	—	—	—	—	—	—	1	1	4	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Harrington ..	2	1	1	—	4	1	4	2	1	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Holme Cultram ..	3	3	—	—	6	4	1	1	1	13	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Keswick ..	—	1	—	—	1	1	1	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Maryport ..	10	1	—	3	14	7	4	—	3	28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Millom ..	3	2	1	—	6	2	6	5	5	24	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Penrith ..	11	—	3	—	14	2	1	2	—	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Wigton ..	5	—	—	—	5	—	2	—	—	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Total for Urban Districts ..	124	24	29	14	191	87	99	68	52	497	—	—	7	2	4	4	—	7	8	13	8	42	3	44	48	17	35	10	8	1	2	7	6	15	98	73	35	4010	207	442	55					
RURAL DISTRICTS.																																														
Alston ..	—	2	1	—	3	1	1	—	1	6	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Bootle ..	4	—	—	—	4	1	—	1	1	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Brampton ..	—	1	—	—	1	—	1	2	2	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Carlisle ..	5	1	—	1	7	3	—	1	2	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cockermouth ..	19	2	3	1	25	7	14	11	4	61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Longtown ..	3	—	2	—	5	2	—	2	2	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Penrith ..	3	1	2	4	8	3	4	1	2	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Whitehaven ..	9	1	3	4	17	9	9	4	—	39	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Wigton ..	6	2	2	—	10	2	8	3	4	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total for Rural Districts ..	49	10	11	10	80	28	37	25	18	188	—	—	4	—	2	—	3	—	3	2	2	22	3	16	20	6	11	2	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total for Administrative County ..	173	34	40	24	271	115	136	93	70	685	—	—	11	2	6	4	—	10	11	15	10	64	6	60	68	23	46	12	9	1	2	9	6	22	142	95	51	5939	359	610	75					

