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COUNTY COUNCIL OF LANARK.

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TWENTY-THIRD  
ANNUAL REPORT

OF THE  
COUNTY AND DISTRICT MEDICAL OFFICER.

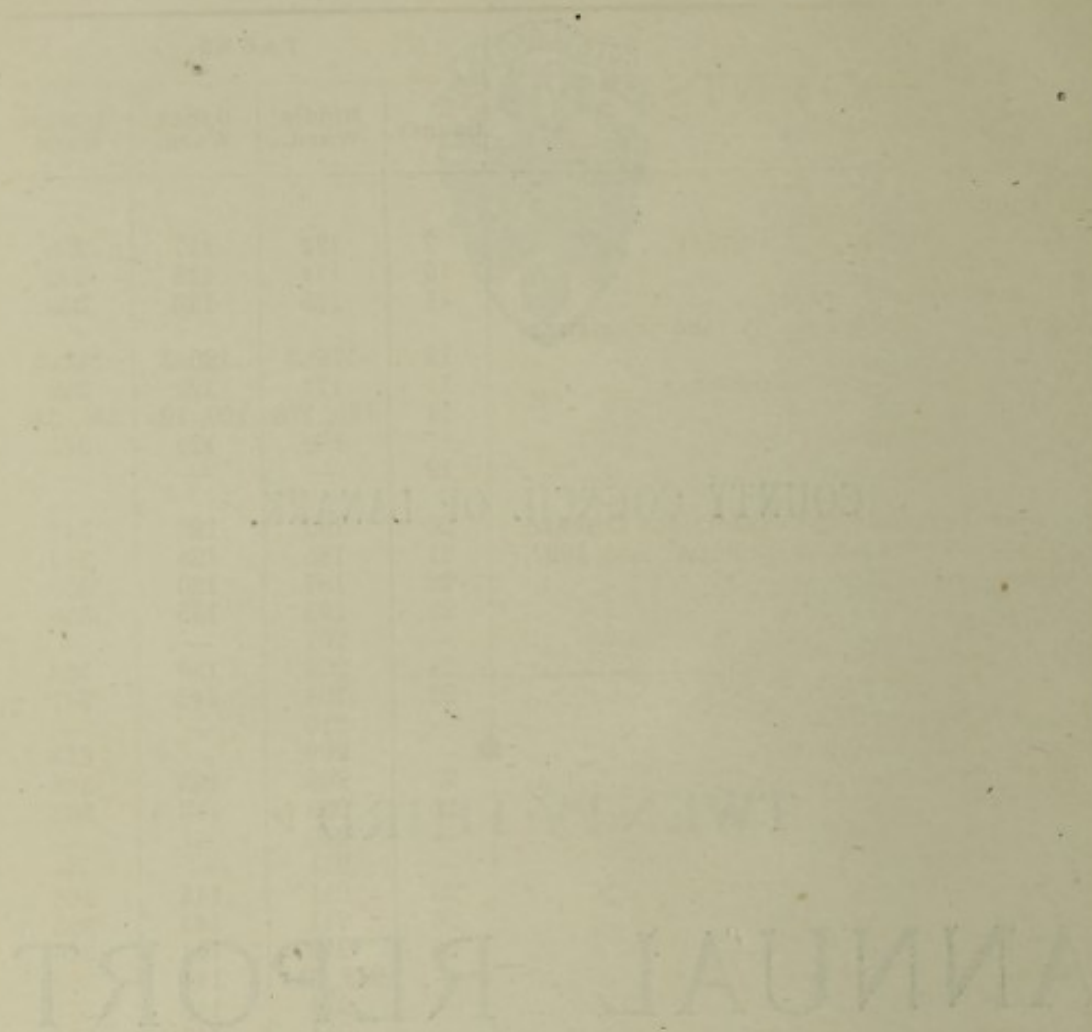
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**1913.**

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GLASGOW:

PRINTED BY ROBERT ANDERSON, 142 WEST NILE STREET.



COUNTY AND DISTRICT MEDICAL COMMISSIONERS

1913

PRINTED BY ROBERT L. LEE, ALBANY, N. Y.

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THE

GOVERNMENT BOARD FOR

THE

COMMISSIONERS

in relation to the

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I am

Very

Yours

JOHN T. WILSON



TO THE LOCAL GOVERNMENT BOARD FOR SCOTLAND,  
TO THE COUNTY COUNCIL OF LANARK, AND  
DISTRICT COMMITTEES THEREOF.

---

MY LORDS AND GENTLEMEN,

In submitting my Annual Report for the year 1913, I have to explain that the work done in the Administrative Control of Tuberculosis, which includes the provision of Sanatorium Benefit for Insured Persons was considered worthy of a special report, and will be issued separately so the subject is not further referred to in this report.

I am,

MY LORDS AND GENTLEMEN,

Your obedient Servant,

JOHN T. WILSON.

COUNTY OFFICES,  
HAMILTON, *September, 1914.*

# STAFF.

## COUNTY HEALTH DEPARTMENT.

---

### County Medical Officer.

JOHN T. WILSON, M.D., D.P.H.

### Tuberculosis Officers and Assistant M.O.H.

FRANK H. SCROGGIE, M.B., Ch.B., D.P.H.

JOHN W. MILLER, M.B., Ch.B., D.P.H.

JAMES R. ADAM, M.B., Ch.B., D.P.H.

ROBERT RICHARDS, M.A., M.B., Ch.B., D.P.H.

J. THOMSON DICK, M.B., Ch.B., D.P.H.

CHRISTINA BARROWMAN, M.B., Ch.B., B.Sc. (P.H.).

### Bacteriologist.

J. HUME PATTERSON, L.R.C.P.Ed., D.P.H.

### Chemist.

WALTER BROWN, F.C.S.

### Inspectors—Food and Drugs, Rivers Pollution, &c.

ROBERT M'NAUGHTON.

CHARLES MACARA.

FRANK M'ARTHUR.

DUNCAN J. BLACK.

*September, 1914.*

## COUNTY OF LANARK

(EXCLUSIVE OF BURGHS).

### Report by the Medical Officer of Health

*For the Year 1913.*

#### I.—VITAL STATISTICS.

The **Area** of each of the three sanitary districts of the County at the end of the year, the **Population** estimated to the middle of the year, and the number of *occupied* and *unoccupied* houses as per Valuation Roll, 1913-14, are given in the following table:—

	Acreage.	Population.	Houses.	
			Occupied.	Unoccupied.
Upper Ward, - - -	327,013	43,445	9,333	331
Middle Ward, - - -	186,623	207,080	39,986	1,175
Lower Ward, - - -	24,669	29,500	5,602	146
County,	538,305	280,025	54,921	1,652

The only change in area during 1913 was in the Lower Ward District, where the remaining portion of the Parish of Govan, amounting to 216 acres, with a population of 18, was annexed by the Burgh of Renfrew. This annexation took place as from 1st October, 1913. In the report of the preceding year information was given as to the heavy losses that took place through the Glasgow Boundaries Act. When these boundaries were adjusted an understanding was come to between parties that this small portion of Govan might be annexed by the Burgh of Renfrew.



The losses sustained in area and population owing to annexation by burghal authorities since 1891 may be stated as follows:—

		Acres.	Population.
1896—City of Glasgow annexed,	- -	450	632
Burgh of Wishaw	„ - -	465	1,100
1899—City of Glasgow	„ - -	370	399
1901—Burgh of Govan	„ - -	209	5,642
„ Hamilton	„ - -	67	—
1906—„ Rutherglen	„ - -	469	3,000
1908—„ Lanark	„ - -	214	260
„ Motherwell	„ - -	438	3,600
1912—City of Glasgow	„ - -	1,706	28,490
1913—„ Renfrew	„ - -	216	18
		<hr/> 4,604	<hr/> 43,141

The census population in each parish or registration district will be found in Tables B of the district reports.

In Table A the population is given for each year since 1891, and was estimated as follows:—For the period 1891-1900 the increases were based on the census figures of 1891 and 1901. For the period 1901-1911 the annual increments have been based almost entirely upon the number of inhabited houses, and it is interesting to find that the estimates made in this way have been found fairly accurate when compared with the census figures obtained in 1911.

In the Middle Ward District the population was revised for the intercensal period 1901-1910, and the rates given in the Annual Report for 1912 are the rates corrected on the revised population (see page 151 of the 1912 Report). As the population in mining and manufacturing communities is liable to sudden fluctuations through the opening up of new works, the development of existing works, and the shutting up of existing works, it is doubtful whether the census figures, which assume a steady and progressive rate of increase or decrease, give such reliable data as the calculations based upon the number of occupied houses. For example, in the Middle Ward District the variation in the number of occupied houses from year to year was considerable, the estimation, based upon the Valuation Roll, being as follows:—

1902,	-	increase,	868	1907,	-	increase,	425
1903,	-	„	1,099	1908,	-	„	349
1904,	-	„	612	1909,	-	„	411
1905,	-	decrease,	49	1910,	-	„	573
1906,	-	increase,	601	1911,	-	decrease,	50

The number of inhabited houses during 1913 shows an increase over that of the preceding year in both the Upper and the Middle Ward. In the Lower Ward area, owing to a large portion being annexed by the City of Glasgow, no comparison can be made.



TABLE A.—POPULATION IN EACH OF THE DISTRICTS AND IN THE COUNTY AS ASCERTAINED AT THE DECENNIAL CENSUS, 1891-1901 AND 1911, ALSO AS ESTIMATED AT THE MIDDLE OF EACH YEAR FROM 1891 TO 1913.

YEAR.	DISTRICTS.			COUNTY.
	Upper Ward.	Middle Ward.	Lower Ward.	
	POPULATION AS	ASCERTAINED AT	DECENNIAL CENSUS.	
1891 -	37,005	142,548	30,261	209,814
1901 -	40,420	179,363	*41,531	261,314
1911 -	42,978	202,663	56,974	302,615
	POPULATION ESTIMATED TO THE MIDDLE OF EACH			YEAR.
1891 -	37,088	143,387	30,606	211,081
1892 -	37,422	146,781	32,024	216,227
1893 -	37,759	150,240	33,499	221,498
1894 -	38,098	153,765	35,035	226,898
1895 -	38,437	157,359	36,633	232,429
1896 -	38,779	161,021	38,296	238,096
1897 -	39,121	164,752	40,027	243,900
1898 -	39,466	168,551	41,829	249,846
1899 -	39,812	172,421	43,704	255,937
1900 -	40,159	176,361	45,657	262,177
1901 -	40,509	180,389	†45,327	†266,225
1902 -	40,868	184,588	43,474	268,930
1903 -	41,230	188,866	44,921	275,017
1904 -	41,230	191,267	47,987	280,484
1905 -	41,230	191,267	47,987	280,484
1906 -	41,900	195,000	49,000	285,900
1907 -	42,000	197,000	52,000	291,000
1908 -	42,500	198,000	54,000	294,500
1909 -	43,000	200,000	55,000	298,000
1910 -	43,200	202,000	55,800	301,000
1911 -	43,043	203,279	57,400	303,722
1912 -	43,043	203,279	57,400	303,722
1913 -	43,445	207,080	29,500	280,025

\* Does not include the population (5,642) in the area annexed to the Burgh of Govan as from 15th August, 1901.

† The population here given for Govan is an *average* for the whole year, and on this the rates have been calculated.

The population was reduced by further Burgh extensions, viz. :—

1906.	1908.	1908.	1912.	1913.
Rutherglen.	Motherwell.	Lanark.	Glasgow.	Burgh of Renfrew.
3,000 persons.	3,600 persons.	260 persons.	28,490 persons.	18 persons.
469 acres.	438 acres.	214 acres.	1,706 acres.	216 acres.



The age and sex constitution of the population as ascertained at the decennial census is given for each ward in the district reports. The summation of these figures are here given :—

	All Ages	Under 5	5-	10-	15-	20-	25-	30-	35-	40-
Both Sexes,	302,615	42,373	39,178	34,820	29,553	26,140	24,160	21,674	19,766	15,848
Males,	155,945	21,303	19,756	18,019	15,806	13,832	12,469	11,202	10,505	8,263
Females,	146,670	21,070	19,422	16,801	13,747	12,308	11,691	10,472	9,261	7,585

	45-	50-	55-	60-	65-	70-	75-	80-	85-	90-	95-	Not stated.
Both Sexes,	12,937	10,770	8,091	6,219	4,950	3,421	1,638	707	269	44	16	41
Males,	6,707	5,634	4,284	3,182	2,418	1,479	666	269	100	15	4	32
Females,	6,230	5,136	3,807	3,037	2,532	1,942	972	438	169	29	12	9

The percentage proportion of the population at quinquennial age periods, as ascertained for each of the three County Sanitary Districts from the figures in the Census Returns, 1911, are given in the under-noted tabular statement. Attention is called to the first two and last three age periods, where it will be found that in comparing the Middle with the Upper Ward District there is at the two early age periods a very much larger proportion of children under 5 and between 5 and 10 years in the Middle Ward, whereas in the later age periods the larger proportion is in the Upper Ward. In other words, in our large industrial communities where the birth-rate is high there is a large proportion of young people, whereas in a district where the birth-rate is somewhat low there is a large proportion of elderly people.

Age Periods.	Upper.	Middle.	Lower.	County.
Under 5 Years,	12·24	14·74	12·68	14·00
5-	12·28	13·40	11·82	12·94
10-	11·58	11·75	11·21	11·50
15-	10·10	9·57	9·55	9·76
20-	8·48	8·63	8·76	8·63
25-	7·63	8·04	8·02	7·98
30-	6·80	7·06	7·79	7·16
35-	6·25	6·42	7·13	6·53
40-	5·24	5·14	5·56	5·23
45-	4·69	4·08	4·63	4·27
50-	3·98	3·41	3·78	3·55
55-	3·19	2·53	2·78	2·67
60-	2·47	1·89	2·32	2·05
65 and upwards,	5·10	3·28	3·90	3·66



The number of **Births** registered was **8,896**, the details of which are as follows :—

	Births Registered.	Birth-rate per 1,000 population. Year 1913.	Average 1906-10.
Upper Ward, - -	1,168	26·88	28·71
Middle Ward, - -	7,001	33·8	37·59
Lower Ward, - -	727	24·64	32·20
County, - -	8,896	31·76	35·36

These figures show the birth-rate to be highest in the Middle Ward area, which is chiefly a mining and manufacturing community. In comparing the rates in the Lower Ward area, there is a difficulty in having comparative statistics—(1) Because of the great alteration in the area through the annexation by the City of Glasgow; and (2) in previous years the population used in calculating birth and death-rates did not include the population of certain institutions. This population has now been included.

The number of **Deaths** registered was 3,952. After making corrections for deaths which occurred in institutions and in other districts, as shown in Table B1 of the district reports, the nett deaths belonging to the districts amounted to **3,916**. The details are as follows :—

	Nett Deaths.	Death-rate per 1,000 population. Year 1913.	Average 1906-10.
Upper Ward, - -	527	12·13	12·77
Middle Ward, - -	3,036	14·66	16·03
Lower Ward, - -	353	11·96	14·32
County, - -	3,916	13·98	15·25

The following Table B gives particulars of the deaths occurring in institutions within the three districts of the County :—

**TABLE B.**—PUBLIC INSTITUTIONS.—THE NUMBER SITUATED WITHIN EACH DISTRICT OF THE COUNTY OF LANARK WHERE PERSONS NOT BELONGING TO THE DISTRICT DIED, AND WHOSE DEATHS ARE EXCLUDED.

District.	Number of Institutions.	Total Population.	Total Deaths during 1913.	Deaths allo- cated to the District.	Deaths excluded.
Upper Ward, -	10	798	41	34	7
Middle Ward, -	15	2,410	311	143	168
Lower Ward, -	10	2,928	124	16	108
County, - -	35	6,136	476	193	283



VITAL STATISTICS EXTRACTED FROM THE REGISTRAR-GENERAL'S ANNUAL  
REPORT FOR THE YEAR 1911.

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In the history of Scottish national statistics the year 1912 will ever be memorable. The Registrar-General then began to prepare and to publish vital statistics for each Public Health area, corrected for transfers, and adjusted for age and sex distribution. What that means may not be understood or appreciated by the public generally; but to Medical Officers of Health, especially County Officers, it provides comparative statistics of some value.

Medical Officers of Health have no doubt prepared and published in their Annual Reports vital statistics, but these were not prepared on a uniform basis. For example, deaths occurring in hospitals, asylums, and poor-law institutions required to be allocated to the Public Health district from which the patient was admitted. That was not always done, with the result that the statistics prepared by Medical Officers of Health and supplied to the Local Government Board were found in some years to be several thousands short of the number actually registered and published by the Registrar-General. The following tabular statement, extracted from the Registrar-General's Annual Report for 1911, and giving birth-rates and death-rates per 1,000 of the population, and infantile deaths per 1,000 births, gives the more important rates for the County Sanitary districts and the Burgh districts of Lanarkshire:—

	Birth-rate. Corrected for Transfers.	Death-rate. Corrected for Transfers and for Age and Sex Distribution.	Infantile Mortality Rate Corrected for Transfers.	Population Estimated to middle of 1911.
COUNTY OF LANARK—				
Upper Ward,	27·6	13·0	80	42,896
Middle „	34·2	15·9	113	202,540
Lower „	28·4	14·3	124	57,215
BURGHS—				
Airdrie, ...	31·3	15·8	122	24,353
Biggar, ...	20·5	11·6	148	1,320
Coatbridge,	32·1	17·0	140	43,288
Glasgow, ...	27·6	19·2	137	781,922
Govan, ...	30·0	19·3	133	89,471
Hamilton, ...	34·2	14·9	112	38,653
Lanark, ...	24·4	13·1	111	5,893
Motherwell,	33·3	14·7	109	40,466
Partick, ...	26·2	15·7	125	66,924
Rutherglen,	27·4	18·9	120	24,375
Wishaw, ...	34·0	16·9	136	25,283



**Deaths in Relation to Age and Cause.**—If reference be made to Table B1 in the district reports, the deaths will be found classified according to age and cause.

The following tabular statement shows the number of deaths and the percentage proportion of deaths at age periods. In comparing the Middle Ward figures with those of the Upper Ward it will be observed that in the former the percentage of deaths of the infant and the under-school age periods is much higher than in the Upper Ward, whereas in the post-mature period the Upper Ward percentage is about double that of the Middle Ward. This contrast is not quite so marked in the Lower Ward.

	UPPER WARD.		MIDDLE WARD.		LOWER WARD.		COUNTY.	
	Deaths.	Per-centage.	Deaths.	Per-centage.	Deaths.	Per-centage.	Deaths.	Per-centage.
Infant Period—								
Under 1 Year,	82	15.55	842	27.73	59	16.71	983	25.07
Under School								
Age—1.5 Years,	35	6.64	391	12.87	42	11.89	468	11.67
School Age—								
5-15 Years,	30	5.69	163	5.36	25	7.08	218	5.56
Adolescence—								
15-25 Years,	27	5.12	130	4.24	22	6.23	179	4.57
Early Mature Per-								
iod—25-45 Years,	62	11.76	361	11.89	51	14.44	474	11.84
Late Mature Per-								
iod—45-65 Years,	106	20.11	585	19.23	74	20.96	765	19.53
Post Mature Per-								
iod—65 Years and								
over,	185	35.10	564	18.57	80	22.66	829	20.91

The population at each age period, except the infant period, is given in Vol. II. of the Census Report, page 253. From this the population at age periods has been estimated for the year 1913, and is given in the following table along with the deaths and death-rates :—

	Under—5	5-15	15-25	25-45	45-65	Over 65
Estimated population—	39,209	68,474	51,536	75,368	35,179	10,259
Deaths— (Year, 1913),	1,451	218	179	474	765	829
Death-rate per 1,000 of the population, }	39.55	3.18	3.47	6.28	21.71	80.80

The high death-rates at the extremes of life and the very low rate during the school-age period are clearly shown. The infant death-rate can only be calculated in relation to the number of births.

*Infant Period.*—The infant death-rate for each year since 1891 is given in Table C for the County as a whole. The following tabular statement shows the number of infant deaths per 1,000 births compared with those for the quinquennial period 1906-10 for each of the three districts:—

	Infant Deaths Year 1913.	Infant Deaths per 1000 births Year 1913.	Average 1906-1910.
Upper Ward, -	82	71·2	85·01
Middle „ -	842	120·2	123·40
Lower „ -	59	81·15	103·80
County, -	983	110·5	115·75

For the year 1913 the rate shows an increase of 4·0 over the preceding year. Of the 983 deaths recorded, 374 took place during the first month, and 156 during the next two months, making 530 deaths of children under 3 months.

INFANT DEATHS CLASSIFIED ACCORDING TO CAUSE. NUMBER IN EACH GROUP COMPARED WITH THAT FOR THE PRECEDING YEAR.

	1913.	1912.
1.—Premature Birth, 155; Congenital Malformations, 56; Atelectasis, 12; Injury at Birth, 7.	230	262
2.—Diarrhœa, 182; other Digestive Diseases, 28; Atrophy, Debility, and Marasmus, 149.	359	286
3.—Pneumonia, 85; Bronchitis, 44; other Respiratory Diseases, 2.	131	247
4.—Tuberculosis—Pulmonary, 3; Meningeal, 22; Abdominal, 25; other Tuberculosis, 3.	53	31
5.—Meningitis, 30; Convulsions, 19; other Nervous Diseases, 3.	52	48
6.—Measles, 13; Whooping Cough, 71; Erysipelas, 1; other Septic Diseases, 5; Diphtheria, 5; Cerebro-Spinal Fever, 2; Syphilis, 2; Scarlet Fever, 1.	100	118
7.—Violence, 8; Suffocation (overlying), 2,	- - - 10	10
8.—Other Causes, 48,	- - - 48	52
Total,	983	1,054

*Infectious Diseases.*—The number of deaths due to infectious diseases which are compulsorily notifiable was 342, details of which are given in Table E.



The deaths from infectious diseases not compulsorily notifiable amounted to 415, made up thus:—

	Upper Ward.	Middle Ward.	Lower Ward.	County.
Measles, - - -	2	76	2	80
Whooping Cough, -	5	103	7	115
Diarrhœa - - -	13	200	7	220

These diseases are all discussed under a separate heading in Part II. of the district reports.

**Respiratory Diseases.**—The group of diseases under the heading respiratory has varied from time to time. In the years preceding 1906 this group included deaths from pneumonia and from influenza with respiratory symptoms. Since the year 1906 these two causes of death have been classified separately. Since 1911 bronchitis has also been given a separate heading. This change in the classification is indicated in the following tabular statement:—

#### OLD CLASSIFICATION.

##### ALL RESPIRATORY DEATHS.

Year.	Deaths.	Death-rate.	Year.	Deaths.	Death-rate.	Year.	Deaths.	Death-rate.
1891	832	3·95	1896	580	2·44	1901	659	2·49
1892	767	3·56	1897	816	3·36	1902	788	2·95
1893	762	3·45	1898	723	2·91	1903	733	2·68
1894	649	2·87	1899	787	3·09	1904	884	2·82
1895	898	3·88	1900	949	3·64	1905	757	2·72

#### NEW CLASSIFICATION.

Pneumonia.			Bronchitis.		Influenza.		Other Respiratory Diseases.	
Year.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.
1906	184	0·64	—	—	25	0·08	499	1·75
1907	237	0·82	—	—	42	0·14	535	1·85
1908	241	0·82	—	—	37	0·12	645	2·21
1909	424	1·43	—	—	36	0·12	355	1·20
1910	453	1·52	—	—	22	0·07	325	1·10
1911	420	1·39	284	0·94	30	0·10	36	0·12
1912	448	1·49	257	0·85	14	0·04	39	0·13
1913	296	1·05	218	0·77	37	0·13	47	0·16

*Pneumonia.*—Deaths from this disease have been classified separately since the year 1906. Deaths from broncho-pneumonia were, up till 1908, included in the general respiratory group, and since 1909 they have been included under the heading “Pneumonia.”

296 deaths occurred during the year 1913. Classified according to age, the deaths were as follows:—

	Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65 and upwards.	Total.	Death-rate.
Upper Ward, -	7	7	4	1	1	2	4	6	32	0·73
Middle „ -	72	37	19	6	4	26	45	31	240	1·15
Lower „ -	6	5	1	...	1	3	6	2	24	0·81
County, -	85	49	24	7	6	31	55	39	296	1·05

*Bronchitis.*—Up to the year 1911 deaths from this disease were included under the general respiratory heading. 218 deaths occurred during the year, and gave a death-rate of 0·77 per thousand of the population. Classified according to age, the deaths were as follows:—

		Under 1	1-2	2-5	5-15	25-45	45-65	65 and upwards.	Total.	Death- rate.
Upper Ward,	-	4	1	...	...	1	7	18	31	0·71
Middle	„	35	9	2	1	6	48	67	168	0·81
Lower	„	5	2	1	...	...	6	5	19	0·64
<hr/>										
County,	-	44	12	3	1	7	61	90	218	0·77

*Influenza.*—Deaths from this disease have been classified separately since the year 1906. During the year 37 deaths occurred, and gave a death-rate of 0·13 per thousand of the population. Classified according to age, the deaths were as follows:—

	5-15	15-25	25-45	45-65	65 and upwards.	Total.	Death-rate.
Upper Ward, -	...	...	3	3	...	6	0·13
Middle „ -	1	1	7	11	8	28	0·13
Lower „ -	...	...	...	...	3	3	0·10
County, -	1	1	10	14	11	37	0·13

*Other Respiratory Diseases,* including asthma, congestion of the lungs, laryngitis, and acute croup, caused 47 deaths, and gave a death-rate of 0·16 per thousand of the population. Classified according to age, the deaths were as follows:—

	Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65 and upwards.	Total.	Death-rate.
Upper Ward, -	...	...	...	...	...	1	7	5	13	0·30
Middle „ -	2	5	5	2	1	3	7	8	33	0·16
Lower „ -	...	1	...	...	...	...	...	...	1	0·03
County, -	2	6	5	2	1	4	14	13	47	0·16



**Malignant Diseases.**—This group includes deaths from diseases certified as cancer, carcinoma, sarcoma, &c. From these causes 209 deaths occurred, and gave a death-rate of 0·74 per thousand of the population. The death-rate for each district of the County was as follows:—Upper Ward, 0·99; Middle Ward, 0·71; and Lower Ward, 0·64. The deaths and death-rates from this group of diseases since 1901 is given in the following tabular statement, viz.:—

Year	Deaths.	Death-rate.	Year.	Deaths.	Death-rate.
1901	136	0·51	1907	202	0·69
1902	138	0·51	1908	196	0·67
1903	166	0·68	1909	207	0·70
1904	157	0·56	1910	214	0·71
1905	153	0·55	1911	198	0·65
1906	206	0·72	1912	228	0·75
			1913	209	0·74

\* For some years a considerable amount of research as to the nature and cause of cancer has been carried on in different countries. In London the work done through the agency of the Imperial Cancer Research Fund has been reported from time to time. A paper\* on this subject by the Director of this Research Fund summarises the results obtained of the comparative and experimental study of cancer during the last ten years, which, he says, have had very far-reaching effects on our knowledge of the disease.

Much of the study goes to illustrate the association of some forms of cancer with chronic irritation, observations on the anatomical distribution of the disease among different peoples and in animals, and laboratory experiments, throwing considerable light on this connection. It has been shown that chronic irritation in many cases determines the site at which cancer develops, though not of itself the definite cause of it. Microscopic observations of the changes occurring at these sites and ultimately resulting in cancer have not, however, cleared up its nature.

It has been proved by experiment that cancer can be transplanted from one animal to another, but this process is quite distinct from infection—in fact there is no evidence from laboratory experiment to support the theory that the disease can be communicated naturally from one animal to another. This has an important bearing on the occurrence of so-called cancer-houses, where several cases of cancer have occurred in successive members of a family, or in members of different families who have occupied the same house. On this subject Dr. Bashford writes:—

“Let me call to your mind how difficult it is to obtain accurate information regarding the causes of death of a number of persons living in a single house over a prolonged period of years, and also point out that cancer is so frequent a cause of death that ultimately one woman out of seven and one man out of about ten above the age of thirty-five dies of it. Therefore aggregations of cases of cancer are

\* *Journal of the Royal Sanitary Institute*, June 1914, pp. 230-236.



found frequently in the same place, whether it be a large area, a house, or even a single room. To enumerate a hundred so-called cancer-houses, or even ten thousand, is no evidence at all, either one way or the other, because the question to be solved is simply this—Is cancer more frequent in certain houses than it is in others? The data available for the human being, into which I have inquired, are valueless for settling this question in the form in which it is formulated. For man it is a question incapable of solution, and therefore wrongly formulated. On the other hand, experiments on the mouse have proved quite definitely that the disease is not communicated from one animal to another, either by infection or by transplantation. The fear of some such occurrence is the only *raison d'être* for raising the question of cancer-houses at all, and, this being the case, the subject is one unworthy of further serious discussion."

The question of heredity in the study of cancer is one of the first importance. Dr. Murray's experiments in mice demonstrated that by in-breeding cancerous stock it has been possible almost to double the frequency of cancer in the case of mice whose mothers and grand-mothers have had cancer of the breast.

"Other experimental methods have shown that this increase is not due to a constitutional modification suitable for cancerous growth throughout the body as a whole, because mice with the hereditary taint do not offer a more suitable soil for the growth of tumours than the animals not so tainted. These experiments point to a localised tissue susceptibility rather than to a constitutional liability to the disease. When chronic irritation has preceded the development of cancer the hereditary factor may predispose the tissue to cancerous change during the prolonged proliferation produced by the chronic irritation. One of the most striking facts is that the disease does not develop in all persons exposed to the same conditions. Therefore, for this and other reasons, the relation between chronic irritation and cancer is spoken of as 'mediate.'"

Occurrences of cancer in different parts of the body have for some time been the subject of statistical investigation, which shows that, though there has been an increase in the total number of deaths from malignant diseases, when these are analysed, the increase is found to be confined to disease of certain organs and tissues. Thus there is no increase of cancer in the skin, uterus, liver, and gall-bladder; while for other parts, especially the stomach and intestines for both sexes, a large increase is recorded. This may in large measure be due to improved diagnosis and certification.

"The cancerous effections of males are in much larger proportion internal or inaccessible than are those of females, and consequently are more difficult of recognition, so that any improvement in medical diagnosis would add more to the male than the female figures" (Ogle). An analysis of the mortality rates from cancer for England and Wales show that this is true. Among males the mortality rate per 1,000,000 living at all ages has risen from 195 in the period 1851-60 to 723 for 1901-05, while the corresponding increase in females has been from 434 to 997. In Frankfort-on-Main the deaths are classified into those from cancer of accessible and of inaccessible regions, and it is of interest to note that the increase of cancer is confined to the latter.



**Meteorology.**—Observations made at the stations established at Bothwell and Leadhills were duly forwarded to the Scottish Meteorological Society, and published by the Registrar-General. From these statistics given in the Quarterly returns the following Table D has been prepared :—

**TABLE D.**—MONTHLY METEOROLOGICAL OBSERVATIONS FOR THE YEAR 1913. Taken at Bothwell and at Leadhills, furnished to the Scottish Meteorological Society, and published by the Registrar-General.

MONTH.	BOTHWELL (Altitude, O.S.D., 150).					LEADHILLS (Altitude, O.S.D., 1,300).				
	Mean Temperature.	Mean Daily Range.	Relative Humidity.	RAIN.		Mean Temperature.	Mean Daily Range.	Relative Humidity.	RAIN.	
				Number of Days it fell.	Amount.				Number of Days it fell.	Amount.
January, -	37.3	8.2	90	14	2.65	33.5	8.5	89	24	7.49
February, -	40.4	10.2	87	13	2.58	36.6	10.6	87	11	4.32
March, - -	41.2	12.7	88	19	3.84	35.6	12.6	84	27	7.94
April, - -	44.7	15.0	84	17	2.69	41.1	12.9	83	20	8.07
May, - - -	50.4	15.0	85	25	2.66	47.5	13.4	87	21	6.26
June, - - -	55.0	13.2	77	16	3.23	51.9	14.9	83	19	4.16
July, - - -	57.6	15.7	80	6	0.85	54.1	17.9	78	5	0.87
August, - -	57.0	15.8	80	10	1.35	55.1	18.7	81	6	1.35
September, -	53.7	13.3	89	10	2.46	50.2	17.4	85	7	2.88
October, - -	49.3	11.9	83	12	1.54	45.1	11.2	84	16	4.34
November, -	44.7	10.0	85	20	4.61	40.8	10.5	93	26	7.10
December, -	39.7	10.1	88	15	4.09	35.5	9.6	91	20	3.65
				117	32.55				202	58.43

## II—PREVALENCE OF INFECTIOUS DISEASE.

The diseases included under this heading are classified in relation to notification, and are divided into groups. Group (1) includes diseases which are compulsorily notifiable (a) under the Notification Act, (b) by adoption under the Notification Act, the first, cerebro-spinal meningitis, being made notifiable in 1906, and the others in 1912, and (c) by order of the Local Government Board, pulmonary tuberculosis being made notifiable in August, 1912, and other forms of tuberculosis in July, 1914; and Group (2), not compulsorily notifiable diseases. The diseases included in these groups are as follows:—

### GROUP I.

(a)	(b)	(c)
Smallpox.	Cerebro-spinal Meningitis.	Pulmonary Tuberculosis.
Diphtheria.	Ophthalmia Neonatorum.	All forms of Tuberculosis.
Scarlet Fever.	Acute Poliomyelitis.	
Typhus Fever.	Tetanus.	
Typhoid Fever.	Anthrax.	
Puerperal Fever.	Glanders.	
Erysipelas.	Actinomycosis.	

### GROUP II.

Measles.	Chickenpox.	Ringworm.
German Measles.	Mumps.	Scabies.
Whooping Cough.		

TABLE E.—NUMBER OF CASES RECOGNISED, AND DEATHS REGISTERED, OF INFECTIOUS DISEASES IN EACH WARD DURING 1913.

		Smallpox.	Diphtheria.	Scarlet Fever.	Typhus Fever.	Typhoid Fever.	Cerebro-Spinal Fever.	Puerperal Fever.	Erysipelas.	Pulmonary Tuberculosis.	Ophthalmia Neonatorum.	Infantile Paralysis.	Tetanus.	Anthrax.	Total.
Upper Ward, C.	...	93	185	...	9	...	1	58	43	...	...	...	...	...	389
D.	...	13	5	...	1	...	...	...	36	...	...	...	...	...	55
Middle Ward, C.	1	309	1,089	1	100	13	17	165	369	43	3	2	1	2,113	
D.	...	22	27	...	6	6	10	5	176	...	...	...	...	...	252
Lower Ward, C.	...	82	166	...	3	2	4	32	31	6	...	...	...	...	326
D.	...	4	6	...	...	2	2	1	20	...	...	...	...	...	35
County, C.	1	484	1,440	1	112	15	22	255	443	49	3	2	1	2,828	
D.	...	39	38	...	7	8	12	6	232	...	...	...	...	...	342



**Smallpox.**—One case of this disease occurred during the year.

## SMALLPOX.

YEAR.	NUMBERS.		YEAR.	NUMBERS.	
	Cases.	Deaths.		Cases.	Deaths.
(1)	(2)	(3)	(1)	(2)	(3)
1892	1	1	1901	169	25
1893	28	2	1902	66	3
1894	8	1	1903	41	1
1895	5	1	1904	183	15
			1905	38	1
<i>Average,</i>	<i>10.5</i>	<i>1.25</i>	<i>Average,</i>	<i>99.4</i>	<i>9.0</i>
1896	...	...	1906	1	Nil.
1897	7	1	1907	...	"
1898	1	...	1908	...	"
1899	11	...	1909	...	"
1900	34	5	1910	2	"
			<i>Average,</i>	<i>0.6</i>	"
<i>Average,</i>	<i>10.6</i>	<i>1.2</i>	1911-12	Nil.	"
			1913	1	...

*The Vaccination (Scotland) Act, 1907*, which provides for returns of statutory declarations of conscientious objection to vaccination, came into operation on 28th August, 1907. Forms were prepared and issued to registrars during the month of December, 1907. The following are the returns received since that date:—

	Deer. 1907.	Number of Declarations.					
		1908.	1909.	1910.	1911.	1912.	1913.
Upper Ward,	- 48	174	213	231	260	321	338
Middle Ward,	- 250	1,222	1,632	1,923	2,061	2,236	2,425
Lower Ward,	- 31	148	225	222	302	390	197
County,	- 329	1,544	2,070	2,380	2,623	2,947	2,960

During the year 1913 the declarations made amounted to **2,960**, the proportion of statutory declarations being **33.27** per cent. of the births. In Table C the number of births registered will be found in the second column. By comparing the number of births with the figures above given, the extent to which infants are not vaccinated on account of conscientious objection may be estimated.

**Diphtheria.**—484 cases; 39 deaths; fatality, 8·05 per cent.

These figures show a decrease in the number of cases and deaths, but not in the fatality rate, on those for the preceding year. The following table shows no marked diminution in the death-rate during the last fifteen years. When one remembers that every facility that aids the early recognition of the disease and that even means of curing the disease are freely offered, it will be admitted that there is reason to regret that 39 deaths should have been recorded during 1913. Failure to recognise the disease and the delay in the administration of anti-toxin are undoubtedly responsible for the high mortality rate. Comparing one district with another, the death-rate in the Upper Ward was 0·3; in the Middle Ward, ·10; and in the Lower Ward, ·13 per 1,000 of the population:—

DIPHThERIA.

YEAR.	NUMBERS.		RATES.		
	Cases Notified.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)
1892	376	119	31·6	1·7	5·5
1893	332	110	33·1	1·5	4·9
1894	331	102	30·8	1·4	4·5
1895	276	66	23·9	1·1	2·8
<i>Average,</i>	<i>328·75</i>	<i>99·25</i>	<i>30·19</i>	<i>1·47</i>	<i>4·44</i>
1896	335	52	15·5	1·4	2·1
1897	213	30	14·1	0·87	1·2
1898	213	37	17·3	0·85	1·4
1899	245	54	22·0	0·96	2·1
1900	327	66	20·1	1·2	2·5
<i>Average,</i>	<i>266·6</i>	<i>47·8</i>	<i>17·92</i>	<i>1·07</i>	<i>1·92</i>
1901	230	56	24·3	0·87	2·1
1902	254	45	17·7	0·95	1·6
1903	248	38	15·3	0·90	1·3
1904	274	48	17·5	0·98	1·7
1905	323	49	15·1	1·1	1·7
<i>Average,</i>	<i>265·8</i>	<i>47·2</i>	<i>17·75</i>	<i>0·97</i>	<i>1·73</i>
1906	433	61	14·1	1·5	2·1
1907	765	56	7·3	2·6	1·9
1908	860	69	8·0	2·9	2·3
1909	699	53	7·5	2·3	1·7
1910	617	55	8·9	2·1	1·8
<i>Average,</i>	<i>674·8</i>	<i>58·8</i>	<i>8·7</i>	<i>2·3</i>	<i>2·01</i>
1911	647	62	9·58	2·15	2·06
1912	589	45	7·64	1·95	1·49
1913	484	39	8·05	1·72	1·39



**Scarlet Fever.**—Cases, 1,440 ; deaths, 38 ; fatality per cent., 2·63.

The following table shows that the prevalence of this disease, as indicated by the cases notified, reached a maximum in the years 1899 and 1909. Comparing one district with another, the death-rate in the Upper Ward was ·12 ; in the Middle Ward, ·13 ; and in the Lower Ward, ·20 per 1,000 of the population :—

SCARLET FEVER.

YEAR.	NUMBERS.		RATES.		
	Cases Notified.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)
1892	1,682	57	3·3	7·8	2·6
1893	1,333	39	2·9	6·04	1·7
1894	1,683	38	2·2	7·4	1·6
1895	1,347	46	3·4	5·8	1·9
<i>Average,</i>	<i>1511·25</i>	<i>45·0</i>	<i>2·98</i>	<i>6·77</i>	<i>2·01</i>
1896	1,123	40	3·5	4·7	1·6
1897	1,115	32	2·8	4·6	1·3
1898	1,845	65	3·5	7·4	2·6
1899	2,140	92	4·2	8·4	3·6
1900	1,807	72	3·9	6·9	2·7
<i>Average,</i>	<i>1606·0</i>	<i>60·2</i>	<i>3·75</i>	<i>6·46</i>	<i>2·42</i>
1901	1,818	55	3·0	6·8	2·08
1902	1,159	59	5·1	4·3	2·2
1903	810	21	2·5	2·9	0·7
1904	582	17	2·9	2·09	0·6
1905	473	14	2·9	1·7	0·5
<i>Average,</i>	<i>968·4</i>	<i>33·2</i>	<i>3·43</i>	<i>3·56</i>	<i>1·22</i>
1906	713	14	1·9	2·49	0·49
1907	1,037	29	2·7	3·5	1·0
1908	1,220	33	2·7	4·1	1·1
1909	2,156	50	2·3	7·3	1·6
1910	1,805	38	2·1	6·0	1·2
<i>Average,</i>	<i>1386·2</i>	<i>32·8</i>	<i>2·36</i>	<i>4·75</i>	<i>1·12</i>
1911	1,549	34	2·19	5·15	1·13
1912	1,804	39	2·16	5·99	1·28
1913	1,440	38	2·63	5·14	1·35

**Typhoid Fever.**—Cases, 113; deaths, 7; fatality per cent., 6·19.

The prevalence of this disease, as shown by the number of notifications received, shows a decrease over that for the preceding year, and the death rate is the lowest recorded. The death-rates were:—Upper Ward, ·02; Middle Ward, ·02; and Lower Ward, nil per 1,000 of the population:—

TYPHOID FEVER.

YEAR.	NUMBERS.		RATES.		
	Cases Notified.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)
1892	446	64	14·3	2·07	2·9
1893	865	90	10·4	3·9	4·08
1894	414	59	14·2	1·8	2·6
1895	561	59	10·5	2·4	2·5
<i>Average,</i>	<i>571·5</i>	<i>68</i>	<i>11·9</i>	<i>2·5</i>	<i>3·04</i>
1896	433	47	10·8	1·8	1·9
1897	312	50	16·02	1·2	2·06
1898	566	61	10·7	2·2	2·4
1899	509	74	14·5	2·00	2·9
1900	305	46	15·08	1·1	1·7
<i>Average,</i>	<i>425</i>	<i>55·6</i>	<i>13·08</i>	<i>1·7</i>	<i>2·2</i>
1901	566	69	12·17	2·1	2·6
1902	280	51	18·2	1·04	1·9
1903	315	52	16·5	1·1	1·9
1904	205	29	14·1	0·7	1·04
1905	406	44	10·8	1·4	1·5
<i>Average,</i>	<i>354·4</i>	<i>49</i>	<i>13·8</i>	<i>1·3</i>	<i>1·8</i>
1906	416	52	12·5	1·4	1·8
1907	217	29	13·3	0·7	1·00
1908	226	21	9·2	0·7	0·7
1909	219	14	6·3	0·7	0·4
1910	217	10	4·6	0·7	0·3
<i>Average,</i>	<i>259</i>	<i>25·2</i>	<i>9·73</i>	<i>0·88</i>	<i>0·86</i>
1911	189	28	14·81	0·6	0·93
1912	135	21	15·5	0·4	0·69
1913	113	7	6·19	0·40	0·24

This Table includes a few cases of Doubtful Fevers.



**Cerebro-Spinal Fever.**—15 cases; 8 deaths.

This disease still lingers, and deaths were reported in both the Middle and Lower Ward Districts.

CEREBRO-SPINAL FEVER.

YEAR.	NUMBERS.		RATES.		
	Cases.	Deaths.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
1)	(2)	(3)	(4)	(5)	(6)
1906	49	42	85·7	·17	1·47
1907	229	171	74·6	·79	5·92
1908	135	87	64·4	·46	2·98
1909	21	10	47·6	·07	·33
1910	11	7	63·6	·03	·23
<i>Average,</i>	<i>89</i>	<i>63</i>	<i>71·2</i>	<i>·30</i>	<i>2·17</i>
1911	10	4	40·0	·03	0·13
1912	5	4	80·0	·013	0·13
1913	15	8	53·3	·05	0·28

**Puerperal Fever.**—22 cases were notified and 12 deaths were recorded.

**Erysipelas.**—255 cases were notified and 6 deaths were recorded.

**Tuberculosis.**—*Pulmonary Tuberculosis.*—Cases, 443; deaths, 232, and gave a death-rate of 0·82 per 1,000 of the population.

The following table shows the decline which has taken place in the death-rate during the last four quinquennial periods:—

PULMONARY TUBERCULOSIS IN THE COUNTY OF LANARK AND IN EACH DISTRICT, DEATH-RATES FOR QUINQUENNIAL PERIODS 1891-1910 AND FOR THE YEARS 1911, 1912, AND 1913 PER 10,000 OF THE POPULATION.

DISTRICT.	1891-1895.	1896-1900.	1901-1905.	1906-1910.	1911.	1912.	1913.
Upper Ward,	12·02	11·90	10·58	8·13	7·20	6·27	8·3
Middle Ward,	13·51	11·44	10·01	8·83	9·1	8·7	8·5
Lower Ward,	12·83	11·70	12·40	11·30	6·23	8·6	6·7
County of Lanark, }	13·16	11·56	10·48	9·15	8·31	8·33	8·28

*Other forms of Tuberculosis* caused 186 deaths, and gave a death-rate of 0·66 per 1,000 of the population. These, classified according to the type of the disease, give the following result:—

Meningeal Tuberculosis,	...	...	...	85
Abdominal Tuberculosis,	...	...	...	77
Other Tuberculosis,	...	...	...	24
Total, ...				186

The combined figures for all forms of tuberculosis gave a death-rate of 1·49 per 1,000 of the population. The rate for each Ward was as follows;—Upper Ward, 1·13; Middle Ward, 1·58; and Lower Ward, 1·42.

The following table gives for each year the deaths and death-rates per thousand of the population (*a*) from pulmonary tuberculosis, and (*b*) from other forms of tuberculosis:—

	Pulmonary Tuberculosis.		Other Forms.	
	Deaths.	Death-rate.	Deaths.	Death-rate.
1891	309	1·47	206	0·98
1892	281	1·30	195	0·90
1893	302	1·36	191	0·86
1894	273	1·20	154	0·68
1895	287	1·24	202	0·87
1896	311	1·31	172	0·72
1897	267	1·10	178	0·73
1898	241	0·97	198	0·79
1899	304	1·19	210	0·82
1900	313	1·20	219	0·84
1891 } to 1900 }	288	1·23	192	0·81
1901	286	1·08	226	0·85
1902	275	1·03	173	0·64
1903	253	0·92	194	0·71
1904	318	1·14	231	0·83
1905	294	1·06	222	0·79
1906	256	0·89	231	0·80
1907	272	0·94	205	0·71
1908	267	0·91	213	0·73
1909	297	1·00	259	0·87
1910	244	0·81	271	0·90
1901 } to 1910 }	276	0·97	222	0·78
1911	250	0·83	224	0·74
1912	251	0·83	182	0·60
1913	232	0·82	186	0·66

**Measles.**—80 deaths, giving a death-rate of 2·85 per 10,000 of the population. As this disease is not notifiable, it has been necessary, in preparing the following table, to estimate the number of cases. For



the Upper Ward the estimation is 25 cases to each death, and for the Middle and Lower Wards 20 cases. This estimation, or rate of fatality (see Column 4), is based on the experience that the large town or urban areas have a higher fatality from measles than the rural areas. The table shows that, during the first ten years of County Administration, the average annual death-rate was 6·65 per 10,000 of the population, and during the last ten years the average has fallen to 4·35 per 10,000 of the population. This decline in the death-rate may be due either to a decrease in the fatality or a decrease in the prevalence of measles, but is probably due to both factors. During similar periods, the average annual death-rate in the Upper Ward decreased from 2·69 to 1·34 per 10,000 of the population; in the Middle Ward, from 7·9 to 4·9; and in the Lower Ward from 5·7 to 4·65:—

## MEASLES.

YEAR.	NUMBERS.		RATES.		
	Cases Estimated.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population
(1)	(2)	(3)	(4)	(5)	(6)
1892	3,730	185	4·9	17·3	8·5
1893	4,745	231	4·8	21·5	10·4
1894	2,005	100	4·9	8·8	4·4
1895	4,540	223	4·9	19·6	9·6
<i>Average,</i>	<i>3,458</i>	<i>169·5</i>	<i>4·8</i>	<i>15·4</i>	<i>7·5</i>
1896	1,690	81	4·7	7·1	3·4
1897	1,750	87	4·9	7·2	3·5
1898	5,915	293	4·9	23·8	11·8
1899	1,035	51	4·9	4·07	2·0
1900	4,350	214	4·9	16·7	8·2
<i>Average,</i>	<i>2,948</i>	<i>145·2</i>	<i>4·9</i>	<i>11·8</i>	<i>5·8</i>
1901	1,705	85	4·9	6·4	3·2
1902	2,515	124	4·9	9·4	4·6
1903	1,685	84	4·9	6·1	3·07
1904	2,425	121	4·9	8·7	4·3
1905	1,990	99	4·9	7·1	3·5
<i>Average,</i>	<i>2,064</i>	<i>101·8</i>	<i>4·9</i>	<i>7·5</i>	<i>3·7</i>
1906	2,545	125	4·9	8·9	4·3
1907	600	30	5·0	2·07	1·03
1908	6,800	335	4·9	23·3	11·4
1909	340	16	4·7	1·1	0·5
1910	4,540	224	4·9	15·2	7·5
<i>Average,</i>	<i>2,965</i>	<i>146</i>	<i>4·9</i>	<i>10·16</i>	<i>5·0</i>
1911	1,225	61	5·0	4·07	2·02
1912	3,980	198	4·9	13·22	6·58
1913	1,610	80	4·9	5·7	2·85

**Whooping-cough.**—115 deaths, and gave a death-rate of 4·10 per 10,000 of the population, which is an increase from that of the preceding year. The following table is prepared on the same basis as that of Measles. It will be observed that on comparing the average annual death-rate of the first decennial period with that of the second decennial period of County Administration, there has only been a slight decrease, viz. :—from 5·2 to 4·9 per 10,000 of the population. During similar periods the average annual death-rate in the Upper Ward decreased from 4·26 to 2·53 per 10,000 of the population; in the Middle Ward, 5·7 to 5·2; and in the Lower Ward the rate increased from 4·05 to 5·85 :—

WHOOPIING-COUGH.

YEAR.	NUMBERS.		RATES.		
	Cases Estimated.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population
(1)	(2)	(3)	(4)	(5)	(6)
1892	2,310	110	4·7	10·7	5·1
1893	2,315	113	4·8	10·4	5·1
1894	3,570	173	4·8	15·8	7·6
1895	3,090	147	4·7	13·3	6·3
<i>Average,</i>	<i>2,593·25</i>	<i>123·75</i>	<i>4·7</i>	<i>11·6</i>	<i>5·5</i>
1896	1,890	93	4·9	7·9	3·9
1897	3,215	157	4·8	13·2	6·4
1898	2,525	124	4·9	10·1	4·9
1899	3,505	169	4·8	13·7	6·6
1900	1,495	74	4·9	5·7	2·8
<i>Average,</i>	<i>2,526</i>	<i>123</i>	<i>4·8</i>	<i>10·1</i>	<i>4·9</i>
1901	4,535	223	4·9	17·1	8·4
1902	2,485	123	4·9	9·3	4·6
1903	2,985	146	4·8	10·9	5·3
1904	2,520	124	4·9	9·06	4·4
1905	2,235	110	4·9	8·03	3·9
<i>Average,</i>	<i>2,952</i>	<i>145·2</i>	<i>4·9</i>	<i>10·8</i>	<i>5·3</i>
1906	2,815	138	4·9	9·8	4·8
1907	2,960	146	4·9	10·2	5·05
1908	3,420	167	4·8	11·7	5·7
1909	2,865	141	4·9	9·7	4·7
1910	1,850	89	4·8	6·2	3·0
<i>Average,</i>	<i>2,742</i>	<i>136·2</i>	<i>4·9</i>	<i>9·5</i>	<i>4·6</i>
1911	3,750	184	4·9	12·46	6·1
1912	2,430	120	4·9	8·07	3·89
1913	2,325	115	4·9	8·3	4·10



**Diarrhoeal Diseases.**—Diarrhoea was the cause of 220 deaths, and gave a death-rate of 0·78 per thousand of the population. The rate for each district of the County was as follows :—Upper Ward, 0·3; Middle Ward, 0·96; and Lower Ward, 0·23. The following shows the death-rates since the year 1891 :—

	Deaths.	Death-rate.		Deaths	Death-rate.
1891	188	0·89	1902	252	0·94
1892	167	0·77	1903	298	1·09
1893	249	1·12	1904	289	1·03
1894	130	0·57	1905	294	1·05
1895	260	1·12	1906	326	1·14
1896	150	0·63	1907	185	0·64
1897	231	0·95	1908	354	1·21
1898	361	1·45	1909	208	0·70
1899	406	1·59	1910	269	0·90
1900	277	1·44	1901	290	1·02
1891 } to } 1900 }	241	1·05	1910 }		
1901	425	1·60	1911	322	1·07
			1912	134	0·44
			1913	220	0·78

### III.—GENERAL.

Under this heading will be found a report by Dr. Patterson on the work done in the bacteriological laboratory; by Mr. Brown on the work done in the chemical laboratory; and by the four inspectors on the work done under the Food and Drugs Acts, the Shops Acts, Fertilisers and Feeding Stuffs Act, also the Rivers Pollution Prevention Acts. All these executive duties are under the administration of the Public Health Committee of the County Council.

**Housing.**—In Table E the houses erected each year are classified according to size, and in the last column the percentage proportion of one-apartment houses is given.

TABLE G.—SHOWING NUMBER AND SIZE OF HOUSES SET FORTH IN PLANS SUBMITTED UNDER BYE-LAWS REGULATING THE BUILDING OR RE-BUILDING OF HOUSES OR BUILDINGS DURING EACH OF THE FOURTEEN YEARS 1899-1913.

Year.	One Apartment.	Two Apartments.	Three Apartments.	Four Apartments.	Five Apartments and Upwards.	Total Houses.	Percentage proportion of One-apartment Houses.
*1899	240	902	237	113	163	1,655	...
*1900	105	1,159	209	61	125	1,659	...
1901	182	1,421	513	166	97	2,379	7·65
1902	360	1,425	421	165	269	2,640	13·63
1903	416	1,432	315	84	297	2,544	16·35
1904	193	530	388	180	314	1,605	12·02
1905	191	577	294	105	370	1,537	12·42
1906	207	856	223	123	397	1,806	11·46
1907	149	607	247	84	212	1,299	11·47
1908	192	686	233	94	163	1,368	14·03
1909	89	534	122	74	115	934	9·52
1910	141	333	101	50	104	729	19·34
1911	89	352	112	36	76	665	13·38
1912	22	167	68	22	51	330	6·6
1913	35	335	221	23	46	660	5·30

\* The figures for these two years are not complete, there being no record for the Upper Ward as the Building Bye-laws were not approved until March, 1901.

The following table, extracted from the Census Report, Vol. I., Part 24, page 1539, shows the number of houses, classified according to size, in each of the County districts. As many dwellings are used as summer residences, and as the Census is taken in the month of April when such houses are empty, a considerable number of dwellings are returned in the Census as unoccupied, whereas in the Valuation Roll they are returned as occupied.

Sanitary Districts.	Apartments.							Total.
	One.	Two.	Three.	Four.	Five.	Six.	Seven and up.	
Upper, - - -	1,213	4,016	1,435	770	427	308	649	8,818
Middle, - - -	9,234	19,022	4,316	1,927	1,248	920	1,177	38,444
Lower, - - -	1,859	4,935	1,489	620	657	312	656	10,528
Total, - - -	12,306	27,973	7,240	3,317	2,332	1,540	3,082	57,790
Percentage, -	21·29	48·40	12·52	5·73	4·03	2·66	5·33	...

**Staff.**—Owing to the prominence given to the administrative control of tuberculosis the whole staffing arrangements had to be reconsidered, and the result is shown in the special report on tuberculosis.



## BACTERIOLOGICAL LABORATORY.

J. HUME PATTERSON, L.R.C.P. and S.Ed., D.P.H.

The number of specimens received during the year for examination was 6,199. The sources of supply might be classified thus:—

From Medical Practitioners, ... ..	3,006
„ Public Health Staff, ... ..	625
„ Hospital Physicians, ... ..	2,190
„ School Medical Staff, ... ..	120
„ County Veterinary Surgeon (E.C.), ... ..	136
„ County Veterinary Surgeon (P.H.), ... ..	80
„ other Veterinary Surgeons, ... ..	28
„ Slaughter-house Staff, ... ..	12
„ County Constabulary, ... ..	2

The areas of supply are under 12 different Local Authorities—the three sanitary districts of the County, and 9 burghs. A few specimens were also received from areas outwith the County.

The number of specimens received each year for examination since the opening of the laboratory will be found in a table at the end of this report.

Table A shows that the number of specimens received from the Upper Ward was 1,031; from the Middle Ward, 3,059; and from the Lower Ward, 952; making a total of 5,042 from the County Districts.

TABLE A.—SHOWING THE NUMBER OF SPECIMENS RECEIVED FROM THE UPPER, MIDDLE, AND LOWER WARDS OF THE COUNTY.

Ward.	Tuberculosis.						Typhoid.						Diphtheria Swabs.			
	Sputum.		Urine		Others.		Blood.		Urine.		Faeces.		Throat.		Nose.	
	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0
Upper	64	150	—	1	16	42	12	30	—	—	—	—	132	341	15	190
Middle	698	838	2	11	40	93	125	341	11	38	3	35	144	555	2	7
Lower	84	113	—	—	11	15	22	27	—	—	—	2	252	420	—	3
	846	1101	2	12	67	150	159	398	11	38	3	37	528	1316	17	200
	1947		14		217		557		49		40		1844		217	
Totals,	2178						646						2061			

	C.S.M. Fluid.		Venereal Disease.		Ophth. Neonat.		Anthrax.		Glanders.		Ringworm.		Miscellan.	
	+	0	+	0	+	0	+	0	+	0	+	0	+	0
Upper	—	—	—	—	1	3	6	—	—	—	20	7	1	—
Middle	—	3	1	4	9	15	9	—	—	1	2	1	18	53
Lower	—	1	—	—	—	—	1	—	—	—	1	—	—	—
	—	4	1	4	10	18	16	—	—	1	23	8	19	53
Totals	4		5		28		16		1		31		72	

Table B shows that the number of specimens received from Burgh Authorities and others was—Hamilton, 403; Airdrie, 82; Coatbridge, 296; Rutherglen, 104; Kirkintilloch, 15; Wishaw, 45; Motherwell, 13; Lanark, 161; Biggar, 7; others, 31; making a total of 1,157.

TABLE B.—FROM BURGH AUTHORITIES AND OTHERS.

	Typhoid.		Diphtheria.		Phthisis.		Tubercle other than Phthisis.		Ring- worm		Other Specimens.	
Burgh.	+	0	+	0	+	0	+	0	+	0	+	0
Hamilton,	13	16	19	63	39	128	3	7	5	3	11	96
Airdrie,	4	11	1	7	16	37	—	3	1	1	1	—
Coatbridge,	4	16	54	80	31	81	—	13	8	2	—	7
Rutherglen,	3	6	5	24	18	44	—	—	1	3	—	—
Kirkintilloch,	—	1	—	1	3	9	—	1	—	—	—	—
Wishaw,	2	9	2	7	5	16	—	—	2	—	1	1
Motherwell,	—	—	—	—	—	2	—	2	7	2	—	—
Lanark,	—	4	22	50	22	22	—	—	36	4	—	1
Biggar,	—	1	1	4	1	—	—	—	—	—	—	—
Others,	—	2	2	11	4	12	—	—	—	—	—	—
Totals,	26	66	106	247	139	351	3	26	60	15	13	105



**Tuberculosis.**—2,697 specimens were received for examination, and the sources from which they were received may be enumerated thus:—

		Results of Examination.					
		Sputum.		Urine.		Other Specimens.	
Wards.		+	0	+	0	+	0
Medical Practitioners,	Upper ...	37	126	—	1	—	—
	Middle ...	121	442	—	6	—	3
	Lower ...	14	52	—	—	—	—
	Burghs ...	139	348	—	5	—	1
Hospitals and Sanatoria,	Upper ...	27	23	—	—	—	—
	Middle ...	573	387	2	5	3	5
	Lower ...	66	51	—	—	—	—
Tuberculosis Officers,	Upper ...	—	—	—	—	—	—
	Middle ...	4	4	—	—	—	1
	Lower ...	4	9	—	—	—	—
School Medical Officers,	Upper ...	—	1	—	—	—	—
	Middle ...	—	5	—	—	—	—
	Lower ...	—	1	—	—	—	—
	Burghs ...	—	3	—	—	—	—
Totals,		985	1452	2	17	3	10

		Public Health.				Executive Committee.					
		Milk.		Others.		Milk.		Expectorate.		Others.	
Wards.		+	0	+	0	+	0	+	0	+	0
Veterinary Surgeons.	Upper,	8	21	—	—	5	18	2	3	1	—
	Middle,	15	31	4*	—	5	37	13	13	—	3
	Lower,	4	6	—	—	1	7	6	2	—	—
	Burghs,	3	20	—	—	—	—	—	—	—	—
Totals, ...		30	78	4	—	11	62	21	18	1	3

\* These were received from Slaughter-house Staff.

For further details, reference should be made to the Special Report on Tuberculosis.

**Typhoid or Enteric Fever.**—738 specimens were received for examination, and of these 199 were returned as positive, and 539 as

negative. The sources from which these were received may be enumerated thus:—

		Results of Examination.					
		Specimens of Blood.		Urine.		Faeces.	
		+	0	+	0	+	0
Medical Practitioners,	Wards.						
	Upper, ...	9	23	—	—	—	—
	Middle, ...	80	148	—	2	1	3
	Lower, ...	2	7	—	—	—	—
Hospital Staff,	Burghs, ...	26	66	—	—	—	—
	Upper, ...	2	—	—	—	—	—
	Middle, ...	14	21	—	15	1	19
Public Health Staff,	Lower, ...	18	10	—	—	—	—
	Upper, ...	1	7	—	—	—	—
	Middle, ...	31	172	11	21	1	13
	Lower, ...	2	10	—	—	—	2
Totals, ...		185	464	11	38	3	37

These figures comprise 649 specimens of blood, 49 urines, and 40 faeces.

*Blood.*—638 specimens from suspected cases of typhoid fever, examined for Widal's reaction, 179 of which gave positive results, while 459 gave negative results.

10 specimens from 4 members of the Hospitals' Staff, and 1 from a private individual treated with anti-typhoid vaccine, were examined for Widal's reaction.

*Urine.*—2 specimens received from Middle Ward medical practitioners, and 15 from Hospital Physicians, were examined with negative results; and 32 from Public Health Staff in the Middle Ward gave positive results in 11 of these.

*Faeces.*—4 specimens received from Middle Ward medical practitioner gave positive result in 1; 20 received from Middle Ward Hospital Staff gave positive result in 1; and 14 from Public Health Staff gave positive result in 1. 2 specimens from the Lower Ward Public Health Staff gave negative results.

*Diphtheria.*—2,197 throat swabs and 217 nasal swabs were received for examination. The former gave positive results in 632 cases, and negative results in 1,448, while Hofmann's pseudo-diphtheria bacillus was found in 114. The latter gave positive results in 19 of the cases, negative results in 164, and Hofmann's pseudo-diphtheria bacillus was found in 37.



The sources from which the specimens were received may be enumerated thus:—

		Results of Examination.					
		Throat Swabs.			Nasal Swabs.		
	Wards.	+	o	Pseudo	+	o	Pseudo
Medical Practitioners,	Upper, ...	90	138	11	—	—	—
	Middle, ...	134	457	24	—	2	—
	Lower, ...	29	55	2	—	—	1
	Burghs, ...	104	224	20	2	—	1
Hospital Staff,	Upper, ...	40	162	5	15	156	34
	Middle, ...	7	15	—	—	1	1
	Lower, ...	211	254	40	—	1	—
Public Health Staff,	Upper, ...	2	24	—	—	—	—
	Middle, ...	3	52	2	2	3	—
	Lower, ...	11	59	8	—	1	—
School Medical Staff,	Upper, ...	—	1	—	—	—	—
	Middle, ...	—	3	2	—	—	—
	Lower, ...	1	2	—	—	—	—
	Burghs, ...	—	2	—	—	—	—
Totals,		632	1,448	114	19	164	37

12 of the above swabs were taken by the Public Health Staff from scholars at a school in a district where the disease prevailed.

The following figures show the number and results of these swabs:—

		Results of Examination.			
School.		+	o	Pseudo.	Total.
Glenboig, ...	...	1	10	1	12

11 swabs were received from the School Medical Staff, 1 of which gave a positive result.

32 swabs were received, taken from individuals in contact with cases of the disease; of these 7 were found positive.

2 swabs taken from the ear received from medical practitioners, 1 of which gave a growth of a bacillus morphologically resembling that of diphtheria, while 1 received from a hospital physician gave a negative result.

Hofmann's pseudo-diphtheria bacillus was observed in 114 of the 1,448 negative throat swabs, and in 37 of the 164 negative nasal swabs, giving a percentage of 7·8 in the former and 22·5 in the latter, again showing, as in former years, that this bacillus is more prevalent in the nose than in the throat.



**Virulence.**—Cultures of bacilli morphologically resembling that of true diphtheria from seven cases tested for virulence gave positive results in three, while a culture of Hofmann's pseudo-diphtheria bacillus proved non-virulent.

**Cerebro-Spinal Meningitis.**—The number of specimens, consisting of spinal fluids, examined was 4, and all gave negative results. Two of the specimens were received from medical practitioners, and two from hospital physicians.

**Anthrax.**—One specimen from the human subject and 15 specimens from cattle were examined with positive results.

**Glanders.**—One specimen of lung from a horse was examined with negative result.

**Ringworm.**—104 specimens of hair from the scalp were examined, 82 of which showed spores or mycelium of *tinea tonsurans*, and one elements of *tinea favosa* (favus). 23 gave negative results. 2 specimens of scrapings from the epidermis were also examined with negative result in one case. 76 of the positive specimens and 23 of the negative were received from the School Medical Staff.

**Ophthalmia Neonatorum.**—29 specimens taken from the eyes of infants suspected to be suffering from gonorrhoeal infection were received for examination. 11 gave positive results and 18 negative.

**Venereal Diseases.**—18 specimens of discharge and one of synovial fluid were examined for the gonococcus with positive results in 7 cases.

At the end of the year arrangements were made for the Wassermann test for syphilis being carried out, and one specimen of blood received gave a positive result.

**Miscellaneous Specimens.**—118. *Positive*—1 specimen of blood for pernicious anaemia, 2 of sputum, 4 of pus, 3 of urine for pathogenic micro-organisms, and 1 specimen for seminal stains. *Negative*—2 specimens of blood for pernicious anaemia, 1 of urine for glucose, 1 laryngeal tumour, and 1 vomit for malignancy, 2 of urine, 2 of sputum, 3 of pus, 1 of ascitic fluid, and 1 faeces for pathogenic micro-organisms.

93 samples of water were examined for bacterial contents.

The following 56 specimens were from animals:—*Positive*—7 milks for deleterious micro-organisms, 1 palate and 1 stomach for actinomycosis, 1 muscle for sarcoma, 1 muscle for quarter evil, 1 sheep's wool for scabies, 1 pony's hair for mange, and 1 carcass of dog for poison. *Negative*—34 milks for deleterious micro-organisms, 3 spleens and 1 liver for pathogenic micro-organisms, 2 ponies' hairs for mange, and 2 trout for poison.

35 of the samples of milk for deleterious micro-organisms were taken in connection with a complaint made by Dalziel Co-operative Society, Limited, Motherwell, with regard to badly tasted milk being received from a farmer in the County. This complaint was immediately inquired into by one of the inspectors, who, in the course of his inquiries, took 31 samples of milk from individual cows, and 2 from the mixed milk of the herd. All these were examined for odour and taste, and sample from cow No. 6, as well as the mixed milks, were found to have a disagreeable taste and odour. The deposits from these samples were examined microscopically, and found to contain a large number of streptococci, proving cow No. 6 to be suffering from mastitis. Two further samples from this cow were obtained, and gave the same results. The milk from the affected animal was immediately excluded from the supply, and no further complaints were received.

## RECORD OF WORK DONE SINCE 1903.

Year.	Specimens.	Sources of Supply.						
		Med. Pract.	P.H. Staff.	Hosp. Staff.	Sch. Med. Staff.	County V.S.	P. H. V. Ss.	Slaugh. Staff.
1903	569	...	...	...	...	...	...	...
1904	791	...	...	...	...	...	...	...
1905	1,270	...	...	...	...	...	...	...
1906	2,061	1,651	142	209	...	31	28	...
1907	5,678	2,739	1,794	1,094	...	40	...	11
1908	8,311	4,310	1,813	1,911	...	99	150	28
1909	7,774	3,202	1,148	3,041	...	44	292	47
1910	6,945	2,951	406	3,200	29	75	247	37
1911	5,949	2,890	494	2,250	99	19	172	25
1912	6,715	3,542	753	2,193	91	20	97	19
1913	6,199	3,006	627	2,190	120	136	108	12



## Chemical Laboratory.

WALTER BROWN, F.C.S.

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The number of samples analysed or examined during the year amounted to 2,112, being a decrease of 166 over 1912, but that year had an unusual large number of samples of flour in connection with an inquiry as to the prevalence of bleaching. It should also be mentioned that a large number of samples of milk were examined in connection with an inquiry as to the natural variations in the composition of cow's milk. The Rivers Pollution and the Public Health departments, on the other hand, show an increase of 37 and 11 respectively. These samples have all been referred to in the monthly reports. The following table shows for each year since 1902 the number of samples analysed in the laboratory, and the administrative authority under which they were obtained.

In connection with the Rivers Pollution Prevention Acts there were 166 samples. These are again further divided into sewage works, including sewer outfalls; trade effluents, including water as raised from mines; and streams, according to the source from which they were taken, showing 26 from sewage works, 47 trade effluents, and 93 streams.

Under Public Health Department 525 samples were analysed—63 samples from public water supplies, 29 from private water supplies, and 430 special samples. The special samples include 365 small daily samples taken from the clean-water tank at Glasford Filters, which are specially examined for colour and alkalinity; and 68 samples other than water which have been examined, and cannot readily be classified under the above headings. In connection with Food and Drugs Acts 1,424 samples were analysed.

**SAMPLES EXAMINED IN THE CHEMICAL LABORATORY CLASSIFIED ACCORDING  
TO ADMINISTRATIVE AUTHORITY UNDER WHICH THEY WERE OBTAINED.**

Year.	Rivers Pollution.			Public Health Department.			Food and Drugs.	Total.
	Sewage Works.	Trade Effluents.	Streams.	Water Supplies.				
				Public.	Private.	Special.		
1902	49	87	180	18	16	...	...	350
1903	77	101	78	35	35	...	4	330
1904	55	54	85	40	38	8	34	314
1905	130	53	105	16	35	1	55	395
1906	69	7	20	1	32	10	37	176
1907	275	47	38	116	44	240	1	761
1908	61	52	77	101	41	418	6	756
1909	420	41	65	117	39	387	30	1,099
1910	77	49	83	187	55	375	115	941
1911	84	76	60	84	47	365	77	793
1912	30	30	69	100	35	379	1,635	2,278
1913	26	47	93	63	29	430	1,424	2,112

**Samples of Sewage.**

SEWAGE WORKS.—Total samples, 26. During the year systematic sampling has only been carried out at one sewage work, viz., Bellshill. Sampling has, however, been made over a period of 6 hours on three occasions, and it is intended to take such samples once a month for a year, when it is hoped, through examination of the sewage under all conditions, to arrive at a definite idea of what purification may be looked for from a complete installation consisting of septic tanks and single continuous filters. The percentage degree of purification, calculated on albuminoid nitrogen and oxygen absorbed, for these samplings has been as follows:—

	May.	Nov.	Dec.
Albuminoid Nitrogen, ...	64	65	84
Oxygen Absorbed, ...	61	64	74
Average, ...	62·5	64·5	79

While it may be claimed that the degree of purification at these works is good, the result in December of 79 per cent. being very good, it has to be pointed out that the effluent is not satisfactory when compared with a "standard effluent" as defined by the Royal Commissioners on Sewage Disposal in their final report. A filter effluent.



according to this standard, shall not contain (1) more than 3·0 parts per 100,000 of suspended solids; and (2) shall not absorb more than 2·0 parts per 100,000 by weight of atmospheric oxygen in 5 days.

The results obtained for the Bellshill effluent were as follows:—

Parts per 100,000.				
	May.	Nov.	Dec.	
Suspended Solids, ... ..	2·1	10·4	11·0	
Dissolved Oxygen Absorbed,	—	3·62	3·85	

In the December sample it was further determined that the suspended solids were responsible for an absorption of 1·30 parts per 100,000 of oxygen, so that even had this effluent contained no matter in suspension it would still have been above the limit of 2·0 laid down by the Royal Commission.

In determining, however, whether sewage or a filter effluent has been sufficiently purified to be discharged into a stream without causing nuisance, it is not the percentage degree of purification, or the amount of suspended solids, or amount of oxygen it will absorb, that has to be considered, so much as the actual effect produced in the stream, and provided that no nuisance is caused it would be unfair to say an effluent was not satisfactory simply because it contains more than 3·0 parts per 100,000 of suspended material, or absorbs more than 2·0 parts of oxygen in 5 days. The standard of purity for river water after having received an addition of sewage is "That it shall not absorb more than 0·4 part per 100,000 of atmospheric oxygen in 5 days." The results obtained from a sample taken in December of the Shirrel Burn below the outfall from Bellshill Sewage Works showed an absorption of ·52 parts per 100,000, while a sample above the outfall absorbed ·22 parts per 100,000. It would, therefore, appear that, provided the water of the Shirrel Burn on reaching Bellshill Works absorbed no more oxygen than it did on this particular date, that the effluent might be considered fairly satisfactory, and that if 50 per cent. of the suspended matter were removed the effluent would be considered entirely satisfactory.

The ordinary samples analysed were as follows:—

Chapelhall, - - -	3 samples.	Newmains,	1 sample.
Shotts Kirk School,	1 sample.	Thankerton, -	11 samples.
Airdrie Hill Square (sewer outfall), 1 sample.			

The samples from Chapelhall include two samples of sludge, one taken from the septic tank and one from the dosing tank. The samples from Thankerton were taken in connection with complaint of odours arising from the discharge of whey from Thankerton Creamery. A special report on this subject, in which the results of analysis were included, was written.



**Samples of Trade Effluent.**

TRADE EFFLUENT.—47 samples from the following public works:—

*Coal Washers.*—26 samples—

Fortrigg, -	- 1 sample.	Gilbertfield, -	- 1 sample.
Murdostoun, -	- 7 „	Gateside, -	- 1 „
Kepplehill, -	- 4 „	Knowton, -	- 1 „
Stane, -	- 9 „	Bardykes, -	- 1 „

Meadowhead, 1 sample.

These samples were all examined for total and volatile suspended solids.

*Drainage from Mines.*—13 samples. Samples of pit water as raised from the mine were examined for total and volatile suspended solids:—

Greenfield, -	- 1 sample.	Broomfield, -	- 1 sample.
Shettleston, -	- 1 „	Shields, -	- 1 „
Gateside, -	- 1 „	Douglas West, -	- 1 „
Stane, -	- 2 „	Kepplehill, -	- 2 „
Knowton, -	- 1 „	Carfin, -	- 1 „

*Print Works*—1 sample from Glengowan Print Works for complete analysis.

*Ammonia Works*—1 sample from Coltness Iron Works, specially examined for phenols, 245·0 parts per 100,000 being found.

*Iron Works.*—1 sample from pickling house at Excelsior Iron Works was found to contain 57·4 parts per 100,000 of iron, and an acidity equivalent to 12·6 parts per 100,000 of  $\text{CaCO}_3$ .

*Paper Mills.*—Caldercruix Paper Mill, 2 samples, one sample being submitted to complete analysis, the other only for total and volatile suspended solids. Moffat Paper Mill, 3 samples for complete analysis. At this mill a special sampling of crude liquor and effluent over a period of 6 hours was carried out. The results of analysis showed a purification of over 90 per cent., calculated on suspended solids.

**Samples of Streams.**

Total samples, 93, of which 13 were examined in connection with discharges from sewage works, and 53 in connection with trade pollutions; 18 were taken from the River Clyde and tributaries, and represent 2 series of samples. A special sampling of the Pow Burn was also made, when 9 samples were taken.

Streams affected by discharge of sewage:—

Samples.		Samples.	
River Irvine, Drumclog, ...	... 2	North Burn, ...	4
Watercourse, Shotts Kirk School,	1	Shirrel Burn, ...	4
Bishopbriggs Burn, Old Auchenairst, 2 samples.			

The samples from North Burn were taken above the Airdrie Burgh boundary at the same points as mentioned in detail in Annual Report, 1912. The results of analysis indicated that this burn, at a point opposite Airdrie Hill House, is free from sewage pollution.



A special inspection was made of the Pow Burn, when 9 samples were taken, the results of analysis being specially reported on

Streams affected by discharge of trade effluent:—

Stream.	Samples.	Pollution.
North Calder, - -	11	Glengowan, Caldercruix, and Moffat.
Luggie Burn, - -	1	Burgh of Coatbridge.
Whinny Burn, - -	4	Excelsior Iron Works.
Rumbling Syke Burn, -	2	Lanarkshire Steel Works.
Dalziell Burn, - -	1	Excelsior Iron Works.
Myres Burn, - -	1	Uddingston Gas Works.
Gateside Burn, - -	1	Gateside Colliery.
South Calder, - -	12	Stane, Kepplehill, and Westwood Collieries.
Coal Burn, - -	2	Dalquhandy Colliery.
Blind Burn, - -	13	Stane and Kepplehill Collieries.
Currie Burn, - -	2	Baton Collieries.
Auchter Water, - -	1	Coltness Iron Works.
Todhole Burn, - -	2	Burgh of Motherwell.

#### **River Clyde—Special Sampling.**

Two series of 9 samples each were taken from the River Clyde and its more important tributaries. The first sampling was made on 29th July, when the river was very low, and the second on 25th November, after considerable rainfall, and when the river was fairly high. The details of these analyses will be found in Tables on pages 43 and 44. These results, generally, do not show any great variation in the chemical composition of the river water on these two occasions, although in a few cases the amount of free ammonia varies considerably. The amount of albuminoid ammonia is practically constant, but the figures for oxygen absorbed are rather higher in November than in July. This difference might be accounted for by the small amount of matter in suspension which, although not yielding any albuminoid ammonia on distillation, might be capable of absorbing oxygen from acid permanganate. It is also to be noted that the amount of dissolved oxygen absorbed after 5 days' incubation at 18° C. is very much higher in November than in July. The estimation of the amount of dissolved oxygen absorbed in 5 days has not previously been carried out on samples of Clyde water. This test has, however, very great value, and, according to the view expressed by the Royal Commission on Sewage Disposal in their final report, is to be accepted as the one chemical test which most clearly indicates the character of a stream. Streams absorbing 0·1, 0·2, and 0·3 parts of dissolved oxygen in 5 days are classed as "very clean," "clean," and "fairly clean," respectively; while those above 0·5 are "doubtful," and up to 1·0 "bad." It will therefore be seen that the River Clyde water in July as far down as Clyde Iron Works is "clean," and in November, during flood weather, is bordering on the limit of impurity.

SAMPLES TAKEN ON 29TH JULY, 1913, FROM THE RIVER CLYDE AND FROM THREE OF ITS  
MOST IMPORTANT TRIBUTARIES, TABULATED IN TOPICAL ORDER.

RESULTS: STATED AS PARTS PER 100,000.

No.	PLACE WHERE TAKEN.	Chlorides as Cl.	Nitrates as Nitrogen.	Ammonia as Nitrogen.		Oxygen Absorbed.	Solids.		Dissolved Oxygen.			Physical Characters		
				Free.	Albu- minoid.		Total.	Volatile.	At once.	After 5 days.	Absorp- tion.	Colour Platinum Standard.	Turbidity.	Odour.
1	Motherwell Railway Bridge,	1.4	.037	.015	.008	.21	24.0	4.0	.95	.87	.08	1.5	Clear	None
2	Avon, " " " "	1.6	.062	.007	.007	.47	21.6	3.0	.87	.78	.09	2.5	Do.	Do.
3	South Calder, " " " "	2.5	.352	.040	.021	.73	61.4	9.4	.70	.53	.17	9.5*	Marked	Very slight
4	Bothwell Bridge, " " " "	1.8	.079	.031	.010	.34	23.4	3.4	.71	.54	.17	2.0	Clear	None
5	Blantyre Suspension Bridge,	1.8	.094	.044	.013	.33	28.4	5.0	.76	.60	.16	2.0	Do.	Do.
6	Haughhead Bridge, " " " "	1.9	.110	.030	.012	.31	28.0	5.0	.97	.78	.19	2.0	Do.	Do.
7	North Calder, " " " "	5.1	.171	1.024	.094	2.75	76.0	14.4	.58	.21	.37	50.0*	Very marked	Tarry
8	Carmyle Weir, " " " "	2.1	.147	.058	.014	.41	30.6	8.2	.70	.52	.18	2.5	Very slight	None
9	Clyde Ironworks, " " " "	2.2	.158	.019	.016	.37	31.8	5.8	.87	.70	.17	2.8	Do.	Do.

\* Filtered through paper before colour estimation was made. Nitrites were present in every sample.



SAMPLES TAKEN ON 25TH NOVEMBER, 1913, FROM THE RIVER CLYDE AND FROM THREE OF ITS  
MOST IMPORTANT TRIBUTARIES, TABULATED IN TOPICAL ORDER.

RESULTS : STATED AS PARTS PER 100,000.

No.	PLACE WHERE TAKEN.	Chlorides as Cl.	Nitrates as Nitrogen.	Ammonia as Nitrogen.		Oxygen Absorbed.	Solids.		Dissolved Oxygen.			Physical Characters.		
				Free	Albumi- noid.		Total.	Volatile.	At once.	After 5 days.	Absorp- tion.	Colour Platinum Standard.	Turbidity.	Odour.
1	Motherwell Railway Bridge,	1.3	.022	.000	.011	.33	15.6	3.8	1.19	.99	.20	1.5	Very slight	None
2	Avon, . . . . .	1.4	.092	.006	.008	.55	14.0	4.2	.78	.62	.16	3.0	Do.	Do.
3	South Calder, . . . . .	2.6	.456	.084	.023	.69	46.6	7.2	.69	.25	.44	7.6*	Marked	Slight
4	Bothwell Bridge, . . . . .	1.6	.094	.007	.008	.43	16.0	4.0	.88	.55	.33	2.0	Very slight	None
5	Blantyre Suspension Bridge, . . . . .	1.6	.106	.007	.008	.45	23.2	3.2	.80	.47	.33	2.0	Do.	Do.
6	Haughhead Bridge, . . . . .	1.8	.098	.025	.009	.43	23.6	5.0	.62	.27	.35	2.2	Slight	Do.
7	North Calder, . . . . .	6.4	.084	.488	.086	1.47	73.8	16.0	.55	Nil	.55	20.0*	Very marked	Distinct
8	Carmyle Weir, . . . . .	2.0	.100	.076	.014	.50	20.4	5.0	.62	.30	.32	2.8	Slight	None
9	Clyde Iron Works, . . . . .	2.0	.108	.025	.008	.54	20.6	4.8	.86	.41	.45	3.0	Do.	Do.

\* Filtered through paper before colour estimation was made. Nitrites were present in every sample.

The sampling of the River Clyde at the various points mentioned in the above tables has been carried on since the year 1902. In these earlier years no estimation was made of the dissolved oxygen in the water, but the chemical data otherwise is of considerable interest in estimating the degree of pollution. Most importance is generally attached to the figures given for free and albuminoid ammonia which are generally combined and spoken of as total nitrogen. The next in importance is known as the oxygen absorbed from acid permanganate. These figures are detailed in the foregoing tables.

In the following table the average figures from the two samplings during 1913, are compared with the average of all previous samples, and also with the maximum and minimum results obtained at these points.

**COMPARISON OF RESULTS OF CHEMICAL ANALYSIS OF THE  
RIVER CLYDE SAMPLES.**

PLACE WHERE TAKEN.	TOTAL NITROGEN.				OXYGEN ABSORBED.			
	1913.	Average.	Max. Min.	Year.	1913.	Average.	Max. Min.	Year.
Motherwell Railway Bridge	·017	·014	·033 ·006	1910 1911	·27	·41	1·27 ·17	1904 1909
Avon, - -	·014	·017	·051 ·005	1909 1911	·61	·53	1·76 ·31	1904 1910
South Calder, -	·084	·126	·255 ·015	1909 1902	·71	·61	·78 ·33	1910 1904
Bothwell Bridge, - -	·028	·032	·063 ·015	1903 1913	·38	·42	1·32 ·22	1904 1907
Blantyre Bridge, - -	·037	·035	·070 ·031	1909 1910	·39	·43	1·30 ·23	1904 1910
Haughhead Bridge, - -	·038	·040	·042 ·017	1913 1911	·37	·50	1·33 ·25	1904 1910
North Calder, -	·846	1·145	1·180 ·300	1909 1902	2·11	2·17	2·75 ·77	1913 1902
Carmyle Weir, - - -	·081	·053	·090 ·027	1913 1904	·45	·55	1·28 ·25	1904 1907
Clyde Iron Works, - -	·034	·044	·078 ·025	1910 1904	·45	·45	1·31 ·26	1904 1907

**Water Supplies.**

The number of samples of water analysed amounted to 92, of which 29 were from private water supplies and 63 from public supplies. The details of analysis of samples from private supplies are to be found in the district reports, which show that 20 were from the Upper Ward, 8 from the Middle Ward, and 1 from the Lower Ward. The samples (63) from public supplies include 52 samples from Glasford Tank, being average weekly samples prepared from daily samples.



**WATER-WORKS.—Camps Water.**—A special visit in order to obtain samples of water during floods was made to the various streams proposed to be included for supply purposes. Samples were obtained from the Camps Water above its junction with the Grains Gill Burn, from Grains Gill before joining Camps Water, and, for the purpose of comparison, from the Midlock Water and the various streams providing the supply to the Burgh of Wishaw, viz.:—Potrail, Potrenick, and Pedden.

The following table shows the results of analysis of the various samples taken from the Camps Water Gathering Area:—

Sample No. 1. Camps Water at site of reservoir, 4/6/12. Clear and transparent; minute trace of greyish fibrous deposit.

„ No. 2. As No. 1, 17/9/12.

„ No. 3. Camps Water above Grains Gill, 17/9/12. Physical character as No. 1.

„ No. 4. Grains Gill, 17/9/12. Physical character as No. 1.

„ No. 5. Camps Water above Grains Gill, 10/10/12. Physical character as No. 1.

„ No. 6. Camps Water above Grains Gill, 24/1/13.

Very turbid, due to clayey matter in suspension.

„ No. 7. Grains Gill, 24/1/13. Physical character as No. 6.

RESULTS : STATED AS PARTS PER 100,000.

Analysis.	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 6.	No. 7.
Chlorides as Cl., - - -	0·9	1·0	1·0	1·1	1·0	0·7	0·9
Nitrites as Nitrogen, - - }	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Nitrates „ - - }	·009	·001	·000	·001	·000	·000	·000
Ammonia, Free, as Nitrogen, -	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
„ Albuminoid, „ -	·003	·0012	·0008	·0008	·0011	·0081	·0080
Oxygen absorbed, - - -	·155	·070	·070	·105	·060	·470	·500
Hardness—Total, - - -	5·29	5·29	6·29	4·86	5·57	2·47	2·73
„ Permanent, - - -	3·25	2·2	2·47	1·82	2·3	·67	·93
Solids—Total, - - -	9·2	6·8	8·0	7·0	7·2	16·0	11·8
„ Volatile, - - -	3·8	2·2	1·8	3·4	2·6	7·6	4·4
„ Suspended, - - -	—	—	—	—	—	11·4	4·8
Iron as Fe., - - -	—	·12	·11	·10	·11	·34	·22
Colour—Platinum Standard, -	1·0	1·0	1·0	1·0	1·0	5·5*	7·0*
Alkalinity as CaCO <sub>3</sub> , - -	5·7	5·1	5·7	4·5	5·4	1·8	1·8
Turbidity at once, - - -	—	—	—	—	—	100	50
„ after 24 hours, - - -	—	—	—	—	—	40	20

\* Filtered through paper before colour was estimated.



ESTIMATION OF SUSPENDED SOLIDS AND TURBIDITY IN SAMPLES TAKEN  
ON 21ST DECEMBER, 1912.

	Camps Water.	Grains Gill.
Total suspended solids, ...	18.80	15.63
Volatile suspended solids, ...	1.24	1.66
Turbidity reading on 26/12/12, ...	180	140
" " 27/12/12, ...	60	60
" " 28/12/12, ...	60	50
" " 29/12/12, ...	50	40
" " 30/12/12, ...	40	30
" " 6/1/13, ...	30	25
" " 7/1/13, ...	30	25
" " 8/1/13, ...	25	20

The turbidity is measured by means of standard solutions containing fine silica in suspension, prepared according to method laid down by the United States Geological Survey.

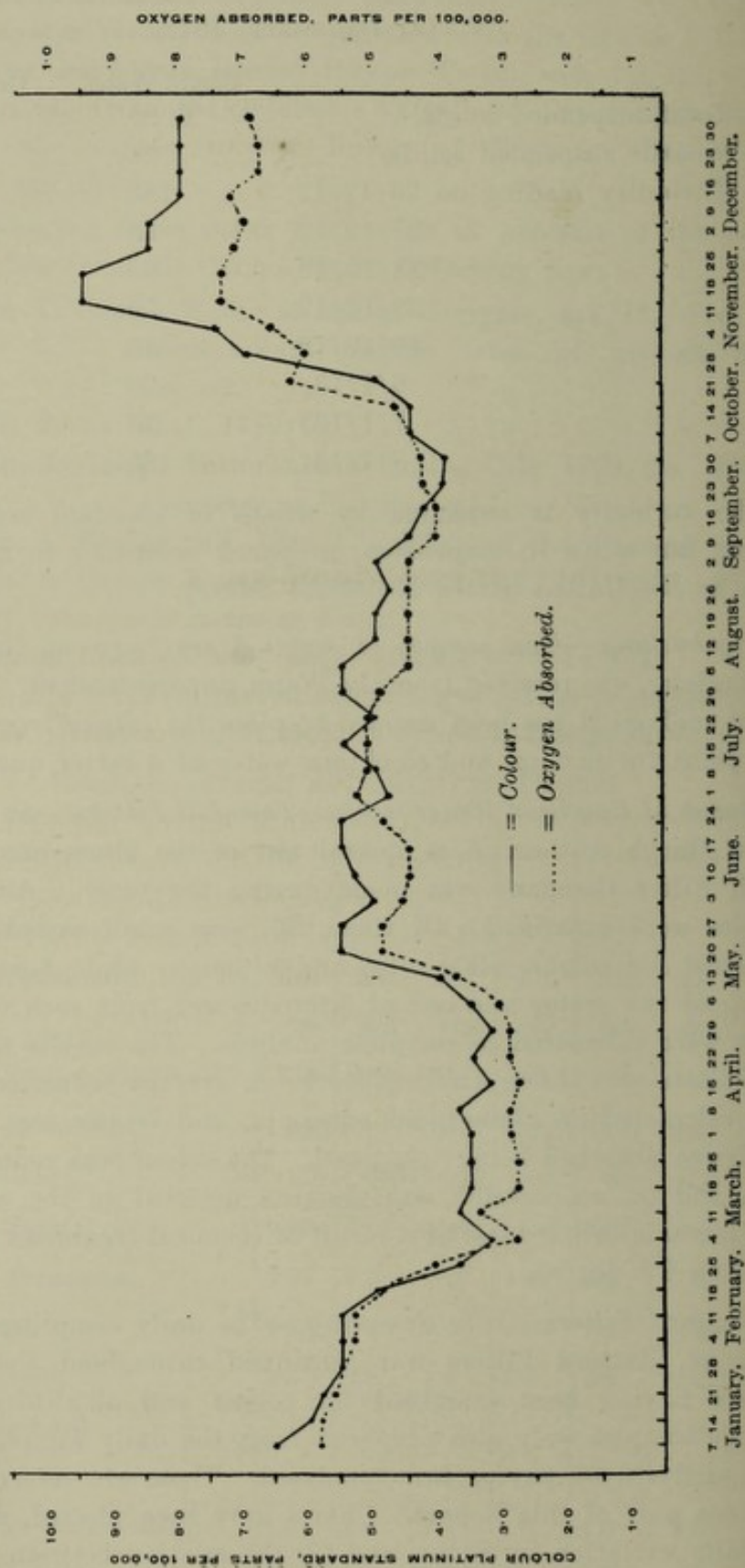
*Cambuslang.*—One sample of water from burn at Greenleeshill, Cambuslang, was received from the Water Superintendent. As a result of the analysis it has been decided to place the intake from this burn at a point further up, and so obtain water of a better quality.

*Burgh of Hamilton Water-works—Townhill Filters.*—At the request of the Burgh Authorities a special test of the filters erected by the Jewell Filter Company was made during the year. Altogether 39 samples were examined. Of these, 35 were small samples specially examined for colour, alkalinity, and alumina, while 4 samples consisting of raw water and one of filtered water from each of the three filters were submitted to complete analysis. The results showed that these filters were doing excellent work, an average reduction of 72 per cent. calculated on albuminoid ammonia, and 76 per cent. calculated on oxygen absorbed being obtained. The colour was reduced 90 per cent., and on no occasion was alumina detected in the water. The total increase in hardness as a result of chemical treatment was rather less than 0.5 degree.

*Glasford Filters, Daily Sampling.*—The daily sampling of filtered water at Glasford Filters was continued throughout the year, 365 samples having been examined for colour and alkalinity. Weekly average samples were also prepared from the daily samples for complete analysis, 52 having been analysed. These are referred to in a previous part of this Report. Charts have been plotted, showing (1) the daily variation in colour, and (2) the relation between colour and oxidisable substances as estimated in the average weekly samples. The results show that there has been a very considerable decrease in colour, amounting to over 30 per cent. The maximum and also the minimum



Diagram showing variation in amount of (1) colour and (2) oxidisable substances as estimated in weekly averages of daily samples taken at Glasford Clean-water Tank.



colour noted being less, amounting in the case of the minimum colour to almost 50 per cent. The minimum colour of 2·2 is the lowest colour noted during the 6 years these observations have been made. The following table shows for each year since 1908 the maximum, minimum, and also the yearly average colour of the water :—

Year.	Max.	Min.	Average.
1908, ...	13·0	3·2	6·0
1909, ...	14·8	3·2	7·7
1910, ...	10·6	2·8	6·7
1911, ...	8·6	2·9	5·3
1912, ...	12·0	4·0	7·0
1913, ...	10·0	2·2	4·6

The average alkalinity is also higher, showing 4·7, as compared with 4·2 in 1912, and 4·0 in 1911.

### Special Samples.

Total samples, 430. Under this heading are included the small daily samples from Glasford Filters (365), and 35 small samples from Burgh of Hamilton Filters, Townhill, which have already been described. The remaining 30 samples are extremely varied in character, and are described in detail.

*Tar.*—9 samples of tar were examined during the year. These samples were all received from the Middle Ward District Road Surveyors. Each of these samples was reported as not being conform to the specification laid down by the Road Board. The details of analysis are given in the following table. The limits laid down in the specification were detailed in last year's Report :—

### RESULTS : STATED AS PARTS PER CENT.

Sample No.	Specific Gravity.	Free Carbon.	Fractionation Test.		Water.	Phenols as Grains per Gal.
			170°C.	270°C.		
1	1·10	18·9	Nil.	17·4	1·2	—
2	1·25	18·6	Nil.	24·0	—	—
3	1·16	5·8	·3	28·2	·6	85·4
4	1·20	16·7	Nil.	26·0	Trace.	49·7
5	1·20	20·18	Nil.	24·7	·3	29·1
6	1·18	14·0	9·0	13·5	4·8	11·9
7	1·20	15·8	2·6	21·8	1·4	63·0
8	1·19	15·8	Nil.	29·5	Nil.	71·0
9	1·22	17·0	Nil.	24·5	Nil.	39·2



A special investigation of the various methods for estimating free carbon in tar was made. A large sample of tar was obtained and duplicate analysis, representing 5 methods, were carried out. This research was owing to the tar distillers questioning the amount (18·6 per cent.) of free carbon found in sample No. 2, and stating that their works chemist had corroborated his result of 14·9 per cent. As a result of 10 analyses, representing 5 different methods, the average was found to be 18·75 per cent. Further analyses made by the distillers resulted in their admitting 19 per cent. of free carbon in the tar.

*Sulphate of Alumina.*—Two samples of alumina, as used at Townhill Filters, were analysed at request of the Hamilton Burgh Authority. These samples were found conform to specification.

*Flock.*—One sample of flock was analysed, and found conform to the "Standard of Cleanliness."

*Paint Materials.*—3 samples, consisting of white lead, linseed oil, and turpentine. These samples were obtained at Lightburn Hospital. The linseed oil and turpentine were found to be genuine, and the white lead to be of good quality, yielding the following results per cent. :— $\text{Pb CO}_3 = 61\cdot95$  ;  $\text{Pb (OH)}_2 = 26\cdot17$  ; Oil, 9·80.

*Air.*—Two samples taken from houses in Morningside Square were examined for amount of carbonic acid gas. The amounts obtained were very high, being ·47 and ·35 per cent. respectively.

*Dust.*—One sample of floor sweepings was examined, and found to consist of earthy and ashy material.

*Trout.*—Two trout alleged to have been poisoned by washings from roads sprayed with tar were specially examined for phenoloid substances, with negative result.

*Dog.*—The body of a black Pomeranian dog was received from the Chief Constable, with instructions to examine same for poison. The stomach of the dog was found to contain a large quantity of oxalic acid.

### Food and Drugs.

Total samples, 1,424. Milk samples, informal, 104 samples, of which 10 were found non-genuine; of these, 6 were deficient in fat, the deficiencies varying between 7 and 20 per cent.; and 4 deficient in both fat and solids not fat. Skim milk, 4 samples; cream, 2 samples; all genuine.

In connection with an investigation as to the daily variation in the composition of cow's milk, 1,267 samples were analysed. The

results obtained will be the subject of a special report. Whisky, 32 samples, of which 3 were found deficient in proof spirit. Flour Improvers, 6 samples. A special examination of 6 substances, so-called "Flour Improvers," was made. These improvers include acid calcium phosphate, wheat phosphate, improved salox, improved salox flour, semolina, and B.L. Flour. The results obtained were specially reported on. Flour, 6 samples, found to contain 0.9, 1.3, 2.5, 2.55, 3.5, and 3.5 parts per million, respectively, of sodium nitrite. Butter, 1 sample, certified to be margarine. Green Peas, 2 samples, specially examined for copper, with negative result.



## Food and Drugs.

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The samples procured throughout the County and in the Burghs of Wishaw and Biggar amounted to 581, which is in the ratio of 1·89 per 1,000 of the population. 89 of the samples were obtained by means of agents. The procuring of samples clandestinely by means of agents has been found to be necessary for the proper administration of the Acts, especially for the detection of adulteration and fraudulent practices in connection with the sale of milk and butter. Informal samples are first purchased, and, from any suspected sources thus discovered, statutory samples are procured. For administrative purposes the samples have been classified thus:—

Samples procured formally,	-	-	391
„ „ informally,	-	-	152
„ received privately,	-	-	38
			<hr/>
			581
			<hr/>

The samples analysed amounted to 568—470 by the Public Analyst, and 98 in the Chemical Laboratory. The remaining 13 samples—8 of butter, 3 of margarine, 1 of condensed milk, and 1 of jam—it was unnecessary to have analysed.

Table A shows the work classified according to administrative area and locality. The number of visits made and samples procured in each district of the County, and in the Burghs of Wishaw and Biggar, were as follows:—

In the **Upper Ward**, 77 visits were made, and 75 samples procured. 4 were certified to be not genuine.

In the **Middle Ward**, 549 visits were made, and 374 samples procured. 43 were certified to be not genuine.

In the **Lower Ward**, 59 visits were made, and 58 samples procured. 12 were certified to be not genuine.

In the **Burgh of Wishaw**, 94 visits were made, and 58 samples procured. 43 were certified to be not genuine.

In the **Burgh of Biggar**, 10 visits were made, and 16 samples procured. All were certified genuine.

TABLE A.—ALLOCATION OF WORK DONE DURING 1913, UNDER THE FOOD AND DRUGS ACTS, ACCORDING TO ADMINISTRATIVE AREA AND LOCALITY.

	Visits to Localities.	Visits to Premises.	Samples Procured.	Samples found Non- genuine.
UPPER WARD.				
Abington and Crawfordjohn, ... ..	1	2	1	—
Blackwood and Kirkmuirhill, ... ..	4	6	10	—
Cariuke and Law, ... ..	3	12	11	—
Carnwath and Carstairs, ... ..	1	16	5	—
Dolphinton, Elsrickle, Dunsyre, and Newbigging, Crawford, ... ..	—	—	—	—
Douglas and Ponfeigh, ... ..	1	6	6	—
Douglas and Ponfeigh, ... ..	1	7	4	—
Crossford, Braidwood, and Hazelbank, ... ..	2	4	—	—
Forth, Wilsontown, Haywood, Braehead, and Tarbrax, Kirkfieldbank and New Lanark, Lanark Races, ...	1	5	7	—
Lesmahagow and Coalburn, ... ..	3	5	2	—
Lesmahagow and Coalburn, ... ..	8	20	25	4
Leadhills, ... ..	—	—	—	—
Lamington and Wiston, ... ..	—	—	—	—
Thankerton, and Robertson, ... ..	1	3	2	—
Symington and Biggar Parish, ... ..	1	1	2	—
	27	77	75	4
MIDDLE WARD.				
Baillieston, Easterhouse, Broomhouse, and Barrachnie, Bargeddie and Kirkwood, ... ..	10	35	27	2
Bargeddie and Kirkwood, ... ..	1	8	4	—
Bellshill and Mossend, ... ..	6	24	19	1
Blantyre, ... ..	10	62	35	2
Bothwell, ... ..	2	9	9	1
Busby, ... ..	1	2	2	—
Cadzow, Eddlewood, Quarter Road, & Limekilnburn, Calderbank and Chapelhall, ... ..	1	8	3	1
Calderbank and Chapelhall, ... ..	8	28	13	2
Cambuslang, Flemington, Halfway, & Gilbertfield, Carfin and Newarthill, ... ..	16	75	47	4
Carfin and Newarthill, ... ..	7	36	26	4
Carmyle, ... ..	2	3	3	—
Carnbroe and Glenmavis, ... ..	5	15	9	—
Cleland and Omoa, ... ..	2	14	11	2
East Kilbride, Maxwelltown, Nerston, Auldhouse, and Jackton, ... ..	2	4	5	—
Ferniegair, Larkhall, Dalserf, and Netherburn, ...	14	64	44	12
Glasford and Chapelton, ... ..	1	3	1	—
Glenboig and Annathill, ... ..	1	4	—	—
Glengowan, Caldercruix, Plains, and Gartness, ...	2	6	8	—
Greengairs and Wattstown, ... ..	2	3	1	—
Hallside, Westburn, and Newton, ... ..	1	2	2	—
Holytown, New Stevenston, and Clydesdale, ...	4	21	10	—
Longriggend, ... ..	3	11	5	—
Mount Vernon, ... ..	1	1	1	—
Newmains, Morningside, and Netherton, ... ..	2	19	22	2
Palace Row, North Motherwell, and Motherwell Hospital, ... ..	1	4	3	—
Salsburgh, ... ..	—	—	—	—



							Visits to Localities.	Visits to Premises.	Samples Procured.	Samples found Non- genuine
MIDDLE WARD.										
Shotts, Harthill, and West Benhar,	...	...	...	...	...	...	2	28	17	1
Stonehouse, Swinhill, and Shawsburn,	...	...	...	...	...	...	2	10	10	4
Strathaven,	...	...	...	...	...	...	3	18	12	2
Tannochside, Thorniewood, Aitkenhead, Bothwell Park, and Cockhill,	...	...	...	...	...	...	1	4	3	—
Uddingston,	...	...	...	...	...	...	5	23	13	—
Udston, Auchentibber, and Hamilton,	...	...	...	...	...	...	—	—	5	3
Waterloo and Overtown,	...	...	...	...	...	...	1	5	4	—
							<u>119</u>	<u>549</u>	<u>374</u>	<u>43</u>
LOWER WARD.										
Bishopbriggs, Auchinairn, Lambhill, and Mavis Valley,	...	...	...	...	...	...	2	11	6	—
Carmunnock,	...	...	...	...	...	...	—	—	—	—
Chryston, Muirhead, and Gartcosh,	...	...	...	...	...	...	1	4	7	2
Farne, Eastfield, &c.,	...	...	...	...	...	...	5	11	8	2
Lenzie,	...	...	...	...	...	...	1	4	4	—
Shettleston,	...	...	...	...	...	...	3	8	15	4
Stepps, Millerston, Hogganfield, and Ridarie,	...	...	...	...	...	...	2	7	7	2
Tollcross,	...	...	...	...	...	...	4	14	11	2
							<u>18</u>	<u>59</u>	<u>58</u>	<u>12</u>
BURGH OF WISHAW,							9	94	58	4
BURGH OF BIGGAR,							1	10	16	—
TOTAL,							<u>174</u>	<u>789</u>	<u>581</u>	<u>63</u>

The nature of the articles purchased and received during the year, the number of each article analysed or examined, and the number found not genuine are recorded in Table B. It will be seen that milk was the article most frequently purchased; butter came next in frequency, alcoholic liquors third, and flour fourth. Of the 568 samples analysed, 63 or 11·09 per cent. were found not genuine.

TABLE B.—SHOWING THE NATURE AND NUMBER OF SAMPLES PURCHASED AND RECEIVED, THE NUMBER ANALYSED, AND THE NUMBER FOUND NON-GENUINE.

ARTICLE.	Procured.	Analysed.	Non-genuine.
Milk, Sweet, - - - -	334	334	37
„ Skimmed, - - - -	22	22	4
Cream, - - - -	8	8	...
Preserved Cream, - - -	2	2	...
Condensed Milk, - - -	1	...	...
Butter, - - - -	55	47	14
Margarine, - - - -	6	3	...
Nut Butter, - - - -	1	1	...
Lard, - - - -	1	1	...
Dripping, - - - -	13	13	2
Sausage, - - - -	3	3	...
Flour, - - - -	15	15	...
Self-raising Flour, - - -	14	14	...
Baking Powder, - - - -	1	1	...
Ground Ginger, - - - -	2	2	...
Rice, - - - -	2	2	...
Green Peas, - - - -	2	2	...
Chicory, - - - -	1	1	...
Essence of Coffee and Chicory, -	11	11	...
Demarara Sugar, - - - -	3	3	...
Golden Syrup, - - - -	3	3	...
Jams, - - - -	14	13	...
Malt Vinegar, - - - -	2	2	...
Marshmallow Cream, - - -	1	1	...
Linseed Meal, - - - -	2	2	...
Olive Oil, - - - -	2	2	...
Cod Liver Oil, - - - -	1	1	...
Camphorated Oil, - - - -	1	1	...
Liquorice Powder, - - - -	1	1	...
Gregory's Powder, - - - -	3	3	...
Sweet Spirit of Nitre, - - -	1	1	...
Fluid Magnesia, - - - -	1	1	...
Lime Juice Cordial, - - - -	2	2	...
Lemon Squash, - - - -	1	1	...
Raspberry Fruit Wine, - - -	1	1	...
Whisky, - - - -	47	47	5
Brandy, - - - -	1	1	1
Grand Total, - - - -	<u>581</u>	<u>568</u>	<u>63</u>



The succeeding paragraphs give additional information with regard to the samples analysed, and the results of legal proceedings taken in connection with some of the samples certified to be not genuine. All the samples procured, formal and informal, as well as those received for examination, are included in the figures given.

MILK.—Regarding the samples of sweet milk, Table B shows that 334 were analysed, and 37 certified to be not genuine.

Classifying the samples according to the amount of milk fat we find—

31	had less than 3 per cent.
11	exactly 3 „
292	above 3 „

and according to non-fatty solids we find—

42	had less than 8.5 per cent.
45	exactly 8.5 „
247	above 8.5 „

Of the 334 samples of sweet milk, 31, or 9.3 per cent., fell below the standard for fat, and 42, or 12.6 per cent., fell below the standard for solids not fat. Of the 31 samples which fell below the standard for fat, 2 contained 2.9 per cent. of fat; and of the 42 samples which fell below the standard for solids not fat, 25 contained between 8.3 and 8.5 per cent. of non-fatty solids. In such small deficiencies no legal proceedings are instituted.

Attention is again drawn to the practice of milk-sellers carrying two qualities of sweet milk on their carts. Thus, in 7 cases, after the first samples had been purchased, the Inspector asked for a sample from another receptacle, which the dairyman stated contained skimmed milk. On analysis these second samples were found to contain milk fat in amounts varying from 2 to 3.1 per cent., which made it obvious that this milk was really being supplied to the public as sweet milk. In such cases, however, an effort is always made to obtain samples by means of an agent. It is again suggested that to prevent the evasion of the law in this manner the contents of barrels or cans carried on milk-carts should be indicated.

2 samples received from Lightburn Hospital, 1 from Uppertown Sanatorium, and 3 from Stonehouse Sanatorium were found on analysis to be deficient in milk fat. The results of analysis were reported to the institutions and to the suppliers. In the case of the supply to Lightburn Hospital, the contractor requested that a sample from the farmer's supply should be taken on delivery. On this being done, the farmer's milk was found to be deficient 5 per cent. in fat and 12 per cent. in solids not fat. Legal proceedings were taken, and the farmer convicted.



In connection with non-genuine samples of milk procured from retailers who buy in their milk supply, an attempt is always made to find out who is really responsible for any deficiency reported by the Public Analyst, by the Inspector taking a sample in course of delivery from the wholesale dealer or farmer. This procedure has been found valuable in putting the responsibility on the right party, and has frequently been the means of preventing legal proceedings against dairy-keepers who may be selling the milk as they get it. These retailers rarely can get a warranty from the wholesale dealer, and, lacking this protection, it would be difficult for them to overcome the presumption that they had sold milk that had been tampered with.

Eight samples were thus taken in course of delivery to retailers, and where the milk was found to be deficient the cases against the retail vendors were dropped. In connection with one of these samples, which was deficient to the extent of 6 per cent. in non-fatty solids, it was deemed desirable to take samples at the farm, with a view to making an "appeal to the cow" by sampling the milk produced by the individual cows of the herd at an evening's and morning's milking. The herd consisted of 12 cows, and altogether 24 samples were taken. These were analysed in the Chemical Laboratory, and from the analyses it was found that none of the samples were below the standard of 3 per cent. for milk fat, and in only three instances did the milk solids other than fat fall below the standard of 8.5 per cent., viz. :—two 8.3 and 8.4 per cent. at the evening's milking, and one 7.9 per cent. at the morning's milking, the latter being the cow which had 8.3 per cent. on the previous evening. The average composition of the evening's milk was 4 per cent. of milk fat and 9.12 per cent. of milk solids other than fat, and of the morning's milk 4.0 per cent. of milk fat and 8.85 per cent. of milk solids other than fat.

The deficiency in one of the samples was found to be due to the method of handling the milk. The official sample was supplied from a setting-out basin, the milk in which had a layer of cream on the top. The Inspector afterwards mixed the milk thoroughly and took an informal sample. The first sample was found to be deficient in milk fat, while the informal sample contained over 3 per cent. of fat.

Five of the samples, including one of the samples of "skimmed milk" above referred to, were certified to be coloured with annatto, a practice which gives the milk a cream colour, associated in the minds of the public with richness in quality.

*Complaint of Milk turning Thick and Ropy.*—A sample of milk was received from a retail dairyman, who stated that his customers complained that he was putting cornflour into the milk. The sample



was examined by the Bacteriologist, who found that the milk was of slimy consistence, readily pulled out into long strings, and from the bacteria present that it must have been contaminated with dirt. The Inspector visited the dairy, and found that the milk-house was badly ventilated, and had a sour, disagreeable smell, largely emanating from several large cans full of sour, thickened milk, which the dairyman stated had been accumulating owing to its unsaleable condition as it came from the farmer. A sample of the milk was procured from the dairyman's cart in Mossend, and on examination in the Bacteriological Laboratory was found to quickly turn thick and ropy and to contain dirt organisms. A re-inspection was made to the dairy premises a fortnight later. The same conditions prevailed, and the dairyman stated he had stopped the supply from the farm concerned. A visit was then made on the same day to the farm, and the farmer's wife interviewed. She stated that the dairyman had been very irregular in his times for lifting the milk, and that she had been forced, through lack of proper receptacles, to empty the whole of the milk supply (about 12 gallons) into a wooden hand-churn, about 4 feet high by 18 inches in diameter, and to this she attributed the souring of the milk. This churn was standing in the milk-house at the time of inspection, containing the previous morning's milk, which was apparently quite sour and thick. The Inspector arranged for a sample from this churn, together with a sample of the evening's milk immediately on milking, to be brought to the Bacteriological Laboratory. Both samples were kept for a day or so, but the Bacteriologist was of opinion that the thickening of these samples was due to lactic acid fermentation. The farmer's wife said she would immediately rectify the matter so far as she was concerned by providing proper receptacles for the milk.

*Complaint of Contaminated Milk Supply.*—Inquiries were made into a complaint made by the Dalziel Co-operative Society, Limited, Motherwell, of the quality of the milk supplied to them by a farmer in the Middle Ward District of the County. The complaint showed that on numerous occasions for nearly a month a portion of both the evening and morning milk had a bad taste and an objectionable odour, which the farmer was quite unable to account for or prevent. Immediately on receipt of the complaint one of the Inspectors inquired into the matter, and the information he elicited pointed to the probability of a single cow's milk being contaminated. In the course of his inquiries he took 34 different samples, including samples of the milk of all the cows in the herd. These were first examined physically, with the result that the milk of one animal was found to be badly



tainted even a few hours after milking. Samples of this cow's milk, and other control samples, were also examined in the Bacteriological Laboratory, and from the results of examination, and the history of the cow obtained by the Inspector, the trouble was found to be due to a bacterial affection of the cow's udder. The supply from the affected cow, which was nearing the end of her lactation period, and only giving a small quantity of milk, was at once stopped, and the source of contamination removed.

Every sample of milk taken formally and certified to be not genuine was fully reported to the County Clerk. In 7 cases no proceedings were instituted owing to the smallness of the deficiencies, and in 2, proceedings against retailers were dropped as a result of samples taken on delivery from farmers concerned having been found deficient. Legal proceedings were instituted in 12 cases, and convictions obtained in every case except one, which was dismissed on a technical objection to the complaint sustained by the Sheriff. The total fines imposed amounted to £22 15s., with the alternative of imprisonment in each case. The fines were all paid.

**SKIMMED MILK.**—22 samples of skimmed milk were obtained, 7 of these being the aforementioned samples of non-genuine sweet milk sold as skimmed milk. 4 samples were certified to be deficient in milk solids, and were reported to the County Clerk for legal proceedings. In one of the cases the deficiency was slight, and no proceedings were taken. Convictions were obtained in two of the remaining cases, while the third was dismissed on evidence that the milk had not been tampered with. Fines amounting to £6 were imposed, all of which were paid.

**CREAM.**—8 samples of cream were procured during the year, 6 being ordinary cream procured from dairymen, and 2 being preserved thick cream sold in jars by grocers. The fat in the ordinary cream ranged from 8·25 to 13·70 per cent. Only one of the preserved cream samples was analysed for fat; it contained 57·50 per cent. One of the former samples was certified to contain ·03 grains per cent. of boracic acid as a preservative, an amount which was considered too slight to warrant legal proceedings. The preserved cream samples, which were labelled as such, contained ·50 and ·24 grains per cent. of boracic acid respectively. The jar in which the former sample was contained bore an inscription that the cream was boracised. There was no such notice in the case of the other sample.

**MILK STANDARD.**—The investigations begun in 1912, and which have already formed the subject of a special first report, were continued, and will be further reported.



**BUTTER.**—Table B shows that 55 samples were procured, of which 33 were informal. 47 samples were analysed. 3 of the formal and 11 of the informal were certified to be not genuine. The informal samples were mostly procured by means of agents, with a view to detecting the prevalence of the practice of supplying margarine for butter. This practice is still carried on in some districts by vendors with carts, who style themselves "Irish Provision Merchants," "Egg and Butter Merchants," &c. These have been kept under careful supervision, but the samples taken during the year were all, with one exception, certified genuine. Repeated purchases by an agent have often to be made from a suspected vendor before a formal sample is procured.

Legal proceedings were taken in all 3 formal non-genuine samples, but in 1 case the proceedings were dropped. The cases are co-related, and as the facts concerning them are of interest they may be recorded. The first sample was procured by an agent from a retailer, who stated that he bought the butter *bona fide*, and the other 2 samples were taken on delivery from the source of his supply, a Glasgow dealer carrying on an extensive business by employing women (ordinary householders) to act as agents. The consignment from which the samples were taken consisted of three boxes, containing  $\frac{1}{2}$ -lb. and 1-lb. rolls of alleged fresh and salt butter respectively, wrapped in plain papers. The boxes were not branded "Margarine" as required by Statute, the branding having, as afterwards confessed by the offender, been planed off. Both the samples taken were certified to be margarine. In the circumstances, the case against the retailer was abandoned, and proceedings instituted against the wholesale dealer. He was charged with (1) selling margarine as fresh and salt butter; (2) failing to have packages of margarine branded with the word "Margarine"; and (3) despatching the material by public conveyance without consigning the same as margarine. He pleaded guilty, and a penalty of £20, or sixty days' imprisonment, was imposed on him.

**MARGARINE.**—Careful supervision of shops where this article is on sale continues to be made, to see that the provisions of the Margarine Acts are being complied with. During the year 6 samples were purchased, and 3 were analysed by the Public Analyst.

Thirty contraventions were detected. Sixteen of these were minor offences in respect of improper labelling or temporary want of wrappers, and it was deemed sufficient to verbally caution the offenders; 11 were in connection with informal samples supplied in plain wrappers as butter to an agent; while 3 were the dual offences



under the Food and Drugs and Margarine Acts, reported on under the heading "Butter."

Attention is called to the words used in advertising the sale of margarine by large firms owning multiple shops throughout the County. Thus one advertisement states, "*Nuts and milk* make the world-renowned \* Margarine," and another, "To buyers of margarine overweight, *made with nuts and cream.*" As these words, "nuts and milk" and "nuts and cream," seemed misleading the Public Analyst was asked to determine, as far as he could, the composition of a particular sample of margarine purchased from one of the above sources. Messrs. Tatlock & Thomson made a fuller examination of the sample than usual, and from the results obtained conclude that the following is the approximate composition of the fat of the sample of margarine:—

Cocoanut Oil, - - - -	45 per cent.
Cottonseed Oil, - - - -	35 „
Animal (including Butter) Fat, - -	20 „
	<hr/>
	100
	<hr/>

The analysts add, "This result would be the highest figure possible for cocoanut oil" in this sample, having regard to the details of analysis, which were as follows:—

Soluble Volatile Acids, - - - -	6.1
Insoluble „ „ (Polenske Number), -	6.0
Iodine Value, per cent., - - - -	54.18
Saponification Value, per cent., - -	22.43
Unsaponification Matter, per cent., -	65

Looking now at the terms of the advertisements, it would be admitted that the words used are misleading. Nuts refer to cocoanuts, and there is no doubt a large quantity of oil expressed from these nuts used. This oil, I believe, costs about 48s. to 54s. per ton. It is difficult to understand, however, where the milk and the cream comes in, unless the statement refers to the use of a small percentage of milk with which the margarine fats may be finally treated. No reference is made in the advertisements to the use of cottonseed oil in the preparation of the margarine, and yet it forms about one-third of the material used, and is no doubt the cheapest constituent, costing about 34s. per ton. Cottonseed oil is expressed from cotton seed, and has long been used for commercial purposes, and the seed itself is an important foodstuff for cattle. Animal fat is also present in the margarine, and from a vegetarian point of view a purchaser would be prejudiced.



In a recent number of "The Grocer and Oil Trade Review" (July 5th) some account is given of a civil action in an English County Court, where the subject of dispute was the quality and value of cocoanut oil used for making margarine. The action was on the grounds of the oil having a nasty taste and smell, and not being neutral. The stuff tasted like sour nuts, and was not fit to make margarine of the best quality, and it seemed to deteriorate the longer it was kept. It may be of interest to quote the following evidence of one of the witnesses:—

"The oil was used to make margarine, and for that purpose should be of very good quality. Fats, *per se*, had no taste or smell. When they were used they would absorb the flavour of the material put into them. If into that fat was introduced a milk culture, it assumed the flavour of butter and became margarine. There were other things used in the manufacture of margarine, but the principal ingredient was milk. Substitutes had to be found for beef fat, and one of these was cocoanut oil, made out of copra, the kernel of the cocoanut. To make that, the cocoanuts were split and left in the sun. The milk was thrown away, and the kernel allowed to dry in the sun, and it was from the copra that the cocoanut oil was manufactured. It should be absolutely neutral—have neither taste nor smell—and then it could safely be used for edible purposes, and to receive milk culture."

Below are also given (1) analyses of 2 samples of margarine, procured informally and sold as butter; and (2) analyses of samples of vegetables or nut butter and nut margarine:—

(1)—MARGARINE.

Cocoanut Oil,	-	-	-	-	65 %	40 %
Cottonseed Oil,	-	-	-	-	15 %	35 %
Butter Fat,	-	-	-	-	2 %	2 %
Other Animal Fat,	-	-	-	-	18 %	23 %

(2)—NUT BUTTER AND NUT MARGARINE.

		Nut Butter.	Nut Margarine.
Cocoanut Oil,	-	68.0 %	85.0 %
Cottonseed Oil,	-	—	—
Butter Fat,	-	2.0 %	4.0 %
Other Fat,	-	30.0 %	11.0 %

These samples were supplied in boxes, bearing printed matter to the effect that they were made from *nuts only*.

DRIPPING.—The 13 samples of dripping purchased were sold as dripping, rendered suet, beef suet, and marrow fat, all being different names for the fat rendered from beef or mutton. Dripping adulterated with a large percentage of cottonseed oil is stocked by some grocers and fishmongers, but it can only be sold as cooking fat, kitchen fee,



or under some other non-specific name. 2 samples were certified to be not genuine, in respect that they contained 40 per cent. of cottonseed oil, and one to be of doubtful purity. Legal proceedings were taken in the 2 non-genuine cases. 1 case was abandoned through a mistake in the Public Analyst's certificate. In the other case the respondent pleaded guilty, and a fine of £2 was imposed.

FLOUR.—15 samples of flour were procured during the year, and were referred to in the monthly report as follows:—

“ Of the samples of flour analysed by the Public Analyst, two were purchased as unbleached, and from the nitrites per million of flour which they were found on analysis to contain—.37 and .072 respectively—the Public Analyst certifies that they may be regarded as unbleached flour. Another sample purchased as flour contained 3.2 parts of nitrites per million of flour, and the Analyst states ‘ may therefore be regarded as bleached flour.’ Four informal samples procured at a baker's premises in the Burgh of Biggar were analysed for bleaching and ‘ improvers.’ The Public Analyst could not detect the presence of added phosphates or other improver in any of the samples. The nitrites were stated to amount to, respectively, .30, 1.00, 2.40, and 2.60 parts per million of flour. Three informal samples of flour were analysed in the Chemical Laboratory, and were found to contain .9, 1.3, and 2.5 parts of nitrogen, as sodium nitrite per million of flour respectively. The last sample was said to be milled where the bleaching process is known to be carried on.

“ A sample of flour was received privately from a baker, who complained he had not been supplied with what he had ordered. He ordered flour milled from Manitoban wheat, and to be unbleached. From various circumstances connected with the consignment, he was of opinion that the flour had not been milled from Manitoban wheat, and that it was bleached. On the sample being analysed in the Chemical Laboratory it was certified to contain 2.55 parts of nitrogen as sodium nitrite per million of flour. An Inspector made further inquiries, and ascertained that the sample as left by the baker had been taken from the top of an opened bag in the bakehouse. In order to make certain that the air of the bakehouse was not the source of the nitrites, he took two other samples from a bag deposited with the rest of the consignment in an outside store. One of these samples was taken from the top of the bag and the other from the centre. On analysis these were both certified to contain 3.50 parts of nitrogen as sodium nitrite, showing that the nitrites were evenly distributed throughout the flour. The nitrites present in this flour are considerably in excess of that found in genuine flour, and are presumably due to bleaching in the process of milling. It should be added that a microscopical examination of the flour was also made in the Bacteriological Laboratory, which showed it to be a high-grade flour.”

SELF-RAISING FLOUR.—14 samples were taken and analysed, the amount of calcium sulphate they contained ranging from .14 to 10 per cent., all within the limit of 10 per cent., suggested by Dr.



Hamill in his report to the Local Government Board. In this report Dr. Hamill states :—

“ Self-raising flour is simply flour to which the active constituents of baking powder have been added in the proper proportions. Most self-raising flours are made with sodium bicarbonate and acid calcium phosphate, which has practically superseded tartaric acid or cream of tartar for this purpose. The quantities recommended for use vary slightly amongst different makers, but 6 lbs. of ‘ phosphate ’ and 3 lbs. of sodium bicarbonate to 280 lbs. of flour represents a fairly usual mixture.

“ The lower grades of acid phosphate, *i.e.*, those containing relatively large quantities of calcium sulphate, are generally used in making self-raising flour. Although these lower-grade phosphates are not so strong as the higher qualities, their inferiority in strength is more than counterbalanced by their cheapness. If the acid phosphate used in preparing self-raising flour according to the above formula contained 50 per cent. of calcium sulphate, the self-raising flour thus produced would contain as much as 70 grains of calcium sulphate per pound.

“ Self-raising flour is, in many cases, sold at the same price as ordinary flour, and this is rendered commercially possible by using a lower-grade, and therefore less expensive, flour in making the self-raising article.

\* \* \* \* \*

“ In these circumstances, it seems desirable that the principle should be adopted that acid calcium phosphate, used for the preparation of baking powder and self-raising flour, should not contain more than 10 per cent. of calcium sulphate.”

COFFEE ESSENCES.—11 samples were procured, 1 labelled “ Coffee Essence,” 2 “ Essence of Coffee and Chicory,” and 2 “ Chicory and Coffee.” The essences of coffee and the essences of chicory and coffee were on analysis found in order. With regard to the essence of coffee and chicory samples, 3 were certified to contain coffee and chicory in the proportions of 1 in 4·3, 1 in 3·7, and 1 in 3·5 respectively. The question here is whether the designation on the label, “ Essence of Coffee with Chicory,” is a correct one. The analyses show that the chicory present is in excess of the coffee, so that the designation should obviously be “ Essence of Chicory with Coffee.” One of the manufacturers was communicated with in the matter, and an interview with the Medical Officer and one of the Inspectors was arranged. The manufacturers stated that in their manufacture of essence of coffee and chicory, coffee was always used in the larger proportion. The investigation is being continued.

MISCELLANEOUS ARTICLES.—The samples of preserves were all certified to be free from extraneous seeds or matter, and the golden syrup samples free from glucose. The samples of sausage, &c., con-



tained 5·7 and 1·7 grains of boracic acid per lb. as a preservative, which amounts are well within the recognised limit of 17·5 grains per lb. The samples of lime juice cordial, lemon squash, and raspberry wine contained 1, ·52, ·28, and ·17 grains of salicylic acid per pint. The sample of marshmallow cream was procured from a baker. It was sold to him as a substitute for the thick cream used in the making of fancy pastries. On analysis the sample was found to contain no fat constituent, but consisted principally of sugar, which shows that the article is more of the nature of a confection. The baker did not find the substitute satisfactory, and had discontinued its use.

DRUGS.—The sample of Gregory's Mixture was certified to be not of the nature, substance, and quality of Gregory's Powder, in respect that it did not contain the ingredients specified in the Pharmacopœia. According to the Pharmacopœia, Gregory's Powder should contain 66·6 per cent. of magnesia (magnesium oxide), whereas this sample contained 53·5 per cent. or thereby of hydrated carbonate of magnesia. The manufacturers were communicated with. They replied that their Gregory's Mixture was prepared according to the British Pharmacopœia Standard. From the analysis, however, it is apparent they have not done so, and they were again communicated with on the matter. They replied admitting that their stock of calcined magnesia (magnesium oxide) contained hydrated carbonate of magnesia, but that it must have taken place by absorption of carbonic acid gas from the atmosphere. Their stock of calcined magnesia which was used in the manufacture of the sample of Gregory's Mixture complained of had been lying exposed to the atmosphere of their stores in Glasgow for about a year. They submitted a sample for analysis by Messrs. R. R. Tatlock & Thomson, and sent a copy of the analysts' report, which is as follows, viz. :—

*“ Analysis of a sample of Calcined Magnesia received on the  
21st instant.*

When heated to a dull redness the sample lost 8·7 per cent., which consists of carbonic acid and water, and this is equal to 15 per cent. of hydrated magnesium carbonate, or the ‘light magnesium carbonate’ of the British Pharmacopœia. According to the requirement of that publication, calcined magnesia ‘when heated to dull redness should lose little or no weight.’

If the calcined magnesia had been originally up to the proper standard, *the presence of the hydrated carbonate may be accounted for if the article had been exposed to the atmosphere for a period.* In order to keep calcined magnesia in proper condition, it requires to be kept in practically air-tight vessels.

Of course, this calcined magnesia could be put right by calcining it at a dull red heat.”



As the above explanation is quite reasonable, it was not considered desirable to lodge a formal complaint for legal proceedings.

All the other samples procured were certified to be genuine.

WHISKY.—47 samples were procured—20 formal, and 27 informal. 18 of the informal samples were procured by means of an agent. On analysis, 2 of the formal and 3 of the informal samples were certified to be deficient in proof spirit. 2 of the samples were procured at Lanark Races. These and all the other samples were certified to be genuine within the meaning of the Food and Drugs Acts. Legal proceedings were instituted in the 2 formal deficiencies, but 1 of them was abandoned owing to circumstances connected with the purchase of the sample. A conviction was obtained in the other case, the fine imposed being £2.

BRANDY.—1 informal sample of brandy was procured during the year, and on analysis was certified to be  $1\frac{1}{2}$  per cent. deficient in proof spirit.

TABLE C.—RECORD OF WORK DONE SINCE 1900.

Year.	SAMPLES.	
	Total Analysed.	Percentage Adulterated.
1900	265	12·5
1901	257	10·5
1902	194	11·3
1903	369	10·00
1904	498	12·04
1905	547	13·52
1906	474	13·29
1907	372	11·82
1908	487	14·98
1909	521	9·59
1910	539	10·76
1911	716*	13·9†
1912	446*	9·3†
1913	568	11·09

From the year 1904 the above figures include Test Samples.

\* This includes samples of flour.

† This figure does not take into consideration the samples of flour certified to be bleached.

## Shops Acts, 1912 and 1913.

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The Shops Acts continue to be administered throughout the County in a conciliatory manner, and have proved of great benefit to the shopkeeping classes by establishing by legislation a weekly half-holiday and other provisions regulating the working hours of shopkeepers and their assistants, which merchants' associations had been previously striving to effect by voluntary means. In the making of Weekly Half-holiday and Closing Orders, these associations gave every possible assistance in connection with the preparing of registers of the shopkeepers within their districts. The provisions of the principal Act as regards assistants' half-holidays and meal hours were amended by the Shops Act, 1913, so as to make their application more suited to the conditions of employment in premises for the sale of refreshments.

Table E shows that 245 inspections were made to localities, 1,209 shops, &c., visited, and 500 contraventions detected. 391 of the contraventions consisted of the want of and failure to exhibit statutory notices. As many shopkeepers had a difficulty in obtaining these notices, the following were sent free of charge, viz. :—

Assistants' weekly half-holiday,	...	...	83
Shops' weekly half-holiday,	...	...	26
Employment of young persons,	...	...	48
Mixed shops,	...	...	341
			<hr/>
			498
			<hr/>

The observance by shopkeepers of the various provisions of the Act may be summarised as follows :—

**CLOSING OF SHOPS FOR WEEKLY HALF-HOLIDAY.**—At present the following Weekly Half-holiday Orders are in operation, viz. :—(1) Carluke Parish—Upper Ward, fixing Wednesday or alternatively Saturday; (2) Middle Ward, fixing Wednesday or alternatively Saturday throughout the whole district. In connection with a proposed Half-holiday Order fixing Tuesday for the Lower Ward, inspection was made at the various localities to be affected by the Order for the purpose of revising the Register of Shopkeepers.

In districts where no weekly Half-holiday Order exists the shopkeepers must close, but have the option of fixing their own day by notice to be exhibited in the shop.

The traders who take advantage of the alternative day (Saturday) are mostly painters and plumbers, &c.



In view of representations made by merchants' associations and others, the County Council granted a concession to shopkeepers, allowing them to keep their shops open on the Wednesday (the day fixed by Order for the weekly half-holiday) preceding Christmas and New-Year's Day, and consequently the administration of the Shops Act was relaxed in this respect during Christmas and New-Year weeks. Regarding the assistants' "afternoon off" during these two weeks, this was left to be arranged between the employers and assistants themselves.

Inspections and inquiries were made in connection with petitions from the shopkeepers in the Clydeside villages of Kirkfieldbank, Hazelbank, Crossford, and Rosebank, which are frequented as holiday resorts, desiring the suspension of the weekly half-holiday during the months of June, July, and August. The Local Authority, after consideration, made an order suspending the weekly half-holiday as craved.

Throughout the year 110 localities were visited on the day of the weekly half-holiday, and 19 cases of failure to close were detected. These were all first offences, and were to be attributed more to inadvertence and ignorance of the provisions of the Act. Verbal cautions were given, and no further cause for complaint was detected with the same offenders.

**EARLY CLOSING ORDERS.** — A Closing Order for the Parish of Cambuslang came into force in the month of March, fixing closing hours, viz., 8 p.m. on every evening except Saturday, when the closing hour is 10 p.m. In the case of butchers' shops, the closing hour is 7 p.m., except on Friday and Saturday, when the closing hours are 7.30 p.m. and 10 p.m. respectively. The only other Closing Order in operation within the County is the Barbers' and Hairdressers' Order, under the 1904 Act, which applies to the special lighting districts of Aitkenhead and Tannochside, Bellshill and Mossend, Blantyre, Bothwell, Cambuslang, and Uddingston.

Twelve inspections were made during the year, when it was found that the closing of shops was satisfactorily carried out, and any contraventions detected consisted mainly of failure to exhibit notices in mixed shops. Two cases of supplying non-exempted goods and 6 cases of shopkeepers failing to close promptly were also detected. Verbal cautions were given.

**MIXED SHOPS.**—This term applies to shops in which part of the trade or business is exempted by the terms of the Acts from closing for a weekly half-holiday, and also from early closing under a Closing Order. In these shops a notice must be exhibited, stating that only exempted goods can be sold. In the course of inspection these shops



were kept under supervision, and many of them tested by an agent being sent to purchase a non-exempted article. Twenty-two cases of supplying non-exempted goods were detected, as well as a large number of cases of failure to exhibit the required notice. Verbal cautions were given, but legal proceedings will have to be instituted against one or two of the persistent offenders.

**STREET TRADING.**—In districts where the half-holiday closing of shops is fixed by an Order, and also where an early Closing Order is in operation, attention was given to the provisions of the Act as regards street trading. Numerous complaints have been received from shopkeepers regarding street trading by van, &c., on the weekly half-holiday and after closing hours. In the course of inspections, 26 contraventions were detected. One of those related to a provision van retailing groceries after the shops were closed at 10 p.m. on Saturday under a Closing Order. A purchase of butter and ham was procured by means of an agent. The vendor pleaded ignorance of the Order, and as this was a first offence he was verbally cautioned. The rest of the cases related mainly to itinerant vendors from Glasgow, trading on the weekly half-holiday, and cautions were given in these cases as well.

**ASSISTANTS' WEEKLY HALF-HOLIDAY.**—This provision has been well observed, only 13 contraventions being detected. Some of these were due to the assistants coming back of their own accord, while in others the offences occurred through the ignorance of small shopkeepers of the requirements of the Act. All the contraventions were remedied on the employers being interviewed by the Inspectors.

**ASSISTANTS' MEAL INTERVALS.**—During the routine inspections of shops, inquiries were made regarding the meal hours of assistants, and only 7 contraventions were detected (all in connection with shops employing one assistant). These were all remedied by the assistant closing the shop for the meal intervals. Some shopkeepers have complained to the Inspectors about the hardship of arranging for a tea interval for their assistants when the closing hour is at 7 o'clock. The Act stipulates that where the hours of employment include the hours from 4 p.m. to 7 p.m., an interval of not less than half-an-hour shall be allowed between those hours for tea. Some shopkeepers get over the difficulty of the tea interval by closing at 6.55 p.m. This arrangement accommodates the assistants themselves, many of whom have stated to the Inspectors that they prefer to work right on and get off promptly at closing time.

**SEATS FOR FEMALE ASSISTANTS.**—Ten contraventions of the provisions of the Act relating to seats for female assistants were detected and promptly remedied.



**HOURS OF EMPLOYMENT OF YOUNG PERSONS.**—The provision relating to the employment of young persons under 18 years of age for more than 74 hours per week was found to be contravened in 6 instances, mostly in connection with the employment of young girls in dairies and ice-cream shops which open on Sundays. The contraventions being all first offences, the employers were verbally cautioned by the Inspectors, and the conditions of the girls' employment brought into line with the requirements of the Act.

**COMMUNICATIONS.**—Twenty-two communications received from shopkeepers, merchants' associations, and shop assistants' unions, asking for information, and stating their difficulties regarding the effect of the Act on their respective businesses, were attended to.

**TABLE E.—SHOWING INSPECTIONS, VISITS TO SHOPS, &c., AND CONTRAVENTIONS IN THE THREE WARDS OF THE COUNTY.**

Inspections and Contraventions.	Upper Ward.	Middle Ward.	Lower Ward.	Total for County.
Inspections to Localities, ...	37	185	23	245
Visits to Shops, &c., ...	193	919	97	1,209
Contraventions—				
Failure to Close: Weekly Half-holiday and under Closing Orders, ...	4	21	—	25
Supplying non-exempted goods,	2	19	1	22
Street Trading, ...	—	26	—	26
Failure to give Assistants Weekly Half-holiday, ...	7	4	2	13
Failure to give proper intervals for meals, ...	1	6	—	7
Failure to provide seats for female assistants, ...	4	5	1	10
Employing young persons under 18 years more than 74 hours per week, ...	—	5	1	6
Failure to exhibit Notices in terms of Act, ...	78	277	36	391
Total Contraventions, ...	96	363	41	500

## By-laws Regulating Places for Public Refreshment.

### Structural Arrangements.

The duties arising in connection with questions relating to the structural arrangements of places for public refreshment under the By-laws have been entrusted to and carried out by the Inspectors under the Food and Drugs and Shops Acts.

In the course of the Inspectors' routine visits to localities throughout the County, 57 inspections of ice-cream shops, fried fish and potato shops, restaurants and tea rooms were made. Some of these were special inspections made in connection with applications to the County Clerk for registration of premises.

A number of communications were received throughout the year, and were attended to.

Seventeen cases of non-compliance with the provisions of the By-laws were detected, and reported to the County Clerk, viz. :—

(1) Eleven cases of direct connection by means of a door between registered premises and a part thereof partitioned off for "sales off the premises."

(2) Two cases of separate rooms with partitions to the ceiling.

(3) One case of inadequate lighting.

(4) Four cases where partitions were over 3 feet 6 inches in height above the floor level.

Several special inspections were made in connection with the registration of bakers' shops, with tea rooms attached with separate entrances, but also connected by a door with the shop. While making application for registration of the tea rooms, the bakers wished to keep the front shop open after the hour prescribed by the By-laws. The terms of the By-laws, however, did not allow of this without closing up the door between the shop and the tea rooms. In order, therefore, to overcome the difficulty, the proprietors of these premises withdrew their applications for registration, and agreed to stop selling refreshments for consumption on the premises after 8 p.m.



## Fertilisers and Feeding Stuffs.

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The samples procured amounted to 44, of which 10 were informal. In procuring these, 15 inspections were made.

The number and nature of the samples procured and the samples found deficient are shown in Table D. It will be seen that 38 of the samples were fertilisers, 4 of which were informal, and 6 were feeding stuffs, all of them informal.

During the year, 35 intimations were sent to sellers of fertilisers and feeding stuffs, giving three days' notice of sampling, with particulars as to place, day, and hour, as required by the Regulations laid down by the Board of Agriculture, so that the seller or his representative might be present if desired. Only in five cases was the seller represented at the sampling. The majority of the others replied that they left the sampling in the hands of the official sampler. The alternative method of sampling as laid down in the aforesaid Regulations, *i.e.*, by means of the spear, was adopted in every case where the samples were taken officially, and no objection was taken to its use.

Thirty-four formal samples were taken at the request of two farmers' associations in Avondale Parish and Lesmahagow Parish. The 10 informal samples were procured from farmers.

Of the samples of fertilisers analysed during the year there were only two deficiencies, *viz.*, a sample of dissolved bones, which was 4·4 per cent. deficient in insoluble phosphates, and a sample of basic slag, which was 10 per cent. deficient in fineness. The former deficiency was within the limit of error prescribed by the Regulations issued by the Board of Agriculture, while in the latter case no action was taken, but it is probable that the buyer would get a rebate in the price of the fertiliser. All the other samples were in excess of the guaranteed percentages of fertilising constituents in the invoices, ranging in extent from ·2 to 4·8 per cent. Of the three samples of sulphate of ammonia, two of them were certified to contain water to the extent of 3·08 and 3·49 per cent. respectively.

With reference to an informal sample of basic slag, some correspondence took place with the sellers regarding the form of the warranty



in the invoice, viz., "22 per cent. phosphate of lime insoluble." The sellers held that this form of guarantee was in order, and the Board of Agriculture for Scotland was communicated with as follows, viz. :—

"I take the liberty of sending you herewith copy correspondence regarding the warranty to be given with sales of basic slag. According to my reading of the Fertilisers and Feeding Stuffs Act, 1906, the percentage of soluble and insoluble phosphates (using 2 per cent. citric acid) should be stated on the invoice. A warranty of 22 per cent. phosphate of lime (insoluble) would seem not to be a proper one. With such a warranty, basic slag which was weak in phosphates could easily be 'made up' to any strength by adding rock phosphates, and the warranty be worthless as an indication of the value of the manure. From the correspondence it will be seen that there is a belief among certain sellers of the manure that the citric soluble warranty is optional on their part.

"I shall be glad, therefore, to have your guidance in the matter."

The Board's reply was as follows, viz. :—

"Adverting to your letter of 13th instant, I am directed by the Board of Agriculture for Scotland to point out that in Section 10 of the above Act the expressions 'soluble' and 'insoluble' are defined as meaning respectively soluble and insoluble in water, or, if so specified in the invoice, in a solution of citric acid or other solvent of the proscribed strength.

"No obligation is laid on the vendor of basic slag to state the percentage of citric soluble phosphates in the slag, but it is the practice of vendors of high-class slag to state their guarantees in this form. The method of stating guarantees in terms of insoluble phosphate only has, in recent years, been adopted by firms who deal in low-grade slags, and especially slags having a low degree of citric solubility."

The form of warranty seems, therefore, to be in order.

With regard to the samples of feeding stuffs which were all informally procured, the results of analysis given in the following table show considerable differences in different samples of the same kind of feeding stuff, particularly with regard to the percentages of water and sand which they contain. Thus, in the three samples of bean meal the percentages of water are 14·05, 10·80, and 13·20, and one contains no sand, while the other two contain ·94 and 2·35 per cent. respectively. In the two samples of linseed cake the percentages of water are 10·21 and 13·18, and of sand ·15 and 1·30; while as regards the oil the percentages are 8·42 and 5·96 respectively. These two samples of linseed cake were obtained from a farmer, who complained about the difference between two consignments which he had received from the same merchant, and for which he was paying the same price.



TABLE SHOWING ANALYSES OF THE VARIOUS FEEDING STUFFS.

	BEAN MEAL (3 Samples).			LINSEED CAKE (2 Samples).		CARNOSINE MEAL (1 Sample).
	Percentages.			Percentage.		Percentage.
Albuminoids, - - -	27·2	24·19	23·19	30·62	30·62	14·87
Sugar, - - -	...	...	...	...	...	17·05
Carbohydrates, - - -	49·03	52·87	50·78	36·64	35·80	32·73
Oil, - - -	1·60	1·58	2·18	5·96	8·42	8·82
Vegetable Fibre, - -	4·50	6·10	5·10	7·50	9·50	4·70
Mineral Matter, - -	3·70	4·46	5·55	6·10	5·45	8·15
Water, - - -	14·05	10·80	13·20	13·18	10·21	13·68
Sand in Mineral Matter, -	...	·94	2·35	1·30	·15	2·25

TABLE D.—SHOWING THE NUMBER OF SAMPLES OBTAINED AND THE NUMBER FOUND DEFICIENT.

FERTILISERS.				FEEDING STUFFS.			
Name.	TOTAL SAMPLES.			Name.	TOTAL SAMPLES.		
	Obtained.	Deficient.			Obtained.	Deficient.	
Basic Slag, - -	9	1		Bean Meal, - - -	3	...	
Bone Meal, - -	3	...		Carnosine Meal, - -	1	...	
Grain Manure, - -	1	...		Linseed Cake, - -	2	...	
Ground Limestone, -	1	...					
Kainit, - - -	3	...					
Nitrolim, - - -	1	...					
Nitrate of Soda, -	2	...					
Potato Manure, -	1	...					
Potash, - - -	3	...					
Pure Dissolved Bones,	2	1					
Sulphate of Ammonia,	3	...					
Superphosphates—							
26 per cent., - -	4	...					
30 „ - -	4	...					
Turnip Manure, -	1	...					
	38	2			6	...	

## Rivers Pollution Prevention.

The systematic inspection of streams and sources of pollution was carried out on the lines adopted in previous years, and the work done by the inspectors is summarised in the following table:—

TABLE A.—SHOWING SOURCES OF POLLUTION, INSPECTIONS, AND POLLUTIONS DETECTED.

SOURCES OF POLLUTION.		INSPECTIONS.		POLLUTIONS DETECTED.
Nature.	Number.	Number.	Samples.*	Number.
Coal-Dross Washers, - -	78	415	42	90
Ammonia Works, - -	24	68	2	15
Paper Mills, - - -	4	27	8	15
Print, Dye Works, &c., -	7	10	4	7
Distilleries, - - -	3	1	...	...
Chemical Works, - -	2	2	...	...
Lead Mine, - - -	1	...	...	...
Total for Industries, - -	119	523	56	130
Sewage Purification Works, and Outfalls, - - -	...	167	36	...
Streams, - - - -	...	632	129	...
GRAND TOTAL, - -	...	1,322	221	130

\*The samples analysed are dealt with in the report of the work done in the Chemical Laboratory.

### Trade Pollutions.

From the above table it will be observed that the total mining and manufacturing pollutions detected amounted to 130. The serious pollutions were reported to the County Clerk, and detailed monthly reports of the work done were issued to the Public Health Committee.

COAL-DROSS WASHERS.—Seventy-eight were under observation, 415 inspections were made, 42 samples taken, and on 90 occasions pollution was detected.



Owing to the frequency with which pollution occurred, the following collieries were specially reported to the County Clerk, who communicated with the colliery owners:—

Colliery.	Company.	Stream affected.
Baton, Shotts, . .	Baton Collieries, Ltd., .	Currie Burn.
Dalquhandy, Coalburn,	Waddell & Son, . . .	Coal Burn.
Fortrigg, Shotts, . .	Baton Collieries, Ltd., .	Almond.
Kepplehill, ,, . .	Kepplehill Coal Co., Ltd., .	Blind Burn.
Knowton, ,, . .	Barr & Thornton, . . .	Breich Water.
Stane, ,, . .	Kepplehill Coal Co., Ltd., .	Blind Burn.
Swinhill, Larkhall, .	Darngavil Coal Co., Ltd., .	Mill Burn.
Westwood, Cleland, .	Murdostoun Coal Co., Ltd. .	South Calder.

In every instance remedial measures were carried out, as briefly set forth in the following notes:—

*Baton Colliery.*—Pollutions were detected at this colliery on 10 occasions, as follows:—

28th January, ...	Settling-area silted up and defective.
11th and 18th February,	Settling-area defective but under repair.
8th and 24th July, ...	Defective outlet in new area.
20th, 23rd and 24th Sept.,	Defective and silted up settling-area.
31st October, ...	Embankment of settling-area defective.
7th November, ...	Settling-area under repair.

These pollutions and defects in the remedial measures were brought to the notice of the Company, and remedied by the provision of additional settling-areas and the cleaning out of the pond on the west side of the colliery on two occasions.

*Dalquhandy Colliery.*—This colliery was reported in connection with a complaint made by a farmer of pollution of the Coal Burn. Improvements were made on the settling ponds.

*Fortrigg Colliery.*—Serious pollutions were detected on four occasions, due to the defective condition of the settling-areas and a defective sluice on one of the brick settling-ponds. Arrangements were made at the close of the year for improvements being carried out on the settling-areas.

*Kepplehill and Stane Collieries.*—In connection with the representations made to the Secretary for Scotland craving permission to institute legal proceedings against the owners of these collieries because of continued pollution of the Blind Burn and the South Calder, com-



munications passed between the Scottish Office and the colliery owners, who carried out specific remedial measures, which were reported on thus:—

“(a) *Kepplehill Colliery*.—The Company promised to have the two existing ponds cleaned out, enlarged, and provided with properly-constructed sluices. One pond was started to be cleaned out on or about 27th February last and was completed on 5th May. The second pond was started on 11th June and completed on 20th July, with the exception of the rebuilding of the sluice outfall.

(b) *Stane Colliery*.—The Company promised to have the two existing ponds cleaned out and provided with properly-constructed sluices. One pond was started to be cleaned out and was completed on 21st June. It is understood that the Company do not intend cleaning out the second pond as promised. They have instead arranged for the provision of a settling-area on the pit-refuse bing, from which the treated effluent will be conveyed to the pond which has just been cleaned out.

Generally speaking, at these collieries the ponds will rapidly fill up, and in order to keep them in good working condition they would require to be thoroughly cleaned out in turn every four months. This is no doubt due to the fact that the coal dross carries a very high percentage of dirt and clay.”

The fears thus entertained were fully confirmed. In each case the settling-ponds were within the time stated practically thrown out of use, being full of sludge. Serious pollutions were again detected, and the matter reported to the Scottish Office. The permission craved by the Council was ultimately granted. After two months' notice to the Company of the Council's intention to raise an action, pollutions again occurring, the papers were forwarded to the Council's law agents. The action is now pending in the Sheriff Court at Hamilton.

*Knowton Colliery*.—This colliery is situated on a tributary of Breich Water, which flows eastwards through the County of Midlothian. Pollution was due to defective and insufficient settling-areas. On 24th September the discharge from the settling-areas was found on analysis to contain 1,532 parts per 100,000 of suspended solids. Remedial measures have been carried out.

*Swinhill Colliery*.—The rebanking of the settling-area, which is of considerable extent, was carried out. This colliery was twice reported to the County Clerk.

*Westwood Colliery*.—A small plant, consisting of a drainer with a bed of felspar, was introduced at this colliery, whereby the fine silt



is recovered from the water in the silt-recovery tank, in addition to the work done by that tank. The improvement thus effected obviates the emptying of the silt-recovery tank daily. The practice here is now to empty the tank at least once every week to a settling-area on the bing. This area, however, permitted the effluent to pass untreated to the South Calder, and to prevent pollution the Company had the original large area cleaned out and sub-divided into three sections. This cost upwards of £80.

In other instances, following on verbal negotiations with the local colliery officials, improvements were carried out. These collieries may be tabulated as follows:—

Allanton.	Chapel.	Hassockrigg.
Barblues.	Darngavil.	Kirkwood.
Bardykes.	Dechmont.	Meadowhead.
Blantyre Farm.	Gateside.	Monkland No. 4.
Broomfield.	Gilbertfield.	North Motherwell.
Craighead.	Hallside.	Tannochside.

The nature of the more important improvements thus carried out may here be mentioned.

*Allanton Colliery.*—The additional wagon drip pond, referred to in last year's report, was constructed during the year. The rearrangement of the discharge pipes from the silt-recovery tank and the main outfall pipe and valves was also carried out at considerable expense. These alterations, it is expected, will help to prevent intermittent pollution.

*Barblues Colliery.*—This colliery is situated on the How Burn, a tributary of the River Almond near Harthill. At the beginning of the year remedial measures were in progress, and now a silt-recovery is in use. Owing to a large continuous overflow of coal washings from the silt-recovery tank to the settling-areas, remedial measures were discussed with the manager and carried out without delay. This overflow is now prevented, and the contents of the tank conveyed to a settling-area on the bing.

*Bardykes Colliery.*—The pollution detected was of a serious nature, affecting the Spittal Burn and the Rotten Calder, and was due to a field drain carrying an overflow from the settling-area direct to the stream. Remedial measures were at once adopted.

*Broomfield Colliery.*—An additional bing settling-pond was provided at this colliery.

*Craighead Colliery.*—Improvements, consisting of the diversion of the overflow from the collecting-pond for the pulsometer, which throws



the washings to ponds on the refuse bing, and the formation of a new pond or settling-area to retain this overflow, which formally went direct to the River Clyde, were, after considerable negotiation, carried out.

*Darngavil Colliery.*—In consequence of repeated complaints of the unsatisfactory condition of the settling-ponds, the carrying out of improvements was begun, but had not been completed at the close of the year.

*Dechmont Colliery.*—Owing to an extension of the pit-refuse bing the settling-area was curtailed, and the discharge entering the burn turbid. An additional pond was subsequently provided.

*Gateside Colliery.*—Serious pollution was detected on Saturday, 19th April, and was due to an overflow of pit water passing through the pond and carrying coaly matter to the burn. Remedial measures were discussed with the colliery manager, and the improvements promised were completed in the month of June. These deal with the repair and enlargement of the emergency settling-ponds, while direct connection with the stream is cut off. At this colliery it may be noted that the pit water contains as high as 117 parts per 100,000 suspended solids, and renders the stream turbid and dark in appearance. The discharge, being water in the same condition as that in which it has been raised from the mine, cannot be dealt with under the Rivers Pollution Prevention Act.

*Hallside Colliery.*—Serious pollution was detected on 30th December, and traced to be coming direct from the silt-recovery tank, in which a breakdown in the dredging buckets had taken place. The discharge was found flowing over the channel leading to the settling-ponds. This was pointed out to the foreman in charge, who admitted having failed to remove the obstruction—a wooden sluice—which had been inserted to direct clear water from the ponds into the outfall drain. It was noted that the full contents of the tank had been discharged. This would represent a total of 20,000 gallons of coal-dross washings and about eight tons of silt. The pollution was subsequently reported to the colliery company, with the suggestion that the contents of the ponds should be conveyed to a series of bing settling-areas. The company have promised to consider the matter.

*Hassockrigg Colliery.*—The cause of pollution detected from time to time was due to a connection between the collecting well for coal washings and the pit-water outfall. This connection has been removed.

*Kirkwood Colliery.*—Coal-dross washing operations, after having been suspended for about two years, were resumed at this colliery



during the month of December. Pollution was detected. Here the settling-areas are not satisfactory, and the local manager has been requested to have them improved. This was carried out early in the current year.

*Meadowhead Colliery.*—Pollution was due to an overflow from the silt-recovery tank, and to drainage from the storage hopper from which the washed dross is discharged into railway wagons. The effluent contained on analysis about 2,500 parts per 100,000 suspended matter. The attention of the colliery owner was called to this pollution, and a large settling-tank has since been provided to intercept the discharges complained of.

*Monkland No. 4 Colliery.*—Pollution here was due to a discharge of coal washings from the wash-boxes, causing an overflowing at the collecting well where the washings are intended to be pumped to the bing settling-area. Remedial measures have been carried out so as to prevent a repetition of this pollution.

*North Motherwell Colliery.*—A large new settling-area has been formed on the refuse bing at this colliery.

*AMMONIA WORKS.*—Twenty-four were under observation. They are connected with the following industries:—Blast furnaces, 9; coal-gas works, 7; coke ovens, 3; gas-liquor works, 3; gas producers, 1; shale oil works, 1.

In connection with these, 68 inspections were made, 2 samples taken, and on 15 occasions pollution was detected.

*Calder Iron Works.*—The disposal of the spent liquor into the disused mine, from which polluting discharges entered the North Calder on two occasions during 1912, has been satisfactory during 1913.

*Carnbroe Iron Works.*—The remedial measures connected with the disposal of spent ammoniacal liquor were found throughout the year to be satisfactory.

*Clyde Iron Works.*—The special evaporating plant brought into use in 1910 has been found to deal satisfactorily with the whole of the spent liquor.

*Coltness Iron Works.*—The discharge of spent liquor here affected the Auchter Water, and was detected as coming from a disused mine into which the liquor is disposed of at intervals. Similar pollution was brought to the notice of the owners of the works in November last, but owing to winter spates it was impossible to get down to the outfalls. The owners have since dealt with the matter.



*Mossend Steel Works.*—Pollution was detected on two occasions, due to accidental causes—(1) at the pumps circulating the liquor through a cooling plant, and (2) at a point where chokage occurred due to tar deposits consolidating in pipes during a period when the works were closed down. Remedial measures were at once adopted. In addition, slight pollution occurred at an outfall into which there is a connection from the cleaning plant where the gas is finally scrubbed before passing to the various parts of the works. It is understood that the Company have remedial measures under consideration.

*Mount Vernon Chemical Works.*—On 7th June deposits of waste lime or chalk were found in the bed of the Tollcross Burn near these works, and on inquiry it was ascertained that, owing to a defect in the drain conveying the waste into a disused mine from the plant connected with the production of caustic soda, a discharge had entered the burn and caused pollution. In order to prevent a continuance of the pollution, the Company have had a bore put down the disused mine at a new point, and have connected the drain from the plant in question directly with it.

*Shotts Iron Works.*—On account of the occurrence of pollution by spent liquor in July, and at other times when it was difficult to be at the works, particularly at the week-ends, inspections and inquiries were made, with the following results:—

Saturday, 12th.—Stream highly discoloured and frothy between 9 and 11 a.m., ascertained by inquiry.

Sunday, 13th.—Pollution distinct between 9 and 10 a.m., ascertained by inquiry.

Thursday, 24th.—Pollution marked between 8 and 9 p.m. Detected.

Saturday, 26th.—Distinct pollution between 11 a.m. and 12 noon. Detected.

As regards the pollution on 26th July, inspection was made at the works and the cause of pollution ascertained to be due to the bursting of a trap on a seal-box on the main gas-tube. This box stands about ten feet high from the ground level. It was explained that the box was half-full of liquor, and, of course, when the accident occurred the liquor poured out on to the ground surface, finding its way to the stream by surface drains. Evidence of this was quite distinct, and may be taken as explaining the cause of pollution.

So far as the pollutions on the other dates are concerned, the foreman could offer no explanation of their occurrence; indeed, he was not



aware of pollution taking place. There are, however, two points where pollution might take place, namely—(1) at the spent liquor storage boilers or cooling tanks, and (2) at the feed-boiler or tank near the steam boilers. Underground, here, there is said to be an iron tank for the purpose of collecting the overflow from the feed-boiler. This underground tank is connected with a pump so that it can be emptied into a series of sand-pits, but it also is said to have a connection direct with the stream. Pollution need not occur at the works, as the remedial measures for the collection and disposal of the spent liquor are sufficient.

Further intermittent pollution was again detected in September, as follows :—

Saturday, 20th—Stream slightly discoloured a short distance below works, at 3.30 p.m.

Sunday, 21st—Stream slightly discoloured by spent liquor near Wishaw Estate at 9.30 a.m.; while at Bonkle, above the Auchter Water, the stream had distinct odour of spent liquor pollution at 7 p.m. A sample taken at this point showed, on analysis, phenols to the extent of 11·2 parts per 100,000.

Monday, 22nd—At Bonkle, at 9 a.m., and at Newmills, Hartwood, at 10.30 a.m., slight pollution by spent liquor.

The owners of the works were subsequently communicated with by the County Clerk, which resulted in some improvement in the stream.

*Tarbrax Oil Works.*—No complaint of pollution by spent ammoniacal liquor was received during the year.

*Wilsontown Ammonia Works.*—The measures for the prevention of pollution by spent ammoniacal liquor at these works remain as formerly. The number of coke ovens in operation is now 75.

MANUFACTORIES.—Seventeen were under observation, 40 inspections were made, 12 samples taken, and on 22 occasions pollution was detected.

In connection with pollution from Glengowan Print Work and the two paper mills at Caldercruix and Moffat, the following report was prepared and submitted to the committee :—

In terms of the instructions contained in the minutes of the Public Health Committee, of 14th May, 1913, the following report is submitted relating to the pollution of the North Calder arising from—

- (1) Glengowan Print Works.
- (2) Caldercruix Paper Mills.
- (3) Moffat Paper Mills.



These three sources of pollution are situated on the upper reaches of the North Calder, in the Parishes of New Monkland and Shotts.

With the view of placing before the committee a full statement of the present position of matters, it may be stated that this report relates to (1) the measures provided for preventing pollution at each of the works, (2) the general condition of the stream in question, and (3) the action taken under the Rivers Pollution Prevention Acts.

#### I. MEASURES PROVIDED FOR PREVENTING POLLUTION.

For the prevention of pollution measures are provided at each work, all of which have involved a very large capital and annual upkeep expenditure. In all, the capital sums expended by the owners amount to about £8,000, while the annual upkeep is about £1,400. It must also be kept in mind that the three works form the chief industrial interests of the districts in which they are situated. By way of illustrating the financial burden upon the owners in providing remedial measures, the cost of maintenance has been worked out in each case in relation to the assessable valuation for 1913-1914, and is found to equal a rate varying from 4s. 4d. to 9s. 7d. per £.

*Glengowan Print Works.*—These works had their origin in a silk-bleaching, dyeing, and print work prior to 1874, since then cotton-bleaching, dyeing, and printing have been carried on by the present firm. The total volume of waste liquid from the trade processes amounts to 750,000 gallons per day. This drainage passes through a precipitation pond, where it comes into contact with sulphate of alumina. It afterwards receives the addition of waste alkali, and passes into a series of nine settling ponds, having a total capacity of 640,000 gallons. The treatment of the effluent is under the control of their own chemists, and a careful record is kept of the daily condition of the discharge as entering the stream.

The remedial measures in use here have been provided progressively, as follows:—

Prior to 1889—3 large Settling Ponds,	} Total capacity, 640,000 gallons.
1895—6 „ „ „	
1907—1 Precipitation Pond and a New Drainage System.	

The capital expenditure involved in these measures amounts to £2,000, and the annual upkeep £400, which equals a rate of 8s. per £ on the assessable valuation of the works, allowing for interest and repayment of capital on the basis laid down for sewage purification works. With regard to the effectiveness of the preventive measures, analyses show that a reduction of suspended solids is effected to the extent of from 60 to 75 per cent. There is also reduction in colour. At the same time, the effluent appears to have a deleterious effect on



the stream, probably due to dissolved colouring or other chemical matter. Yet it is difficult to suggest any further practicable and reasonably available remedial measures to obviate this.

In 1907, the Company carried out measures, following upon pressure by the County Council and also by the agents for a riparian proprietor, but since the members of the Committee inspected the works in June, 1911, the position of matters is unchanged.

*Caldercruix Paper Mills.*—These mills were established prior to 1868. According to evidence given by the owner before a Royal Commission on Rivers Pollution at that time, the total flow of effluent did not then exceed 20,000 gallons per day. At the present time the total flow is equal to about  $1\frac{1}{2}$  million gallons per day. The trade processes are boiling and washing of rags, the breaking and bleaching of them into half pulp, and, finally, the beating of them into fine pulp, which is conveyed to the paper-making machines. To deal with the large quantity of waste liquid arising from these processes presents no small problem, and the owners have endeavoured to handle it as far as cost and other circumstances permitted. They have therefore proceeded with remedial measures progressively, thus:—

1895—8 settling ponds and 2 sludge areas.

1906—Caustic soda recovery plant.

1912—Vacuum filter dealing with waste.

1913—Bleach recovery plant.

The capital expenditure involved in these measures amounts to £3,600. The annual cost may be stated at £700, allowing for recoverable products. This figure equals a rate of 9s. 7d. per £ on the assessable rental of the mills, inclusive of interest and repayment of capital on the basis laid down for sewage purification works.

The means adopted for the treatment of the waste liquids from the breakers and the machines consist of eight settling ponds. These have a total capacity of about 192,000 gallons, and are only cleaned out at intervals. If they are permitted to remain in use when full of sludge, the effluent may carry with it large quantities of fibrous matter, and thus cause serious pollution. To obviate this, and in order to deal with other minor sources of pollution from the mills, the Company have arranged to adopt additional measures. These are described in the following statement received by Sir Thomas Munro, County Clerk, on 12th March. This statement also refers to the existing remedial measures, viz. :—



STATEMENT OF SOURCES OF POLLUTION DEALT WITH, AND PROPOSALS  
FOR DEALING WITH SOURCES STILL AFFECTING THE STREAM.

(1) *Lime Grouts*.—Formerly the lime grouts resulting from the manufacture of caustic soda at this mill was allowed to flow into the existing settling tanks, which were periodically allowed to overflow into the existing sludge ponds, and carried to waste. About a year ago, however, a vacuum filtering plant was installed. The present procedure is that the lime grouts are allowed to flow into a small tank, the under side of which is connected to a vacuum pump. A vacuum is formed under the grouts, with the result that the weak caustic liquor is extracted, leaving a carbonate of lime in a more or less dry state. This dry carbonate of lime is now emptied into a waggon and carted to waste. The weak liquor is taken back and re-used in the mill.

This source of pollution has been entirely removed.

(2) *Bleach Grouts*.—The grouts resulting from the manufacture of bleach at this mill was formerly allowed to run to the settling tanks and sludge ponds, as mentioned for the lime grouts above. At the present time these bleach grouts are allowed to run into a waggon, in which they are allowed to settle. The liquor is then decanted off, and re-used, while the sludge is carried to waste.

The question is under consideration whether it would not be possible to treat these bleach grouts similarly to the present method employed of treating the lime grouts, but in any case this source of pollution has been removed.

(3) *Clay Mud*.—Clay is brought to this mill in a dry state, and is mixed with water to a certain consistency. A certain amount of sediment settles out during this mixing process, with the result that the mixing tanks are cleaned out once a week. This sediment consists chiefly of sand, and as the quantity is very small, it is negligible. If found necessary, this sediment could be carried to waste.

(3A) *Alum Refuse*.—Alum cake is brought to this mill, and dissolved, with the result that a certain amount of sediment is obtained. These dissolving tanks are cleaned out periodically, and the refuse carted to waste.

This source of pollution is now removed.

(4) *Machine Back-Water*.—At the present time the back-water from the machines, containing fine fibre and clay, flows to the existing settling tanks, which are emptied at intervals into existing sludge ponds. Since the improvement in the method of treating lime and bleach grouts was effected, these settling tanks take several months to fill up. It is proposed to treat this fibre, if necessary, at three different points:—

(a) By the introduction of settling tanks in the mill, 1 tank for each paper machine. In these settling tanks, which are of special construction, the bulk of the fibre and clay would be removed, leaving a fairly pure back-water.

(b) The exact procedure for eliminating the remaining fibre contained in the flow-over from these tanks cannot be definitely stated until such time as these tanks have been tested, but the introduction of a revolving save-all to treat the overflow would be found absolutely satisfactory.



- (c) In the event, however, of there still being too much sediment in the water, the existing settling tanks would be altered into a type suitable for working in conjunction with an Allen Filter-press.

(5) *Wash-water* from the breakers, used in preparing the rag stuff, flows to the existing settling tanks.

(6) *Overflow from the Rag-Washers in the Rag-Boiling House.*—This flows into the burn, after flowing through a small settling-pond.

(7) *General Cleaning-up of Floors, &c.*

It is proposed to treat sources 5, 6, and 7 together. This effluent is to be led to a filter-bed, of sufficient area to treat the quantity of water, and the matter in suspension will thus be eliminated. These filters will be in duplicate, with the result that it will be possible to clean them at regular intervals. The fibre, &c., retained by the filters will either be carted to waste or burned.

(8) As you are aware, in connection with our treatment of rags a large quantity of caustic soda is employed. At one time this was allowed to discharge into the river, but several years ago a recovery plant was installed, with the result that this source of pollution was practically entirely removed. At rare intervals, however, rags are occasionally treated with lime, and as this is a rare occurrence it is proposed that the spent liquor from this lime boiling will be treated as in the case of sources Nos. 5, 6, and 7.

(9) *Mud from Dissolving-Tanks in connection with the Soda Recovery Plant.*

In the ordinary working of the soda recovery plant installed at this mill, soda is recovered in the form of soda ash. This soda ash must be dissolved in hot water, with the result that a certain amount of sediment settles out. This sediment is largely carbon, and the quantity is not great. The dissolving-tanks are cleaned out once a fortnight, and if necessary a small filter can be installed to keep back the most of the matter in suspension.

*Method of Procedure.*—From consideration of the above, it will be noticed that the chief sources of existing pollution are thus enumerated under 4, 5, and 6. We may say that the arrangements are practically completed for dealing with source No. 6, *i.e.*, the overflow from the rag-washers, and it is expected that within a few days this source of pollution will be eliminated. When this work is completed, attention will then be given to source No. 5, *i.e.*, the overflow from the breakers in the mill, and we expect that this should be completed in a few weeks' time. Upon this being accomplished, attention will then be given to the source of pollution No. 4, *i.e.*, to the removal of the fibre and clay contained in the back-water from the machines.

It may be noted that the special plants proposed to be adopted for dealing with particular sources of pollution are well known, and, where in use, are also known to work satisfactorily. The new measures proposed for source No. 6 are now in progress of being carried out, but it will be some time before the whole measures are completed.



MOFFAT PAPER MILLS.—These mills were also established prior to 1868, in which year their valuation was £300. At present it is £1,100. Within the last ten years considerable extensions have been made to buildings and plant. The raw material chiefly used is wood pulp, which is subjected to the process of washing and breaking. The flow of liquid waste averages 700,000 gallons per day, which is dealt with in a series of thirty-one settling tanks, having a total capacity of 260,000 gallons. Thirteen of these tanks occupy a space inside the works, and are connected with a sludge well and two filter presses, where waste pulp is recovered for re-use. The remainder of the tanks (18 in number) were constructed during 1913, and are situated outside the mills alongside the river. They are connected with a very large sludge area, into which the solids, settled out in the tanks, are pumped at least once every week, in order to keep the tanks in good working order.

The remedial measures have been provided progressively, thus:—

Prior to 1900—1 settling pond and ash track (now disused).

1903—13 settling tanks, with sludge pits, &c., and 2 filter presses.

1913—18 settling tanks, with large sludge area.

The capital expenditure for these measures is estimated at £1,900. The annual cost may be estimated at £235, which equals a rate of 4s. 4d. per £ on the assessable valuation of the mills, inclusive of interest and repayment of capital, on the basis laid down for sewage purification works.

In order to ascertain the effectiveness of the new tanks provided in 1913, a six hours' average sampling of the effluent as entering the ponds and as discharging from them was carried out, along with the chemist, on 11th September last. The analyses show a reduction of 93 per cent. in the suspended solids, and an equally corresponding improvement in the chemical composition of the effluent. The effect of the discharge in the stream on the day of sampling was almost negligible. Subsequent inspections have also shown similar results.

The present position at each work may be summarised thus:—At Glengowan Print Work there has been no change in remedial measures since 1907. The present treatment of the waste liquor is extensive, and very costly. At Caldercruix Paper Mills additional measures have been arranged, and a start has been made with them, while the existing settling ponds have been cleaned out since last meeting of committee. It is, however, perhaps for the committee to



consider whether the owners should be called upon to give an undertaking to complete the new measures within a specified time. At Moffat Mills a series of 18 settling tanks were completed last year, and are at present in operation, with satisfactory results.

## II. GENERAL CONDITION OF THE STREAM.

With regard to the general condition of the stream, the records in the monthly reports show evidence of pollution from time to time. No special sampling has, however, been done since 29th May and 11th September last, but arrangements will be made for further special sampling and analyses at an early date. As regards the sampling on 29th May last, the analyses show that the effluent from the three works had a deleterious effect on the stream. Thus, the effluent from the print work was of a polluting nature, which appeared to be due to dissolved colouring or other chemical matter, while the effluents from the two mills was of a polluting nature largely due to suspended solids. This goes to bear out the difference to be expected between the effluent from a print work and that from paper mills. In a print work large quantities of dyes of all kinds are used, with mordaunts, oils, soaps, and chemicals. In paper mills, however, there are large quantities of fibrous or pulpy matter, and only very small quantities of dyes are used. The worst colour is geranium—a bright-red colour which changes the whole aspect of the stream into which it enters. This occurs three or four times in the year at Caldercruix and Moffat Mills. Most other colouring material at the mills is readily precipitated, and settles out with the suspended solids.

## III. ACTION TAKEN UNDER THE RIVERS POLLUTION PREVENTION ACTS.

No serious attempt appears to have been made to deal with the question of pollution, until 1889, when inquiries and inspections were made by the Rivers Inspector for Scotland, at the instigation of the then Secretary for Scotland. In his report the Inspector referred to pollution, and detailed a number of recommendations for its abatement. Subsequently, in 1892, the District Committee of the Middle Ward made application to the Secretary for Scotland for his consent to institute, in terms of Section 6, legal proceedings against the owners of the three works for causing continued pollution. All this resulted in the adoption of certain remedial measures, which appear to have been completed in 1895. It was stated at that time that the pollution from the paper mills had been going on for upwards of 40 years—a period which may have suggested a prescriptive right to pollute. Fortunately, this cannot be set up as a bar to proceedings under the Rivers Pollution Act, 1876.



Since the County Council undertook the administration of the Acts, in 1895, further serious consideration has been given to the question of the pollution of the stream, which has been the subject of many complaints, particularly when it was of a deep-red colour. Besides, the matter has been specially brought to the notice of the present Royal Commission dealing with the treatment of trade waste, &c. Evidence was given by Sir Thomas Munro, County Clerk, and myself, in January, 1910, and the Commission thereafter, on 1st and 2nd April, visited the works.

In regard to the position relating to coloured pollutions, generally speaking, it has been found difficult to deal with them, the definition clause (20) of the Act stating that the word *Polluting* "shall not include innocuous discoloration." The evidence given before the Commission above-mentioned shows that the question of innocuous discoloration was fully referred to, and liberty is here taken to quote the following statement then made by the County Clerk, viz.:—  
*"This is a question for experts, but it seems that from the legal point of view the saving in Section 20 of the Act of 1876 makes it exceedingly difficult to deal with a pollution a characteristic of which is discoloration. The fact of discoloration being present seems to imply the inference that the effluent is harmless, and to throw an undue burden of proof on the prosecutor. From the practical point of view, also, my experience has been that a highly discoloured liquid introduced into a stream, however harmless its chemical properties may be, is looked upon by the public as a very real and serious offence."*

On 17th July, 1913, a communication was received from the Secretary of the Commission on the question of standards for suspended solids in trade waste. As this communication and the subsequent correspondence have some bearing on pollution from print, dye, and paper works, it is printed as an appendix to this report.

J.T.W.

County Offices,  
Hamilton, 7th April, 1914.



[*Appendix referred to.*]

COMMUNICATION FROM SECRETARY OF ROYAL COMMISSION  
ON SEWAGE DISPOSAL, AND REPLY BY COUNTY MEDICAL  
OFFICER.

Royal Commission on Sewage Disposal,  
3 Queen Anne's Gate,  
Westminster, S.W., 16th July, 1913.

DEAR SIR,

The Commission are considering the advisability of recommending a general standard for suspended solids in trade wastes, but, before making any recommendation, they desire to ascertain your views on the subject, more particularly in regard to the precise limit which might properly be fixed.

I am directed to ask if you would be good enough to state what figures for suspended matter (in parts per 100,000) you would consider reasonable and practicable, the sample being kept for 48 hours at laboratory temperature before analysis.

If you are able to suggest such a limit, the Commission would be glad if you could supply them with figures showing, as regards the several trades, that, given efficient plant, it is practicable for manufacturers to comply uniformly with the standard.

The Commission would be very glad if you could give them this information, if possible, in the course of a few days.

Yours faithfully,

R. H. KEENLEYSIDE,

*Secretary.*

Dr. J. T. WILSON,  
County Medical Officer of Health,  
County Offices,  
Hamilton,  
Lanark.

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County Offices,  
Hamilton, 19th July, 1913.

DEAR SIR,

I duly received yours of 16th instant, regarding a general standard for suspended solids in trade wastes, and beg to make the following observations:—

The trade wastes referred to would probably include paper mills, print works, and bleach and dye works, but I am not sure that you

wish me to refer also to coal dross washings, where the suspended solids are often very considerable, and yet they are more easily dealt with than any other form of trade waste. Dealing with the former class of waste liquors, I have obtained from the staff a tabular statement of the more important samples taken, and find that from paper mills the amount of suspended solids varies considerably, but has reached as high as 89 parts per 100,000. We find that where there is an efficient series of settling ponds the amount of suspended solids can be reduced to 5 parts per 100,000, or less. The amount of suspended solids in print works, where they have a considerable settling area, has never exceeded 6 parts per 100,000, and generally varies from 3 to 4 parts per 100,000. At bleach and dye works, where they use precipitants, we have sometimes got as high as 23 parts per 100,000 in the effluent, but we believe here it can also be reduced by proper treatment to 5 parts per 100,000. We would therefore consider it reasonable and practicable to suggest 5 parts per 100,000 as a standard.

Regarding coal dross washings, of which we have had considerable experience, we would suggest 10 parts per 100,000 as a reasonable and practicable standard.

You will remember that pit water, as raised from the mine, frequently contains large quantities of suspended solids, which can be readily purified by sedimentation. The Commission might make some recommendation with regard to this.

We have been looking forward to some guidance from the Commission with regard to coloured discharges. Perhaps you would kindly let me know whether there is to be a report issued on this subject shortly.

I am,

Yours faithfully,

JOHN T. WILSON.

The SECRETARY,

Royal Commission on Sewage Disposal,

3 Queen Anne's Gate,

Westminster, London, S.W.



TABULAR STATEMENT OF SUSPENDED SOLIDS IN TRADE WASTE LIQUORS,  
REFERRED TO IN LETTER TO SECRETARY TO ROYAL COMMISSION ON  
SEWAGE DISPOSAL.

PERIOD.	RESULTS, PARTS PER 100,000.			
	Moffat Paper Mill.	Caldercruix Paper Mill.	Glengowan Print Work.	Avonbank Bleach and Dyework.
1900, - - -	11.8	...	3.6	...
1901, - - -	...	...	...	...
1902, - - -	5.3	...	...	...
1903, - - -	...	56.2	3.3	...
1904, - - -	11.5	66.8	3.5	...
1905, - - -	22.6	54.0	3.6	...
1906, - - -	6.0	...	3.0	...
1907, - - -	...	...	4.4	...
1909, - - -	...	89.2	4.0	23.2
1910, - - -	7.0	42.8	...	...
1911, - - -	8.6	14.4	4.6	...
1913, - - -	...	37.6	6.2	...
Average Crude Effluents,	195.6	50.0	17.0	24.8
Average Settling Tank Capacity, - - -	9½ hours' flow.	3½ hours' flow.	14 hours' flow.	24 hours' flow in duplicate.
Suggested Standard— Parts per 100,000, -	5	5	5	5

Royal Commission on Sewage Disposal,  
3 Queen Anne's Gate,  
Westminster, S.W., 22nd July, 1913.

DEAR SIR,

I beg to acknowledge the receipt of your letter of the 19th instant, and to thank you for the information contained therein.

The Commission are now considering their report on trade wastes, which they hope will be issued about the end of the year. It is probable that the report will contain some recommendations as to coloured discharges.

Yours faithfully,

R. H. KEENLEYSIDE,

*Secretary.*

Dr. J. T. WILSON,  
County Medical Officer of Health,  
County Offices,  
Hamilton,  
Lanark.

*Clyde Paper Mill.*—A discharge of caustic washing here enters the River Clyde. This pollution is intermittent. It appears that the washings from the caustic plant cannot be drained to the public sewer.

*Gartloch Distillery.*—The extensive remedial measures carried out in 1911 and completed in 1912, to prevent the emission of offensive odours from the sewers into which the liquor is disposed, have been found to work satisfactorily throughout the year.

### **Solid Matter Pollution.**

As in previous years, a number of complaints, which are referred to below, were made with regard to the pollution of streams by solid matter from manufactories and dwelling-houses.

*Calderbank Steel Works.*—In connection with the disposal of ashes from Calderbank Steel Works, inspection was made, when satisfactory measures were found in operation for the disposal of the ashes from the gas producers and steam boilers. The ashes are removed from the works in railway wagons and tipped away from any stream.

*Carnbroe Iron Works.*—The tip for the blast-furnace slag is situated along the course of the North Calder. In the earlier period of its use large boulders of slag found their way into the stream, and obstructed its flow. At present tipping is being done some distance from the river, where a large plant is in operation making "ballast."



*Coltness Iron Works.*—The tipping bank for blast-furnace slag is on the bank of the Auchter Water, into which several boulders of slag have fallen.

*Blantyre Refuse Destructor.*—Complaint was made of disused tin cans and other receptacles from the destructor at Blantyre being found in the River Clyde. The complaint was inquired into, and reported to the District Sanitary Inspector.

*Lintfieldbank, near Coalburn.*—In the course of inquiries made into a complaint of pollution of the Coal Burn, it was learned that the householders in the village of Lintfieldbank indulged in the most objectionable practice of throwing the contents of the privies and ashpit refuse into the stream. Warning notices were posted up, and the attention of the District Sanitary Inspector drawn to the matter. The matter was also reported to the County Clerk. Cause for complaint was subsequently removed.

*Mossend Steel Works.*—The ashes from the gas-producers are deposited close to the edge of the Shirrel Burn. No serious obstruction has, however, occurred.

*New Lanark, &c.*—An inspection and inquiries were made into a complaint of pollution of the River Clyde by household and other refuse from the village and mills at New Lanark, when the method of disposal was found to be unsatisfactory. A report was submitted to the County Clerk, who communicated with the proprietors, the Gourock Ropework Company, Ltd., who were to consider proper means for the disposal of the refuse.

Inspections were also made in connection with pollutions of the Rivers Clyde and Nethan, in the vicinity of Kirkfieldbank and Crossford respectively, by solid matter from various sources.

### **Sewage Pollutions and Sewage Disposal.**

In connection with sewage pollutions 167 inspections were made, and 36 samples taken.

**SPECIAL DRAINAGE DISTRICTS.**—With regard to sewage pollutions for which the District Committee are responsible, the present position in each of the three districts may be briefly stated as follows:—

In the Upper Ward there are 7 special drainage districts, all of which except one are provided with some means for sewage purification.

At *Carluke* the construction of intercepting and outfall sewers, referred to in previous reports, to obviate pollution of Jock's Burn as it passes through Carluke, is presently being carried out, and is expected to be completed during the current year. The outfall is to the southmost of the two fields west of the railway station, presently utilised for irrigation purposes, and the improvements will remove long-standing cause for complaint.

At *Lesmahagow* consideration of means for the prevention of pollution of the Nethan by sewage is still before the local committee, and the matter is further referred to under the heading "Streams."

At *Thankerton* the disposal of the sewage for some time gave cause for anxiety, not so much from the point of view of rivers pollution, but from alleged nuisance to residents near to the outfall and irrigation fields. This nuisance was found to be due mainly to the nature of the discharges from the creamery at Thankerton, which, especially during the summer months, consisted of considerable quantities of whey. Complaint was made to the Local Government Board by a householder residing near the irrigation fields, and a full report was by request prepared for the Board, and appears at pages 127-38 of the Annual Report for 1912. The owners of the creamery have been called upon to discontinue discharging whey to the drainage system, and it is believed that arrangements have been made to give effect to this.

In the Middle Ward there are 23 special drainage districts, 7 of which are provided with complete systems of purification. The position as regards the other 16 districts is shown in the following tabular statement summarising information obtained from the District Engineer :—



Drainage District.	Population about	Action taken.
Stonehouse, - - -	3,222	Negotiating for a site for works.
Larkhall, - - -	12,865	Land acquired and plans prepared for works for Avon outfalls. Negotiating for site for works for Clyde outfalls.
Bothwell, - - -	3,503	Sewage from one-third of district treated at Fallside Sewage Works. Engineer to report on scheme for remainder of district.
Blantyre, West, - - -	15,630	Land acquired for works. Detailed plans prepared. Engineer reporting on new site.
Do., East, - - -		
Aitkenhead and Tannochside, - - -	3,057	Negotiating for site for works at Haughhead.
Uddingston, - - -	8,729	Do. do.
Chapelhall, - - -	1,986	Works in operation for portion of district drainage to Shotts Burn.
Carfin, - - -	2,116	Sewage of northmost part irrigated ; remainder treated at Motherwell Burgh Purification Works. Engineer designing complete works for northmost part.
New Stevenston, - - -	3,730	Committee considering report on scheme.
Holytown, - - -	1,997	Do. do.
Bellshill and Mossend, -	15,870	Works for north side of district in operation. Scheme for south side before committee.
Baillieston, - - -	4,343	Plans and specifications prepared for whole district.
Mount Vernon, - - -	4,408	Part of sewage dealt with at new works at Westthorn, Lower Ward. Negotiating for land for sewage works for Carmyle outfall.
Cambuslang, - - -	19,563	Works at Threeneuk under construction.
Newton and Flemington,	4,846	Land acquired. Tank already provided. Construction of filters under consideration.
Shotts, - - -	8,036	District formed 1912. Engineer preparing plans and specifications for sewers and purification works.

During the year sewage works were completed and brought into use at Crindledyke, Bonkle, Furnace Row, and Lochview—all within the *Newmains* Special Drainage District. These works were designed by the District Engineer. For Cambuslang, purification works have been in course of construction at Threeneuk for the most part of the year. These comprise septic tanks, settling wells, and sludge areas, and are expected to be in full operation early in the current year.

For the outfalls to the River Avon from *Larkhall* the construction of tanks at sites at Braehead and near High Merryton Farm is to be proceeded with during the current summer. Inquiries were made into a complaint regarding these outfalls.

In the Lower Ward District the 6 special drainage districts are provided with sewage purification works. Those for Carmunnock District were completed during the year.

Special inspections were made of the sewage works at Bishopbriggs, Chryston and Muirhead, and Stepes, where alterations were made in the method of working the distribution trays, so as to prevent the ponding up of liquid, which gave rise to a deposit of polluting matter. These alterations had the effect of preventing the filter from fouling. At the same time, the method of distribution at each work is defective.

POPULOUS PLACES AND INSTITUTIONS.—Special inspections and inquiries were made with regard to the disposal of sewage at the under-noted places :—

Annathill.	Nackerty.
Bellside.	New Lanark.
Burnside.	Old Auchenairst.
Carnbroe.	Over Possil.
Douglas West.	St. Mary's Industrial School,
Gartness.	Bishopbriggs.
Glenboig.	West Benhar.
Loanend.	

At *Braidwood* several inspections and inquiries were made in connection with a requisition to form Braidwood district into a special drainage area, and in relation to proposals the District Committee's engineers made in 1912 for draining a portion of the district. The Medical Officer and Rivers Inspector also had a meeting with the Engineers and District Clerk, and discussed these proposals and the question generally, and advised them in the matter.

At *Kirkmuirhill* an inspection was made in connection with a claim in respect of the death of a cow and quey, alleged to have been due to drinking sewage discharged on to the tile-work field at Kirkmuirhill. The question of a special drainage area for the district is in the hands of a special sub-committee.



BURGHs.—So far as the burghs are concerned, additional works are still to be provided at *Hamilton, Motherwell, and Wishaw*.

Attention was again called to the serious pollution of the Cadzow Burn and River Clyde by sewage from the Burgh of Hamilton. Negotiations between the burgh authorities and the Trustees of the late Duke of Hamilton for a site for purification works for this outfall are still proceeding. Serious pollution of the Park Burn and River Clyde at Bothwell Bridge occurred during the months of July and August by discharges of a most objectionable character from the burgh Park Burn Sewage Works. Inquiries elicited the information that the work of cleaning out the six large septic tanks was in progress, and that, owing to the unsuitable structural arrangement of the tanks, large quantities of sludge were discharged to the Park Burn and River Clyde, where most offensive conditions were created. The attention of the Town-Clerk and Burgh-Surveyor was at once called to the circumstances, and the work was stopped until the winter. The matter was also reported to the County Clerk. Pollution, but in a less degree, was again detected in the month of December, when the work of cleaning out the tanks was resumed.

With regard to the Burgh of Motherwell, the following reports were submitted to the Court with reference to alterations made, and intended to be made, by the burgh authorities on the original schemes prepared by Mr. Carter, and endorsed by Order of the Court in 1903 :—

COUNTY COUNCIL OF THE COUNTY OF LANARK *versus* THE BURGH OF  
MOTHERWELL.

*Report by William Allan Carter, M.Inst.C.E., Edinburgh, as to progress in the execution of works for preventing pollution, &c.*

JULY, 1913.

HAMILTON, 6th March, 1901.—Having heard parties' procurators, repels the defences. Remits to Mr. William Allan Carter, C.E., 5 St. Andrew Square, Edinburgh, to examine the South Calder Water, Sow Burn, Muckle Burn, Gilly's Burn, and the Todhole Burn, hear parties, report on the best practicable and available means of preventing the fall or flow of the sewage matter referred to into these burns, or of rendering harmless the said sewage matter, and the nature and cost of the work and apparatus required: Certifies the witnesses, Dr. Robb, John Clark, Charles Pullar Hogg, William Liston Douglas, Dr. Tatlock, Dr. King, W. R. Copeland, and R. T. Thomson: Finds the pursuers entitled to expenses, and decerns.

MARK GEORGE DAVIDSON.



In obedience to the Interlocutor above quoted, I reported on 24th July, 1902, on proposed works for preventing pollution of various watercourses by sewage from the Burgh of Motherwell. Objections were lodged by the defenders to this report, and, under an Interlocutor of 14th October, 1902, I reported on these objections on 11th February, 1903. Following the above procedure, the Burgh of Motherwell employed me to carry out the works indicated in my report, with such modifications of detail as should seem desirable, and also keeping in mind the possibility of varying the exact sites for purification works.

Negotiations were then entered into by the Town Council of Motherwell with a view to the acquiring of sites for the necessary works. These negotiations were somewhat protracted. A site for works near Coursington Bridge for dealing with the sewage from the eastern part of the Burgh of Motherwell was, however, acquired in 1904, and I prepared working plans both for purification works and intercepting sewers, which I submitted along with a report to the Town Council on 28th October, 1904. This report was considered by the Town Council, but progress was delayed because of the necessity of considering carefully the policy to be adopted in the treatment of public works, which discharged enormous quantities of water used and fouled in the various processes of manufacturing steel, &c. Another matter which caused some delay was that, when the sewage problem for the eastern part of the burgh was brought to a focus by my report, I was informed that the Carfin and Cleekhimin districts of the County were desirous of discharging sewage into the works at Coursington Bridge, and which would require to be dealt with in these works. Finally, however, matters were adjusted, and in April, 1905, I lodged an amended report and set of plans with the Town Council. Further delay took place, and I had occasion to write to the Town-Clerk in May, 1905, urging that progress should be made. Eventually, advertisement was made, and offers for the construction of the various works were received from contractors in September, 1905, and work was commenced in the beginning of 1906. The construction of the purification works and the sewers to convey the sewage from the eastern part of the burgh and the Carfin district of the County occupied two years. By the spring of 1908, therefore, installation No. 2, referred to in my original report, had been completed, and the discharges of crude sewage into the Todhole Burn and into the upper reaches of the North Calder Water had, therefore, been stopped. During the execution of these works serious difficulty was encountered by subsidence, due to mineral workings, and this difficulty has to be faced in carrying out any structural work in this locality.

During the time that these works were in course of construction the Town Council of Motherwell had been considering sites for the other purification works indicated in my original report, and a Provisional Order was promoted in 1908 under the "Private Legislation Procedure (Scotland) Act," which, *inter alia*, asked powers to acquire the site for sewage works first referred to in my original report—situated a short distance to the east of Hamilton Bridge on the north side of the River Clyde—and also to construct intercepting sewers, which, however, owing to buildings erected since the date of my report, followed other lines than those originally suggested by me. Considerable opposition to the acquisition of the site was offered by its



proprietor on the ground of damage to the amenity of his residential property. On account of this and other considerations, the Burgh of Motherwell opened negotiations with the Duke of Hamilton for a site a little further down the Clyde Valley. It was, of course, desirable to have a site arranged for before attempting to design the necessary works. About this time the discharges of sewage into the Muckle Burn urgently required attention on account of their polluting effect on the Clyde. Whenever arrangements as to the proposed site for purification works were sufficiently adjusted with the Duke of Hamilton to warrant work being executed, with the proposed site as a final objective, the Burgh of Motherwell constructed the upper portion of the intercepting sewer to take the sewage out of the Muckle Burn. This work was begun under my charge in September, 1909. During the time which had elapsed between the date of my original report and 1909 the Burgh of Motherwell had constructed an intercepting sewer along the course of the Sow Burn, under the charge of the Burgh Surveyor. It was arranged to take the discharge from this Sow Burn sewer into the new sewer conveying sewage from the Muckle Burn area towards the proposed new works in the Clyde Valley.

The Burgh of Motherwell had acquired information pointing to the probability of subsidence all over this district on account of mineral workings. This difficulty and risk exist all round Motherwell, and keeping it in view, the Burgh of Motherwell decided only to construct the intercepting sewer for taking the sewage from the Sow Burn and Muckle Burn districts as far as a point a little below the Clyde Bridge. No improvement, so far as the purification of the Clyde is concerned, was therefore effected by the new sewer. The sewage discharge was simply removed further down the Clyde nearer the proposed works.

Justification for the determination of the burgh only to construct a portion of the intercepting sewer was evidenced at the beginning of 1911, when considerable subsidence took place just beyond the temporary termination of the new sewer. This subsidence would undoubtedly have crippled the intercepting sewer had it been constructed throughout its whole length. Obviously it was to the advantage of the Burgh of Motherwell to delay any further construction in this locality till the subsidence either ceased or became less serious in extent. The delay which took place in this instance saved the burgh thousands of pounds. My information is that further subsidences may be expected, and it seems as if a long period of years would have to expire before anything like assurance could be given that the sewers would be immune from this danger. As I have said, the danger of subsidence is present all over the district, and it seems to me that the situation must be faced accordingly.

After the extensive subsidence alluded to, the Burgh of Motherwell naturally wished to delay matters as far as possible, while at the same time responsibility for the completion of purification works was not shirked.

In May, 1912, I wrote to the Town-Clerk pointing out that no progress seemed to have been made for some time, and I recapitulated what works had been carried out, and, generally, the progress which had been made. This letter was submitted to the Drainage Committee of the Town Council of the Burgh of Motherwell, and the Town-Clerk was instructed to reply that the matter had been held over meantime,



owing to the fact that the working of the minerals had caused extensive subsidence.

In the beginning of this year, however, I received instructions from the Burgh of Motherwell to prepare Parliamentary plans incorporating the drainage works and purification works still to be executed as part of a Provisional Order, for which the Burgh intended to apply. Plans were duly prepared, and showed the site which had been feued from the Duke of Hamilton as a site for works for the sewage of the southern and western portions of the burgh. Authority to use this site for sewage purification was to be asked by the proposed Order. Power to acquire a site near the Gilly Burn for the northern portion of the burgh was also asked, and the necessary intercepting sewers to lead the sewage to both of the sites were also shown on the plans.

It was lately found that the Order could not become law this session, and accordingly it was deemed expedient to delay the whole Order till the autumn session of this year. The works shown in the Parliamentary plans complete the works originally advised by me in my original report in 1902, and would provide, along with the works already constructed for the eastern part of the burgh, a complete scheme for dealing with the sewage of the burgh.

Progress in this matter has undoubtedly been exceedingly slow, but the explanations previously given show the causes of the delays which have taken place, and for which considerable justification exists.

Keeping in view the intention of the burgh to apply for a Provisional Order in the next session of Parliament embracing sewerage works, it seems probable that further steps will shortly be taken to complete the whole scheme, and I have no suggestion to make at the present time with the view of obtaining more rapid progress.

Reported by

WM. ALLAN CARTER.

Edinburgh, 51 Queen Street,  
24th July, 1913.

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SHERIFFDOM OF LANARKSHIRE AT HAMILTON.

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*Minute for Defenders, I.C., The County Council of the County of Lanark, Pursuers, against The Commissioners of the Burgh of Motherwell, Defenders.*

In obedience to the Interlocutor of the Court, dated 3rd October, 1913, the defenders set forth the following proposals.

Instead of having the purification works, first described in Mr. Carter's report of 24th July, 1902 (No. 31 of Process), constructed on a site a short distance to the east of Hamilton Bridge on the north side of the River Clyde, it is proposed to construct these works on a site to the north-west of Hamilton Bridge, on the east side of the River Clyde, which, at the place in question, flows in a northerly direction. A site extending to 10 acres has been feued, and is situated in the Parish of Dalziel and County of Lanark, being the enclosure numbered 444 and parts of the enclosures numbered 443 and 445 on the Ordnance Survey Map of said parish (1-2500 scale) marked edition of 1912,



and lying within the following boundaries, namely, beginning at the north-west corner of said enclosure numbered 444; thence south-westward and generally southward along the boundaries of said enclosure numbered 444 for a distance of 387 yards or thereby; thence southward for a distance of 67 yards or thereby in the said enclosure numbered 445; thence eastwards for a distance of 143 yards or thereby in the said enclosures numbered 445 and 443; thence northwards for a distance of 262 yards or thereby in said enclosure numbered 443 to join the north-east boundary of said enclosure numbered 444; thence along said north-east boundary of said enclosure numbered 444 for a distance of 207 yards or thereby to the point of commencement of this description.

The defenders considered that in arranging for this site they were in effect carrying out a part of the scheme referred to in Sheriff Thomson's Interlocutor of 20th February, 1903, being guided by Mr. Carter in their selection of a site, and keeping in mind the burgh's objections as regards sites to Mr. Carter's original report (No. 31 of Process) and Mr. Carter's report on the objections raised by the burgh (No. 34 of Process).

The lines of intercepting sewer originally proposed by Mr. Carter to conduct sewage to the site of purification works for the part of the burgh draining to the Clyde have been departed from in constructing the upper stretches of the intercepting sewers from the Sow and Muckle Burns. The lower stretch which it is now proposed to construct will traverse the Logan's Plantation to the site described, which has been feued for the purpose of purification works.

In making these alterations the defenders considered that they were giving effect to the Interlocutor of the Court of 20th February, 1903, read along with Mr. Carter's report (No. 34 of Process).

Installation No. 2 of Mr. Carter's original scheme has been duly completed along with its relative intercepting sewers.

The defenders have presently before Parliament a Bill seeking powers to acquire a site for installation No. 3 of Mr. Carter's original scheme. Instead, however, of scheduling the exact area indicated by Mr. Carter originally, a larger area, including the area originally indicated, has been scheduled, and such larger area may be described as a piece of land in the Parish of Dalziel and County of Lanark, being the enclosures numbered 548 and 549 of the Ordnance Survey Map of said parish (1-2500 scale) marked edition of 1912. It may be found unnecessary, however, to acquire the whole of the area scheduled. The lines of intercepting sewers leading to this site are proposed to be as originally suggested by Mr. Carter. The defenders would propose, however, to vary these exact lines, if it were found desirable to do so, in the course of negotiation with the Caledonian Railway whose lines are crossed by one of the proposed sewers (and who are opposing the burgh's application in Parliament), or from anything arising in the course of the execution of the work or otherwise.

The defenders respectfully ask the leave of the Court to make the alterations above proposed upon the original scheme which they were ordained to execute by Interlocutor of the Court of 20th February, 1903.

(Sgd.) JAMES BURNS,  
*Town-Clerk, Motherwell,*  
*Agent for Defenders.*



With reference to the Burghs of Airdrie and Coatbridge, pollution is still taking place as in 1905, when legal action was first taken against these burghs.

In terms of the interlocutors by the late Sheriff-Substitute Glegg, which are contained in last year's report, a remit was made to Mr. W. A. Carter, C.E., Edinburgh, who reported on the practicability of schemes for both burghs. The cases thereafter came before the Court several times during the year for further procedure, relative to which the following interlocutors were issued by Sheriff-Substitute Lee of Airdrie:—

#### BURGH OF AIRDRIE.

AIRDRIE, 19th December, 1913.—The Sheriff-Substitute having seen the report by Mr. Carter, No. 26/1 of process, and heard parties' procurators thereon, and on the objections thereto by the defenders and answers by the pursuers, Nos. 27 and 28 of process, repels the eighth plea in law of the defenders: Appoints parties to be further heard on objections 5 and 9 of the aforesaid objections, and assigns 9th January, 1914, at 11 a.m., as a diet for said hearing.

B. P. LEE.

*Note.*—Mr. Carter's report disposes of the eighth plea in law of the defenders, which now falls to be repelled.

I have allowed a further hearing, because Mr. Carter has suggested a choice of three places for the sewage works, and before remitting to him to complete his scheme, I think that the defenders should have an opportunity of saying which of these places they prefer.

Any alternative plan which the defenders wished to suggest should have been lodged at latest with their objections, but I think they may properly be allowed this further opportunity of having any plan they have prepared laid before Mr. Carter, when he is considering the whole matter over again.

I can hear no further objections on the general question of the necessity and practicability of a sewage scheme, and, subject to the two points I have mentioned, the next step in procedure must be to remit to Mr. Carter to complete the plan which he has suggested in his report as the best for dealing with the Airdrie sewage by itself.

(Intld.) B.P.L.

AIRDRIE, 17th February, 1914.—The Sheriff-Substitute, having heard parties' procurators and made avizandum, repels the whole objections by the defenders to the report of Mr. Carter, No. 26/1 of process; and in respect that it has now been found that the defenders are committing an offence against Section 3 of the Rivers Pollution Prevention Act, 1876, by permitting sewage matter to fall or flow or be carried into the streams condescended on in the petition, and in respect that, on its appearing from the report by Mr. Carter, C.E., No. 26/1 of process, that there are means practicable and available by which the defenders can prevent the continuance of said offence, the eighth plea-in-law of the defenders has now been repelled: Decerns and requires the defenders to abstain from the commission of said offence, but before fixing the time within which and the mode of action by which the requirement hereof must be complied with, allows the defenders four weeks within which to submit a scheme for the remedy of the pollution complained of, and continues till 20th March, 1914.

(Sgd.) B. P. LEE.



*Note.*—This case has been in Court since August, 1905, and in the interval between then and now there have been various appeals to successive Sheriffs, at least two appeals to the Court of Session, and one to the House of Lords. As early as 10th April, 1906, on an appeal to the Sheriff, there was an interlocutor in which it was decided to remit to a skilled person for report under Section 10 of the Rivers Pollution Prevention Act, 1876, and parties were appointed to be heard as to the terms of the remit. This remit was noticed with approval by the Lord President in giving judgment on a Special Case on 9th July, 1907, but owing to successive appeals and other delays it was not until 10th July, 1912, that a remit was actually made to Mr. Carter, C.E., Edinburgh. Mr. Carter having reported, the case came before me for the first time on 11th July, 1913, when the defenders were allowed to lodge objections to the report. I thereafter heard parties on the objections and answers, and on 19th December, 1913, I appointed them to be further heard on two objections (numbers 5 and 9), to give the defenders an opportunity of stating which of Mr. Carter's alternative proposals they preferred, and of having another scheme, which they had stated they were having prepared, laid before Mr. Carter for his consideration. At this time I assumed (not having been myself concerned with the earlier procedure, and not being very exactly informed as to its steps) that the remit to Mr. Carter had been for the practical purpose of determining what was to be done to prevent pollution, and how it was to be done, and considering that the defenders should long ago have made up their minds what they wished, and been in a position to formulate their proposals, I stated in my note, as a warning against reliance on further delay, that "the next step in procedure must be to remit to Mr. Carter to complete the plan which he has suggested in his report as the best for dealing with the Airdrie sewage."

If I made a mistake in taking this view of the purpose and effect of the remit, I may, I think, at least plead that, coming into the case at a very late stage, I was led into the mistake, or allowed to fall into it, by the agents of the parties who have been in the case from the beginning. At the debate on the objections Mr. Carter's report was certainly accepted on both sides as containing proposals which, subject only to such modification as the Court might allow, must be adopted as a scheme for the purification of the streams through which the Burgh of Airdrie is committing the offence complained of. Mr. Smith, indeed, for the County Council, still maintains that this is the present position, and Mr. M'Murdo, for the Burgh, was so far from contesting it, that he strongly urged that Mr. Carter's proposal for a joint-scheme of drainage should be forced upon the adjoining Burgh of Coatbridge.

At the adjourned debate on the reserved objections Mr. M'Murdo has now, for the first time, taken up the position that the remit to Mr. Carter, whatever its purpose was, was not to determine the mode of action to be adopted to put an end to the offence, and that, in terms of Section 10 of the Rivers Pollution Prevention Act, the defenders must have an opportunity of adopting their own means for the prevention of the pollution complained of on a simple and unconditional order by the Court to abstain from the commission of the offence. In my opinion, the latter of these two propositions is stated much too high. I think that the section gives power to impose on the offending defenders a mode of action, and the large discretion allowed



to the Court has generally been exercised in this way. I know of no case in which there has been a simple order to abstain which would render the defenders liable, in case of default, to very high cumulative penalties. At present, however, I attach very little importance to this question, because I feel strongly that if the defenders are willing, or can be induced, to tackle the question of means honestly and seriously for themselves, it is from every point of view to be preferred that the scheme to be adopted (assuming, of course, its ascertained sufficiency) should be one of their own choice, in the administration of which they will, as authors, have an interest and satisfaction, which they might not feel in regard to an equally good scheme imposed on them by others. Holding this view, I am prepared, as a matter of discretion, to allow the defenders to make their own proposals, and to consider these proposals, when made, with expert assistance with a view to the adoption of a scheme acceptable to the defenders for the treatment and disposal of their sewage. I can only take this course, however, if I am not precluded by the remit which has already been made to Mr. Carter, and it is maintained for the County Council that I am so precluded.

Now, the terms of the remit (see Sheriff-Substitute's interlocutor of 10th July, 1912) are quite inconclusive. They exactly follow the words of the Section (10) of the Act, which empowers the Court to remit to skilled parties to report, and which are as follows:—" Previous to granting such order (*i.e.*, an order to abstain from committing an offence) the Court may, if it think fit, remit to skilled parties to report on the best practicable and available means and the nature and cost of the apparatus required, who shall in all cases take into consideration the reasonableness of the expense involved in their report." From the terms of this clause the report contemplated seems to me to be merely the advice or guidance of an expert, which the Court may obtain as an alternative to, or in supplement of, any other form of enquiry, to enable it to determine whether (1) an offence is being committed, and (2) it can practicably and reasonably be prevented. The words "best practicable and available means" are quoted from Section 3 of the Act, and their context there shows that the report authorised in Section 10 may be obtained by the Court to guide it in determining whether any offence against the Act shall be deemed to have been committed. Further, as in every case the order following on the report might be one simply requiring the defenders to abstain from the commission of the offence, without any inserted conditions as to mode of action, it seems clear that it was not intended that the reporter should on this remit do more than inform the Court as to whether a remedy was possible and practicable, and on what general lines it could reasonably be required. In short, the remit appears to have been intended only as an additional facility for putting the Court in possession, by enquiry, of the whole circumstances and possibilities, to enable it to frame its eventual order "as it may think just." I think that it is in this way that the power to remit has been interpreted. In *Yorkshire West Riding Council v. Holmfirth Urban Sanitary Authority* (1894), 2 Q.B. 842, Lindley, L.J. (at page 848), describes it as a "power to consult experts for information." Similarly, Lord President Dunedin, on 9th July, 1907, in his opinion in giving judgment in one of the appeals in this case, after stating that the Sheriff had rightly found that an offence had been committed, proceeded—"What I think did then ensue was an enquiry under Section 10, and *that* the Sheriff was prepared to make, because he had made a remit under Section 10."



Mr. Smith maintained that in this case at any rate it was clear that the purpose of the remit to Mr. Carter was to obtain from him a scheme for adoption as a remedy for the state of matters already found to constitute an offence, and that if the report was not now to be given practical effect to by an order to execute the remedial works recommended, the remit had been *ab initio* without any conceivable object, and a mere waste of time and expense. I cannot agree with this argument. The first judicial step towards a remit, in the Sheriff's interlocutor of 10th April, 1906, immediately followed a reservation of the defenders' eighth plea-in-law, which is "there being no means practicable and available by which the defenders can render the sewage less harmful, the defenders should be assoilzied." The reservation of this plea required that (as the Lord President said in the passage which I have quoted from his opinion) an enquiry should ensue, and is thus enough to explain the necessity for and the purpose of the remit. It may be observed that this plea-in-law remained undisposed of until 19th December, 1913, when I repelled it after consideration of Mr. Carter's report along with the defenders' objections to it.

I think, therefore, that neither the remit and report, nor anything else that has occurred in this protracted litigation, form any impediment to allowing the defenders still to propose their own scheme for preventing the pollution of the streams. But if the defenders prefer this course, there must be no further delay in the preparation and production of their plan. Objection was taken to this pollution at least as early as 1896, and as early as April, 1897 (as I find from the correspondence produced in process), the Town Council of Airdrie was considering, and consulting expert engineers, as to the means by which the requirements of the County Council might be met. During the last few years it must have been growing increasingly apparent to the Town Council that action could not be much longer delayed, and I gather from the Sheriff-Substitute's comment in his Note of 10th July, 1912, on the Town Council's failure before then to approve of a scheme, that there must have been some invitation or opportunity to produce a proposal, which might have been sent to Mr. Carter along with the remit. It is now more than seven months since Mr. Carter's exhaustive report was in the defenders' hands, and since they began considering objections and necessary alternatives to its proposals. In these circumstances, the defenders should have no difficulty in rapidly formulating their plans, if they have any, and it would, I think, be highly improper to further hang up this case for the considerable time that might have been justified if they were now called on to consider the question for the first time. In my opinion a further period of four weeks should be ample, and is as much as should be allowed. The defenders will, of course, understand that any proposal they may now make must be tested and examined by a neutral expert under a further remit from the Court. In ordinary course, therefore, it will be subjected for report to Mr. Carter as the person already chosen to advise the Court in this matter. The procedure which Mr. M'Murdo appeared to me to press for, of simply ordering the defenders to abstain from committing the offence and leaving them to work out their own salvation, would be contrary to all precedent, and will certainly not be adopted. (Intld.) B.P.L.



## BURGH OF COATBRIDGE.

AIRDRIE, 31st October, 1913.—Allows answers to objections to be received, and ordains the defenders within two weeks to lodge plans showing what they propose to do to effect the purification of the drainage of the portions of the burgh which are omitted from the plan of Mr. Laing, and on said plans being lodged remits the same to Mr. Carter to examine and report *quam primum*, and meantime continues the cause with the motion of pursuers.

B. P. LEE.

AIRDRIE, 5th December, 1913.—Of consent allows the report by Richard Hamilton, Medical Officer of Health, Coatbridge, to be received, and marked No. 38 of process; and having seen the report of Mr. Carter, No. 36 of process, and heard parties' procurators thereon, allows the defenders, within three days hereof, to lodge an amended plan showing their proposals to meet objections in Mr. Carter's said report, and on said plan being lodged remits the same with the process to Mr. Carter to consider, and to report *quam primum*.

B. P. LEE.

In the reports by Mr. Carter suggestions were made as to the feasibility of a joint-scheme by the Burghs and the County. In view of these suggestions being considered, a report was prepared with special reference to the interests of the Middle Ward District Committee, along with the following *notanda*:—

INFORMATION RELATIVE TO REPORTS BY MR. CARTER, C.E., ON  
PROPOSED SEWAGE PURIFICATION SCHEMES.

<i>Airdrie.</i>			Houses.	Population
Brown Burn, ...	County Area, South Biggar Road, ...	42	210	
	Carlisle Road, ...	34	170	
North, and Gartsherrie	Whiteriggs, &c., ...	122	600	
Burn,	Glenmavis, ...	117	585	
<i>Coatbridge.</i>				say
North Calder, ...	County Area, Carnbroe or Brewsterford, ...	168	1,000	
North, and Gartsherrie	Gartgill and Gartsherrie, ...	101	505	
Burn,	Old Townhead and Hollandhurst, ...	40	200	
	Kipps, ...	20	100	
Luggie Burn, ...	Kirkwood, ...	102	513	
	Old Monkland, Kirkstyle, and Douglas Support, ...	27	135	

Discussion of pollution from the County areas outwith the scope of the remit by the Sheriff of Airdrie to Mr. Carter, which has to do with the streams within the Burghs and not with the whole drainage area of the streams.

So far as the County areas are concerned, the estimated costs for the schemes (£2,000) is so small as to be of little importance to the financial side of the question.

Reference to County schemes is extremely general and indefinite in Mr. Carter's reports. The two portions alluded to may probably be







**Streams.**

In connection with trade and sewage pollution, 632 inspections of streams were made, and 129 samples taken.

*River Almond.*—A complaint, received from the Bathgate District Committee Clerk, regarding pollution from coal-dross washers within Lanarkshire, was inquired into, and reported upon to the effect that evidence of intermittent pollution from Fortrigg and Hassockrigg Collieries, Shotts, had been detected. Remedial measures were carried out at the sources referred to.

*Blind Burn.*—This stream has been seriously polluted by coal-dross washings from Stane and Kepplehill Collieries. The Secretary for Scotland having granted permission to initiate legal proceedings against the owners of these collieries, the case is pending in Court.

*Broomfield Farm, Netherburn.*—Inspections were made into a complaint of pollution of a stream on this farm by discharges of pit-water from Broomfield Colliery. Samples of the discharge were also taken. This is a pollution which cannot be dealt with under the Rivers Pollution Prevention Acts, but the attention of the colliery owners was drawn to it, and the results of the inspections communicated to the factor for the Hamilton estate, on which the farm and colliery are situated.

*Caley Burn, Bishopbriggs.*—The upper reach of this burn at Old Auchenairston was inspected in connection with pollution by piggery drainage. Previously the owner of the piggery had provided a large tank, and opportunity was taken of sampling the stream during the time the new tank was being filled with the drainage and there was no discharge to the stream. This was carried out on 8th December, and the analysis shows that the stream was only slightly affected by sewage from the houses in Old Auchenairston. Further inspection will be made to ascertain the effect of the discharge with piggery drainage after the tank has been in operation for some time.

*Camlachie Burn.*—The upper reach of this burn at Springboig being affected by a black and turbid discharge of water from Greenfield Colliery at Lightburn, inquiries and inspection were made, but the discharge was found, as formerly, to be due to water as raised from the mine which cannot be dealt with under the Rivers Pollution Prevention Acts. The colliery owner is aware of the character of the discharge, and it is passed through a series of small tanks before entering the burn.

*Coal Burn.*—Exhaustive inquiries and inspections were made into a complaint by a farmer of alleged pollution of the Coal Burn by coal-dross washings. Several collieries with coal-washing plant drain to this stream, and the information obtained seemed to point to one of



them (Dalquhandy) being the source of pollution. Defects were found in the arrangements to prevent pollution, and the owners were communicated with through the County Clerk. Communications were also addressed to the owners of Auchlochan and Bellfield Collieries, drawing attention to the complaint, and suggesting that special care might be taken in the management of preventive measures. In the course of these inspections pollution by solid matter was also detected, and is referred to under the heading "Solid Matter Pollution."

*Douglas Water.*—Special inspections were made of the drainage outfall for the new mine at Douglas West in connection with a complaint of pollution. The means taken to prevent pollution of a small stream which flows through grazing lands were found to be insufficient, and representations were made to the Wilsons & Clyde Company, who agreed to adopt the suggestion of the Rivers Inspector to provide satisfactory means to purify the pit-water and to convey the effluent in a pipe direct to the Douglas Water. It was also suggested that such a pipe would be a suitable outfall for the effluent from the sewage works to be provided for the drainage from the new houses.

*Jock's Burn, Carluke.*—Early in the year the Medical Officer attended a meeting and inspection in connection with the proposals to prevent the sewage pollution of this stream by discharges from Carluke Special Drainage District. A scheme has been agreed on, and is presently being proceeded with.

*Luggie Water.*—Inspections were made of the sources of pollution which are liable to affect this stream at Bedlay Collieries and Tannoch Chemical Works. At Tannoch the stream was found affected by coal-dross washings from the upper reach of the Cameron Burn, while the Mollin Burn, a smaller tributary of the Luggie which receives drainage from the Bedlay Collieries, was in course of being cleaned out. The measures for the prevention of pollution, both at the coal-dross washing plant and the sulphate ammonia works, were found in satisfactory working order.

*The Nethan, Lesmahagow.*—The Medical Officer and Rivers Inspector made an inspection in company with the local committee's Engineer, in connection with a proposal to construct a new intercepting and outfall sewer to discharge into the River Nethan further away from the village than the present outfalls, which have been a cause of complaint. A site for purification works and means of purification were also considered. The question of preventing pollution has been before the local drainage committee for some considerable time. In June the committee's Engineers submitted a report, showing how the various outfalls to the Nethan could be linked up and the sewage carried to alternative sites for purification works on the north



side of the Carlisle Road Bridge. Their estimate of the cost of carrying out a complete scheme of intercepting and outfall sewers with sewage disposal works at Craighead Mill amounted to £4,470, of which £2,800 would be required for purification works, while an alternative scheme, which would only deal with the outfalls from the Glebe downwards, passing the sewage through a tank and dispensing with filtration, would cost about £1,980. This cost could be further reduced if the site selected for a tank were the one immediately to the north side of the Carlisle Road Bridge, which would probably be quite satisfactory. No action having been taken since the Engineer's report was submitted, the Medical Officer communicated with the Clerk to the local committee on 6th April in the following terms:—

“ I have again discussed the question of sewage disposal with Rivers Inspector M'Arthur, and will be glad if your committee will consider the desirability of carrying out that portion of the scheme in the report of the Engineers which provides for the laying of an outfall sewer intercepting the outfalls from the Manse to Milton. The site for works suggested immediately to the north of the Carlisle Road Bridge should, I think, be acceptable for a time, and probably no filters would be required for many years to come, as the volume of water in the Nethan in relation to the volume of sewage is large, even in summer weather, and a high degree of purification is not at all necessary. Probably the Engineers should be asked to communicate the cost involved in this section of the scheme, and I think you will find it will not likely exceed £1,200.”

*North Burn.*—In connection with a complaint by the Town-Clerk of Airdrie that this stream was seriously polluted by sewage in its upper reach above the Burgh of Airdrie, special inspection and sampling were made on 9th October. At this date the stream was found dry for fully half-a-mile above Airdrie Burgh boundary, and at the first point where it was flowing the water was clear and sparkling.

*North Calder.*—On the 8th August communication was received from Messrs. James Dunlop & Co., complaining of the pollution of this stream by paper-mill effluent above their works at Calderbank. For some time previous to July Fair holidays untreated effluent from Moffat Paper Mill had been passing direct to the Calder, but new tanks have since been brought into operation with considerable improvement. On 11th September samples of the stream were taken during a six hours' average sampling of the trade effluents produced at Moffat Paper Mills. The results of analysis showed that the stream below the paper mills to contain only 3·0 parts per 100,000 suspended matter.

*Pow Burn, at Uddingston.*—In connection with a complaint which appeared in the local press alleging serious pollution of the Pow Burn, special inspections were made by the Medical Officer and staff of the



stream and its various sources of pollution. Eighteen samples were taken at various points in the course of the stream from Bothwell Park Colliery to near its junction with the River Clyde, and the results of the inquiries made were reported by the Medical Officer to a special meeting of the local drainage sub-committee.

*South Calder.*—In connection with inquiries and inspections regarding the pollution of this stream, considerable pollution was found being carried into it by the Todhole Burn, which is within the jurisdiction of the Burgh of Motherwell. It would appear that pollution comes from public works, and probably a bye-pass on the Burgh sewer. As the sources of pollution of the Calder in the County are being dealt with, the attention of the Burgh Authority has been called to the condition of the Todhole Burn.

*Shirrel Burn.*—This stream receives the sewage of Holytown and New Stevenston, and was the subject of complaint as regards its condition opposite Thankerton House. The provision of sewage purification works has, however, been reported on by the District Engineer, but consideration is delayed pending a report as to the mineral workings along the line of the proposed sewers and the site for the works.

*Swinstie Burn.*—Inquiry and inspection were made in connection with a complaint by the occupant of Swinstie Farm regarding sewage pollution. Two sewage outfalls enter the stream from Bellside and Omoa which cause serious pollution. There is no trade pollution as alleged by the complainer. The pollution has been brought to the notice of the Middle Ward District Committee.

*Tollcross Burn.*—Inspection and inquiries were made as to a proposed outfall drain to be laid from the New North Mount Vernon pits to this stream. The drain is intended to carry pit-water, of which there will be a discharge amounting to about 65 gallons per minute. This discharge is likely to be somewhat turbid and discoloured for some time, probably about a year, on account of sinking operations. One of the terms of consent by the Superior of the Lands to the company's proposal is, however, to the effect that "The water must be clarified as far as possible, and that the company accept liability for any claims arising from the pollution of the burn by water from the pits." This clause in the agreement between the Superior and the Colliery Company should safeguard the condition of the stream.

*Whinney Burn.*—This burn rises within the Burgh of Wishaw, and flows towards the River Clyde through the lands of Belhaven and Dalziel Estates. It also receives a small tributary, which passes mainly



through the Burgh of Motherwell, and which is affected by trade discharges. These were inspected along with the Burgh officials, and a report furnished thereanent. In the County area the Whinney Burn receives a discharge of iron water from Excelsior Iron Works, and is also liable to spent liquor pollution from the Glasgow Iron and Steel Company's Ammonia Works. At each source, however, remedial measures are provided dealing with the effluents produced by the trade processes.

In connection with the standards of purification suggested by the Royal Commission on Sewage Disposal, referred to in last year's report, a start was made towards the close of the year to take systematically, for a period of twelve months, a series of samples from the streams above and below the point where discharges enter from sewage works. This start was made at Bellshill-Hattonrigg Sewage Works, which discharge into the Shirrel Burn. The results of analysis will be found specially referred to in the Chemical Laboratory portion of this report.

### Complaints.

The complaints received during the year regarding the pollution of streams were duly inquired into and reported on. A note of the streams or places concerned is given below, and the complaints are referred to under the headings "Trade Pollutions," "Solid Matter Pollution," "Sewage and Sewage Disposal," and "Streams":—

River Almond at Shotts.	Douglas Water at Douglas West.
River Avon at Larkhall.	Jock's Burn at Carluke.
Braidwood Village.	Kirkmuirhill Village.
Broomfield Farm, Netherburn.	Langbyres Burn at Swinstie.
Camlachie Burn at Shettleston.	North Burn at Whiterigg.
Coal Burn at Coalburn.	Pow Burn at Uddingston.
River Clyde at Blantyre and New Lanark.	Shirrel Burn at Mossend.



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## CHAPTER II

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UPPER WARD.

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Annual Report for 1913.

S T A F F.  
PUBLIC HEALTH DEPARTMENT.  
UPPER WARD DISTRICT.

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County and District Medical Officer.

JOHN T. WILSON, M.D., D.P.H.

Tuberculosis Officer and Asst. M.O.H.

JAMES R. ADAM, M.B., Ch.B., D.P.H.

District Sanitary Inspector.

WILLIAM PATERSON.

Sanitary Inspector.

JOHN S. ANDERSON.

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District Hospital Roadmeetings (26 beds), and Shelter (4 beds).

Visiting Physician,    -    -    -    -    ROBERT B. BARR, M.B., C.M.

Matron,                -    -    -    -    Miss A. SCHERZER.

*August, 1914.*



## COUNTY OF LANARK.

## DISTRICT OF THE UPPER WARD.

## Report by the Medical Officer of Health

*FOR THE YEAR 1913.***I.—VITAL STATISTICS.**

The **Area** of the district at the close of the year was **327,013** acres. The acreage of each parish and the population of each registration district are given in Table B.

The average density of population was 0·13 person to the acre.

The **Population** at the Decennial Census, 2nd April, 1911, was **42,978**. At the middle of the year 1913 it has been estimated at **43,445**.

The number of inhabited houses according to the Valuation Roll, 1913-14, was **9,333**, and of unoccupied houses **331**. These figures show an increase of 45 in the number of inhabited houses.

The following table shows the increase of population during the two last decennial periods from the excess of births over deaths, compared with the actual increase as ascertained at the decennial censuses :—

	Total Births.	Total Deaths.	Population.		
			Natural Increase.	Actual Increase.	Difference being Loss.
1891-1900	12,223	6,062	6,161	3,415	2,746
1901-1910	12,091	5,521	6,570	2,558	4,012

The constitution of the population as regards age, sex, and conjugal conditions, as ascertained at the last census, is given in the following table :—

Sex and Condition.	All Ages.	Under 5	5-	10-	15-	20-	25-	30-	35-	40-
Both Sexes,	42,978	5,262	5,278	4,975	4,339	3,646	3,280	2,923	2,688	2,250
Males,	21,650	2,703	2,619	2,516	2,290	1,941	1,649	1,443	1,369	1,133
Females,	21,328	2,559	2,659	2,459	2,049	1,705	1,631	1,480	1,319	1,117

Males—

Single,	14,328	2,703	2,619	2,516	2,287	1,666	900	506	361	222
Married,	6,567	...	...	...	3	272	736	914	984	860
Widowed,	720	...	...	...	...	2	11	23	23	49
Not Stated,	35	...	...	...	...	1	2	...	1	2

Females—

Single,	13,339	2,559	2,659	2,459	2,008	1,216	687	434	315	218
Married,	6,649	...	...	...	41	484	933	1,024	955	838
Widowed,	1,328	...	...	...	...	4	11	19	46	61
Not Stated,	12	...	...	...	...	1	...	3	3	...

	45-	50-	55-	60-	65-	70-	75-	80-	85-	90-	95-	Not Stated.
Both Sexes,	2,016	1,692	1,371	1,063	930	626	350	187	64	10	2	26
Males,	993	818	704	513	441	271	131	66	25	2	...	23
Females,	1,023	874	667	550	489	355	219	121	39	8	2	3

Males,—

Single,	174	130	92	65	46	21	11	6	1	...	...	2
Married,	765	627	523	355	277	160	57	22	6	1	...	...
Widowed,	54	60	88	91	115	89	63	33	18	1	...	...
Not Stated,	..	1	1	2	3	1	..	...	...	...	...	21

Females—

Single,	207	179	109	94	88	47	35	15	6	1	...	3
Married,	738	564	408	296	205	106	39	15	1	1	1	...
Widowed,	77	129	150	159	196	202	144	91	32	6	1	...
Not stated,	1	2	...	1	...	...	1	...	...	...	...	...

The decennial population for each parish or registration district, as ascertained at the last three censuses, 1891, 1901, and 1911, is given in the following table :—



PARISH OR REGISTRATION DISTRICT.*	CENSUS POPULATIONS.		
	1891.	1901.	1911.
Biggar, ... ..	546	531	605
Carluke, ... ..	8,058	8,966	9,619
Carmichael, ... ..	593	1,198	1,471
<i>Carnwath</i> , ... ..	3,798	3,052	3,741
<i>Forth</i> , ... ..	1,526	1,790	2,031
<i>Haywood</i> , ... ..	—	995	674
Carstairs, ... ..	1,977	1,893	1,878
Covington and Thankerton, ... ..	396	314	385
<i>Crawford</i> , ... ..	636	719	681
<i>Leadhills</i> , ... ..	998	895	839
Crawfordjohn, ... ..	789	707	617
Culter, ... ..	420	392	372
Dolphinton, ... ..	248	250	245
Douglas, ... ..	2,266	2,397	2,509
Dunsyre, ... ..	191	200	175
Lamington and Wandel, ... ..	305	362	271
Lanark, ... ..	2,531	3,019	3,078†
<i>Lesmahagow</i> , ... ..	9,752	9,608	10,641
<i>Kirkfieldbank</i> , ... ..		1,346	1,349
Libberton, ... ..	486	432	461
Pettinain, ... ..	259	271	261
Symington, ... ..	432	388	420
Walston, ... ..	301	283	255
Wiston and Roberton, ... ..	497	412	400
<b>District of the Upper Ward,</b> ... ..	<b>37,005</b>	<b>40,420</b>	<b>42,978</b>

The constitution of the population, as ascertained at the last census, is given on the page opposite, but the sex and conjugal conditions may be summarised thus:—

	Males.	Females.	Both Sexes.
Single,	14,328	13,339	27,667
Married,	6,567	6,649	13,216
Widowed,	720	1,328	2,048
Not stated,	35	12	47
<b>Total,</b>	<b>21,650</b>	<b>21,328</b>	<b>42,978</b>

\* When there is more than one Registration District in a parish, the district bearing the name of the parish is put first, and all are printed in italics.

† By mutual agreement with the County Council an extension of the Burgh of Lanark to the extent of 214 acres, and containing 260 of a population, was arranged to take effect as from 1st August, 1908. The retention of this area would probably have added 300 to the census population.

**Statistical Tables.**—Table C, which in former years contained death-rates from certain causes of death during the whole period of County administration has been modified, and is now lettered A. It contains only birth-rates, death-rates from all causes, and infantile death-rates.

Table B now contains a largely extended list of causes of deaths, with no reference to age, while Tables B1 and B2 classify the deaths according to age groups. In Table B1 the age groups are related to the cause of death, and in Table B2 the age groups are related to the place of death—the parish or registration district.

**TABLE A.**—ANNUAL BIRTH-RATES AND DEATH-RATES PER 1,000 OF THE POPULATION. INFANTILE DEATHS PER 1,000 BIRTHS.

Year.	Births.	Birth-rate.	Nett. Deaths.	Death-rate.	Infants under 1 year.	
					Deaths.	Death-rate.
1891	1,231	33·2	681	18·3	133	108·0
1892	1,217	32·5	596	15·9	104	85·4
1893	1,231	32·6	619	16·3	125	101·5
1894	1,232	32·3	521	13·6	108	87·6
1895	1,194	31·0	669	17·4	138	111·3
1896	1,239	31·9	532	13·7	85	68·6
1897	1,285	32·8	554	14·1	126	98·0
1898	1,178	29·8	605	15·3	109	92·5
1899	1,130	28·3	632	15·8	112	99·1
1900	1,286	32·0	653	16·2	133	103·4
1891 to 1900	1,222	31·6	606	15·6	116	95·5
1901	1,299	32·1	598	14·8	113	86·9
1902	1,238	30·3	598	14·6	108	87·0
1903	1,171	28·4	549	13·3	103	87·9
1904	1,155	28·0	500	12·1	97	83·9
1905	1,123	27·2	560	13·5	107	95·2
1906	1,217	29·0	516	12·3	92	75·5
1907	1,201	28·5	548	13·0	95	79·1
1908	1,252	29·4	572	13·4	120	95·8
1909	1,260	29·3	547	12·7	117	92·8
1910	1,175	27·1	533	12·3	95	80·8
1901 to 1910	1,209	28·9	552	13·2	104	86·5
1911	1,213	28·1	526	12·2	93	76·6
1912	1,161	26·9	496	11·5	81	69·7
1913	1,168	26·9	527	12·13	82	71·72

The **Births** registered amounted to **1,168**—males, 590; and females, 578. The birth-rate was **26·9** per thousand of the population, being the same as for 1912, the lowest birth-rate yet recorded, see Table A. The average annual birth-rates for the previous four quinquennial periods were as follows:—

1891-95.	1896-1900.	1901-05.	1906-10.
32·3	31·0	29·2	28·7





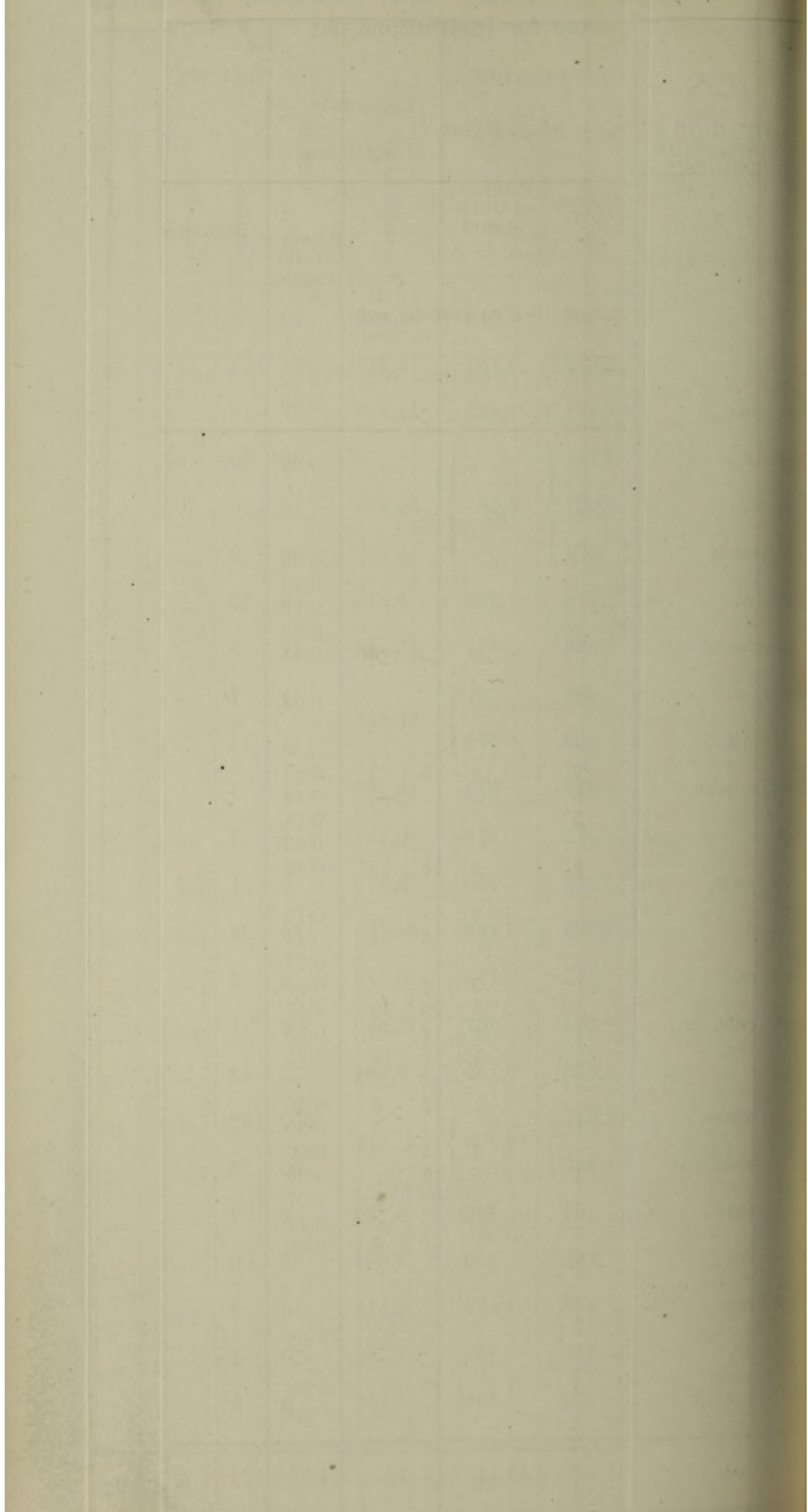




TABLE B1.—UPPER WARD.—Year 1913.—Deaths classified according to cause and age periods, and corrected for Institutions, &amp;c.

120B1

Population, 43,445. Acreage, 327.013. Registered Births, { Legitimate, M., 552; F., 544;  
 { Illegitimate, M., 38; F., 34; Total, 1,168. Deaths under 1 year, { Legitimate, 76.  
 { Illegitimate, 6.

CAUSE OF DEATH.	Registered in District.	Transferred from other Districts.	Transferred to other Districts.	Nett Deaths.	NETT DEATHS AT DIFFERENT AGE PERIODS.																	Rates per 1,000 Population.	Registered in Institutions in Districts.
					Weeks.					Months.					Years.								
					-1	1-2	2-3	3-4	Total -4	1-3	3-6	6-9	9-12	Total -12	1-2	2-5	5-15	15-25	25-45	45-65	65 and over.		
All Causes {Certified, -	519	26	22	523	15	11	7	5	38	15	14	5	9	81	17	18	29	27	60	106	185	12.00	35
{Uncertified, -	3	1	...	4	1	...	...	...	1	...	...	...	...	1	...	...	1	...	2	...	...	0.09	...
Enteric Fever, - - -	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	0.02	1
Typhus Fever, - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox, - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chickenpox, - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles, - - -	3	...	1	2	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	0.05	1
Scarlet Fever, - - -	5	...	...	5	...	...	...	...	...	...	...	...	...	...	2	2	1	...	...	...	...	0.12	3
Whooping Cough, - -	7	...	2	5	...	...	...	1	1	1	2	...	1	5	...	...	...	...	...	...	...	0.12	...
Diphtheria, - - -	13	...	...	13	...	...	...	...	...	...	...	...	...	...	1	3	9	...	...	...	...	0.30	6
Influenza, - - -	6	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	...	...	0.13	...
Erysipelas, - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Septic Diseases, -	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	0.02	...
Puerperal Fever, - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Fever, -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis, -	39	1	4	36	...	...	...	...	...	...	...	...	...	...	...	...	1	2	13	5	3	0.83	8
Meningeal Tuberculosis, -	6	...	...	6	...	...	...	...	...	...	...	1	...	1	1	1	3	...	...	...	...	0.14	...
Abdominal Tuberculosis, -	6	...	...	6	...	...	...	...	...	...	...	1	1	2	1	...	3	...	...	...	...	0.14	...
Other Tuberculosis, - -	1	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	0.02	...
Malignant Diseases, - -	43	1	1	43	...	...	...	...	...	...	...	...	...	...	...	...	2	...	5	13	23	0.99	2
Rheumatic Fever, - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meningitis (Simple), - -	5	...	...	5	...	...	...	...	...	...	1	...	...	1	1	1	...	2	...	...	...	0.12	...
Cerebral Haemorrhage, -	17	2	...	19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	14	...	0.44	1
Convulsions, - - -	3	...	...	3	...	1	...	1	2	...	...	...	...	1	3	...	...	...	...	...	...	0.07	...
Other Nervous Diseases, -	17	...	1	16	...	...	...	...	...	...	...	...	...	...	...	...	...	3	6	7	...	0.37	1
Circulatory Diseases, - -	68	4	4	68	...	...	...	...	...	...	1	...	...	1	...	...	5	3	20	39	...	1.57	3
Pneumonia, - - -	32	1	1	32	...	1	...	...	1	1	1	...	4	7	7	4	1	1	2	4	6	0.73	2
Bronchitis, - - -	30	1	...	31	1	...	...	...	1	...	1	1	1	4	1	...	...	...	1	7	18	0.71	...
Laryngitis, - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Respiratory Diseases, -	14	...	1	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	7	5	0.30	...
Diarrhoea, - - -	13	1	1	13	...	1	...	...	1	4	3	1	...	9	1	...	...	...	...	3	...	0.30	1
Other Digestive Diseases, -	11	...	...	11	...	...	...	...	...	1	...	...	...	1	...	2	...	...	3	3	2	0.25	...
Violence, - - -	18	4	2	20	...	...	...	...	...	1	...	...	...	1	...	2	4	5	6	2	...	0.39	1
Congenital Malformations, -	3	...	...	3	...	1	...	1	2	...	...	1	...	3	...	...	...	...	...	...	...	0.07	...
Premature Birth, - - -	19	...	...	19	8	3	5	2	18	1	...	...	...	19	...	...	...	...	...	...	...	0.41	...
Atrophy, Debility, &c., - -	25	...	...	25	4	2	2	...	8	4	4	...	...	16	...	1	...	...	...	8	...	0.58	1
Atelectasis, - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Injury at Birth, - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Suffocation, Overlying, - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Syphilis, - - -	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	0.02	...
Rickets, - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Defined Diseases, - -	108	10	4	114	3	2	...	...	5	1	1	...	1	8	1	...	3	3	17	27	55	2.63	4
Ill-defined Diseases, - - -	8	1	...	9	...	...	...	...	...	1	...	...	...	1	...	...	...	1	1	4	2	0.21	...
Total, - - -	522	27	22	527	16	11	7	5	39	15	14	5	9	81	17	18	30	27	62	106	185	12.14	35

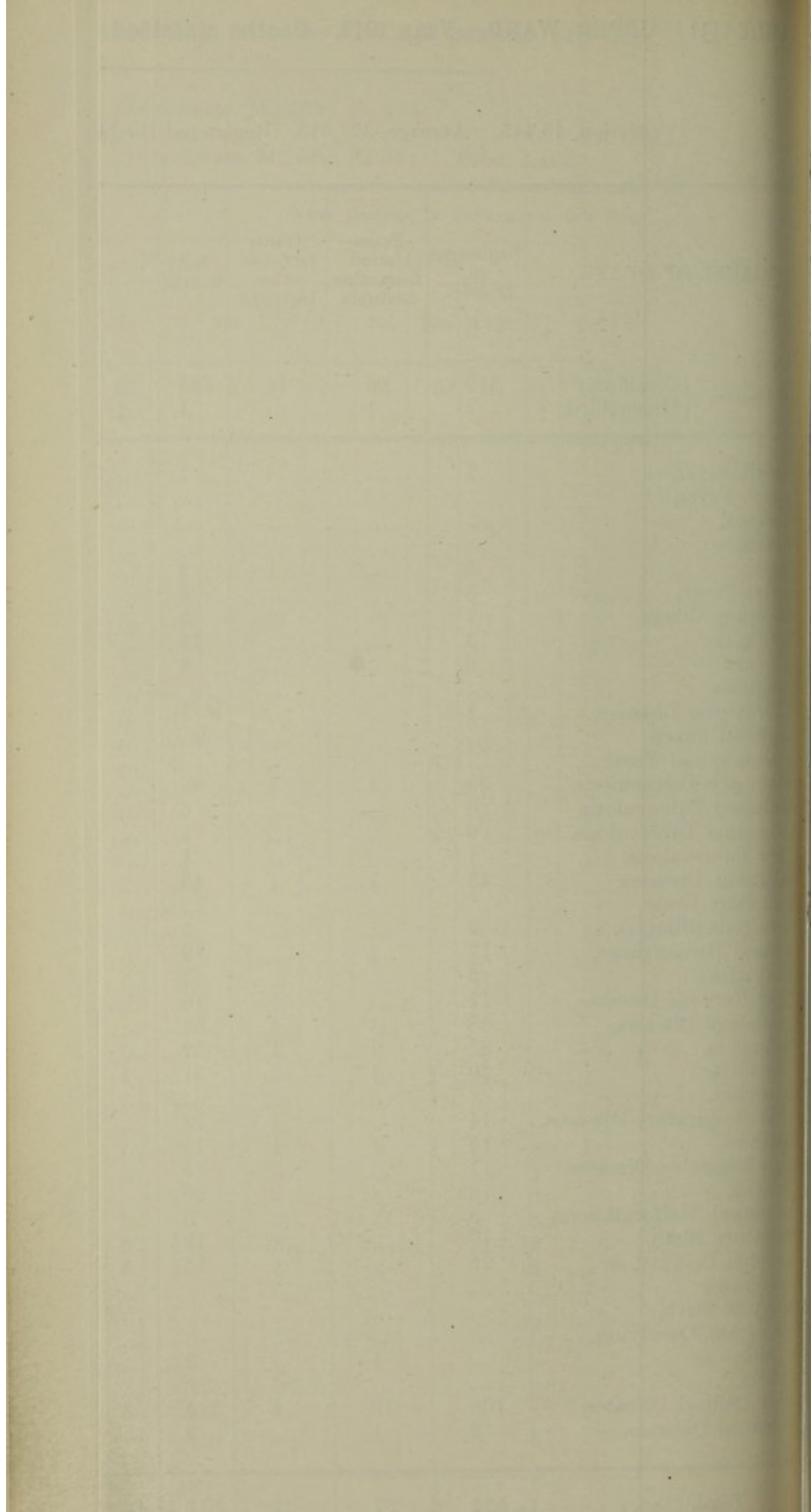




TABLE B2.—UPPER WARD.—Year 1913.—Births and Deaths in each Parish or Registration District. 120B2  
Deaths classified according to age periods, and corrected for Institutions, &c.

REGISTRATION DISTRICTS.	Registered Births.	Nett Deaths.	DEATHS AT DIFFERENT AGE PERIODS.																
			Weeks.					Months.					Years.						
			-1	1-2	2-3	3-4	Total -4	1-3	3-6	6-9	9-12	Total -12	1-2	2-5	5-15	15-25	25-45	45-65	65 and over
Biggar, - - - -	10	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	3
Carluke, - - - -	264	122	3	4	2	2	11	5	2	1	...	19	5	4	11	5	20	23	35
Carmichael, - - -	37	3	...	...	...	...	...	...	...	1	...	1	...	...	1	2	2	2	5
Carnwath, - - - -	130	41	1	2	1	...	4	2	2	1	1	10	2	1	1	1	2	8	16
Forth, - - - - -	80	28	3	...	...	...	3	1	1	...	1	6	2	...	1	2	4	4	9
Haywood, - - - -	30	9	...	1	1	...	2	...	2	...	...	4	...	...	...	...	1	2	2
Carstairs, - - - -	39	23	1	...	...	1	2	...	...	...	...	2	1	1	4	2	...	3	10
Covington, &c., - -	11	5	...	...	...	...	...	1	...	...	...	1	...	...	...	3	...	1	...
Crawford, - - - -	11	7	...	...	...	...	...	...	...	...	...	...	...	...	1	1	3	1	1
Leadhills, - - - -	14	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	9
Crawfordjohn, - -	11	8	...	...	2	...	2	...	...	...	...	2	...	...	...	...	1	1	4
Culter, - - - - -	4	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
Dolphinton, - - -	6	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Douglas, - - - - -	66	25	1	...	...	...	1	...	...	...	1	2	...	4	1	1	1	6	11
Dunsyre, - - - - -	2	2	...	...	...	1	1	...	...	...	...	1	...	...	...	...	...	1	...
Lamington, &c., - -	4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Lanark, - - - - -	52	43	1	...	...	...	1	...	1	1	1	4	...	2	4	3	6	7	17
Lesmahagow, - - -	330	134	5	3	1	1	10	6	6	1	5	28	6	5	5	4	17	34	35
Kirkfieldbank, - -	30	23	1	...	...	...	1	...	...	...	...	1	1	1	1	...	3	3	13
Libberton, - - - -	8	2	...	1	...	...	1	...	...	...	...	1	...	...	...	...	...	1	...
Pettinain, - - - -	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Symington, - - - -	15	8	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	1	4
Walston, - - - - -	3	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
Wiston, &c., - - -	5	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3
Total, - - - - -	1,168	527	16	11	7	5	39	15	14	5	9	82	17	18	30	27	62	106	185

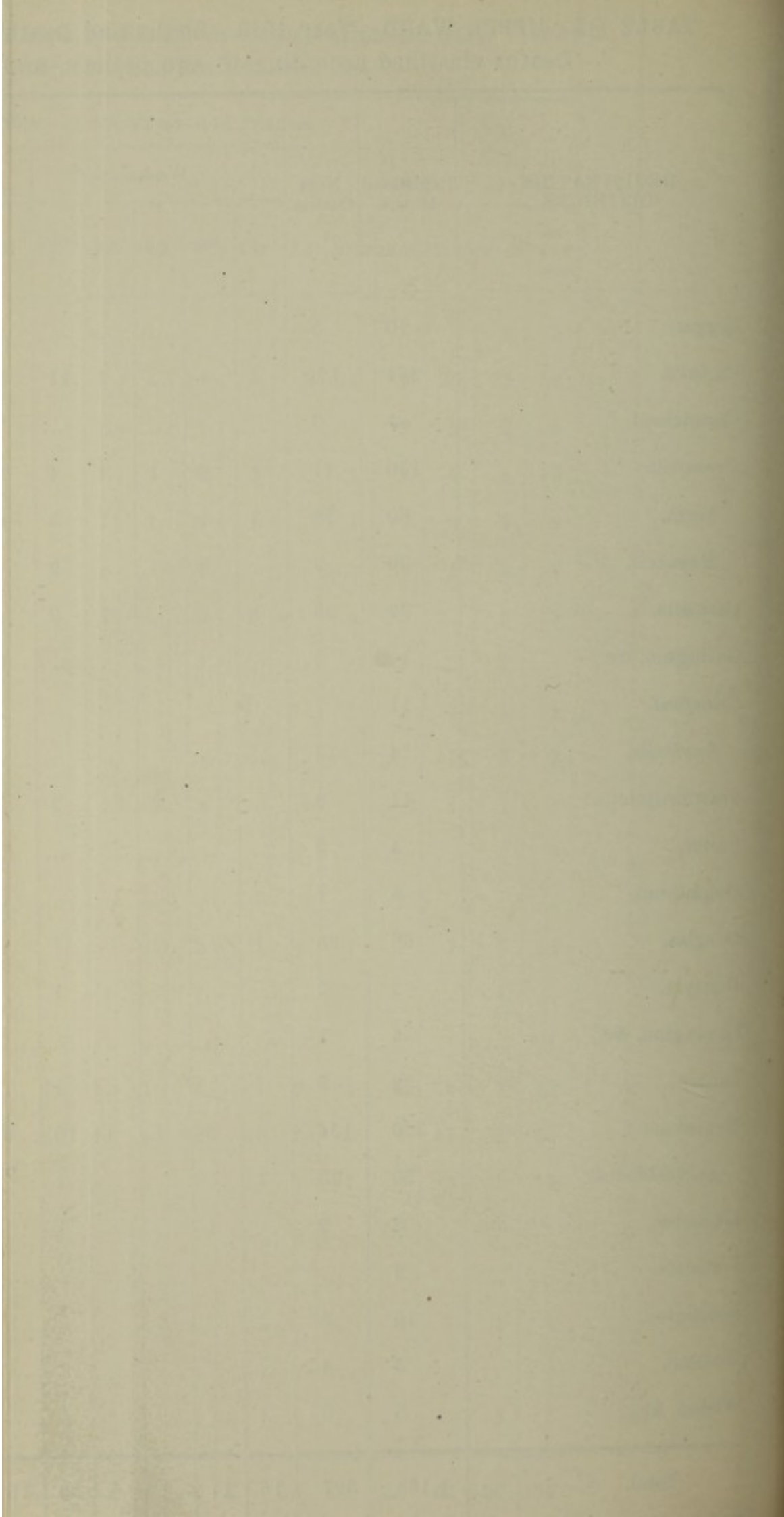




TABLE B3.—Statistics Prepared and Published by the Registrar-General, Year 1913.

120B3

## UPPER WARD DISTRICT.

## Rates per 1,000 of Estimated Population.

Population—Census 1911, - - - -	42,978
„ —Estimated to middle of year, - -	42,072

## Numbers.

Births, corrected for transcripts, - - - -	1,151
„ illegitimate, corrected for transcripts, - - - -	78
Marriages, uncorrected, - - - -	242
Deaths, „ - - - -	520
„ transferred out, - - - -	21
„ „ in, - - - -	32
„ corrected, both sexes, - - - -	531
„ „ males, - - - -	263
„ „ females, - - - -	268

Birth-rate, corrected for transcripts, - - - -	27.4
Marriage-rate, uncorrected, - - - -	5.8
Death-rate, all causes, uncorrected, - - - -	12.4
„ „ corrected for transfers, - - - -	12.6
„ „ „ and adjusted for age and sex distribution, - - - -	12.7
„ phthisis, corrected for transfers, - - - -	0.9
„ all tuberculosis, corrected for transfers, - - - -	1.2
„ principal epidemic diseases (those asterisked below), corrected for transfers, - - - -	0.9

Infantile mortality rate (deaths of children of under one year per 1,000 births), corrected, - - - -	73
Illegitimate rate (illegitimate births per 100 total births), corrected for transcripts, - - - -	6.8

## CAUSES OF DEATH (CORRECTED FOR TRANSFERS).

CODE NUMBERS. SHORT LIST.	CAUSES OF DEATH.	ALL AGES.	AGES.										
			—1	1—	5—	10—	15—	25—	35—	45—	55—	65—	75—
1	*Enteric Fever, ... ..	1	—	—	—	—	—	—	1	—	—	—	—
2	Typhus Fever, ... ..	—	—	—	—	—	—	—	—	—	—	—	—
3	Smallpox, ... ..	—	—	—	—	—	—	—	—	—	—	—	—
4	*Measles, ... ..	2	—	1	1	—	—	—	—	—	—	—	—
5	*Scarlet Fever, ... ..	5	—	4	1	—	—	—	—	—	—	—	—
6	*Whooping-cough, ... ..	8	8	—	—	—	—	—	—	—	—	—	—
7	*Diphtheria and Croup, ... ..	13	—	4	6	3	—	—	—	—	—	—	—
8	Influenza, ... ..	—	—	—	—	—	—	—	—	—	—	—	—
9	Erysipelas, ... ..	1	—	—	—	—	—	—	—	—	—	1	—
10	Phthisis, Pulmonary Tuberculosis, ... ..	36	—	1	—	1	12	8	5	4	2	3	—
11	Tuberculous Meningitis, ... ..	6	1	2	2	1	—	—	—	—	—	—	—
12	Abdominal Tuberculosis, ... ..	7	2	1	2	1	—	1	—	—	—	—	—
13	Other Tuberculous Diseases, ... ..	3	—	1	—	—	1	1	—	—	—	—	—
14	Cancer, Malignant Disease, ... ..	48	—	—	1	—	—	—	4	5	12	18	8
15	Rheumatic Fever, ... ..	—	—	—	—	—	—	—	—	—	—	—	—
16	Meningitis, ... ..	7	1	2	—	—	—	1	2	—	1	—	—
17	Organic Heart Disease, ... ..	59	—	—	—	—	3	—	2	6	14	22	12
18	Bronchitis, ... ..	32	6	1	—	—	—	1	1	1	7	8	7
19	Pneumonia (all forms), ... ..	38	7	10	1	1	1	2	1	2	2	6	5
20	Other Diseases of the Respiratory Organs, ... ..	12	1	—	—	—	—	1	—	1	4	2	3
21	*Diarrhoea and Enteritis (under 2 years), ... ..	8	7	1	—	—	—	—	—	—	—	—	—
22	Appendicitis and Typhlitis, ... ..	7	—	—	1	1	2	1	1	—	1	—	—
23	All Liver Diseases (not Malignant), ... ..	5	1	—	—	—	—	1	—	—	—	1	2
24	Other Diseases of Digestive System (under 2 years), ... ..	5	4	1	—	—	—	—	—	—	—	—	—
25	Nephritis and Bright's Disease, ... ..	12	—	—	1	—	—	1	2	3	1	3	1
26	Puerperal Sepsis, ... ..	—	—	—	—	—	—	—	—	—	—	—	—
27	Other Diseases and Accidents of Pregnancy and Parturition, ... ..	7	—	—	—	—	2	5	—	—	—	—	—
28	Congenital Debility and Malformation, including Premature Birth, ... ..	39	39	—	—	—	—	—	—	—	—	—	—
29	Violent Deaths, excluding Suicide, ... ..	21	1	2	1	2	6	5	2	—	2	—	—
30	Suicide, ... ..	—	—	—	—	—	—	—	—	—	—	—	—
...	Other Defined Diseases, ... ..	138	5	2	—	1	1	6	8	15	22	31	46
31	Diseases Ill-Defined or Unknown, ... ..	11	1	—	—	—	—	1	1	1	3	2	2
	Total, ... ..	531	84	33	17	11	28	35	30	38	71	97	86

TABLE 10. - *Continued*

TABLE 10. - *Continued*

TABLE 10. - *Continued*

TABLE 10. - *Continued*

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TABLE 10. - *Continued*

TABLE 10. - *Continued*

TABLE 10. - *Continued*

TABLE 10. - *Continued*

TABLE 10. - *Continued*

TABLE 10. - *Continued*



The **Deaths** registered amounted to **522**. After making corrections for deaths which occurred in institutions and in other districts, as shown in the following tables, the deaths of persons belonging to the district amounted to **527**, and gave a death-rate of **12·13** per thousand of the population. The death-rate for the preceding year was 11·52, and the average annual rate for the last two decennial periods was 15·6 and 13·2 respectively.

PUBLIC INSTITUTIONS SITUATED WITHIN THE DISTRICT WHERE SOME PERSONS NOT BELONGING TO THE DISTRICT DIED AND WHOSE DEATHS ARE EXCLUDED.

NAME OF INSTITUTION.	PARISH WHERE SITUATED.	POPULATION, POLICE CENSUS, DEC., 1913.	DEATHS.	
			Total during 1913.	Allocated to Upper Ward.
Lanark Poorhouse, ...	Lanark, -	69	12	10
Lanark Fever Hospital, ...	Do., -	4	2	...
Convalescent Home, ...	Do., -	21	...	...
Smyllum Orphanage, ...	Do., -	579	8	5
Bellefield Sanatorium, ...	Do., -	69	...	...
Douglas Cottage Hospital and Sanatorium,	Douglas, -	18	3	3
District Hospital, ...	Carluke, -	23	15	15
Carluke Poorhouse, ...	Do., -	7	...	...
Parochial Lodging-house,	Lesmahagow,	8	1	1
TOTAL, ... ..		798	41	34

PUBLIC INSTITUTIONS SITUATED OUTWITH THE DISTRICT WHERE SOME PERSONS BELONGING TO THE DISTRICT DIED AND WHOSE DEATHS ARE INCLUDED.

Glasgow Hospitals, &c.,	- - - -	11 Deaths.
Edinburgh „	- - - -	2 „
Other Institutions,	- - - -	5 „
Total, - - - -		<u>18</u> „

The foregoing tables show that of 41 deaths occurring in institutions within the district 7 were excluded, as they were persons not belonging to the Upper Ward ; on the other hand 18 deaths were included, as they were persons belonging to the Upper Ward, who died in institutions outwith the district. For the same reasons 14 deaths were excluded of persons dying in private residences and elsewhere, and 9 deaths were included.

DEATHS IN RELATION TO AGE AND CAUSE.—The deaths are classified in Table B1 according to age and cause. The deaths are here arranged in recognised age periods, and the percentage proportion of deaths at each period given :—

Infant Period—Under 1 year, ... ..	82 deaths or 15·6 per cent.
Under School Age—1·5 years, ... ..	35 „ 6·6 „
School Age—5·15 years, ... ..	30 „ 5·7 „
Adolescence—15·25 years, ... ..	27 „ 5·1 „
Early Mature Period—25·45 years, ... ..	62 „ 11·8 „
Late Mature Period—45·65 years, ... ..	106 „ 20·1 „
Post Mature Period—65 years and upwards, 185	„ 35·1 „

The population at each of these age periods, except the infant period, is published in Vol. II. of the Census Report, page 253. From these figures the population at each age period has been estimated for the year 1913. This is shown in the following tabular statement along with the deaths and death-rate :—

POPULATION, DEATHS, AND DEATH-RATES AT AGE PERIODS.

	Under 5.	5·15.	15·25.	25·45.	45·65.	65 & over.
Estimated population, ... ..	5,314	10,354	8,063	11,250	6,202	2,217
Deaths, ... ..	117	30	27	62	106	185
Death-rate per 1,000 of the population, ... ..	22·01	3·89	3·34	5·50	17·09	83·44
Death-rate per 1,000, 1912, ...	23·00	1·75	3·50	5·20	16·93	76·08

The high death-rates at the extremes of life are clearly shown. The infant death-rate can only be calculated in relation to the number of births.

INFANT PERIOD.—The infant death-rate for each year since 1891 is given in Table A. The average annual rate for the last two decennial periods was 95·5 and 86·5. For the year 1913 the rate was 71·74. Of the 82 deaths recorded, 39 took place during the first month and 15 during the next three months, making 54 deaths of children under 3 months.

INFANT DEATHS CLASSIFIED IN GROUPS ACCORDING TO CAUSE. NUMBER IN EACH GROUP COMPARED WITH THAT FOR THE PRECEDING YEAR.

	1913.	1912
1. Premature Birth, 18; Congenital Malformations, 3,	21	16
2. Diarrhœa, 9; Other Digestive Diseases, 1; Atrophy, Debility, and Marasmus, 16,	26	30
3. Pneumonia, 7; Bronchitis, 4,	11	16
4. Tuberculosis—Meningeal, 1; Abdominal, 2,	3	2
5. Meningitis, 1; Convulsions, 3,	4	4
6. Whooping Cough, 5,	5	8
7. Violence, 1,	1	2
8. Other Causes, 11,	11	3
Total,	82	81



Among the deaths classified under "Other Causes" are : Acute abscess, 1 ; disease of nose, 1 ; purpura, 1 ; and heart failure, 1.

INFECTIOUS DISEASES.—The number of deaths due to infectious diseases, which are compulsorily notifiable, was 55, made up as follows :—

Diphtheria,	...	...	...	...	13
Scarlet fever,	...	...	...	...	5
Typhoid fever,	...	...	...	...	1
Cerebro-spinal fever,	...	...	...	...	—
Puerperal fever,	...	...	...	...	—
Erysipelas,	...	...	...	...	—
Pulmonary tuberculosis,	...	...	...	...	36

The deaths from infectious diseases, not compulsorily notifiable, amounted to 20, made up thus :—Measles, 2 ; whooping-cough, 5 ; and diarrhoea, 13.

These diseases are all discussed under a separate heading in part II. of this report.

RESPIRATORY DISEASES.—The group of diseases under the heading respiratory, has varied from time to time. In the years preceding 1906 this group included deaths from pneumonia and from influenza with respiratory symptoms. Since the year 1906 these two causes of death have been given a separate column in Table B. Since 1911 bronchitis has also been given a separate heading. This change in the classification is indicated in the following tabular statement :—

#### OLD CLASSIFICATION.

##### ALL RESPIRATORY DEATHS.

Year.	Deaths.	Death-rate.	Year.	Deaths.	Death-rate.	Year.	Deaths.	Death-rate.
1891	—	—	1896	91	2·34	1901	73	1·80
1892	112	2·99	1897	108	2·76	1902	91	2·22
1893	89	2·35	1898	117	2·96	1903	82	1·98
1894	76	1·99	1899	98	2·46	1904	79	1·91
1895	129	3·35	1900	125	3·11	1905	109	2·64

#### NEW CLASSIFICATION.

Pneumonia.			Bronchitis.		Influenza.		Other Respiratory Diseases.	
Year.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.
1906	22	0·52	—	—	3	0·07	43	1·02
1907	22	0·52	—	—	6	0·14	56	1·33
1908	19	0·44	—	—	5	0·11	60	1·41
1909	39	0·90	—	—	7	0·16	44	1·02
1910	44	1·01	—	—	5	0·11	47	1·08
1911	35	0·81	26	0·60	—	—	5	0·11
1912	43	1·00	23	0·53	2	0·05	5	0·12
1913	32	·73	31	·71	6	·13	13	·30

PNEUMONIA.—Deaths from this disease have been classified separately since the year 1906. Deaths from broncho-pneumonia were, up till 1908, included in the general respiratory group, and since 1909 they have been included under the heading "Pneumonia."

32 deaths occurred during the year 1913—22 of these being in the populous parishes of Lesmahagow and Carlisle. Classified according to age the deaths were as follows :—

Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65 and upwards.
7	7	4	1	1	2	4	6

BRONCHITIS.—Up to the year 1911, deaths from this disease were included under the general respiratory heading. 31 deaths occurred during the year, giving a death-rate of .71 per thousand of the population. 11 of these deaths occurred in the Carlisle and Lesmahagow parishes. Classified according to age, the deaths were as follow :—

Under 1	1-2	2-5	5-15	25-45	45-65	65 and upwards.
4	1	—	—	1	7	18

INFLUENZA.—Deaths from this disease have been classified separately since the year 1906. 6 deaths occurred during the year, classified, according to age, as follows :—Three between 25 and 45 years, and three between 45 and 65 years.

OTHER RESPIRATORY DISEASES—including asthma, congestion of the lungs, and acute croup—caused 13 deaths. Classified according to age, five were between 5 and 15, seven between 45 and 65, and five over 65 years.

MALIGNANT DISEASES.—43 deaths occurred during the year. This group includes deaths from diseases certified as cancer, carcinoma, sarcoma, &c. The proportions so certified are, roughly, about 50 per cent. cancer, 40 per cent. carcinoma, and 10 per cent. other forms. The average annual number of deaths from these diseases has been gradually increasing. Thus, for the quinquennial period 1891-95 the death-rate per 10,000 of the population was 4.7, and for 1906-10 was 7.2. During 1913 the death-rate amounted to 9.9, as compared with 9.5 in 1912. Classified according to age, the deaths were as follows :—

5-15	15-25	25-45	45-65	65 and over.
2	—	5	13	23



MALIGNANT DISEASE IN EACH REGISTRATION DISTRICT OF THE UPPER WARD. — AVERAGE ANNUAL NUMBER OF DEATHS FOR QUINQUENNIAL PERIODS OF 1891-1910 AND FOR EACH OF THE YEARS 1911, 1912, AND 1913; ALSO, THE AVERAGE ANNUAL DEATH-RATE FOR SAME PERIODS IN THE UPPER WARD.

Registration District.	1891-1895.	1896-1900.	1901-1905.	1906-1910.	1911.	1912.	1913.
Biggar, - - - - -	0·2	0·4	1·4	1·2	2	...	...
Carlisle, - - - - -	4·0	6·8	6·8	6·6	8	8	9
Carmichael, / - - - -	0·6	0·2	0·8	1·2	1	2	...
Carnwath, - - - - -	2·2	2·4	2·8	2·8	2	3	7
Forth, - - - - -	0·8	0·2	1·0	0·8	1	4	...
Haywood, - - - - -	...	0·2	0·6	0·4	...	...	...
Carstairs, - - - - -	1·2	0·6	2·4	2·2	2	2	3
Covington, &c., - - - -	0·4	0·4	0·4	0·2	1	...	1
Crawford, - - - - -	0·2	0·6	1·0	1·4	...	2	1
Leadhills, - - - - -	0·2	1·0	0·6	0·6	...	2	...
Crawfordjohn, - - - -	0·2	0·4	0·8	0·6	3	1	2
Culter, - - - - -	0·4	0·2	0·2	0·6	1	...	...
Dolphinton, - - - - -	0·4	0·4	0·4	...	1	1	...
Douglas, - - - - -	0·8	2·0	2·6	2·4	3	2	...
Dunsyre, - - - - -	0·2	...	...	0·4	1	...	...
Lamington, &c., - - - -	0·2	...	0·6	...	...	...	1
Lanark, - - - - -	1·8	1·6	0·6	1·2	2	3	2
Lesmahagow, - - - - -	3·6	4·8	6·2	5·4	6	9	15
Kirkfieldbank, - - - -	0·2	1·0	1·0	0·8	1	1	2
Libberton, - - - - -	...	0·6	...	0·2	...	...	...
Pettinain, - - - - -	...	...	0·6	0·2	...	1	...
Symington, - - - - -	0·4	0·2	0·4	0·6	...	...	...
Walston, - - - - -	...	0·2	...	0·6	...	...	...
Wiston, &c., - - - - -	...	0·6	0·4	0·6	...	...	...
Upper Ward District, - -	18·0	24·8	31·6	31·0	35	41	43
Average Annual Death-rate per 10,000 of the Popula- tion, - - - - -	4·76	6·28	7·70	7·29	8·13	9·52	9·9

**CIRCULATORY DISEASES.**—These diseases were responsible for 68 deaths, giving a death-rate of 1·57 per 1,000, as compared with 1·64 in 1912. 62 of the deaths were of persons over 25 years. In the year 1910 a change in the classification of deaths took place whereby cerebral hæmorrhage, which previously had been classed under Circulatory Diseases, was included as a sub-heading under the class Nervous Diseases. The result of this change is seen in the following table, which shows that the death-rate from circulatory diseases, which averaged 2·3 per 1,000 in the years 1908-09-10, was reduced, after this change of classification, to 1·7 per 1,000, while the rate from nervous diseases was correspondingly increased from 0·7 to 1·09 per 1,000.

Year.	Circulatory Diseases.		Nervous Diseases.	
	Deaths.	Rate.	Deaths.	Rate.
1908	105	2·44	35	0·82
1909	90	2·09	36	0·83
1910	104	2·40	28	0·67
1911	85	1·97	48	1·13
1912	71	1·64	51	1·18
1913	68	1·57	43	0·98

## II.—PREVALENCE OF INFECTIOUS DISEASES.

The diseases included under this heading are classified in relation to notification, and are divided into two groups. Group 1 includes diseases which are compulsorily notifiable (*a*) under the Notification Act, (*b*) by adoption under the Notification Act, and (*c*) by order of the Local Government Board, and Group 2 not compulsorily notifiable diseases. The diseases included in these groups are as follows:—

### GROUP I.

(A)	(B)	(C)
Smallpox,	<i>August, 1906.</i>	<i>1st August, 1912.</i>
Diphtheria,	Cerebro-spinal Meningitis.	Pulmonary Tubercu-
Scarlet Fever,	<i>24th October, 1912.</i>	losis.
Typhus Fever,	Ophthalmia Neonatorum,	<i>1st July, 1914</i>
Typhoid Fever,	Acute Poliomyelitis,	All forms of Tubercu-
Puerperal Fever,	Tetanus,	losis.
Erysipelas.	Anthrax,	
	Glanders,	
	Actinomycosis.	

### GROUP II.

Measles,	Chickenpox,	Ringworm,
German Measles,	Mumps.	Scabies.
Whooping Cough.		



TABLE E.—NUMBER OF CASES OF NOTIFIABLE INFECTIOUS DISEASE  
IN EACH PARISH DURING 1913.

PARISH.	Diphtheria.	Scarlet Fever.	Typhus Fever.	Typhoid Fever.	Cerebro-Spinal Fever.	Pulmonary Tuberculosis.	Erysipelas.	Puerperal Fever.	TOTAL.
1. Biggar, - - -	...	2	...	...	...	2	2	...	6
2. Carluke, - - -	12	21	...	1	...	5	2	...	51
3. Carmichael, - - -	11	4	...	...	...	5	1	...	21
4. Carnwath, - - -	4	25	...	7	...	3	...	...	39
5. Carstairs, - - -	15	23	...	...	...	1	3	...	42
6. Covington, &c., -	2	5	...	...	...	1	2	...	10
7. Crawford, - - -	...	1	...	...	...	4	4	...	9
8. Crawfordjohn, - -	3	2	...	1	...	3	...	...	9
9. Culter, - - -	...	...	...	...	...	...	...	...	...
10. Dolphinton, - - -	...	...	...	...	...	...	...	...	...
11. Douglas, - - -	26	36	...	...	...	1	2	...	65
12. Dunsyre, - - -	...	...	...	...	...	...	...	...	...
13. Lamington and Wandel.	...	...	...	...	...	1	...	...	1
14. Lanark, - - -	3	10	...	...	...	5	2	...	20
15. Lesmahagow, - - -	17	53	...	...	...	11	27	...	109
16. Libberton, - - -	...	...	...	...	...	...	1	...	1
17. Pettinain, - - -	...	...	...	...	...	...	...	...	...
18. Symington, - - -	...	3	...	...	...	1	1	...	5
19. Walston, - - -	...	...	...	...	...	...	1	...	1
20. Wiston and Roberton,	...	...	...	...	...	...	...	...	...
<i>Total for year 1913,</i> -	93	185	...	9	...	43	58	1	389
<i>Total for year 1912,</i> -	110	189	...	7	...	52	60	...	420
<i>Deaths in 1913,</i> -	13	5	...	1	...	36	...	...	55

TABLE E1.—NUMBER OF CASES OF NOTIFIABLE INFECTIOUS DISEASE  
OCCURRING IN EACH MONTH DURING 1913.

	Diphtheria.	Scarlet Fever.	Typhus Fever.	Typhoid Fever.	Cerebro-Spinal Fever.	Pulmonary Tuberculosis.	Erysipelas.	Puerperal Fever.	TOTAL.
January, - - - -	5	18	...	1	...	6	6	1	37
February, - - - -	5	6	...	4	...	3	2	...	30
March, - - - -	14	7	...	...	...	6	6	...	33
April, - - - -	4	18	...	...	...	8	3	...	33
May, - - - -	1	6	...	...	...	2	7	...	16
June, - - - -	2	15	...	...	...	5	3	...	25
July, - - - -	13	11	...	...	...	4	6	...	34
August, - - - -	13	27	...	...	...	2	3	...	45
September, - - - -	11	24	...	3	...	1	7	...	46
October, - - - -	6	16	...	...	...	4	6	...	32
November, - - - -	8	17	...	...	...	1	4	...	30
December, - - - -	11	10	...	1	...	1	5	...	28
Total, - - - -	93	185	...	9	...	43	58	1	389

A series of tables lettered D, with a distinctive number for each disease, will be found throughout the report. These tables show, for the whole period of compulsory notification, not only the cases and deaths, but also the rates calculated therefrom.

#### Smallpox.

No cases occurred in any part of the district, but the following Table D1 shows the prevalence in previous years, and that the last case of smallpox occurred in the year 1904:—



TABLE D1.—SMALLPOX.

YEAR.	NUMBERS.		YEAR.	NUMBERS.	
	Cases.	Deaths.		Cases.	Deaths.
(1)	(2)	(3)	(1)	(2)	(3)
1892	...	...	1903	2	...
1893	...	...	1904	16	3
1894	...	...	1905	...	...
1895	1	...	<i>Average,</i>	<i>6·2</i>	<i>0·8</i>
<i>Average,</i>	<i>0·25</i>	...	1906	...	...
1896	...	...	1907	...	...
1897	..	...	1908	...	...
1898	...	...	1909	...	...
1899	...	...	1910	...	...
1900	3	...	<i>Average,</i>	...	...
<i>Average,</i>	<i>0·6</i>	...	1911	...	...
1901	3	1	1912	...	...
1902	10	...	1913	...	...

*The Vaccination (Scotland) Act, 1907*, which provides for returns of statutory declarations of conscientious objection to vaccination, came into operation on the 28th August of that year. Forms were prepared, duly approved by the Local Government Board, and issued to registrars during the month of December, 1907. The returns received since that date are of considerable interest, and may be tabulated as follows :—

Registration District.	Dec., 1907.	No. of Declarations.						Registration District.	Dec., 1907.	No. of Declarations.					
		1908.	1909.	1910.	1911.	1912.	1913.			1908.	1909.	1910.	1911.	1912.	
Biggar, ...	—	—	—	1	—	2	—	Douglas, ...	—	5	3	6	3	7	
Carluke, ...	11	42	68	77	74	99	95	Dunsyre, ...	—	—	—	—	—	1	
Carmichael, ...	—	24	8	14	13	13	26	Lamington and Wandel, ...	—	—	—	—	—	—	
Carnwath, ...	3	7	10	4	—	20	22	Lanark, ...	—	2	8	9	17	16	
Forth, ...	12	36	37	34	38	39	53	Lesmahagow, ...	16	43	60	59	85	86	
Haywood, ...	2	4	7	11	11	14	11	Kirkfieldbank, ...	1	1	2	5	6	3	
Carstairs, ...	1	5	5	5	4	8	7	Libberton, ...	—	—	—	—	—	1	
Covington and Thankerton, ...	—	1	—	1	1	2	2	Pettinain, ...	—	—	1	—	—	1	
Crawford, ...	1	4	2	—	4	5	2	Symington, ...	—	—	—	—	1	—	
Leadhills, ...	—	—	—	—	—	—	1	Walston, ...	—	—	—	—	—	—	
Crawfordjohn, ...	1	—	2	3	2	4	—	Wiston and Robertson, ...	—	—	—	1	—	—	
Culter, ...	—	—	—	1	—	—	—								
Dolphinton, ...	—	—	—	—	1	—	1								
								Totals,	48	174	213	231	260	321	

The proportion of unvaccinated children has risen steadily since the Vaccination (Scotland) Act, 1907, became law, and it has been estimated that there are now over 1,500 unvaccinated children in the Upper Ward. The declarations in 1913 amounted to 338, and, comparing these with the number of births registered in the Upper Ward district, the percentage of unvaccinated children may be estimated. The proportion of statutory declarations for the whole ward was 29·0 per cent. of the total births. The largest proportion of statutory declarations occurred in the registration districts of Carmichael, Forth, and Haywood, where the population is largely engaged in mining. The percentages were—Carmichael, 70·3; Forth, 66·2; Haywood, 36·7; Carluke, 36; Lesmahagow, 29·4; Lanark, 23·1; Carstairs, 17·9; and Carnwath, 16·9.

#### Diphtheria and Membranous Croup.

Cases, 93; deaths, 13; fatality, 12·9 per cent.

The age-incidence of cases and deaths was as follows:—

	Ages—1	1-2	2-5	5-15	15-25	25-45	45-65	Total.
Cases,	—	3	13	56	14	6	1	93
Deaths,	—	1	3	9	—	—	—	13



Table D2 shows the annual prevalence of diphtheria since 1892. The figures given are not strictly comparable, owing to the large amount of throat swabbing which was done during 1907 and 1908 for the purpose of detecting carriers of infection.

The number of cases notified shows a decrease of 17 from the preceding year. This is largely accounted for by the marked decrease in the number of notifications received from the Parish of Lesmahagow.

There were 13 deaths, showing an increase of 9 over last year. This figure has only been exceeded on two occasions during the last 21 years—namely, in 1892 and 1893, when there were 22 and 14 deaths respectively.

It had been hoped that the mortality from diphtheria had been permanently reduced by the prompt and early use of antitoxin, but it appears evident from Table E2 that much more could be done in this direction. The free use of antitoxin in suspicious cases and cases prior to removal to hospital has much to recommend it, more particularly in a widely scattered area such as the Upper Ward, where removal to hospital frequently entails the loss of a day. Table F1 (diphtheria) shows that, out of 42 patients, 14 were admitted to hospital on or after the fourth day of illness, and this is probably an underestimate owing to the tendency of patients to date their illness from the first serious symptoms, and to the difficulties parents experience in stating when first their child took ill.

Of the 9 deaths which occurred in the District Hospital, 2 were very seriously ill on admission, and offered no prospect of recovery.

Delay on the part of patients or their parents in getting medical advice was responsible for the regrettable fact that 5 patients were only admitted to hospital on or after the seventh day of illness. Classified according to parish, the deaths were as follows:—Carluke, 5; Carstairs, 3; Douglas, 2; Carmichael, 1; Forth, 1; and Lanark, 1.

TABLE D2.—DIPHTHERIA AND MEMBRANOUS CROUP.

YEAR.	NUMBERS.		RATES.		
	Cases.	Deaths.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)
1892	101	22	21·7	2·6	5·8
1893	88	14	15·9	2·3	3·7
1894	60	11	18·3	1·5	2·8
1895	65	9	13·8	1·6	2·3
<i>Average</i>	<i>78·5</i>	<i>14·0</i>	<i>17·8</i>	<i>2·0</i>	<i>3·69</i>
1896	106	8	7·5	2·7	2·0
1897	75	1	1·3	1·9	0·2
1898	77	7	9·0	1·9	1·7
1899	84	4	4·7	2·1	1·0
1900	102	9	8·8	2·5	2·2
<i>Average</i>	<i>88·8</i>	<i>5·8</i>	<i>6·53</i>	<i>2·2</i>	<i>1·46</i>
1901	63	7	11·1	1·5	1·7
1902	83	11	13·2	2·0	2·6
1903	78	4	5·1	1·8	0·9
1904	48	5	10·4	1·1	1·2
1905	57	7	12·2	1·3	1·6
<i>Average</i>	<i>65·8</i>	<i>6·8</i>	<i>10·3</i>	<i>1·60</i>	<i>1·6</i>
1906	111	10	9·0	2·6	2·3
1907	251	10	3·9	5·9	2·3
1908	226	10	4·4	5·3	2·3
1909	135	6	4·4	3·1	1·3
1910	56	1	1·7	1·3	0·2
<i>Average</i>	<i>155·8</i>	<i>7·4</i>	<i>4·75</i>	<i>3·66</i>	<i>1·74</i>
1911	84	4	4·76	1·95	0·9
1912	110	3	2·7	2·5	0·7
1913	93	13	12·9	2·1	2·9



The number of throat swabs received for bacteriological examination from medical practitioners during the year was 239. Of these, 90 gave a positive and 138 a negative result, while 11 showed the presence of the pseudo-diphtheria bacillus. No nose swabs were sent in during the year by general practitioners. All the positive swabs, as well as 3 of the negative swabs, were notified.

The removals to hospital numbered 42, or 45·0 per cent. of the total cases. Antitoxin was administered in 7 cases before removal to hospital, but of the 51 cases treated at home only 21 are known to have had antitoxin administered. As the efficacy of antitoxin treatment depends on its early use, more could be hoped for in this direction. The following table shows, as far as can be ascertained, the number of cases in each parish which received antitoxin treatment:—

TABLE E2.—SHOWING AS FAR AS COULD BE ASCERTAINED THE NUMBER OF CASES WHICH RECEIVED ANTITOXIN WHILE AT HOME.

Parish.	Number of cases notified.	Number of deaths.	Removed to Hospital.		Not Removed to Hospital.	
			Antitoxin given prior to removal.	Antitoxin not given prior to removal.	Antitoxin given.	Antitoxin not given.
Carlisle, ...	12	5	—	9	1	2
Michael, ...	11	1	2	2	3	4
Law, ...	4	1	—	—	—	4
Braidwood, ...	15	3	—	13	—	2
Longton, ...	2	—	—	1	—	1
St. John, ...	3	—	—	—	3	—
St. Giles, ...	26	2	4	4	12	6
St. Mark, ...	3	1	1	2	—	—
St. Andrew, ...	17	—	—	5	2	10
Total, ...	93	13	7	35	21	29

The incidence of the disease in each parish and the sources of infection, so far as discovered, will now be considered.

**Carlisle.**—12 cases, 5 deaths. Carlisle, 1; Law, 9; Braidwood, 2. Three of the patients admitted from Law died in the District Hospital. Two of these were in the same family, the first having contracted the disease at school and infected his brother. A visitor to the house was



also infected. The third death was that of a female aged 6 years, a brother of whom had already been notified. The case occurring at Carluke was that of a child 1 year of age. Visitors to the house were seen by the Assistant Medical Officer, and swabs taken, which proved negative. The source of infection was not found. The remaining 2 deaths were those of children treated at home.

**Carnwath.**—4 cases. No deaths. Wilsontown, 2; Carnwath, 2.

**Carmichael.**—11 cases, 1 death. Douglas Water, 10; Tower Farm, 1. The latter case was that of a dairymaid at a farm, and was only discovered when a visit was paid to the farm in the course of enquiries into the cause of cases occurring at Douglas Water. The attack was a very mild one, and the patient had continued to carry out her duties. She was at once removed to the District Hospital, and the premises disinfected, after which the milk supply was allowed to be resumed. One case removed from Douglas Water died at the District Hospital.

**Douglas.**—26 cases, 2 deaths. Douglas, 5; Glespinside, 6; Loaningfoot, 5; Braehead, 3; Townfoot, 3; Townhead, 2; Carmacoupfoot, 1; and Blue Tower, 1. 5 cases were notified during the first six months of the year. The first had been discharged 8 days previously from the Scarlet Fever Ward of the District Hospital. 14 cases occurred during the next two months, although the school was closed from 27th June, but the first case of this series appears to have been infected immediately before this, probably at school, and was responsible for the cases which followed. The source of infection of the remaining cases was not ascertained, but there is no doubt that there were a number of mild unrecognised cases in the village and surrounding district. There were no "return cases" among the above.

**Crawfordjohn.**—3 cases, no deaths. All the patients were school children, two occurring at the same time, though not in the same family, and the other 16 days later. The only probable source of infection was thought to be the school. The Assistant Medical Officer visited with the intention of swabbing all present, but found the school closed, as the parents had refused to allow their children to attend.

**Covington and Thankerton.**—2 cases, no deaths. The first case was that of a female, aged 39, and occurred in a dairy farm of 28 cows. The milk was sent to Thankerton Creamery. The patient was not employed in any way in the dairy, and was nursed at home with all



precautions taken. The milk supply was not stopped. The second case was thought to be due to direct contact with two children discharged 7 days previously from the scarlet fever wards of Belvidere Hospital, Glasgow, but no definite evidence of this was obtained.

**Lanark.**—3 cases, no deaths. New Lanark, 2; Lanark, 1. The latter case was removed to the District Hospital as an "observation case," and the swab examination failed to show the presence of the diphtheria bacillus either in the throat or nose.

**Lesmahagow.**—17 cases, no deaths. Lesmahagow, 5; Tillietudlem, 2; Coalburn, 3; Crossford, 4; other localities, 3. The source of infection in these cases was not found, but in 2 of those occurring at Coalburn there is reason to believe it was acquired outwith the County.

**Carstairs.**—15 cases, 1 death. Carstairs Junction, 15 cases. There were no cases during the first 7 months of the year. The first was that of a child  $4\frac{1}{2}$  years old, who had been playing with another child discharged from the Scarlet Fever Ward of the District Hospital 10 days previously. The second case notified lived next door to the first. The third case notified took ill two days after the discharge of her sister, also from the Scarlet Fever Ward of the District Hospital. Another patient was removed from the same house on the day following. The fifth case was that of a girl employed at a dairy farm beside the Junction, and the source of infection was not traced. She was immediately removed to hospital. The sixth case was a child who had been visited by and played with another child discharged 4 days previously from the District Hospital. The latter was swabbed by the Assistant Medical Officer, and the swab found to be positive. No definite source of infection could be traced in the remaining cases, but it is undoubtedly the case that there were several children in the village suffering from mild unrecognised diphtheria or acting simply as "carriers" of the disease.

### Scarlet Fever.

Cases, 185; deaths, 5; fatality, 2·7 per cent.

The age incidence of cases and deaths was as follows:—

Ages,	1	1-2	2-5	5-15	15-25	25-45	45-65	Total.
Cases,	—	5	37	126	12	14	1	185
Deaths,	—	2	2	1	—	—	—	5

The number of cases removed to hospital was 97, or 52·4 per cent of the total cases.

TABLE D3.—SCARLET FEVER.

YEAR.	NUMBERS.		RATES.		
	Cases.	Deaths.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)
1892	176	5	2·8	4·7	1·3
1893	337	12	3·5	8·9	3·1
1894	408	5	1·2	10·7	1·3
1895	275	5	1·8	7·1	1·3
<i>Average,</i>	<i>299</i>	<i>6·75</i>	<i>2·25</i>	<i>7·88</i>	<i>1·77</i>
1896	287	8	2·7	7·4	2·0
1897	197	4	2·0	2·03	1·0
1898	543	17	3·1	13·7	4·3
1899	398	8	2·01	9·9	2·0
1900	207	8	3·8	5·1	1·9
<i>Average,</i>	<i>326·4</i>	<i>9·0</i>	<i>2·7</i>	<i>8·27</i>	<i>2·28</i>
1901	427	8	1·8	10·5	1·9
1902	163	6	3·6	3·9	1·4
1903	110	2	1·8	2·6	0·4
1904	112	1	·8	2·7	0·2
1905	124	3	2·4	3·0	0·7
<i>Average,</i>	<i>187·2</i>	<i>4·0</i>	<i>2·13</i>	<i>4·56</i>	<i>·97</i>
1906	123	0	0	2·9	0
1907	86	4	4·6	2·0	0·9
1908	169	2	1·1	3·9	0·4
1909	477	7	1·4	11·0	1·6
1910	318	2	0·6	7·3	0·46
<i>Average,</i>	<i>234·6</i>	<i>3·0</i>	<i>1·27</i>	<i>5·5</i>	<i>0·70</i>
1911	144	1	0·7	3·3	0·2
1912	189	1	0·5	4·3	0·2
1913	185	5	2·7	4·3	1·15

**Lesmahagow.**—53 cases, 2 deaths. Lesmahagow, 6; Auchenheath, 1; Shoulderrig, 1; Tillietudlem, 1; Old Bellfield, 1; Kirkmuirhill, 4; Blackwood, 3; Crossford, 4; Kirkfieldbank, 9; Coalburn, 18; Waterside, 5.

The following cases occurred at dairy farms within the district:—

S.M., age 8, Coalburn. Patient attended school up till the date of onset of the disease, and probably was infected at school, as another pupil had taken ill in the class a short time before. The dairy con-



sisted of 9 milch cows, and the milk was retailed in Coalburn and the surrounding district. During the 3 days which elapsed between the onset of the disease and removal to hospital patient was nursed by her mother, who, however, had nothing to do with the dairy, all the work being undertaken by Mr. M. and a servant girl. The milkhouse was situated well apart from the kitchen. The house was thoroughly disinfected, and all precautions taken to protect the milk supply, which was not stopped. No further cases occurred.

S.S., age  $3\frac{1}{2}$ , Blackwood.—Patient had been to Leadhills for one day about a week previous to taking ill, but no source of infection could be traced. The dairy consisted of 30 cows, and the milk was sent daily to Glasgow. On the character of the disease becoming apparent the authorities in Glasgow were informed, and the milk was used only for making cheese. Three days later a second case occurred in the family, H.S., age 7, who had been playing with his sister. Both were isolated, and nursed by a woman brought in for the purpose. The milk supply was not resumed until both patients had recovered and the house was certified to be free from infection. No further cases occurred.

A.C., age  $3\frac{1}{2}$ , Coalburn.—Patient was residing temporarily at the farm, when she contracted scarlet fever. There were in the dairy 5 milch cows, 4 of which were at once sent to a neighbouring farm, while one was kept for private use. No milk was sold from the farm during the patient's illness, and no further cases occurred.

Unrecognised cases were responsible for 4 further cases at Kirkmuirhill and 1 at Crossford.

Infection was received outwith the district in 11 cases—Waterside, 4; Coalburn, 3; Crossford, 3; and Tillietudlem, 1.

In a number of cases the source of infection was traced to the school, as in Lesmahagow, Shoulderrig, and Kirkfieldbank.

There were no return cases noted in the parish.

**Douglas.**—36 cases, 1 death.

One return case was notified as occurring 16 days after the discharge of another member of the family from the District Hospital. The latter was said to have "caught cold" on the journey home, and had a discharging nose. There is no reason to doubt that this was the source of infection.

Of the others notified during the year 12 were secondary to previously notified cases, while in 3 infection was traced to the school.

In the remaining cases no source of infection was definitely ascertained.



The prevalence of the disease in Douglas is probably partly attributable to the reluctance of parents to seek medical advice in cases of apparently trivial sickness, and to the disregard paid to the necessity of isolation of patients prior to removal to hospital.

One patient, suffering from a very malignant type of scarlet fever, died at home.

**Lanark.**—10 cases, no deaths.

Smyllum Orphanage, 8; New Lanark, 1; other localities, 1.

The cases occurring at Smyllum were all infected there, and were treated in the hospital attached to the Institution.

**Carlisle.**—21 cases, 1 death.

Carlisle, 9; Law, 11; Kilncadzow, 1.

These occurred throughout the year, without at any time becoming epidemic. 3 patients were infected outwith the district.

**Carstairs.**—23 cases, 1 death.

Carstairs Junction, 23.

Two of the above were thought to be return cases.

D. M'B.—Onset of disease, 7 days after return of sister from District Hospital. No evidence that the latter suffered from discharge of nose or ears.

W. B.—Onset of disease, 6 days after return of brother from District Hospital. When visited at home the latter was found to be suffering from discharging ears and nose, but these symptoms were absent on date of discharge.

**Carnwath.**—25 cases, no deaths.

Forth, 17; Wilsontown, 5; Woolfords, 1; Haywood, 1; Carnwath, 1.

The majority of these cases were infected at school, and in one case the source of infection was traced to a school outwith the County.

A mild unrecognised case caused one other case in the same family at Forth.

**Crawfordjohn.**—2 cases, no deaths.

**Crawford.**—1 case.

This patient was a boy employed at a dairy farm. The diagnosis was doubtful, and the disease proved eventually to be measles. The milk, which was sent to Glasgow, was stopped till the patient was removed to hospital, and was only resumed after the premises, &c., had been thoroughly disinfected.



**Biggar.**—2 cases, no deaths.

**Symington.**—3 cases, no deaths.

The first patient attended Biggar School, where there were several cases of scarlet fever.

**Covington.**—5 cases, no deaths.

Two patients attended Biggar School, while 2 others were visitors from Motherwell, and sickened only 2 days after their arrival.

**Carmichael.**—4 cases, no deaths.

Douglas Water, 3; other localities, 1.

The source of infection of these cases was not determined.

### **Typhoid Fever.**

Cases, 9; death, 1; fatality, 11·1 per cent.

The age incidence of the cases and deaths was as follows:—

Ages,	2-5	5-15	15-25	25-45	45-65	Total.
Cases, -	1	2	2	3	1	9
Deaths, —	—	—	—	1	—	1

During the year 32 specimens of blood were received in the laboratory from medical practitioners for examination, and 9 of these proved positive to Widal's reaction. All of the positive cases were notified. Of the 9 cases, 6 were treated in Roadmeetings Hospital, 2 in Motherwell County Hospital, and 1 was isolated at home.

The incidence of the disease according to parish and the sources of infection will now be considered.

TABLE D4.—TYPHOID FEVER.

YEAR.	NUMBERS.		RATES.		
	Cases.	Deaths.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)
1892	38	1	2.6	1.0	0.2
1893	52	9	17.3	1.3	2.3
1894	58	9	15.5	1.5	2.3
1895	37	4	10.8	0.9	1.0
<i>Average,</i>	<i>46.2</i>	<i>5.7</i>	<i>12.4</i>	<i>1.2</i>	<i>1.5</i>
1896	33	6	18.1	0.8	1.5
1897	24	6	25.0	0.6	1.5
1898	27	2	7.4	0.6	0.5
1899	19	6	31.5	0.4	1.5
1900	33	4	12.1	0.8	0.9
<i>Average,</i>	<i>27.2</i>	<i>4.8</i>	<i>17.6</i>	<i>0.6</i>	<i>1.2</i>
1901	34	6	17.6	0.8	1.4
1902	11	4	36.3	0.2	0.9
1903	31	3	9.6	0.7	0.7
1904	12	2	16.6	0.2	0.4
1905	13	4	30.7	0.3	0.9
<i>Average,</i>	<i>20.2</i>	<i>3.8</i>	<i>18.8</i>	<i>0.4</i>	<i>0.9</i>
1906	19	4	21.0	0.4	0.9
1907	25	4	16.0	0.5	0.9
1908	5	1	20.0	0.1	0.2
1909	5	1	20.0	0.1	0.2
1910	9	1	11.1	0.2	0.2
<i>Average,</i>	<i>12.6</i>	<i>2.2</i>	<i>17.4</i>	<i>0.3</i>	<i>0.5</i>
1911	9	2	22.2	0.2	0.4
1912	7	2	28.5	0.1	0.4
1913	9	1	11.1	0.2	0.2

**Carnwath Parish.**—7 cases, 1 death.

Mrs. S., age 35. Onset, 6/1/13. Notified, 23/1/13. Removed to hospital, 23/1/13. On notification being received a visit was paid by the County Medical Officer, and on enquiry being made it was found that the patient had for three weeks previous to her own illness been nursing her sister, resident in the Burgh of Lanark. The latter had been removed to St. Mary's Hospital, Lanark, suffering from what was thought to be jaundice, but which on examination proved to be typhoid fever. A specimen of blood was taken which confirmed the diagnosis,



and in the absence of suitable accommodation at the time in the Burgh Hospital she was removed to Roadmeetings. Mrs. S. died in the District Hospital. The primary source of infection was not found. This one unrecognised case was shown to be responsible for 5 other cases, as follows:—

Mary G., age 6, Wilsontown. Onset, 25/1/13. Notified, 3/2/13. The father of this patient is known to have visited Mrs. S. prior to her removal to hospital. There had been no illness among the other members of this family. Patient was isolated at home, and made an uneventful recovery.

Mrs. J. F., age 32, Haywood. Onset, 31/1/13. Notified, 3/2/13. Removed to hospital, 3/2/13. Patient is a sister-in-law of Mrs. S., and visited and nursed her at Wilsontown after her return from Lanark. She had been in the habit of taking her two children with her to the house, and the younger child mentioned below was usually put into the bed occupied by Mrs. S.

Andrew F., age 3, Haywood. Onset, 1/2/13. Notified, 3/2/13. Removed to hospital, 4/2/13. Child of Mrs. J. F. Was put into bed with Mrs. S. while his mother attended to the house and patient.

James G., age 5, Wilsontown. Onset, 29/1/13. Notified, 8/2/13. Removed to hospital, 7/2/13. Son of Mrs. J. G. Nursed by Mrs. S., and lodged and slept in the same bed with the latter after his mother was removed to hospital. Two other brothers living with friends showed no symptoms.

Mrs. W. A., age 37, Wilsontown. Onset, 25/8/13. Notified, 6/9/13. Removed to hospital, 6/9/13. Patient nursed her sister-in-law (Mrs. G.) for three weeks prior to her own illness. It was thought that Mrs. G. was also suffering from typhoid fever, but a negative Widal reaction was obtained, and she was not notified.

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Thomas M'D., age 18, Tarbrax. Onset, 2/12/13. Notified, 10/12/13. Removed to hospital, 10/12/13. Lodger. Came from Ireland, 29/10/13. Doctor in charge of the case stated that patient complained of feeling unwell at an earlier date than that stated, although he remained at his work up till 3/12/13.

A negative Widal reaction was obtained from all the other inmates of the house.

It was learnt later that patient's stepfather arrived in Ireland from Fife on or about 26/10/13, suffering from what was stated at the time to be "miners' white damp." About the middle of November this



was discovered to be typhoid, when the whole of his family contracted the disease. Patient brought to Tarbrax with him underclothes which his stepfather had been wearing, and also received a number of letters from his home.

**Crawfordjohn Parish.—1 case.**

A. R., age 62. Onset, 2/9/13. Notified, 11/9/13. Removed to hospital, 12/9/13. Patient was at Douglas from 27th to 30th August, and at Glasgow from 30th August to 1st September. Though the sample of blood taken gave the Widal reaction, there is reason to doubt whether the patient actually suffered from typhoid fever.

**Carlisle Parish.—1 case.**

R. J., age 21. Onset, 20/9/13. Notification, 30/9/13. Removed to hospital, 30/9/13. Attended Wishaw Picture House on several occasions prior to taking ill, but no definite source of infection could be traced.

**Cerebro-Spinal Fever or Meningitis.**

No cases occurred in any part of the district, but the following Table D5 shows the prevalence in previous years:—

TABLE D5.—CEREBRO-SPINAL FEVER.

YEAR.	NUMBERS.		RATES.		
	Cases.	Deaths.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)
1906	2	2	100	0·04	0·4
1907	5	5*	100	0·11	1·1
1908	8	6†	75	0·18	1·4
1909	2	2‡	100	0·04	0·4
1910	...	...	...	...	...
1911	...	...	...	...	...
1912	...	...	...	...	...
1913	...	...	...	...	...

\* One death was registered as enteritis and cardiac shock.

† Four deaths were registered as due to causes other than cerebro-spinal fever.

‡ One death was registered as meningitis.



**Erysipelas.**—58 cases, no deaths.

1 case was treated at hospital.

**Puerperal Fever.**—One case was notified.

**Non-notifiable Diseases.**—

Measles,	...	...	...	...	...	284
Whooping-cough,	...	...	...	...	...	43
Mumps,	...	...	...	...	...	7
Chickenpox,	...	...	...	...	...	13
Ringworm,	...	...	...	...	...	23
Scabies,	...	...	...	...	...	11
Total,	...	...	...	...	...	383

**Measles** (284 CASES, 2 DEATHS).

The sources of information available to the Department regarding the prevalence of measles are (1) the register of deaths, (2) information sent by schoolmasters for the purposes of certification of scholars absent on account of infectious disease, for the purposes of the grant, and (3) applications made by school authorities for closure of schools when the attendance is interfered with by epidemic prevalence.

The following table shows the deaths classified according to parish and age periods:—

Parish.	Under 1	1-5	5-15	15-25	25-35	Total.
Douglas,	...	1	...	...	...	1
Kirkfieldbank,	...	...	1	...	...	1
	...	1	1	...	...	2

2 deaths were registered, one a female, 5 years of age, residing at Kirkfieldbank, and the other a male, 2 years of age, residing at Douglas. The cause of death in both cases was "pneumonia complicating measles." The disease was very prevalent towards the latter part of the year at Leadhills, Douglas Water, and Carnwath. Leadhills Public School was closed from 8th September till 7th October, and Douglas Water School from 10th November to 8th December. Certificates signed by two members of the Local Authority were granted to the above School Boards.

3 cases were treated at the District Hospital, and were discharged cured.

**Whooping-Cough.**

The number of deaths from this disease shows a decrease of 43 compared with the preceding year.

The following table shows the deaths from whooping-cough classified according to parish and age periods:—

Parish.	3-4 weeks.	1-3 months.	3-6 months.	9-12 months.	Total.
Carlisle, -	...	...	2	...	2
Lesmahagow, -	1	1	...	1	3
	1	1	2	1	5

The disease was epidemic during January and February at Walston, and the public school there was closed from 3rd to 28th February inclusive. The usual certificate was granted to the Local Authority.

**Mumps** (7 CASES, NO DEATHS).

This shows a decrease of 40 cases from last year. The majority of the cases occurred at Douglas Water during the measles epidemic, and it was at one time feared that it would assume epidemic proportions, but fortunately this did not turn out to be the case.

**Chickenpox** (13 CASES, NO DEATHS).

This shows an increase of 8 cases over last year. The disease was mild, and distributed over the Upper Ward generally.

**Ringworm** (23 CASES).

This shows a decrease of 3 cases from last year. Arrangements were made for the treatment of 10 cases at Motherwell County Hospital. 8 of these were from the Burgh of Lanark.

**Diarrhoeal Diseases** (13 DEATHS).

Table D6 shows the number of deaths and the death-rate from diarrhoeal diseases since the year 1892. It is gratifying to note that the death-rate during 1913, 2·9, is the lowest yet recorded.

The distribution of the deaths according to parish is shown in the following table:—

Month.	Total Deaths.	Carlisle.	Carn- wath.	Lanark.	Lesma- hagow.	Libberton.
January,	- 3	—	1	1	—	1
April, -	- 1	1	—	—	—	—
June, -	- 1	1	—	—	—	—
August, -	- 2	2	—	—	—	—
September, -	- 2	—	—	1	1	—
October, -	- 1	—	—	1	—	—
December, -	- 3	1	—	1	1	—
	13	5	1	4	2	1



TABLE D6.—DIARRHŒA.

Year.	Numbers.	Rates.	Year.	Numbers.	Rates.
	Deaths.	Deaths per 10,000 Population.		Deaths.	Deaths per 10,000 Population.
(1)	(2)	(3)	(1)	(2)	(3)
1892	26	6.94	1901	35	8.64
1893	39	10.32	1902	22	5.38
1894	14	3.67	1903	31	7.51
1895	35	9.10	1904	19	4.60
Average	28.5	7.50	1905	21	5.09
1896	12	3.09	Average	25.6	6.24
1897	25	6.39	1906	27	6.44
1898	25	6.33	1907	20	4.76
1899	43	10.80	1908	33	7.76
1900	32	7.96	1909	24	5.58
Average	27.4	6.91	1910	21	4.85
			Average	25.0	5.87
			1911	31	7.20
			1912	13	3.02
			1913	13	2.9

**School Closure, 1913.**—The following schools were closed on account of infectious disease, and certificates were signed by two members of the Local Authority under the Scotch Education Code, Article 30 :—

School.	Parish.	Disease Prevalent.	Period of Closure.
Smyllum Orphanage (Infant Department), -	Lanark	Scarlet Fever	24th Jan. to 17th Feb., 1913.
Douglas Public School, -	Douglas	Diphtheria	30th Aug. to 29th Sept., 1913
Carstairs Junction Public School, - . . .	Carstairs	Scarlet Fever & Diphtheria	19th Sept. to 6th Oct., 1913.
Leadhills Public School,	Crawford	Measles	8th Sept. to 7th Oct., 1913.
Douglas Water Public School, - . . .	Carmichael	Do.	17th Nov. to 8th Dec., 1913.
Walston Public School, -	Walston	Whooping Cough	3rd to 28th Dec., 1913.

The deaths from diarrhoeal diseases classified according to age periods were as follows :—

Under 1 month.	Under 1 year.	Under 2 years.	Over 2 years.	Total.
1	8	1	3	13

**Exclusion of Scholars.**—Special certificates of exclusion of scholars under the Public Health Act were granted for the purposes of the Scotch Education Code, under Article 19F, and the number certified is shown in the following table :—

*Exclusions from Public Schools certified under Public Health Act.*

School.	DISEASE.						
	Whooping-cough.	Mumps.	Measles.	Chicken-pox.	Ring-worm.	Ophthalmia.	Scabies.
Douglas Public, -	3	...	12	2	5	...	...
New Lanark Public, -	...	...	32	...	...	...	...
Waterside Public, -	7	...	...	1	...	...	...
Carstairs Jn. Public, -	...	...	45	1	...	...	...
Douglas Water Public,	2	7	92	3	11	2	11
Covington Public, -	1	...	...	...	...	...	...
Lanark Public, -	1	...	18	...	...	...	...
Walston Public, -	19	...	...	...	...	...	...
Lesmahagow Jun. Public,	1	...	...	3	2	...	...
	34	7	199	10	18	2	11

**Anthrax.**—5 outbreaks of this disease among cattle were reported, namely :—Carnwath, 2; Lesmahagow, 2; and Symington, 1. All the Cattle affected died.



**HOSPITALS.**

The District Hospital at Roadmeetings was opened in 1897, and the number of patients admitted each year since then was as follows:—

Year.	Diphtheria.	Scarlet Fever.	Typhoid Fever.	Other Diseases.	Total.
1897	2	2	1	...	5
1898	5	30	18	1	54
1899	1	17	4	...	22
1900	2	17	17	1	37
1901	1	48	8	2	59
1902	16	46	4	7*	73
1903	13	41	9	...	63
1904	...	27	8	...	35
1905	2	41	9	2†	54
1906	16	33	10	5†	64
1907	35	30	18	3†	86
1908	38	74	3	13†	128
1909	44	166	4	10†	224
1910	21	126	7	15†	169
1911	29	72	7	21†	129
1912	48	141	3	20†	212
1913	42	97	8‡	27†	174

\* Includes 6 cases of Smallpox. † Includes cases of Phthisis, 23; Measles, 3; and Erysipelas, 1. ‡ Includes 2 cases from Burgh of Lanark.

For the year 1913 the usual statistics are given. Thus, Table F shows that 22 cases were in hospital at the commencement of the year, and that 174 were admitted, making a total of 196 patients under treatment during the course of the year. Of these, 159 were discharged well, 16 died, and 21 patients remained in hospital at the close of the year. The patients admitted were certified to be suffering thus—from scarlet fever, 97; typhoid fever, 8; diphtheria, 42; phthisis, 23; measles, 3; and erysipelas, 1.

Table F2 gives the localities from whence the patients came, and shows that 22 were admitted from Carluke Parish, 32 from Lesmahagow Parish, 29 from Douglas Parish, and 32 from Carstairs. The others being from different parishes throughout the district.

## HOSPITAL STATISTICS FOR THE YEAR 1913.

TABLE F.—ADMISSIONS, DISCHARGES, &amp;c.

Cases at the beginning of the year.	Admitted.	Discharged.	Died.	Cases at the close of the year.	ADMISSIONS AS NOTIFIED.					
					Diphtheria.	Scarlet Fever.	Typhoid Fever.	Pulmonary Tuberculosis.	Measles.	Erysipelas.
22	174	159	16	21	42	97	8	23	3	1

TABLE F1.—PATIENTS CLASSIFIED ACCORDING TO THE STAGE OF DISEASE WHEN ADMITTED.

## DIPHTHERIA (42 Admissions).

Day of Illness, -	1	2	3	4	5	6	7 & over.
No. of Cases, -	2	10	16	4	4	1	5

## SCARLET FEVER (97 Admissions).

Day of Illness, -	1	2	3	4	5	6	7 & over.
No. of Cases, -	6	33	23	22	5	3	5

## TYPHOID FEVER (8 Admissions).

Week of Illness, ...	1	2	3	4	5 & over
No. of Cases, ...	2	3	...	1	2





### III.—GENERAL SANITATION.

#### Housing.

**Public Health Act and Building Bye-laws.**—In terms of the Public Health (Scotland) Act, 1897, the word "house" means a dwelling-house, and includes schools, also factories and other buildings in which persons are employed. The plans lodged under the Building Bye-laws with the District Clerk, reported upon by the Sanitary Inspector, and disposed of by the Committee, numbered 67. The total number of dwelling-houses set forth in the plans during 1913 amounted to 260. The dwellings classified, according to size, may be summarised as follows:—One apartments, 7; two apartments, 134; three apartments, 100; four apartments, 2; and five apartments and upwards, 17.

The distribution of these new dwellings according to parish is given in the Annual Report of the District Sanitary Inspector, but it may be mentioned here that they were mostly provided for three industrial communities. At Coalburn, in Lesmahagow Parish, the Caprington and Auchlochan Collieries, Ltd., made considerable additions to their existing dwellings; at Tarbrax, in Carnwath Parish, the Pumpherstons Oil Company also made considerable additions; while at Douglas West, in Douglas Parish, a new mining village was commenced by Messrs. Wilsons & Clyde Coal Company.

In respect of these developments it may be of interest to quote the Local Government Board's circular letter to County Medical Officers, of date 27th September, 1911, viz.:—

Public Health.

No. 87026.

Local Government Board,  
Edinburgh, 27th September, 1911.

SIR,

HOUSING, TOWN PLANNING, &c., ACT, 1909.

I am directed by the Board to refer to the powers conferred on Local Authorities under Part II. of the Housing, Town Planning, &c., Act, 1909, and more particularly to the terms of Section 54, which authorises Local Authorities to apply to the Board for authority to prepare or adopt town planning schemes as respects land which is in course of development or appears likely to be used for building purposes.

The Board are desirous of being kept informed from time to time of any localities that show signs of rapid development, or of any proposals on an extensive scale to build houses in any particular locality.

I am accordingly to say that the Board will be obliged if, as occasion may arise, you will kindly furnish them with particulars regarding any such localities or building proposals in the County for which you act.

I am,

SIR,

Your obedient Servant,

DAVID BROWN,  
*Assistant Secretary.*



In accordance with this circular a letter was addressed to the Secretary of the Board, intimating that 50 houses, with modern sanitary conveniences for each dwelling, including a water-closet, slop sink, wash-boiler, and coal cellar, were being erected at Douglas West, and that the Company expected to build 150 houses altogether, and offering to supply the Board with copies of the plans and any other information required. Mention was also made of 22 houses erected at Woolford's, and more recently 48 houses at Tarbrax, by the Pumpherston Oil Company.

**DOUGLAS WEST.**—The plans first lodged under the Building By-laws showed a proposed site for these houses beyond Douglas West Station on the Blackwood Hill, so that the access would have been by a cattle creep under the railway or a footbridge over the railway. The Medical Officer suggested that a suitable site might be obtained in the plantation to the east of the station, near the colliery. This was considered by the Superior, and ultimately agreed to. The first lot of houses erected consist of a cottage for the manager and 48 two-apartment houses for the workmen, in blocks of six, of which a plan is given in the Annual Report of the District Sanitary Inspector.

*Water Supply.*—The water supply is obtained from a spring in Robshill Wood. This supply was first measured by the District Sanitary Inspector on 23rd April, and the flow was found to be 900 gallons per hour. When measured on 5th July, when the Medical Officer was present, the flow was only 500 gallons per hour. Further inspections were made on 5th July, and certain springs located and measured. Broadlea springs, which afford a supply for the railway station, were found to yield 600 gallons per hour. Since then it has been found that an additional supply might be obtained from springs feeding Windrow Burn. Meanwhile the Company have constructed a pond at the Robshill Wood spring, and a sufficient supply is being obtained for the houses. It has also been arranged that Scrogton Farm will receive a supply from the Company's pipe.

*Drainage and Sewage Disposal.*—The Company undertook to provide a septic tank, the effluent from which was to mix with the pit water, and the combined flow taken in a pipe to Douglas Water.

During the current year plans have been submitted for the erection of a new school, which is referred to later, and it is hoped that in time a model mining village will be obtained.



**TARBRAK.**—These 48 houses have on the ground floor a room and kitchen, a scullery with slop sink, water supply and wash-boiler, water-closet, and coal cellar. There is also an attic room, making three apartments. The design of the house is similar to those previously erected, and a plan will be found in the District Sanitary Inspector's Annual Report. An inspection was made in the month of October, when it was found that 24 houses were nearing completion. With regard to the other 24, the contractor had not been able to carry out the contract stipulated owing to the shortage of labour. The work, however, was resumed early in the spring of this year, and is being completed. The Company's attention was directed to the condition of the roadways and some details of construction.

**COALBURN.**—The Caprington and Auchlochan Collieries, Limited, had erected some excellent workmen's dwellings, but the conveniences consisted of midden privies. When plans were lodged for the erection of some two-storey blocks, consisting of 24 houses, the Medical Officer arranged for a meeting with the Company's representatives, and discussed the plans in detail. The importance of providing water-closets in these new dwellings was urged, and were ultimately agreed to. Another two-storey block was erected at Glaickhead. This consists of three-apartment houses, and a plan of these is shown in the Annual Report of the District Sanitary Inspector.

**WILSONTOWN.**—Messrs. Wm. Dixon, Limited, in 1911 erected a block of six workmen's dwellings of an approved type, and subsequently undertook to remodel some of the existing blocks on similar lines. During the course of the year enquiries showed that no progress was being made with the alterations, as this would necessitate rendering some of the houses vacant, and owing to the scarcity of houses in the locality the work could not be proceeded with. Early in November the Company were communicated with, and after much negotiation they agreed to build two additional blocks with twelve houses.

**One-apartment Dwellings.**—In Table G the houses erected each year are classified according to size, and in the last column the percentage proportion of one-apartment houses is given.



TABLE G.—SHOWING NUMBER AND SIZE OF HOUSES SET FORTH IN PLANS SUBMITTED UNDER THE BYE-LAWS REGULATING THE BUILDING OR RE-BUILDING OF HOUSES OR BUILDINGS DURING EACH OF THE TWELVE YEARS 1901-1912.

Year.	One Apartment.	Two Apartments.	Three Apartments.	Four Apartments.	Five Apartments and Upwards.	Total Houses.	Percentage proportion of One-apartment Houses
1901	...	87	20	39	...	146	...
1902	25	70	22	44	41	202	12·3
1903	23	79	23	22	25	172	13·3
1904	15	37	40	19	25	136	11·0
1905	18	38	30	12	47	145	12·4
1906	11	30	62	25	37	165	6·6
1907	10	56	49	22	28	165	6·0
1908	33	88	35	21	17	194	17·0
1909	6	30	25	8	19	88	6·8
1910	9	30	11	3	14	67	13·4
1911	13	28	22	6	14	83	15·6
1912	...	9	29	2	10	50	...
1913	7	134	100	2	18	260	2·6

**School Buildings.**—The plans relating to schools are here tabulated with a description of the buildings:—

School Board.	School.	Description of Buildings.
Symington,	Symington,	Teachers' Room with Lavatory, &c. Additions to Teachers' House of Bathroom, W.C., &c., also improved sanitary conveniences in the playground.
Carstairs,	Carstairs,	Alterations and Additions.

The design of school buildings has for many years proceeded upon a uniform plan. As all buildings erected by School Boards required the approval of the Scotch Education Department, no special interest has been taken by the Medical Officer of Health in the design and construction outside the requirements of the Building Bye-laws. Attention, however, has been called to one or two matters from time to time, such as the difficulty in obtaining cross ventilation in large schools with central halls. When class-rooms are equipped round central halls one side must be ventilated through the hall instead of being in direct contact with the external air. During the last five years in many parts of England school buildings have been designed on the pavilion system, and cross ventilation readily obtained. For the first time in our experience in Lanarkshire plans have been lodged on such a design for a school to be erected at Douglas West during the



current year near a new mining village. As the plan is of considerable interest an illustration has been prepared, and is here incorporated.

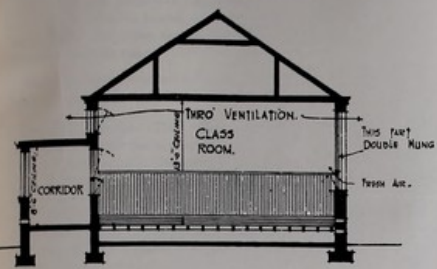
Attention has also been called to the construction and position of sanitary conveniences. It has been the practice to place water-closets in the playground at a remote distance from the main buildings, whereas with properly constructed water-closets might quite well be placed either within or close to the main building.

**Domestic and Sanitary Conveniences.**—Wherever an efficient system of sewerage and sewage disposal has been provided, the introduction of water-closets has always been suggested, but when the number and arrangement were such as to allow of only one closet for every four families, and these closets were placed at a distance from the dwellings, the result has been very unsatisfactory. After long experience it has been found that the only satisfactory way of providing suitable domestic and sanitary conveniences for workmen's dwellings is to have separate sanitary conveniences for each house. This is of far more importance than the particular type of closet provided.

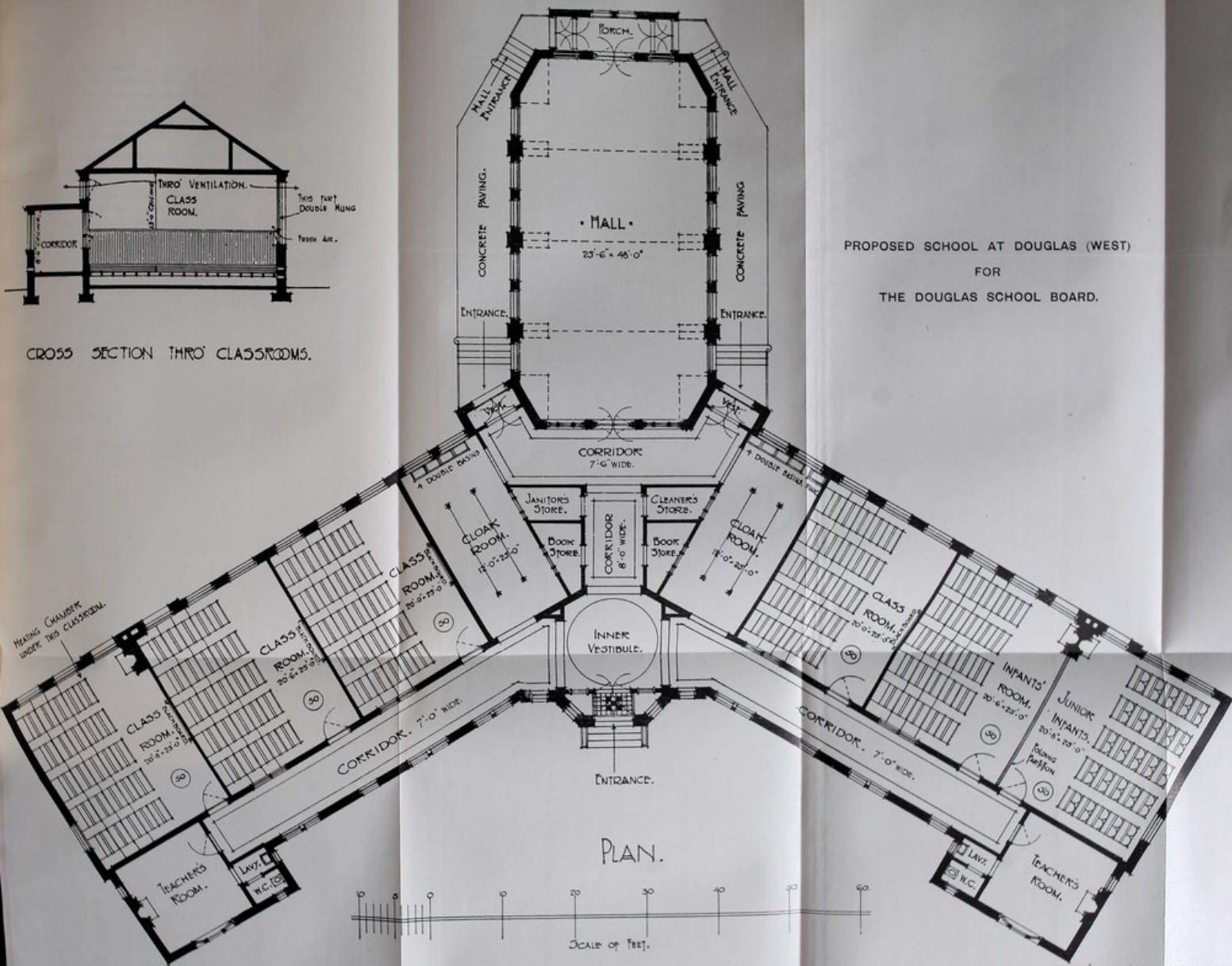
**Housing Acts.**—These Acts greatly increase the powers and duties of Local Authorities, and great activity has been displayed to improve workmen's dwellings. The inspections made include properties in the following localities:—Haywood, Wilsontown, Climpy, Coalburn, Bankend, Bellefield, Gateside, Law, Glespin, and Carmacoupfoot. The records kept of these inspections were submitted to the Public Health Committee, who appointed a Sub-Committee to deal with the matter. During the current year this Sub-Committee has made a large number of inspections, with a view to action being taken under Section 17 (1) of the Housing and Town Planning, &c., Act, 1909.

*Haywood.*—The colliery for which these houses were erected ceased operations about thirteen years ago, and immediately thereafter a large number of the dwellings were vacated. Owing to developments in adjacent industries at Wilsontown and Tarbrax many of these houses came to be occupied again during the last two or three years. As the houses were now all privately owned and little was being done for their upkeep and repair, structural defects became very apparent. The inspections made showed that the largest proportion of the workmen were employed by Dixons, Ltd., and representatives of that Company were met with a view to urging for better housing for their workmen. The owner of the Haywood houses was also advised that serious structural alterations and improvements would be required if the houses were to remain in occupancy. He indicated that he was unable to carry out the remedial measures suggested. It was thought



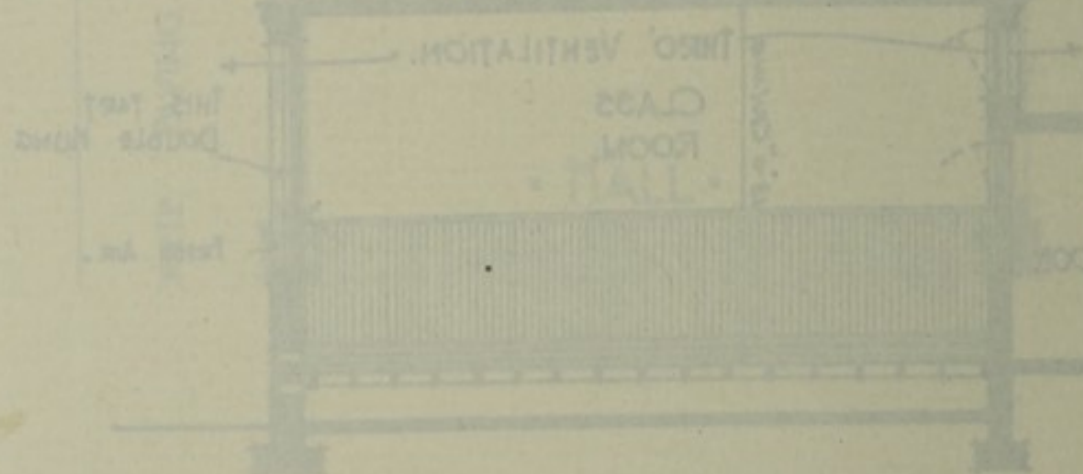


CROSS SECTION THRO' CLASSROOMS.

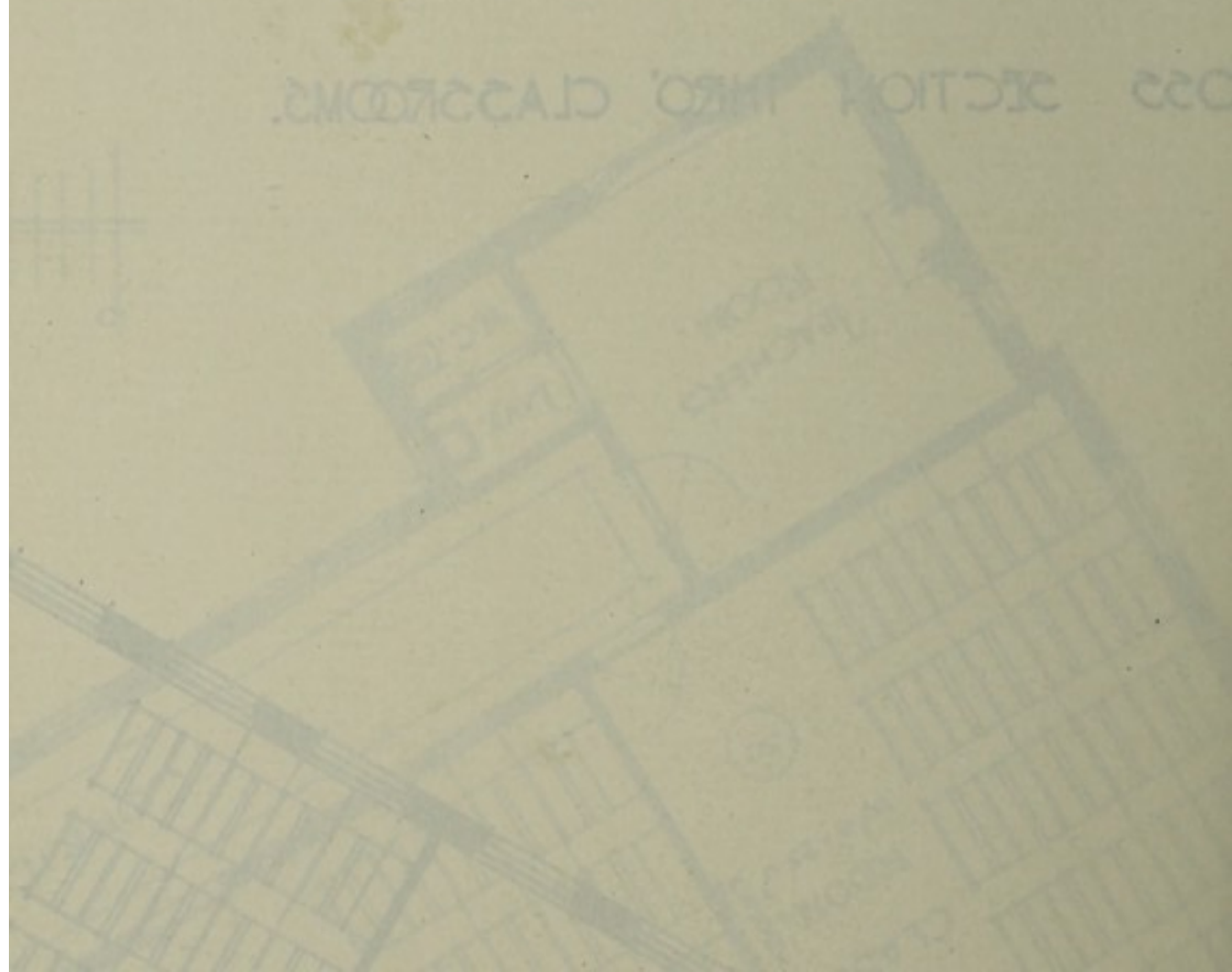


PROPOSED SCHOOL AT DOUGLAS (WEST)  
FOR  
THE DOUGLAS SCHOOL BOARD.

JAMES CONNELL ARCHITECT  
WISHART & WHEATWELL, P.L.A.  
AUGUST 1914.



SECTION THRO' CLASSROOM.





desirable to take proceedings under the Housing Acts with only a small portion of the dwellings, owing to the scarcity of dwellings in the locality. For this purpose a representation was made with regard to one block, in what is known as Loan Street or No. 8 Row, and a Closing Order for these houses has been served on the proprietor during the current year.

The houses above referred to in other localities will be dealt with in detail in next year's report.

*Carstairs Junction.*—This village consists of about 190 houses, owned and occupied mainly by employees of the Caledonian Railway Company, and occupies the ground adjacent to the railway, and is not a desirable site from many points of view. Few of the houses have any garden, the type of building being mostly tenements, either being at the side of the road or at the rear, with common ground of access. The houses themselves have not been complained of, but the water supply, the construction and position of water-closets, large common ashpits, defective drainage, and sewage disposal of all the various houses have been considered from time to time. The Company have been pressed for remedial measures, and during the current year these are being carried out. As will be seen from references in the paragraphs relating to water supply and scavenging, remedial measures have been carried out this year, and consist of the introduction of a public water supply to all the dwellings, the provision of new water-closets, the abolition of ashpits, and the provision of portable bins. A special scavenging district has been formed.

**Tents, Vans, and Sheds.**—In the course of the year 66 inspections were made by the Sanitary Inspector of the accommodation provided for seasonal workers.

In the month of June inspection was made by the Medical Officer and Sanitary Inspector of the more important fruit-growers' premises on the north bank of the River Clyde, in what is known as Nemphlar district, and on the south bank of the Clyde inspection was made of two at Crossford and one at Underbank. All these premises were found in fairly satisfactory order.

In the month of July the Royal Commission on Housing made an inspection of the various fruit-growing centres. Evidence by the County Medical Officer and other district officials was given in Lanark. Several of the more important fruit-growers also were heard.

*Carlisle Market Place.*—This open space has long been used for travelling vans during fair times, and complaint has from time to time been made during the last ten years by householders residing in the



vicinity that nuisances arise. The subject has been reported upon from time to time to the District Committee, who have found the greatest difficulty in dealing with the matter and in suggesting a remedy for the conditions complained of. Along with the District Sanitary Inspector I attended a meeting of Parish Council representatives in the month of September, and found there was a strong opinion that the County Authorities should exercise such control over the show-ground as would prevent vans being located there during fair or holiday seasons. Should the County Authorities not be able to exercise such control, then they ought to insist upon the owner of the ground and the occupiers of the vans from committing a nuisance. It seems that these travelling vans or shows come at least twice a year, and remain in the Market Square for periods varying from seven to fourteen days. The ground is leased from the Superior for an annual payment, said to be £25. It was strongly urged that the Market Square was not a suitable place for public shows and for such a gathering of the public as takes place. It was thought that all such shows should be held outside the town, and not in such close proximity to human habitation. The Medical Officer promised to make further enquiry into the matter and write the County Clerk, who advised as follows:—

County Offices,  
Hamilton, 20th October, 1913.

DEAR SIR,

CARLUKE MARKET PLACE.

I am favoured with your letter of 17th instant enclosing copy of Notes regarding the use of this place by travelling vans.

The question raised by the complaints that have been made to you and by your own investigation is a difficult one. The same point was put to me only just recently from another part of the County, and if an opportunity affords I should be glad to discuss the matter with you.

Meantime I assume that you are satisfied that so far as the complaint relates to want of sanitary conveniences or misuse of the ground from a sanitary point of view you have difficulty in dealing with it under Section 16 of the Public Health Act. Equally, I presume that you have not seen your way to advise the making of General Regulations under Section 73, Sub-section 2, of the same Act. The power conferred by that sub-section is pretty wide, and is not, in my opinion, limited to nuisances caused inside the actual tent or van, but would apply to the misuse of the ground upon which the tent or van is placed, or which immediately surrounds it. I do not think that the specific powers which are limited to the actual tent or van contained in Sub-section 3 of that section militate against the wider powers contained in Sub-section 2.



The only other statutory provision under which the matter could, in my opinion, be dealt with is by the County Council making bye-laws under Section 57 of the Local Government (Scotland) Act, 1889. We have found that the Court have interpreted the powers conferred upon County Councils under that section in the widest sense, so as to empower them to make bye-laws relating to any matter of common public interest.

There are, however, two difficulties. (1) It is doubtful whether these bye-laws could be applied to private land—this I do not consider insuperable; and (2) whether Section 73 of the Public Health Act of 1897 does not prevent the making of bye-laws under the Act of 1889 dealing with the same subject. Section 57 of the Act of 1889, you will see, confines the bye-laws to matters not already punishable in a summary manner by virtue of any Act in force throughout the County.

Yours truly,

THOS. MUNRO,  
*County Clerk*

This was forwarded to the District Clerk, and a small committee was appointed to visit the locus and report. During the current year this was done.

**Workshops.**—The number of workshops on the register at the close of the year was 266, being a decrease of 13 compared with the preceding year.

The number of notices received from the Factory Inspector during the year was as follows:—

Commencement to occupy workshops,	...	4 notices.
Sanitary defects,	... ..	0 „
Sanitary Accommodation Order,	... ..	0 „

**Outworkers.**—Under Section 107, two lists of outworkers were received by the District Clerk, giving the names of 8 outworkers.

The inspections made by the sanitary staff, the defects found, and the action taken, were as follows:—

1.—INSPECTIONS MADE BY THE SANITARY INSPECTORS.

PREMISES.	NUMBER OF—		
	Inspections.	Written Notices.	Prosecutions.
Factories, - - - - -	18	...	...
Workshops, - - - - -	322	...	...
Workplaces, - - - - -	3	...	...
Total, - - - - -	343	...	...

## 2.—DEFECTS FOUND.

PARTICULARS.	NUMBER OF DEFECTS.			Number of Prosecutions.
	Found.	Remedied.	Referred to H. M. Inspector.	
Nuisances under the Public Health Acts :—				
Want of cleanliness, - - -	2	2	...	...
Want of ventilation, - - -	1	1	...	...
Overcrowding, - - - -	...	...	...	..
Want of drainage of floors, - -	2	2	...	..
Other nuisances, - - - -	5	5	..	...
Sanitary Accommodation, {	Insufficient, -	...	...	...
	Unsuitable, or	...	...	..
	Defective, -	...	...	..
Not separate for sexes, - -	...	...	...	..
Total, - - - -	10	10	...	..

## 3.—HOME WORK.

Lists received from employers, ...	...	...	...	...	2
Number of outworkers, ...	...	...	...	...	8
Addresses of outworkers received from other Councils, ...	...	...	...	...	1
Addresses of outworkers forwarded to other Councils, ..	...	...	...	...	—
Prosecutions, ...	...	...	...	...	—
Inspections of outworkers' premises, ...	...	...	...	...	3
Outwork in unwholesome premises, ...	...	...	...	...	—
Outwork in infected premises, ...	...	...	...	...	—

## 4.—REGISTERED WORKSHOPS.

Total number of workshops on register at end of 1913—266. For detailed list see Table H.

## 5.—OTHER MATTERS.

Matters notified to H.M. Inspector of Factories, ...	...	...	...	—
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A detailed tabular statement, prepared from the register of workshops, classified according to the trade or industry, is here given, along with a note of the number of employees :—

TABLE H.—WORKSHOPS, INCLUDING RETAIL BAKEHOUSES, CLASSIFIED ACCORDING TO THE NATURE OF THE INDUSTRY.

Parish or Group of Parishes.	Dressmakers.	Tailors.	Milliners.	Bakers.	Shoemakers.	Saddlers.	Blacksmiths.	Joiners and Cabinetmakers.	Laundry- keeper.	Other Manufacturers.	Total.
Group No. 1, ...	2	4	...	3	3	...	10	12	...	1	35
„ 2, ...	11	7	...	4	7	1	10	8	...	4	52
„ 3, ...	4	3	...	4	4	1	8	4	...	2	30
Lesmahagow, ...	8	12	1	6	9	1	7	13	...	6	63
Carluke, .. ...	11	17	4	7	11	2	4	13	1	16	86
Total Workshops,	36	43	5	24	34	5	39	50	1	29	266

The parishes included in the different groups are as follows :—

Group No. 1.—Biggar, Dolphinton, Walston, Culter, Symington, Lamington, Crawford, Crawfordjohn, Wiston and Robertson, and Covington.

„ 2.—Carnwath, Carstairs, Dunsyre, and Libberton.

„ 3.—Lanark, Pettinain, Carmichael, and Douglas.

### Special Districts.

The extent to which local administration contributes to the advancement of general sanitation may be realised from the number of districts formed for special purposes—Water supply, Drainage and Sewage disposal, Scavenging, and Lighting. The number of districts so formed is shown in the following tabular statement, where a blank space in the assessment column will be understood to indicate that no district has been formed for the special purpose indicated.

TABLE I.—LIST OF Special Districts IN THE Upper Ward, AND THE RATES LEVIED FOR THE YEAR 1913-1914 (AS ASCERTAINED FROM THE COUNTY CLERK).

District.	Parish.	RATE OF ASSESSMENT PER £.			
		Water.	Drainage.	Lighting.	Scavenging.
Carlukc, -	Carlukc, -	6d.	2d.	3½d.	1¾d.
Law, -	Do., -	1½d.	2d.	...	...
*Carnwath, -	Carnwath, -	9d.	1s. 4½d.	...	...
Forth, -	Do., -	2s. 8d.	...	...	...
Crawford, -	Crawford, -	7d.	...	...	...
Douglas, -	Douglas, -	2d.	3d.	3d.	5¾d.
Lesmahagow, -	Lesmahagow, -	11½d.	2½d.	2½d.	2½d.
Blackwood and Kirkmuirhill, {	Do., -	1s. 6½d.	...	...	...
Kirkfieldbank, {	Do., -	1s. 2d.	...	...	...
Crosslaw, -	Lanark, -	...	5d.	4d.	...
Braidwood, -	Carlukc, -	1s.	...	...	...
Roberton, -	{ Wiston and Roberton, }	2s. 2d.	...	..	...
Symington, -	Symington, -	1s. 3d.	...	...	...
Thankerton, -	Covington, -	1s.	5d.	..	..
Leadhills, -	Crawford, -	...	..	...	9d.

\* The water district includes Carstairs Junction.

If the districts be classified according to the number of purposes for which local administration and taxation are applied, we obtain the following results:—

W.	D.	S.	L.	Carlukc, Douglas, and Lesmahagow.
W.	D.	—	—	Law, Carnwath, and Thankerton.
—*	D.	—	L.	Crosslaw.
W.	—	—	—	Crawford, Blackwood and Kirkmuirhill, Kirkfieldbank, Braidwood, Roberton, Forth, and Symington.
—	—	S.	—	Leadhills.

In the above the initial letter only is used to indicate the purpose.

\* Water in this district is supplied by the Burgh of Lanark.



### Water Supplies.

**Public Supplies.**—The Lanarkshire (Middle Ward District) Water Order Confirmation Act, 1913, deals mainly with Camps Water Scheme. This important source of supply, situated in the Parish of Crawford, was referred to in the report for the preceding year. As the main pipe is laid through a considerable portion of the Upper Ward area, and deprives the Upper Ward District of an important and valuable water supply, provision was made in the Order for a supply of 150,000 gallons per day for the Upper Ward District. Section 37 of the Confirmation Order provides for this, and is quoted *in extenso* in the Annual Report of the District Sanitary Inspector.

**Douglas Water.**—The gravitation water supply originally provided for the mining village of Ponfeigh was complained of as inadequate as far back as the year 1905, and the subject has been referred to from time to time in the Annual Reports. Numerous investigations and enquiries were made by the Medical Officer and Sanitary Inspector, which ended during 1913 in the suggestion that an independent supply might be obtained for this village from three springs rising on Robert Law Hill on Douglas Estate, and flowing in a constructed channel towards a farm building known as Brownfield, now occupied by miners. This supply, when measured in May, 1912, by the District Sanitary Inspector, yielded a flow of 37,000 gallons per day of 24 hours. In June, 1912, the Medical Officer took a sample of this water for analysis, and the analyst's report indicated that the water was of sufficient purity to be used for domestic purposes, but the physical characters were not satisfactory. This was probably due to disturbance of the channel when taking the sample, the run of water at the point being so shallow. This source of supply was again measured in October, 1912, when the Medical Officer was present, and found to yield only 32,400 gallons per day of 24 hours. In August, 1913, this supply was measured by the Company's representatives, and found to yield only 17,280 gallons. This made the Company hesitate to abandon their present supply for that now suggested, and the matter was again delayed. During the current year the subject has again been taken up, and the formation of a special water supply district is now under consideration.

**Climpy.**—Complaint was received as to the inadequacy of the supply to this village, and numerous inspections and investigations were made by the Medical Officer and District Sanitary Inspector. The existing supply is usually obtained from a spring, known as the "Company's Well," which is only available during the winter months. The results of inspection showed that a supply could be obtained from the mine shaft, but at present this can only be secured by descending the shaft with pitchers to a depth of 10 fathoms. A sample of this water was analysed, and it was found that although it was hard it



was quite wholesome. Negotiations were then entered into with the colliery company and the owner of the houses to have this water pumped to a tank on the surface. These negotiations are proceeding during the current year.

*Kirkfieldbank.*—Owing to complaints as to the inadequacy of the supply to this village during dry weather, there is a proposal to increase the supply by laying a pipe from the Wishaw Main as it passes near Cartland Bridge. This has been carried out during the current year.

*Crossford and Hazelbank.*—A connection to the Wishaw main pipe as it passes through Braidwood has been suggested as the most practicable method of obtaining a supply for these two villages. A continuation of the pipe from Kirkfieldbank has also been suggested.

*Carstairs Junction.*—This village is situated within Carnwath Special Water District, and is supplied from two sources, viz. :—

(1) The River Clyde supply is laid on to about 130 houses, owned by the Caledonian Railway Company; and

(2) Carnwath Special District water, which is only available from Kennedy wells situated in the streets, is used for domestic purposes.

During the year it was agreed that the Carnwath supply should be augmented by procuring an additional supply from the Motherwell main pipe, and negotiations are proceeding with the Caledonian Railway Company with a view to having the Clyde supply to the houses replaced by the special district water.

*Carstairs Village.*—Samples of water were taken for analysis by the District Sanitary Inspector from the three public wells in this village, the results of which showed the water to be unfit for domestic purposes. In January of the current year it was agreed to form a special water district, a supply to be obtained from the Motherwell pipe within Carnwath Special Water District.

*Private Supplies.—Upper Ward District Hospital.*—Owing to the inadequacy of the private supply of water to the hospital, it was agreed that the Sub-Committee of Management of Carlisle Special Water Supply District should provide a sufficient supply of water for the hospital by leading a 3-inch pipe from the Motherwell main before it enters the tank at Coldstream. This pipe will be joined with the private supply in Yieldshields Road.

*Woolfords.*—Investigations were made by the Sanitary Inspector as to the water supply to Old and New Woolfords Rows. This supply is pumped from an air shaft in Woolfords Colliery. A sample was forwarded for analysis, and the results afforded no evidence of organic contamination, but the physical character was decidedly objectionable and the amount of iron high. As a result of these investigations a mechanical filter has been provided, but the results have so far been disappointing.



*Hardington Mains, Lamington.*—Further investigations were made by the Sanitary Inspector regarding the water supply to this farmhouse, and the water found to be unsuitable for domestic or dairy purposes. Legal proceedings were instituted regarding this matter during the current year.

*Coulterhaugh Farm.*—In connection with a proposed new supply to this farm two samples of water were forwarded from a spring on Coulter Allers Estate. The results of analysis showed that this water would be quite suitable for domestic purposes if proper means were taken to free it from suspended matter.

Samples of water were forwarded for analysis from various other sources, the results of examination of which will be found in Table J.

TABLE J.—SAMPLES OF WATER ANALYSED IN THE PUBLIC HEALTH LABORATORY.

*Results of Analysis stated as Parts per 100,000.*

No.	Chlorides as Cl.	Nitrates as Nitrogen.	AMMONIA AS NITROGEN.		Oxygen Absorbed.	Total Hardness.	Total Solids.	Colour, Platinum Standard.	Water Supply
			Free.	Albuminoid.					
1	8.5	.076	.021	.002	.130	15.0	59.8	2.8	Cowford Farm, Carstairs.
2	1.8	.044	.004	.021	.980	9.3	16.8	9.4*	Columbie Farm, do.
3	3.2	.400	.000	.007	.090	8.8	29.0	2.2	Kilnhills, Lesmahagow.
4	1.5	.006	Nil.	.000	.125	20.0	21.0	1.0	No. 1. Spring Douglas West.
5	1.5	.020	.008	.007	.480	7.0	10.4	5.0	No. 2. Water, 150 yards from No. 1.
6	1.4	.036	.011	.052	2.18	9.4	17.8	28.0*	Columbie Farm, Carstairs.
7	2.6	1.048	.006	.006	.280	16.0	29.6	1.5	do. proposed supply do.
8	1.4	.000	.062	.006	.300	16.0	35.4	2.8*	Woolfords Colliery.
9	3.3	.220	.005	.007	.255	10.2	20.6	1.4	Well opposite Co-op. Store, Carstairs.
10	1.4	.225	.000	.002	.210	18.2	52.4	1.4	Well opposite Blacksmith, Carstairs.
11	5.5	.499	.001	.006	.185	21.4	56.6	1.8	Haddow's Well, Carstairs.
12	2.0	.000	.003	.007	.240	7.3	21.8	2.4	Spring, Blair Farm, Crossford.
13	2.2	.000	.001	.005	.215	10.5	22.0	2.8	Water, Fence Farm, Tillietudlem.
14	1.3	.000	.022	.022	.975	7.1	17.0	14.8*	Proposed supply, Pool and Auchengray.
15	10.3	.827	.000	.004	.130	33.0	52.6	1.2	Well, Newmains, Cleghorn.
16	1.7	.035	.005	.002	.140	23.7	34.4	2.4*	Water, Bore at Castlehill Farm.
17	1.2	.000	.008	.002	.130	78.8	64.6	1.8*	Water, Mine Well, Climpy.
18	1.2	.000	.000	.000	.105	62.4	58.8	1.8	Water 20 fathoms down Climpy Pit.
19	1.4	Nil.	.000	.000	.130	10.0	12.0	1.1	Water, Rigside, Douglas.
20	1.3	.000	.000	.009	.175	11.8	22.2	2.2*	Nether Hangingshaw Farm, Coulter.

\* Filtered through Paper before colour was estimated.

Nitrites were present in Nos. 1, 2, 3, 6, 7, 9, 10, 11, 12, 15, and 16



### **Drainage and Sewage Disposal.**

*Braidwood.*—The question of forming a special district was under consideration during the year. Several inspections, including a special visit by the Medical Officer, accompanied by the Engineers, were made in the month of November, when a scheme for draining the district, prepared in 1912, was carefully gone into. The results of this inspection was reported to the District Clerk. The matter is still under consideration.

*Carluke.*—In the month of May an inspection was made of Jock's Burn by the Local Committee, accompanied by representatives from the District Committee and the Medical Officer. The construction of intercepting and outfall sewers, to obviate nuisance and pollution of the stream, is presently being carried out.

*Crawford.*—Inspection was made by the Medical Officer in the month of September, when the drainage from this village was found to be in an unsatisfactory condition. Since then the outfall sewers from the septic tank, which were previously discharged into a ditch, have been piped down to the River Clyde. The sewage from the hotel is discharged into a filter tank, and this has been the subject of complaint from time to time. Negotiations are presently in progress for the erection of a new septic tank on a more suitable site.

*Lesmahagow.*—During the year the question of preventive pollution of the Nethan from this special drainage district was still under the consideration of the Local Committee, who have instructed their engineers to report on a modified scheme for dealing with the sewage pollution of the stream. This matter is more fully referred to under Rivers Pollution in the County portion of this report.

*Blackwood and Kirkmuirhill.*—The formation of a special drainage district for this area has been under consideration.

*Thankerton.*—The complaints made and the action taken in connection with the disposal of sewage from this district are fully referred to at pages 127-38 of the Annual Report for 1912. As pointed out in these notes, cause for complaint seemed to be due to the nature of the discharges from the creamery to the drainage system. The owners of the creamery have been called upon to discontinue discharging whey to the drainage system, and arrangements have been made to cart the whey on to moss land.



*Carstairs Junction.*—The main drainage outfall was inspected by the Medical Officer and Sanitary Inspector in the month of September, when it was found that the sewage from both ends of the village gravitated to a point near the centre and immediately to the west of the old school, where there is a culvert under the railway. This outfall was traced for a considerable distance as it flows through the lands of Strawfrank Farm, where it runs in an open ditch, and had all the appearance of fairly strong sewage. Negotiations are presently proceeding with the railway company for the improvement of the drainage arrangements, and the question of forming a special drainage district is being considered.

### Scavenging.

*Carstairs Junction.*—Numerous inspections and enquiries were made during the year, and the abolition of ashpits for portable bins arranged for. During the current year a special scavenging district has been formed, and a daily dust cart service has been arranged for, which is estimated to cost about £65 per annum.

*Crawford.*—An inspection was made of this village, when it was found that there were a number of old properties with ashpits, but that water-closets had been provided at all the villas of recent construction. A special scavenging district has been formed, but special scavenging does not come into operation until Martinmas, 1914.

In the other three districts, Douglas, Leadhills, and Lesmahagow, the scavenging arrangements have been carried through in a satisfactory manner.

### Nuisances.

*Carlisle.*—The nuisance relating to want of proper sanitary conveniences in properties in High Street and Rankine Street, referred to in last year's report, was the subject of legal proceedings during the year. The proprietor was instructed to carry out remedial measures.

*Lawhill.*—The nuisance referred to in last year's report, relating to want of proper means of drainage, &c., was also the subject of legal proceedings, and the proprietor instructed to carry out remedial measures.

*Braidwood.*—Complaint was received regarding a nuisance due to an overfull and foul ashpit and filthy privies at a property known as Thomson's Buildings. A statutory notice was served on the proprietor and legal proceedings taken. In January of the current year the District Sanitary Inspector reported that the ashpit had been emptied



before the case was called into Court, but that the Sheriff had granted interdict against a recurrence of the nuisance.

*Wilsontown Terrace, Forth.*—Complaint was received from the tenant of Bank Farm, Forth, regarding the sewage from the above terrace causing a nuisance on the farm lands. Inspection was made by the Medical Officer in the month of September, and the following is an extract from the notes made:—

“ In company with the factor of Wilsontown Terrace inspected the outfall. Found that the old outfall, which carried natural drainage from the moss lands as well as road surface water, had all been connected up with the sewage and conveyed to a septic tank. Permission to construct this septic tank was obtained from the representatives of the proprietors, and the site has been granted for a nominal sum of ls. per annum. From the tank the effluent is conveyed in an existing pipe throughout the length of this field. The drainage then passes underneath the back highway to lands on the farm of West Forth. There it runs in the open in a ditch, which is very much in need of being cleaned out. This field is used for grazing three young horses and a number of young cattle. Subsequently saw the tenant of this farm, and pointed out that sewage had gone in this channel since ever Wilsontown Terrace was built, and that, although the volume of sewage had been increased by the introduction of water and water-closets, probably the condition was no worse. The farmer, however, alleged that the condition was much worse, and that he was afraid of his animals suffering. Promised that before another grazing season came round I would endeavour to arrange for some further purification. Subsequently suggested to the Sanitary Inspector that it would be desirable to separate the sewage of Wilsontown Terrace from the natural drainage. If that were done the septic tank would work more efficiently, then the sewage could be further purified on the rough pasture. So long as there is a large flow of land drainage it would be impossible to treat the tank effluent satisfactorily. As the Company have taken some interest in granting facilities for the septic tank, probably they would also take some interest in having the tank effluent irrigated in the rough pasture land, which might thereby be improved.”

The matter is still under consideration.



**Dairies.**

**Veterinary Inspection of Dairy Herds.**—The following tabular statement gives the results of inspection of all dairy herds in the district inspected by the Veterinary Surgeon during the season ending May, 1914, viz. :—

**TABULAR STATEMENT, SHOWING RESULTS OF THE VETERINARY INSPECTION OF DAIRY HERDS IN THE UPPER WARD DISTRICT, CLASSIFIED ACCORDING TO PARISH.**

PARISH.	Herds.	Cows.	Suspected Tubercle.						Cows with Abnormal Conditions of Udder.						
			Samples of Milk.	Results.				Tubercle.	Mammitis.	Eruption on Teats.	Induration.	Indurated Teats.	Atrophy.	Total.	
				Smear.		Biological.									
				+	-	+	-								
Biggar, -	27	376	1	...	1	...	1	...	6	1	8	...	8	23	
Carluke, -	69	1,221	3	...	3	...	3	...	11	5	19	...	42	77	
Carmichael, -	32	608	4	...	4	...	4	...	4	...	12	...	25	41	
Carnwath, -	110	1,781	5	2	3	...	3	2	14	5	32	...	57	110	
Carstairs, -	32	782	3	1	2	...	2	1	2	3	12	...	27	45	
Covington and Thankerton, }	18	257	1	...	1	...	1	..	2	...	5	...	8	15	
Crawford, -	11	85	...	...	...	...	...	...	...	1	2	...	3	6	
Crawfordjohn, -	37	389	...	...	...	...	...	...	5	1	6	...	15	27	
Culter, -	18	156	...	...	...	...	...	...	3	...	5	...	2	10	
Dolphinton, -	23	203	...	...	...	...	...	...	4	...	4	...	5	13	
Douglas, -	27	365	1	1	...	...	...	1	3	...	8	...	11	23	
Dunsyre, -	11	135	...	...	...	...	...	...	1	...	4	...	8	13	
Lamington and Wandel, }	12	100	...	...	...	...	...	...	...	...	1	...	3	4	
Lanark, -	39	574	3	...	3	...	3	...	5	3	10	...	26	44	
Lesmahagow, -	183	3,320	4	...	4	...	4	...	35	14	56	...	118	223	
Libberton, -	32	519	2	...	2	...	2	...	8	2	6	...	16	32	
Pettinain, -	19	323	...	...	...	...	...	...	5	2	5	..	15	27	
Symington, -	17	150	...	...	...	...	...	...	1	...	1	...	3	5	
Walston, -	29	217	1	...	1	...	1	...	3	2	3	...	5	13	
Wiston and Roberton, }	23	270	2	1	1	...	1	1	2	1	4	...	8	16	
Total, -	769	11,831	30	5	25	...	25	5	114	40	203	...	405	767	

When the smear proved positive no biological examination was done.

This shows that 30 samples of milk were taken from suspected udders, and that 5 of these gave positive results. So soon as these results were obtained the owners were communicated with as to the disposal of the animal. The Sanitary Inspector kept in touch with each case, and reported that in two instances the cows had been slaughtered at the farms, and in the other four sold to butchers in the open market.

### **Offensive Businesses.**

**Private Slaughter-houses.**—There are now only seven private slaughter-houses within the district, viz. :—Carnwath, 2; Carmichael, 1; Crawford, 2; Crawfordjohn, 1; and Symington, 1.

**Public Slaughter-houses.**—A special report is at present in course of preparation dealing with the whole question of meat inspection, slaughter-houses, &c.

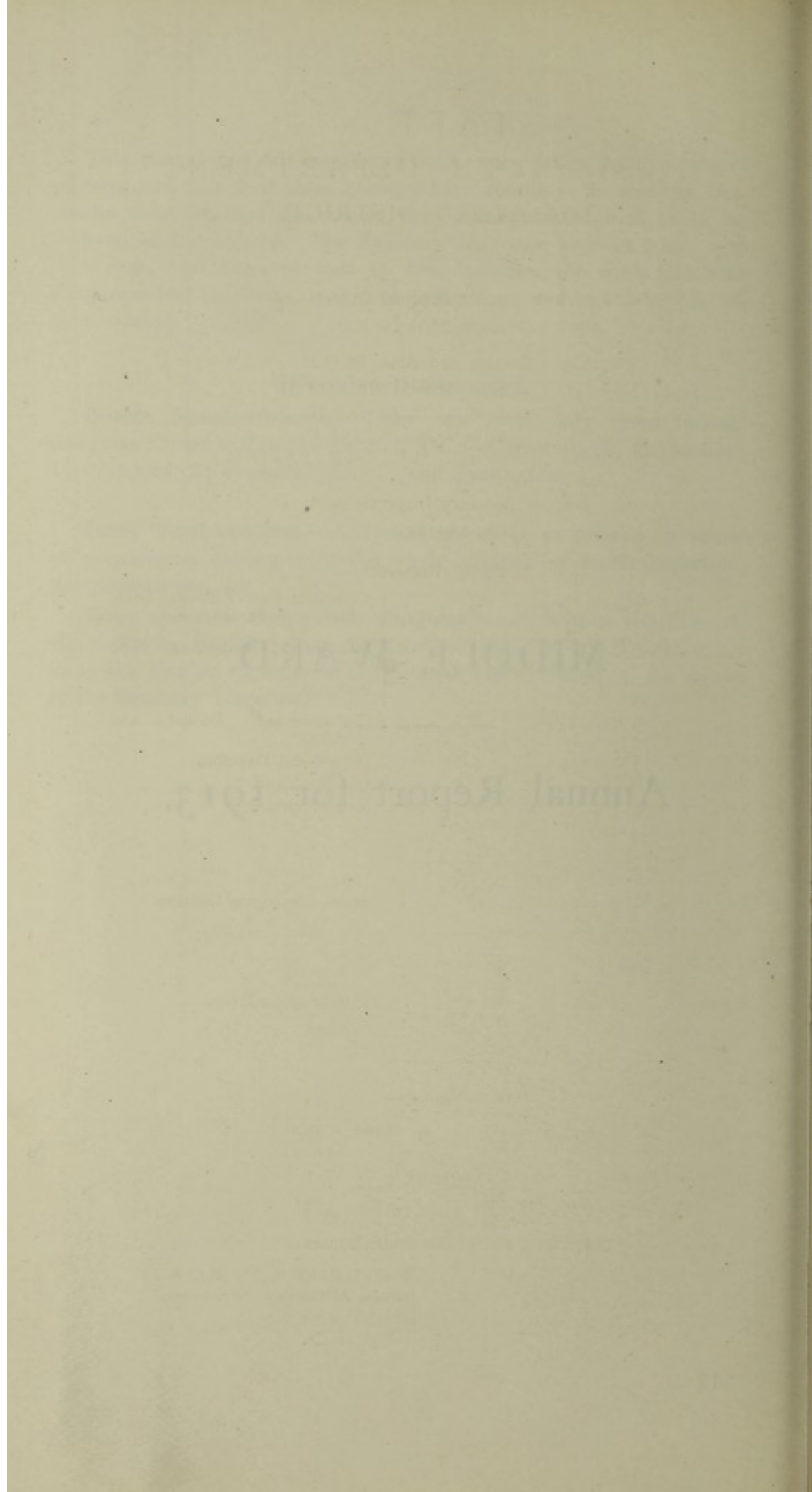
There are now four public slaughter-houses within the district, viz. :—Forth, Carluke, Lesmahagow, and Douglas. Full particulars as to the number of animals slaughtered will be found in the report of the Sanitary Inspector.



# MIDDLE WARD.

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Annual Report for 1913.





# STAFF.

## PUBLIC HEALTH DEPARTMENT.

### MIDDLE WARD DISTRICT.

#### County and District Medical Officer—

JOHN T. WILSON, M.D., D.P.H.

#### Tuberculosis Officers and Asst. M.O.H.—

FRANK H. SCROGGIE, M.B., Ch.B., D.P.H.

JOHN W. MILLER, M.B., Ch.B., D.P.H.

J. THOMSON DICK, M.B., Ch.B., D.P.H.

CHRISTINA BARROWMAN, M.B., Ch.B., B.Sc.(P.H.).

#### District Sanitary Inspector—

JAMES DOBSON.

#### Local Sanitary Inspectors—

WILLIAM B. MITCHELL, Strathaven, ...	...	...	{	Avondale, East Kilbride, Glas-
				ford, and Stonehouse.
JAMES BUCHANAN, Cambuslang, ...	...	...	}	Blantyre and Cambuslang.
GEORGE BUTTLE, Hamilton, ...	...	...		
WILLIAM DICK, Bellshill, ...	...	...	}	Bothwell.
ALEXANDER JENNINGS, Bellshill, ...	...	...		
JAMES CALDWELL, Wishaw, ...	...	...	{	Cambusnethan Dalziel, and
ROBERT BROWN, Shotts, ...	...	...		
ROBERT MILLIGAN, Larkhall, ...	...	...		Dalserf and Hamilton.
JOHN FINNIE, Baillieston, ...	...	...		Old Monkland.
JAMES MUIR, Airdrie, ...	...	...		New Monkland.
THOMAS FRAZER, Hamilton, ...	...	...		

SAMUEL JACKSON, Hamilton, ...	...	...	Special Scavenging Districts.
PETER STEWART, Hamilton, ...	...	...	Do. do.

GEORGE MILLER, Hamilton, ...	...	...	<i>Inspector of Buildings.</i>
WILLIAM MARTIN, ...	...	...	<i>Assistant.</i>

#### Health Visitors—

Nurse M'NEILL.  
 „ STRATH.  
 „ ROSS.

Nurse STEWART.  
 „ ARNOT.

#### Superintendents of Slaughter-houses—

ALEXANDER CAMERON, Bellshill.  
 JOHN F. SMELLIE, Blantyre.  
 ALFRED NIMMO, Larkhall.

ROBERT RANKIN, Stonehouse.  
 JOSEPH M'GOWAN, Strathaven.  
 ROBERT BELL, Shotts.

# STAFF.

## PUBLIC HEALTH HOSPITALS.

### MIDDLE WARD DISTRICT.

#### Medical Officer—

JOHN T. WILSON, M.D., D.P.H.

<i>County Hospital, Motherwell,</i> (100 beds)	- . -	Dr. JOHN REID, Resident Physician-Superintendent. Miss J. CHAPMAN, Matron.
<i>Lightburn Joint-Hospital (Shettleston),</i> (60* beds)	- . -	Dr. ANDREW COWAN, Resident Physician-Superintendent. Miss S. MONTGOMERY, Matron.
<i>County Hospital, Bellshill,</i> (30 beds)	- . -	Drs. JAMES MUIR and WALTER S. FINDLAY, Visiting Physicians. Miss M. THOMSON, Matron.
<i>County Sanatorium, Stonehouse,</i> (30 beds)	- . -	Dr. A. H. M'LEAN, Visiting Physician. Miss J. STEVENSON, Matron.
<i>County Sanatorium, Shotts,</i> (30 beds)	- . -	Dr. J. M'MILLAN, Visiting Physician. Miss ISA KEIR, Matron.
<i>County Sanatorium, Longriggend,</i> (30 beds)	- . -	Dr. JAMES KIRKLAND, Visiting Physician. Miss A. BALLANTYNE, Matron.
<i>Blantyre Hospital,</i> (10 beds)	- . -	Dr. F. H. SCROGGIE, Visiting Physician. Miss A. MANN, Matron.
<i>Dalserf Hospital,</i> (10 beds)	- . -	Dr. F. H. SCROGGIE, Visiting Physician. Miss F. SMITH, Matron.

\*30 beds owned by the Middle Ward District Committee.



COUNTY OF LANARK.

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## DISTRICT OF THE MIDDLE WARD.

(Area, 186,623 acres.)

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# Report by the Medical Officer of Health

## *FOR THE YEAR 1913.*

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**I.—VITAL STATISTICS.**

The **Area** of the District at the close of the year was **186,623 acres**. The acreage of each parish and the population of each registration district is stated in Table B.

The density of population was 1.10 persons to the acre.

The **Population** at the middle of the year has been estimated from local sources of information as **207,080**. The population estimated by the Registrar-General was 200,706.

The number of inhabited houses according to the Valuation Roll, 1913-14, was **39,986**, and of unoccupied houses, 1,738, showing an increase of 634 occupied houses.

It is now considered best to estimate the population from the number of occupied houses, and the population given above is entirely estimated from that source. Formerly the police census taken at the close of the year was also considered.

The constitution of the population as regards age, sex, and conjugal conditions, as ascertained at the last census, is here given, and it is assumed that the proportion at each age group remains constant during the intercensal period.

Sex and Condition.	All Ages	Under 5	5-	10-	15-	20-	25-	30-	35-	40-		
Both Sexes,	202,663	29,882	27,162	23,453	19,769	17,503	16,309	14,310	13,011	10,430		
Males,	105,201	14,953	13,708	12,028	10,679	9,408	8,602	7,494	7,037	5,514		
Females,	97,462	14,929	13,454	11,425	9,090	8,095	7,707	6,816	5,974	4,916		
Males—												
Single,	70,371	14,953	13,708	12,028	10,651	8,027	4,401	2,283	1,446	971		
Married,	31,767	...	...	...	28	1,370	4,134	5,090	5,421	4,300		
Widowed,	3,048	...	...	...	...	9	65	117	170	240		
Not Stated,	15	...	...	...	...	2	2	4	...	3		
Females—												
Single,	60,227	14,929	13,454	11,425	8,845	5,116	2,413	1,168	815	571		
Married,	32,213	...	...	...	245	2,952	5,239	5,550	4,990	4,025		
Widowed,	5,016	...	...	...	...	25	55	98	169	320		
Not stated,	6	...	...	...	...	2	...	...	...	...		
Percentage proportion of both sexes at each age group,	...	14.74	13.40	11.57	9.75	8.63	8.04	7.06	6.42	5.14		
Sex and Condition.	45-	50-	55-	60-	65-	70-	75-	80-	85-	90-	95-	Not Stated.
Both Sexes,	8,281	6,923	5,133	3,832	3,007	2,115	957	390	150	28	9	9
Males,	4,348	3,695	2,746	1,976	1,468	909	397	160	58	11	3	7
Females,	3,933	3,228	2,387	1,856	1,539	1,206	560	230	92	17	6	2
Males—												
Single,	631	498	265	219	158	73	36	11	7	...	...	5
Married,	3,448	2,851	2,118	1,348	907	498	178	60	11	4	...	1
Widowed,	269	345	361	409	403	338	183	89	40	7	3	...
Not stated,	...	1	2	...	...	...	...	...	...	...	...	1
Females—												
Single,	412	341	206	193	151	111	54	15	8	...	...	...
Married,	3,098	2,391	1,598	1,004	650	335	105	26	5	...	...	...
Widowed,	422	495	583	659	738	759	401	188	79	17	6	2
Not stated,	1	1	...	...	...	1	...	1	...	...	...	...
Percentage proportion of both sexes at each age group,	4.08	3.41	2.53	1.89	1.48	1.04	0.47	0.19	0.07	0.01	0.00	0.00

**Statistical Tables.**—For the first time on record the basis of the returns of births and deaths throughout Scotland is uniform. This has now been made possible through the Registrar-General undertaking to transfer through local Registrars, but under departmental supervision, the deaths of non-residents to their usual place of residence. The supplying of a long felt want enables each district to compare their vital statistics with all others, and also prevents the leakage of deaths which in the past existed between the returns published by Medical Officers of Health for their respective districts and those actually registered throughout the country. This leakage of deaths amounted, annually, to several thousands. The Registrar-General has also undertaken to supply Medical Officers of Health with the statistics of their areas in



advance of the published returns. The figures supplied for the Middle Ward are of interest in comparing those compiled by our own staff, and for that purpose are incorporated in this report (see Table B3).

Table C, which in former years contained death-rates from certain causes of death during the whole period of County administration, has been modified, and is now lettered A. It contains only birth-rates, death-rates from all causes, and infantile death-rates:—

TABLE A.—BIRTH-RATES AND DEATH-RATES PER 1000 OF THE POPULATION. INFANTILE DEATHS PER 1000 BIRTHS.

Year.	Births.	Birth-rate.	Nett Deaths.	INFANTS UNDER 1 YEAR.		
				Death-rate.	Deaths.	Death-rate.
1891	5,853	40·8	2,908	20·1	752	128·4
1892	6,027	41·0	2,859	19·2	764	126·9
1893	6,163	41·0	2,890	19·1	851	137·7
1894	6,117	39·7	2,624	16·9	700	114·4
1895	5,996	38·1	3,100	19·5	833	138·9
1896	6,125	38·0	2,382	14·7	666	108·7
1897	6,183	37·5	2,737	16·6	796	128·7
1898	6,361	37·7	3,003	17·8	863	135·6
1899	6,607	38·3	3,209	18·6	882	133·4
1900	6,891	39·0	3,368	19·0	991	143·8
1891 to 1900	62,323	39·1	29,080	18·1	8,098	129·9
1901	7,263	40·3	3,175	17·6	1,009	138·9
1902	7,356	40·2	2,996	16·4	841	114·3
1903	7,415	40·0	2,995	16·1	912	122·9
1904	7,505	39·9	3,079	16·3	934	124·4
1905	7,283	38·1	3,041	15·9	913	125·3
1906	7,285	37·6	3,096	15·9	945	129·7
1907	7,452	37·9	3,085	15·7	867	116·3
1908	7,703	39·1	3,580	18·1	1,088	141·2
1909	7,550	38·1	2,996	15·1	843	111·6
1910	7,309	36·4	3,145	15·6	860	117·6
1901 to 1910	74,121	38·9	31,188	16·3	9,212	124·2
1911	6,981	34·3	3,002	14·7	782	112·0
1912	7,111	34·9	2,967	14·5	804	113·0
1913	7,001	33·8	3,036	14·6	842	120·2

The death-rates from 1901 to 1910 have been revised since the census population (1911) was obtained, and may now be considered as final.

The **Births** registered were 3,547 males and 3,454 females, making a total of 7,001. Of this number 330, or 4·7 per cent., were illegitimate. The birth-rate was **33·80** per thousand of the population, and though it is the lowest recorded in this district, it is still one of the highest rates in Great Britain. The average annual birth-rates for the previous four quinquennial periods were as follows:—

1891-95	1895-1900	1901-05	1906-10
40·2	38·1	39·7	37·8

For the three divisional areas the rates for the year 1913 were—in the First, 22·3; in the Second, 35·5; and in the Third, 32·0 per thousand.

The number of births in the district given by the Registrar-General was 6,916, and the rate calculated from his estimated population was 34·5.

The **Deaths** registered amounted to 2,990. After making corrections for deaths which occurred in institutions and in other districts, as shown in the following tables, the deaths of persons belonging to the district amounted to **3,036**, and gave a death-rate of **14·6** per thousand of the population. This rate is slightly higher than was recorded last year which was the lowest death-rate reached during the whole period of County administration (see Table A). The average annual rate for the last two decennial periods was 18·1 and 16·3 respectively. The rates for the three divisional areas were—in the First, 12·7; in the Second, 15·0; and in the Third, 14·0 per thousand.

The total number of deaths given by the Registrar-General after correction for transfers was 3,009, which is 27 less than is recorded by this department; the death-rate for this figure is given as 15·0. The Registrar-General also gives the death-rate adjusted for age and sex distribution, and calculated on his estimated population as 16·0.

The number of births exceeded the deaths by 3,965, which constitutes the *natural increase* in population.









TABLE B1.—MIDDLE WARD.—Year 1913.—Deaths classified according to cause and age periods, and corrected for Institutions, &amp;c.

176B1

Population, 207,080; Acreage, 186,623; Registered Births, { Legitimate, M., 3,372; F., 3,299;  
 { Illegitimate, M., 175; F., 155; Total, 7,001.

Deaths under 1 year, { Legitimate, 791.  
 { Illegitimate, 51.

CAUSE OF DEATH.	Registered in District.	Transferred from other Districts.	Transferred to other Districts.	Nett Deaths.	NETT DEATHS AT DIFFERENT AGE PERIODS.																	Rates per 1,000 Population.	Registered in Institutions in District.
					Weeks.					Months.					Years.								
					-1	1-2	2-3	3-4	Total -4	1-3	3-6	6-9	9-12	Total -12	1-2	2-5	5-15	15-25	25-45	45-65	65 and over.		
All Causes {Certified, - {Uncertified, -	2,970 20	286 4	239 5	3,017 19	195 2	42 ...	36 1	39 1	312 4	129 1	135 ...	121 ...	139 1	836 6	227 ...	164 ...	162 1	130 ...	357 4	579 6	562 2	14.57 0.09	311 ...
Enteric Fever, - - -	5	1	...	6	...	...	...	...	...	...	...	...	...	...	...	1	2	1	2	...	...	0.02	5
Typhus Fever, - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox, - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chickenpox, - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles, - - -	75	1	...	76	...	...	...	...	...	...	2	3	8	13	32	28	3	...	...	...	...	0.36	4
Scarlet Fever, - - -	28	2	3	27	...	...	...	...	...	...	...	...	1	1	1	10	12	2	1	...	...	0.13	17
Whooping Cough, - -	104	...	1	103	...	...	...	1	1	7	8	20	27	63	30	9	...	1	...	...	...	0.49	...
Diphtheria, - - -	23	5	6	22	...	...	...	...	...	...	...	...	3	3	2	10	6	1	...	...	...	0.10	13
Influenza, - - -	28	...	...	28	...	...	...	...	...	...	...	...	...	...	...	...	1	7	11	8	...	0.13	1
Erysipelas, - - -	3	2	...	5	...	...	...	...	...	...	...	...	1	1	...	...	...	...	2	1	...	0.02	1
Other Septic Diseases, -	18	12	1	29	1	...	1	1	3	...	1	...	1	5	...	3	4	3	3	9	2	0.14	2
Puerperal Fever, - - -	8	2	...	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.04	4
Cerebro-Spinal Fever, -	5	1	...	6	...	...	...	...	...	...	...	...	1	2	...	3	...	2	1	...	...	0.02	...
Pulmonary Tuberculosis, -	208	10	42	176	...	...	...	...	...	...	...	...	1	2	2	2	21	41	72	35	1	0.85	73
Meningeal Tuberculosis, -	62	5	...	67	...	...	...	...	...	...	4	8	6	18	17	10	19	...	3	...	...	0.32	6
Abdominal Tuberculosis, -	63	2	2	63	...	...	...	2	2	4	6	5	4	21	13	13	10	...	5	1	...	0.30	4
Other Tuberculosis, - -	19	4	2	21	...	...	...	...	...	...	1	1	1	3	2	1	2	...	2	3	...	0.10	5
Malignant Diseases, - -	140	17	9	147	...	...	...	...	...	...	...	...	...	...	...	...	2	19	77	49	...	0.71	6
Rheumatic Fever, - - -	4	1	...	5	...	...	...	...	...	...	...	...	...	...	...	2	1	1	...	...	...	0.02	...
Meningitis (Simple), - -	66	1	1	66	...	3	...	...	3	3	4	4	13	27	17	8	9	...	3	...	...	0.31	2
Cerebral Haemorrhage, -	141	10	14	137	...	...	...	...	...	...	...	...	...	...	...	...	...	11	55	71	...	0.66	19
Convulsions, - - -	27	...	...	27	6	...	1	...	7	2	3	2	2	16	7	1	2	1	...	...	...	0.13	...
Other Nervous Diseases, -	72	7	26	53	...	...	...	1	1	...	...	...	2	3	...	2	3	4	17	18	6	0.25	39
Circulatory Diseases, - -	296	29	30	295	...	...	...	1	1	...	...	...	...	...	...	1	5	10	42	120	115	1.42	34
Pneumonia, - - -	237	17	14	240	...	1	...	3	4	11	18	18	21	72	37	19	6	4	26	45	31	1.15	21
Bronchitis, - - -	173	6	11	168	1	1	5	2	9	8	8	6	4	35	9	2	1	...	6	48	67	0.81	13
Laryngitis, - - -	2	...	...	2	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	0.00	...
Other Respiratory Diseases, -	32	2	3	31	...	...	...	...	...	...	...	...	2	2	5	3	2	1	3	7	8	0.14	2
Diarrhoea, - - -	200	...	...	200	...	4	1	6	11	39	52	33	32	167	33	...	...	...	...	...	...	0.96	...
Other Digestive Diseases, -	112	46	6	152	...	2	1	2	5	5	7	4	6	27	5	16	19	9	15	30	31	0.73	4
Violence, - - -	114	43	34	123	1	...	1	1	3	2	...	...	1	6	2	8	14	16	40	26	11	0.59	5
Congenital Malformations, -	48	2	...	50	30	6	3	3	42	4	3	...	1	50	...	...	...	...	...	...	...	0.24	...
Premature Birth, - - -	127	1	3	125	95	12	10	4	121	3	...	...	1	125	...	...	...	...	...	...	...	0.60	1
Atrophy, Debility, &c., -	132	4	1	136	43	6	12	8	69	30	13	12	2	126	8	2	...	...	...	...	...	0.65	...
Atelectasis, - - -	12	...	...	12	8	...	...	2	10	2	...	...	...	12	...	...	...	...	...	...	...	0.05	...
Injury at Birth, - - -	5	1	...	6	6	...	...	...	6	...	...	...	...	6	...	...	...	...	...	...	...	0.02	...
Suffocation, overlying, -	1	...	...	1	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	0.00	...
Syphilis, - - -	2	...	...	2	...	...	...	...	...	2	...	...	...	2	...	...	...	...	...	...	...	0.00	...
Rickets, - - -	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	0.00	...
Other Defined Diseases, -	315	43	23	335	2	7	1	2	12	1	1	1	2	17	4	7	14	19	63	67	144	1.61	26
Ill-defined Diseases, - -	82	13	12	83	4	...	1	1	6	6	3	...	1	16	1	5	3	1	12	26	19	0.40	4
Total, - - -	2,990	290	244	3,036	197	42	37	40	316	130	135	121	140	842	227	164	163	130	361	585	564	14.66	311





TABLE B<sup>2</sup>.—MIDDLE WARD.—Year 1913.—Births and Deaths in each Registration District. 176B2  
Deaths classified according to age periods, and corrected for Institutions, &c.

REGISTRATION DISTRICTS.	Births.	Nett Deaths.	DEATHS AT DIFFERENT AGE PERIODS.																	
			Weeks.					Months.					Years.							
			-1	1-2	2-3	3-4	Total -4	1-3	3-6	6-9	9-12	Total -12	1-2	2-5	5-15	15-25	25-45	45-65	65 and over.	
Avondale, - - -	108	65	...	...	...	...	...	1	1	1	...	3	...	2	...	3	9	17	31	
East Kilbride, - - -	69	53	...	...	...	1	1	...	1	...	...	2	4	1	2	3	10	10	21	
Glasford, - - -	35	18	...	...	...	1	1	...	...	...	1	2	1	...	...	1	1	4	9	
Stonehouse, - - -	106	46	1	2	1	...	4	...	...	1	3	8	1	1	2	1	9	8	16	
First Division, - -	318	182	1	2	1	2	6	1	2	2	4	15	6	4	4	8	29	39	77	
Blantyre, - - -	647	297	24	6	2	1	33	14	18	15	15	95	29	22	15	11	33	58	34	
Bothwell, - - -	636	321	19	8	3	2	32	16	10	11	12	81	27	15	14	12	40	64	68	
Bellshill, - - -	782	310	25	6	5	5	41	16	21	20	13	111	25	12	18	17	26	63	38	
Holytown, - - -	609	222	13	2	4	4	23	13	11	8	9	64	12	14	13	15	22	46	36	
Cambuslang, - - -	798	378	18	3	5	3	29	15	9	19	25	97	22	30	21	14	55	69	70	
Cambusnethan, - - -	416	157	23	3	3	...	29	5	5	1	4	44	15	5	7	2	17	31	36	
Calderhead, - - -	131	44	5	1	1	1	8	3	3	4	...	18	...	3	2	1	7	5	8	
Dalserf, - - -	163	58	6	...	...	1	7	5	7	1	3	23	3	1	1	6	5	9	10	
Larkhall, - - -	529	212	13	1	2	4	20	6	12	9	8	55	23	12	11	9	19	37	46	
Dalziel, - - -	92	31	3	1	...	1	5	1	...	1	...	7	2	1	4	3	5	5	4	
Hamilton, - - -	266	118	11	1	1	1	14	5	10	3	12	44	6	9	3	7	16	14	19	
Second Division, - -	5,069	2,148	160	32	26	23	241	99	106	92	101	639	164	124	109	97	245	401	369	
New Monkland, - - -	450	173	11	3	3	3	20	5	7	7	6	45	9	8	10	9	28	37	27	
Old Monkland, Eastern, -	94	36	2	...	1	1	4	3	1	2	...	10	4	2	5	1	5	6	3	
Old Monkland, Coatbridge, -	83	45	1	...	1	...	2	1	3	3	2	11	6	3	3	2	3	9	8	
Old Monkland, Western, -	376	224	10	1	3	7	21	9	10	8	18	66	23	12	11	4	23	41	44	
Shotts, Eastern, - -	119	56	3	1	...	...	4	3	1	1	2	11	1	3	6	2	8	13	12	
Shotts, Middle, - -	81	22	2	...	...	...	2	2	1	...	2	7	1	...	1	1	2	5	5	
Shotts, Calderhead, - -	220	83	6	2	1	3	12	2	2	3	3	22	5	4	8	3	11	20	10	
Shotts, Western, - -	160	53	1	...	1	1	3	4	1	2	2	12	6	3	5	3	6	10	8	
Shotts, Northern, - -	31	14	...	1	...	...	1	1	1	1	...	4	2	1	1	...	1	4	1	
Third Division, - -	1,614	706	36	8	10	15	69	30	27	27	35	188	57	36	50	25	87	145	118	
Total, - - -	7,001	3,036	197	42	37	40	316	130	135	121	140	842	227	164	163	130	361	585	564	

TABLE II - MIDDLE WARD - 1911  
Deaths classified according to sex and age

Age	Sex	Deaths		Total
		Male	Female	
Under 1	Male	1	1	2
Under 1	Female	1	1	2
1 to 4	Male	1	1	2
1 to 4	Female	1	1	2
5 to 9	Male	1	1	2
5 to 9	Female	1	1	2
10 to 14	Male	1	1	2
10 to 14	Female	1	1	2
15 to 19	Male	1	1	2
15 to 19	Female	1	1	2
20 to 24	Male	1	1	2
20 to 24	Female	1	1	2
25 to 29	Male	1	1	2
25 to 29	Female	1	1	2
30 to 34	Male	1	1	2
30 to 34	Female	1	1	2
35 to 39	Male	1	1	2
35 to 39	Female	1	1	2
40 to 44	Male	1	1	2
40 to 44	Female	1	1	2
45 to 49	Male	1	1	2
45 to 49	Female	1	1	2
50 to 54	Male	1	1	2
50 to 54	Female	1	1	2
55 to 59	Male	1	1	2
55 to 59	Female	1	1	2
60 to 64	Male	1	1	2
60 to 64	Female	1	1	2
65 to 69	Male	1	1	2
65 to 69	Female	1	1	2
70 to 74	Male	1	1	2
70 to 74	Female	1	1	2
75 to 79	Male	1	1	2
75 to 79	Female	1	1	2
80 to 84	Male	1	1	2
80 to 84	Female	1	1	2
85 to 89	Male	1	1	2
85 to 89	Female	1	1	2
90 to 94	Male	1	1	2
90 to 94	Female	1	1	2
95 to 99	Male	1	1	2
95 to 99	Female	1	1	2
100 and over	Male	1	1	2
100 and over	Female	1	1	2
Total	Male	10	10	20
Total	Female	10	10	20



TABLE B3.—Statistics Prepared and Published by the Registrar-General, Year 1913.

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## MIDDLE WARD DISTRICT.

## Rates per 1,000 of Estimated Population.

Population—Census 1911, ... ..	202,663
Do. Estimated to middle of Year, ...	200,706

## Numbers.

Births, Corrected for Transcripts, ... ..	6,916
Do. Illegitimate, do. ... ..	322
Marriages, Uncorrected, ... ..	1,322
Deaths, do. ... ..	2,937
Do. Transferred Out, ... ..	168
Do. do. In, ... ..	240
Do. Corrected, Both Sexes, ... ..	3,009
Do. do. Males, ... ..	1,566
Do. do. Females, ... ..	1,443

Birth-rate, Corrected for Transcripts, ... ..	34.5
Marriage-rate, Uncorrected, ... ..	6.6
Death-rate—All Causes, do. ... ..	14.6
Do. do. Corrected for Transfers, ... ..	15.0
Do. do. Corrected for Transfers and Adjusted for Age and Sex Distribution, ... ..	16.0
Do. —Phthisis, Corrected for Transfers, ... ..	0.9
Do. —All Tuberculosis, do. ... ..	1.7
Do. —Principal Epidemic Diseases [those Asterisked below], Corrected for Transfers, ... ..	2.1

Infantile Mortality Rate (Deaths of Children of under One Year per 1,000 Births), Corrected, ... ..	123
Illegitimate Rate (Illegitimate Births per 100 Total Births), Corrected for Transcripts, ... ..	4.7

## CAUSES OF DEATH (CORRECTED FOR TRANSFERS).

CODE NOS.	Long List.	Short List.	CAUSES OF DEATH.	ALL AGES.	AGES.												
					—1	1—	5—	10—	15—	25—	35—	45—	55—	65—	75—		
	1	1	*Enteric Fever, ... ..	6	—	1	1	1	1	1	1	—	—	—	—		
	2	2	Typhus Fever, ... ..	—	—	—	—	—	—	—	—	—	—	—	—		
	5	3	Smallpox, ... ..	—	—	—	—	—	—	—	—	—	—	—	—		
	6	4	*Measles, ... ..	77	15	59	3	—	—	—	—	—	—	—	—		
	7	5	*Scarlet Fever, ... ..	29	1	11	11	3	2	1	—	—	—	—	—		
	8	6	*Whooping-cough, ... ..	107	64	42	—	—	1	—	—	—	—	—	—		
	9	7	*Diphtheria and Croup, ... ..	22	2	14	4	1	1	—	—	—	—	—	—		
	10	8	Influenza, ... ..	8	—	—	—	—	—	4	—	1	1	1	1		
	18	9	Erysipelas, ... ..	6	1	—	—	—	1	—	—	1	2	—	—		
	28, 29a	10	Phthisis, Pulmonary Tuberculosis, ... ..	176	1	3	11	10	43	32	38	25	12	—	1		
	30	11	Tuberculous Meningitis, ... ..	67	20	28	11	3	—	5	—	—	—	—	—		
	31	12	Abdominal Tuberculosis, ... ..	58	18	26	5	4	—	2	1	1	—	1	—		
	29b, 32, 33, 35	13	Other Tuberculous Diseases, ... ..	33	7	4	3	—	7	7	2	3	—	—	—		
	45	14	Cancer, Malignant Disease, ... ..	146	—	1	—	—	2	4	15	30	46	35	13		
	47	15	Rheumatic Fever, ... ..	14	—	—	2	2	1	3	2	2	2	—	—		
	61c	16	Meningitis, ... ..	81	36	30	5	3	3	—	—	3	1	—	—		
	77-80	17	Organic Heart Disease, ... ..	218	2	—	3	2	9	8	25	31	58	57	23		
	90	18	Bronchitis, ... ..	183	39	12	1	2	—	2	5	15	39	47	21		
	91, 92	19	Pneumonia (all forms), ... ..	264	85	57	5	1	4	9	18	27	21	26	11		
	86-88, 93 98b	20	Other Diseases of Respiratory Organs, ... ..	33	3	10	3	—	2	—	2	2	2	5	4		
	104	21	*Diarrhoea and Enteritis (under 2 years), ... ..	182	151	31	—	—	—	—	—	—	—	—	—		
	108	22	Appendicitis and Typhlitis, ... ..	15	—	—	4	4	2	1	1	1	1	1	—		
	111-115	23	All Liver Diseases (not Malignant), ... ..	23	1	—	—	—	1	3	1	7	3	5	2		
	99-103, 107,	24	Other Diseases of Digestive System (under 2 years), ... ..	31	26	5	—	—	—	—	—	—	—	—	—		
	109-110, 116-118	25	Nephritis and Bright's Disease, ... ..	64	—	6	—	1	2	3	11	12	14	12	3		
	119, 120	26	Puerperal Sepsis, ... ..	11	—	—	—	—	1	6	4	—	—	—	—		
	137	27	Other Diseases and Accidents of Pregnancy and Parturition, ... ..	34	—	—	—	—	5	13	13	3	—	—	—		
	134-136, 138-141	27	Other Diseases and Accidents of Pregnancy and Parturition, ... ..	34	—	—	—	—	5	13	13	3	—	—	—		
	150, 151	28	Congenital Debility and Malformation, including Premature Birth, ... ..	283	283	—	—	—	—	—	—	—	—	—	—		
	164-186, 190	29	Violent Deaths, excluding Suicide, ... ..	115	8	9	3	11	15	16	17	15	9	5	7		
	163	30	Suicide, ... ..	7	—	—	—	—	—	—	3	2	1	1	—		
	All other Nos.	x	Other Defined Diseases, ... ..	646	68	36	13	11	21	27	40	61	104	139	126		
	187-189	31	Diseases ill-defined or Unknown, ... ..	70	17	11	—	—	—	2	5	10	8	9	8		
Total, ... ..				3,009	848	396	88	59	124	149	204	252	324	344	221		

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PUBLIC INSTITUTIONS SITUATED WITHIN THE DISTRICT WHERE SOME PERSONS NOT BELONGING TO THE DISTRICT DIED AND WHOSE DEATHS WERE EXCLUDED.

NAME OF INSTITUTION.	PARISH WHERE SITUATED.	POPULATION, POLICE CENSUS, DEC., 1913.	DEATHS.	
			Total during 1913.	Allocated to the Middle Ward.
Kirklands Asylum, ... ..	Bothwell, ... ..	270	36	6
Hartwood do., ... ..	Shotts, ... ..	1,116	62	31
Dalziel Poorhouse, ... ..	Dalziel, ... ..	104	29	...
New Monkland Poorhouse, ...	New Monkland, ...	149	36	5
Omoa Combination Poorhouse,	Shotts, ... ..	172	42	26
County Hospital, Motherwell,	Dalziel, ... ..	208	56	45
Do. do., Bellshill, ... ..	Bothwell, ... ..	38	19	13
Do. Sanatorium, Shotts, ...	Shotts, ... ..	34	11	6
Do. do., Stonehouse, ... ..	Stonehouse, ...	40	4	2
Do. do., Longriggend, ... ..	New Monkland, ...	38	9	5
Blantyre Hospital, ... ..	Blantyre, ... ..	15	5	2
Dalserf do., ... ..	Dalserf, ... ..	14	...	...
Blantyre Cottage Hospital, ...	Blantyre, ... ..	6	2	2
Elmwood Convent, ... ..	Bothwell, ... ..	57	...	...
St. Vincent Home for Deaf and Blind Children, ... ..	Old Monkland, ...	149	...	...
TOTAL, ... ..	...	2,410	311	143

PUBLIC INSTITUTIONS SITUATED OUTWITH THE DISTRICT WHERE SOME PERSONS BELONGING TO THE DISTRICT DIED AND WHOSE DEATHS ARE INCLUDED.

*General Hospitals.*

Glasgow Royal Infirmary, -	109
Glasgow Western Infirmary, -	26
Glasgow Victoria Infirmary, -	13
Edinburgh Royal Infirmary, -	5
Alexander Hospital, Coatbridge	3
Other General Hospitals, -	3

*Infectious Hospitals.*

Lightburn Hospital, -	12
Belvidere Hospital, -	1

*Asylums.*

Larbert Institution, -	3
Gartloch Asylum, -	2
Riccartsbar Asylum, -	2

*Poor Institutions.*

Hamilton Poorhouse, -	12
Old Monkland Poorhouse, -	9
Stobhill Hospital, -	2
Nitshill Poorhouse, -	1

*Other Institutions.*

Children's Hospital, -	7
Maternity Hospital, -	9
St. Mary's Hospital, Lanark, -	3
Cancer Hospital, -	2
Samaritan Hospital, -	1
Seaside Homes, Dunoon, -	1
Private Nursing Homes, -	11

179

58

Total, 237

The foregoing tables show that of 311 deaths occurring in institutions within the District, 168 were excluded as they were persons not belonging to the Middle Ward, and that, on the other hand, 237 deaths were included as they were persons belonging to the Middle Ward, who died in institutions outwith the District. For the same reason 76 deaths were excluded of persons dying in private residences, and 53 deaths were included.

Although the allocation and transference of deaths is not now carried out entirely by our own staff, the above figures do not show any appreciable difference to that of former years.

**Deaths in Relation to Age and Cause.**—The deaths are classified in Table B1 according to age and cause. The deaths are here arranged in recognised age-periods, and the percentage proportion of deaths at each age-period :—

Infant Period—under 1 year, ...	...	842 deaths, or 27·7 per cent.
Under School Age—1·5 years, ...	391	„ 12·8 „
School Age—5·15 years, ...	163	„ 5·3 „
Adolescent—15·25 years, ...	130	„ 4·2 „
Early Mature Period—25·45 years, ...	361	„ 11·7 „
Late Mature Period—45·65 years, ...	585	„ 19·2 „
Post-Mature Period—65 years and upwards, ...	564	„ 18·5 „

The population at each of these periods, except the infant period, has been obtained from the Registrar-General, so that the actual death-rates for each age-period can now be given :—

POPULATION, DEATHS, AND DEATH-RATES AT AGE-PERIODS.

	Under 5.	5-15.	15-25.	25-45.	45-65.	Over 65.
Population (estimated),	30,535	51,718	38,084	55,238	24,695	6,810
Deaths, ...	1,233	163	130	361	585	564
Death-rate per 1000						
of the population,	40·37	3·15	3·41	6·53	23·68	82·81
Death-rate (1912),	43·14	2·80	4·10	6·38	19·69	84·31

The high death-rates at the extremes of life, and the very low rate during the school age-period are clearly shown. The infant death-rate can only be calculated in relation to the number of births.

**Infectious Disease.**—The number of deaths due to infectious diseases which are compulsorily notifiable was 254, made up thus :—

Diphtheria, -	22	Puerperal Fever, -	10
Scarlet Fever, -	27	Erysipelas, -	5
Typhoid Fever, -	6	Pulmonary Tuberculosis, -	176
Cerebro-Spinal Fever, -	6	Tetanus, -	2



The deaths from infectious diseases not compulsorily notifiable amounted to 530—diarrhœa, 200 ; measles, 76 ; and whooping cough, 103 ; other tuberculous diseases, 151. The prevalence of these various diseases will be further referred to in the second portion of this report.

**Respiratory Diseases.**—The group of diseases under the heading “respiratory” has varied from time to time. In the years preceding 1906 this group included deaths from pneumonia and from influenza with respiratory symptoms. Since the year 1906 these two causes of death have been given a separate column in Table B. Since 1911 bronchitis has also been given a separate heading. This change in the classification is indicated in the following tabular statement :—

#### OLD CLASSIFICATION.

Year.	Deaths.	Death-rate.	Year.	Deaths.	Death-rate.	Year.	Deaths.	Death-rate.
1891	553	3·85	1896	392	2·43	1901	458	2·54
1892	534	3·63	1897	592	3·59	1902	580	3·17
1893	546	3·63	1898	492	2·91	1903	538	2·90
1894	464	3·01	1899	570	3·30	1904	576	3·06
1895	634	3·98	1900	666	3·77	1905	549	2·87

#### NEW CLASSIFICATION.

PNEUMONIA.			BRONCHITIS.		INFLUENZA.		OTHER RESPIRATORY DISEASES.	
Year.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.
1906	128	0·66	—	—	20	0·10	378	1·95
1907	175	0·89	—	—	26	0·13	415	2·11
1908	193	0·97	—	—	24	0·12	500	2·52
1909	321	1·61	—	—	25	0·12	239	1·20
1910	348	1·73	—	—	13	0·06	218	1·08
1911	311	1·52	200	0·98	22	0·10	28	0·13
1912	343	1·68	188	0·92	12	0·05	29	0·14
1913	240	1·59	168	0·81	28	0·13	33	0·15

The rates from 1901 to 1910 have been revised.

*Pneumonia.*—Deaths from this disease have been classified separately since 1906. Deaths from broncho-pneumonia were, up till 1908, included in the general respiratory group, and since 1909 they have been included under the heading “Pneumonia.”



240 deaths occurred during the year 1913—30 of these being in the Parish of Blantyre, 85 in Bothwell, and 37 in Cambuslang. Classifying the total deaths according to age, the result is as follows :—

Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65 and upwards
72	37	19	6	4	26	45	31

The deaths registered under this cause, when compared with last year, show a decrease of 73, and it is gratifying to note that this saving is in the age group under 1 year.

*Bronchitis.*—Up to the year 1911, deaths from this disease were included under the general respiratory heading. 168 deaths occurred during the year, giving a death-rate of 0·81 per thousand of the population. Classified according to age, the deaths were as follows :—

Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65 and upwards
35	9	2	1	...	6	48	67

Here also it is satisfactory to note that in the age group under 1 year a decrease of 12 is the main contribution to the total decrease of 20.

*Influenza.*—Deaths from this disease have been classified separately since the year 1906. 28 deaths from this cause were registered during the year, 11 of which were persons over 45 and 8 over 65 years of age.

*Other Respiratory Diseases*—including asthma, congestion of lungs—caused 31 deaths. Classified according to age, the deaths were as follows :—

Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65 and upwards
2	5	3	2	1	3	7	8

*Malignant Diseases.*—This group includes deaths from diseases certified as cancer, carcinoma, sarcoma, &c. The proportions so certified are, roughly, about 50 per cent. cancer, 40 per cent. carcinoma, and 10 per cent. other forms. The average number of deaths from these diseases has been gradually increasing. Thus, for the quinquennial period 1891-95, the death-rate per 10,000 of the population was 4·9, for 1896-1900 it was 5·1, for 1901-05 it was 5·2, and for 1906-10 it was 6·9. During 1913 the death-rate was 7·1, as compared with 7·3 in 1912 and 5·9 in 1911. Classified according to age the deaths were as follows :—two between 15 and 25; nineteen between 25 and 45; seventy-seven between 45 and 65; and forty-nine over 65 years of age.



MALIGNANT DISEASE IN EACH REGISTRATION DISTRICT OF THE MIDDLE WARD.—AVERAGE ANNUAL NUMBER OF DEATHS FOR QUINQUENNIAL PERIODS 1891-1910, AND FOR EACH OF THE YEARS 1911, 1912, AND 1913; ALSO, THE AVERAGE ANNUAL DEATH-RATES FOR SAME PERIODS.

Registration District.	Population, Census 1911.	1891-1895.	1896-1900.	1901-1905.	1906-1910.	1911.	1912.	1913.
Avondale, -	5,033	2'2	3'2	3'6	5'6	5	6	8
East Kilbride, -	3,977	4'0	4'2	3'2	3'6	3	4	2
Glasford, -	1,312	0'8	1'2	1'6	1'4	2	1	1
Stonehouse, -	3,688	2'0	2'0	1'8	2'6	2	2	5
Blantyre, -	16,821	7'0	6'0	6'6	8'6	13	10	7
Bothwell, }	18,956	18'4	20'6	7'4	14'2	12	20	15
Bellshill, }	18,638			8'0	8'8	7	11	10
Holytown, }	16,617			7'6	9'6	13	10	9
Cambuslang, -	24,864	7'2	8'8	9'2	15'6	16	20	17
Cambusnethan, }	11,585	6'6	4'4	5'8	11'0	6	12	7
Calderhead, }	2,991			1'4	3'0	1	3	1
Dalserf, - }	4,427	6'2	10'0	0'6	3'0	2	3	1
Larkhall, - }	14,202			7'8	13'2	7	9	14
Dalziel, - -	1,876	0'2	0'4	0'2	1'2	2	1	3
Hamilton, - -	7,775	3'8	4'8	3'8	3'8	5	4	7
New Monkland, -	13,728	7'6	5'8	9'4	10'4	8	10	13
Old Monkland—	2,496	6'4	10'4	1'8	2'0	2	4	4
East, - }				2'8	1'6	2	1	2
Coatbridge, }	2,772			7'8	9'4	5	14	10
West, - }	12,472	3'0	5'8	1'4	0'8	1	1	3
Shotts—East, }	3,691			0'8	1'0	1	...	3
Middle, - }	3,270			1'6	2'8	3	...	1
Calderhead, }	5,680			2'2	2'6	3	3	4
West, - }	4,559			0'8	0'4	...	...	...
North, - }	1,234							
Middle Ward District,	202,663	75'4	87'6	97'2	136'2	121	149	147
Average Annual Death-rate per 10,000 of Population, }		4'95	5'19	5'24	6'91	5'95	7'32	7'11

In the County portion of the report reference is made to the work done in connection with the Imperial Cancer Research Fund, and to a paper read by the Director, Dr. Bashford. This shows that though there has been an increase in the total number of deaths from malignant diseases, the increase has been found to be due to diseases of certain organs and tissues. Thus, there is no increase in cancer of the skin, uterus, liver, and gall bladder, while for other parts, especially the stomach and intestines for both sexes, a large increase is recorded. This increase may in large measure be due to improved diagnosis and certification.

**CIRCULATORY DISEASES.**—These diseases were responsible for 295 deaths, giving a death-rate of 1·42 per 1,000, as compared with 1·22 in 1912. 277 of the deaths were of persons over 25 years. In the year 1910 a change in the classification of deaths took place, whereby cerebral hæmorrhage, which previously had been classed under Circulatory Diseases, was included as a sub-heading class under Nervous Diseases.

The result of this change is seen in the following table, which shows that the death-rate from Circulatory Diseases, which averaged 2·18 per 1,000 in the years 1908-09-10, was reduced after this change of classification by nearly one-half to 1·36 per 1,000, while the rate from Nervous Diseases was correspondingly increased from ·61 to 1·30 per 1,000 :—

Year.	Circulatory Diseases.		Nervous Diseases.	
	No. of Deaths.	Death-rate.	No. of Deaths.	Death-rate.
1908	414	2·09	151	0·76
1909	444	2·22	111	0·55
1910	451	2·23	109	0·54
<i>Average.</i>	436	2·18	123	0·61
1911	296	1·45	256	1·24
1912	250	1·22	271	1·31
1913	295	1·42	283	1·35
<i>Average</i>	280	1·36	270	1·30

The *Vital Statistics* relating to each registration district or parish will be found in Tables B, B1, and B2, and the *morbidity*, or number of cases of infectious disease notified, is given in Part II. of the Report.

## II.—PREVALENCE OF INFECTIOUS DISEASE.

The diseases included under this heading are classified in relation to notification, and are divided into two groups. Group 1 includes diseases which are compulsorily notifiable (*a*) under the Notification



Act, (b) by adoption under the Notification Act, and (c) by order of the Local Government Board, and Group 2 not compulsorily notifiable diseases. The diseases included in these groups are as follows :—

## GROUP I.

(a)	(b)	(c)
Smallpox.	<i>August, 1906.</i>	<i>1st August, 1912.</i>
Diphtheria.	Cerebro-spinal Meningitis.	Pulmonary
Scarlet Fever.	<i>24th October, 1912.</i>	Tuberculosis.
Typhus Fever.	Ophthalmia Neonatorum.	<i>1st July, 1914.</i>
Typhoid Fever.	Acute Poliomyelitis.	All forms of
Puerperal Fever.	Tetanus.	Tuberculosis.
Erysipelas.	Anthrax.	
	Glanders.	
	Actinomycosis.	

## GROUP II.

Measles.	Chickenpox.	Ringworm.
German Measles.	Mumps.	Scabies.
Whooping Cough.		

The total prevalence of notifiable infectious diseases remained about the same high level of 1912, and was maintained largely by the continued high prevalence of scarlet fever. There were 2,114 cases of infectious sickness during 1913, against 2,262 in 1912. Smallpox was absent during the year. Typhus fever showed an increase of 1; cerebro-spinal fever, 9; erysipelas, 28; pulmonary tuberculosis, 4; ophthalmia neonatorum, 36; infantile paralysis, 2; tetanus, 2; and anthrax, 1; while there were decreases in diphtheria, 49; scarlet fever, 165; typhoid fever, 17; puerperal fever, 2; and erysipelas, 65. Each infectious disease is dealt with under a separate heading, but reference should be made to the following statistical tables. Table B shows for the year 1913 the number of deaths registered in each Parish or Registration District, and Table E shows the cases notified in each parish. From these two sets of figures is calculated the rate of fatality, which is generally expressed as the number of deaths occurring in 100 cases. Table D, which was incorporated in former reports previous to 1909, has been discontinued, and all the information will now be found in the new Tables D, of which there are seven, distinguished by figures. Thus Table D1 relates to smallpox, and Table D2 to diphtheria. The following Table E shows the distribution of the cases of infectious sickness in each parish :—

TABLE E.—NUMBER OF CASES OF INFECTIOUS SICKNESS RECOGNISED IN EACH PARISH DURING 1913.

PARISH.	Smallpox.	Diphtheria.	Scarlet Fever.	Typhus Fever.	Typhoid Fever.	Cerebro-Spinal Fever.	Puerperal Fever.	Erysipelas.	Pulmonary Tuberculosis.	Ophthalmia Neonatorum.	Infantile Paralysis.	Tetanus.	Anthrax.	Total.
1. Avondale, -	...	7	19	...	1	...	...	8	6	...	...	...	...	41
2. East Kilbride, -	...	4	12	...	...	...	1	2	16	...	...	...	...	35
3. Glasford, -	...	3	6	...	...	...	...	...	1	...	...	...	...	10
4. Stonehouse, -	...	1	16	...	3	2	...	3	4	...	...	...	...	29
<i>First Division, -</i>	...	15	53	...	4	2	1	13	27	...	...	...	...	115
5. Blantyre, -	1	30	57	...	5	6	3	12	42	3	...	...	...	159
6. Bothwell, -	...	112	314	1	24	1	5	40	115	7	...	2	...	621
7. Cambuslang, -	...	28	150	...	3	...	4	24	46	6	...	...	...	261
8. Cambusnethan, -	...	19	153	...	24	1	...	19	28	8	...	...	...	252
9. Dalserf, -	...	6	30	...	5	1	...	10	14	3	...	...	1	70
10. Dalziel, -	...	1	10	...	13	...	1	3	3	2	...	...	...	33
11. Hamilton, -	...	9	32	...	2	...	...	3	9	1	...	...	...	56
<i>Second Division, -</i>	1	205	746	1	76	9	13	111	257	30	...	2	1	1452
12. New Monkland, -	...	33	68	...	1	1	...	12	23	...	...	1	...	139
13. Old Monkland, -	...	45	75	...	14	...	2	9	36	1	1	...	...	183
14. Shotts, -	...	11	147	...	5	1	1	20	26	12	2	...	...	225
<i>Third Division, -</i>	...	89	290	...	20	2	3	41	85	13	3	1	...	547
<i>Middle Ward, -</i>	1	309	1089	1	100	13	17	165	369	43	3	3	1	2114



\* **Smallpox.**

One man, aged 35, was notified in the Parish of Blantyre, and was removed to Dalsersf Hospital for observation. The eruption, although resembling that of smallpox, proved to be that of chicken-pox.

Table D1 shows the prevalence in previous years, and that the last case of smallpox occurred in 1910.

TABLE D1.—SMALLPOX.

YEAR.	NUMBERS.		YEAR.	NUMBERS.	
	Cases Notified.	Deaths Registered.		Cases Notified.	Deaths Registered.
(1)	(2)	(3)	(1)	(2)	(3)
1891	...	...	1902	35	1
1892	1	1	1903	15	1
1893	11	1	1904	127	9
1894	8	1	1905	38	1
1895	1	...	<i>Average,</i>	<i>53</i>	<i>3</i>
<i>Average,</i>	<i>4</i>	...	1906	1	...
1896	...	...	1907	...	...
1897	2	...	1908	...	...
1898	1	...	1909	...	...
1899	11	...	1910	2	...
1900	7	1	<i>Average,</i>	...	...
<i>Average,</i>	<i>4</i>	...	1911	...	...
1901	50	6	1912	...	...
			1913	1	...

*The Vaccination (Scotland) Act, 1907*, which provided for returns of statutory declarations of conscientious objection to vaccination, came into operation in that year. Forms were prepared, duly approved by the Local Government Board, and issued to registrars in the month of December, 1907. The returns received since that date are of considerable interest, and may be tabulated here as follows:—

Registration District.	No. of Declarations.						Registration District.	No. of Declarations.					
	1908.	1909.	1910.	1911.	1912.	1913.		1908.	1909.	1910.	1911.	1912.	1913.
Avondale, ...	16	17	14	16	12	20	Larkhall, ...	142	153	165	170	173	195
East Kilbride, 3	11	18	9	20	16		Dalziel, ...	8	16	18	12	27	35
Glasford, ...	8	8	16	12	8	13	Hamilton, ...	77	135	109	129	128	114
Stonehouse, 36	33	23	23	46	44		New Monkland, 46	64	92	116	111	141	
Blantyre, 122	149	183	197	231	250		Old Monkland, E., 27	36	34	28	28	34	
Bothwell, ...	93	89	106	119	122	160	Coatbridge, ...	7	18	16	24	22	21
Bellshill, ...	248	272	321	348	365	365	Old Monkland, W., 25	19	42	48	48	71	
Holytown, 132	228	225	225	264	258		Shotts, East, ...	54	59	81	73	71	69
Cambuslang, 9	149	156	189	248	269		„ Middle, ...	29	19	24	36	27	34
Camb'nethan, 58	42	86	82	90	87		„ Calderhead, 26	37	72	72	76	76	
Calderhead, 17	27	29	44	42	60		„ West, ...	17	43	64	54	46	50
Dalserf, ...	20	23	23	33	25	36	„ North, ...	2	5	6	2	6	7
							Totals,	1222	1632	1923	2061	2236	2425

The number of unvaccinated children in the district continues to mount up. Since the 1907 Act came into force almost 12,000 children have not been vaccinated. By comparing the number of births with the figures above given, the extent to which children have not been vaccinated on account of conscientious objection may be estimated. The proportion of declarations for the whole district is 34·6 per cent. of the total births. The proportion varies greatly in different localities. The largest proportion of statutory declarations was registered in the registration districts of Shotts Eastern, 57·9 per cent.; Bells-hill, 46·6 per cent.; Calderhead, Cambusnethan, 45·8 per cent.; Hamilton, 42·8 per cent.



TABLE D2.—DIPHTHERIA AND MEMBRANOUS CROUP.

YEAR.	NUMBERS.		RATES.		
	Cases Notified.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)
1891	149	61	40.9	1.04	4.2
1892	262	91	34.7	1.78	6.1
1893	220	86	39.0	1.46	5.7
1894	245	80	32.6	1.59	5.2
1895	175	51	29.1	1.11	3.2
<i>Average.</i>	<i>210</i>	<i>74</i>	<i>35.1</i>	<i>1.39</i>	<i>4.9</i>
1896	193	38	19.7	1.2	2.3
1897	108	26	24.0	0.65	1.5
1898	115	27	23.5	0.7	1.6
1899	132	41	31.0	0.76	2.3
1900	170	43	25.3	0.96	2.4
<i>Average,</i>	<i>144</i>	<i>35</i>	<i>24.3</i>	<i>0.85</i>	<i>2.0</i>
1901	122	42	34.4	0.67	2.3
1902	146	31	21.2	0.79	1.6
1903	109	25	22.9	0.57	1.3
1904	170	37	21.7	0.88	1.9
1905	210	34	16.2	1.09	1.7
<i>Average,</i>	<i>151</i>	<i>34</i>	<i>22.3</i>	<i>0.80</i>	<i>1.8</i>
1906	261	46	17.6	1.33	2.3
1907	439	40	9.1	2.22	2.0
1908	442	44	9.9	2.23	2.2
1909	351	35	9.9	1.75	1.7
1910	424	43	10.1	2.09	2.1
<i>Average,</i>	<i>383</i>	<i>41</i>	<i>10.8</i>	<i>1.93</i>	<i>2.0</i>
1911	429	44	10.2	2.10	2.1
1912	358	28	7.8	1.76	1.3
1913	309	22	7.1	1.49	1.0

**Diphtheria and Membranous Croup.**

Cases, 309; deaths, 22; fatality, 7.1.

The number of cases notified as diphtheria has in recent years been influenced by bacteriological examination of suspected cases, and since the facilities for such examination began to be fully taken advantage of by the medical practitioners in the district, the number of cases notified has remained much above that of former years. The death-

rate given in Column 6 of Table D2 is probably the best index of the prevalence of the disease, and it is satisfactory that the rate for 1913, viz., 1.0 per 10,000 of the population, is the lowest yet recorded.

In no case was the milk supply found responsible for the spread of the disease.

The number of removals to hospital was 245 or 79 per cent.

CLINICAL CASES, INFECTED CONTACTS, AND DEATHS DURING EACH MONTH  
AND AT CERTAIN AGE-PERIODS.

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Clinical Cases, - -	30	25	25	11	20	13	15	25	33	32	36	44	309
Contacts, - - -	7	2	...	2	1	3	3	...	4	5	5	3	35
Deaths, - - -	1	2	2	...	1	1	3	1	3	1	3	4	22
Ages, -1	1-5	5-15	15-25	25-45	45-65	65+	All ages.						
Cases, 9	129	144	17	9	1	...	...	...	...	...	...	309	
Deaths, 3	12	6	1	...	...	...	...	...	...	...	...	22	

TABLE SHOWING THE DISTRIBUTION OF CLINICAL AND CONTACT CASES  
AND ALSO THE NUMBER OF FATAL CASES NOTIFIED BEFORE AND  
AFTER DEATH.

PARISH.	CLINICAL CASES.			CONTACT CASES.		Deaths classified in relation to notification.				
	Houses Invaded.	Persons Attacked.	Deaths.	Cases notified.	Cases not notified.	Days notified before death.			Day of death.	Notified after death.
						Over 7.	2-7.	1.		
Avondale, - -	6	7	...	1	...	...	...	...	...	...
East Kilbride, -	3	4	1	...	...	...	...	...	...	1
Glasford, - -	3	3	...	...	...	...	...	...	...	...
Stonehouse, -	1	1	...	...	...	...	...	...	...	...
Blantyre, - -	28	30	1	1	3	...	1	...	...	...
Bothwell, - -	92	112	8	10	1	2	1	...	1	4
Cambuslang, -	24	28	3	1	...	...	...	...	1	2
Cambusnethan, -	18	19	...	1	...	...	...	...	...	...
Dalserf, - -	6	6	1	...	1	...	...	...	...	1
Dalziel, - -	1	1	...	...	...	...	...	...	...	...
Hamilton, - -	7	9	2	3	...	...	...	...	...	2
New Monkland, -	24	33	2	1	2	...	...	...	...	2
Old Monkland, -	38	45	3	4	6	...	...	...	...	3
Shotts, - -	11	11	1	...	...	...	...	1	...	...
	262	309	22	22	13	2	2	1	2	15

The investigations made, and the preventive measures adopted will now be dealt with for each parish.



**Avondale.**—7 cases in 6 families, with no deaths. Two patients suffered from a second attack. In 3 cases patients were supposed to have been infected at school, and the mother of another case had suffered from sore throat, but thought little of it. Two cases were secondary to others in the house. In one case the source of infection could not be traced.

**East Kilbride.**—Four cases occurred in three houses, with one death. Two cases—sisters—occurred at a dairy farm, K. A son of this farmer worked at a neighbouring farm, D, in Glasford Parish, where diphtheria was discovered later. On 26/1/13 he visited his father's farm, and the following week was two days in bed. A swab from his throat proved positive, and he probably infected the above cases, which were both notified 7/2/13. Measures were taken to safeguard the milk supply, and no further cases occurred. One case in this district had had diphtheria three years previously. Another had been discharged from the County Hospital, Motherwell, after scarlet fever, 26/4/13, and developed diphtheria 10 days later, had not been from home between these dates.

**Glasford.**—3 cases occurred in different houses, with no deaths. The farm D, mentioned above, is in this district, and when a child, aged 4, sickened on 1/2/13 with sore throat it was found to be diphtheria. The Asst. Medical Officer visited, swabbed the inmates, arranged for all the milk to be churned, and suggested that, as the milk from this farm was sent to Rutherglen, fresh milk from another farm be sent in its place. The local Sanitary Inspector reported that this could not be arranged, and permission was, therefore, granted the farmer to make use of his own supply, provided that he kept his wife and man-servant—suspected cases—from milking. This servant, the brother of the two cases in East Kilbride, was found later to give a positive swab, although all the other swabs were negative. All precautions were taken, and no further cases arose.

A case of a girl of seven, treated for diphtheria (positive swab), in December, 1912, was discharged 18/12/12, her swab being then negative. On 10/2/13 she was notified again as suffering from diphtheria. No definite source of infection could be traced. In another case the child had been from home over one night, and had probably been infected while travelling in trains.

**Stonehouse.**—One case occurred—schoolboy—travelling to a school outwith the district. A swab taken from his throat proved positive; antitoxin was administered, and the patient was isolated at home. The source of infection could not be traced.



**Blantyre.**—30 cases occurred in 28 families, with one death. The cases were distributed as follows:—High Blantyre, 6; Low Blantyre, 2; Stonefield, 22.

*High Blantyre.*—Of the 6 cases notified 1 was found, on admission, to be a severe case of broncho-pneumonia, and proved fatal 24 hours after admission. A Polish child, aged 9 months, died on the 5th day of illness. The other cases were mild, and had no connection with each other.

*Stonefield.*—Two of the cases notified were found not to be suffering from diphtheria.

In several of the other cases the disease was only recognised by bacteriological examination.

**Bothwell.**—112 cases occurred in 92 families, with 8 deaths. The cases were distributed as follows:—Bellshill, 32; Bothwell, 10; Carfin, 1; Carnbroe, 4; Chapelhall, 3; Holytown, 3; Newarthill, 2; New Stevenston, 1; Palace Colliery, 33; Tannochside, 1; Uddingston, 22.

*Bellshill.*—The cases which occurred here presented no feature of special interest.

*Bothwell.*—Most of the cases occurred in the first quarter of the year. Two cases notified from Elmwood Convent were the last of an outbreak which occurred there towards the close of the previous year (see Annual Report, 1912, page 167). One case contracted the disease outwith the district.

*Chapelhall.*—Two of the cases were members of the same family. Both sickened on the same day, and were probably secondary to a previous case in the household, which occurred at the end of last year.

*Holytown.*—All 3 cases were members of the same family. One of them, a girl, 5 years, died in hospital eight days after admission.

*Palace Colliery.*—More than half the cases occurred in September and October. The disease was of a mild type, and great difficulty was experienced in discovering the primary cases. Repeated house-to-house visitations were carried out by the local Sanitary Inspector, and doubtful cases were visited by the Asst. Medical Officer. In one family the primary case, which was probably infected outwith the district, gave rise to six secondary cases. Of these 4 occurred in the same family, while other two families each contributed a case.

*Tannochside.*—The case notified was that of an infant 10 months old. No diphtheria bacilli were discovered in a swab taken from throat, but one from the nose revealed the presence of pseudo-diphtheria bacilli.



*Uddingston*.—The disease showed no particular seasonal prevalence, and the cases occurred more or less regularly throughout the year. One case, a boy of 8 years, died at home from what was reported to have been post-diphtheritic paralysis. A swab taken from the throat, however, proved negative, and no secondary cases occurred in the household.

*Cambuslang*.—28 cases occurred in 24 families, with 3 deaths. The cases were distributed as follows:—Cambuslang, 12; Halfway, 7; Newton, 9.

Two of the fatal cases were aged 3 years, and had been ill for five and six days respectively before notification. The third fatal case was aged  $1\frac{1}{2}$  years, and on admission to hospital was operated on for laryngeal obstruction. The remaining cases do not call for comment.

*Cambusnethan*.—19 cases occurred in 18 families, and all recovered. The cases were distributed as follows:—Netherton, 7; Newmains, 6; Overtown, 3; Stane, 3.

*Netherton*.—4 of the cases occurred in the same row. One of these was secondary to a previous case in the family.

*Newmains*.—In 1 case the disease was contracted outwith the district.

*Dalserf*.—6 cases occurred in different families, with 1 death. All the cases occurred in Larkhall.

*Dalziel*.—The case notified from this district proved to be one of laryngismus stridulus.

*Hamilton*.—9 cases occurred in seven houses, with 2 deaths. The cases were distributed as follows:—Eddlewood, 2; Ferniegair, 2; Meikle Earnock, 2; Quarter, 2.

Two of the cases occurred on a dairy farm near Hamilton, the milk being sent to a dairy in the Burgh. The Asst. Medical Officer examined and swabbed all the inmates of the farm, and it was not considered necessary to place any restriction on the milk supply.

*New Monkland*.—33 cases occurred in 24 families, with 2 deaths. The cases were distributed as follows:—Airdrie, 1; Annathill, 15; Glenboig, 11; Greengairs, 3; Longriggend, 1; Luggiebank, 2.

*Glenboig*.—Associated with 7 cases which occurred in October and November there was an outbreak of "sore throat" in Glenboig Public School. The school was visited by the Asst. Medical Officer, who found that 18 scholars had been absent with sore throat during the previous three weeks, but that all had again returned. Swabs were taken from those cases, and one, a girl, J. P., proved positive. She was excluded from school and isolated at home. 3 cases occurred during the next four days, after which the outbreak ceased.



*Annathill.*—7 cases occurred within fourteen days in August, in five families, all living closely together. The original source of infection was not traced. In December, 4 cases occurred in two families living next door to each other.

*Greengairs.*—A small outbreak occurred in the family of a miner, there being 3 clinical cases, and 2 with positive swabs. The 3 former were removed to hospital, and the others were isolated at home. No other cases occurred.

*Old Monkland.*—45 cases occurred in 38 families, with 3 deaths. The cases were distributed as follows:—Baillieston, 8; Bargeddie, 5; Broomhouse, 1; Calderbank, 1; Glenboig, 7; Mount Vernon, 18; Rosepark, 1; Tollcross, 2; West Maryston, 2.

*Baillieston.*—1 case, a girl, A. F., aged 11, occurred in January in the family of a woman employed as a milker at a farm near Baillieston. She died an hour or so after admission to hospital, and a swab taken *post-mortem* proved positive. Swabs were taken from the rest of the household by the medical attendant, and three were found to be positive, one being the woman employed at the farm. They were removed to hospital for treatment. A secondary case, and also one giving a positive swab, occurred in the house next door to that in which the above cases took place. The infection here was obviously direct, the two families being intimate with each other, and there was no evidence that the milk supply, which was not interfered with, had become contaminated.

*Mount Vernon.*—A small epidemic took place in Kenmuirhill Buildings in May, the outbreak being preceded by a number of cases of sore throat. 1 case, a boy, after being a month in hospital, was dismissed apparently well, but after being home for a few days, developed a "cold" with nasal discharge, which on subsequent bacteriological examination proved to be diphtheritic in origin. Other 4 members of the family became infected from this case, 3 having clinical diphtheria, and 1 giving a positive swab.

An outbreak due to milk infection occurred in December, 7 cases occurring in three houses. The milk was retailed from a dairy in Shettleston, which received part of the supply from a farm in the Lower Ward District and part from a farm near Baillieston, and on investigation being made it was found that the owner of the farm in the Lower Ward area, the owner of the dairy, and two milk carriers were infective, swabs taken from their throats being positive (see Lower Ward report). Swabs were taken from the families of the workers on the Baillieston farm, and in 1 case, the son of one of the milkers, a positive result was obtained. The mother herself, although her throat was negative, was prohibited from milking, and the boy was isolated at home. Subsequent examination of the organism obtained from his throat showed them to be non-virulent, and there being no evidence that the milk from the farm was infected, no further action was taken with this particular supply.



*Shotts.*—11 cases occurred in separate families, with 1 death. The cases were distributed as follows:—Cleland, 3; Harthill, 2; Salsburgh, 3; Shotts, 3.

The cases were scattered throughout the district, and occurred at intervals throughout the year. In only 1 case, M. B., residing in Salsburgh, could infection be traced to a previous case, while in some the illness was so slight as to render the diagnosis of diphtheria doubtful.

TABLE D3.—SCARLET FEVER.

YEAR.	NUMBERS.		RATES.		
	Cases Notified.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)
1891	1,490	53	3.55	10.39	3.6
1892	1,323	45	3.40	9.01	3.0
1893	828	23	2.77	5.51	1.5
1894	1,043	24	2.30	6.78	1.5
1895	898	26	2.89	5.70	1.6
<i>Average,</i>	<i>1,116</i>	<i>34</i>	<i>3.06</i>	<i>7.42</i>	<i>2.2</i>
1896	648	25	3.85	4.02	1.5
1897	708	20	2.82	4.29	1.2
1898	1,145	44	3.84	6.79	2.6
1899	1,365	65	4.76	7.91	3.7
1900	1,308	52	3.97	7.41	2.9
<i>Average,</i>	<i>1,035</i>	<i>41</i>	<i>3.98</i>	<i>6.13</i>	<i>2.4</i>
1901	1,202	42	3.49	6.66	2.3
1902	867	47	5.42	4.69	2.5
1903	548	17	3.10	2.90	0.9
1904	329	13	3.95	1.72	0.6
1905	281	7	2.49	1.46	0.3
<i>Average,</i>	<i>645</i>	<i>25</i>	<i>3.90</i>	<i>3.44</i>	<i>1.3</i>
1906	463	14	3.02	3.02	0.7
1907	820	21	2.56	4.16	1.0
1908	876	22	2.51	4.42	1.1
1909	1,283	33	2.57	6.41	1.6
1910	1,194	28	2.34	5.91	1.3
<i>Average,</i>	<i>927</i>	<i>24</i>	<i>2.54</i>	<i>4.67</i>	<i>1.1</i>
1911	1,057	22	2.08	5.22	1.0
1912	1,254	29	2.31	6.16	1.4
1913	1,089	27	2.47	5.21	1.3

**Scarlet Fever.**

Cases, 1,089; deaths, 27; fatality, 2·47 per cent.

Table D3 shows the annual prevalence of scarlet fever since 1891. It will be noted that the incidence of scarlet fever has now remained at an almost constant high level for the past five years. The fatality-rate remains satisfactorily low.

Although several cases occurred on dairy premises, in no case did the milk supply become infected.

The number of cases removed to hospital was 961, being 88 per cent. of the total cases.

RETURN CASES.—857 cases were discharged from hospital, and of these 17 gave rise to 23 return cases, while 3 others were suspected of giving rise to 3 more cases.

The following table shows the distribution of the cases in the various hospitals:—

	Motherwell.	Lightburn.	Bellshill.	TOTAL.
Number of cases discharged,	632	144	81	857
Number of infectious cases discharged,	13	2	2	17
Number of persons infected,	17	3	3	23
Infectivity rate,	2·1	1·2	2·5	—

Of the 17 cases giving rise to return cases it was found that 8 developed a discharging nose soon after their return home, 1 developed a discharging ear, while in 8 cases there was apparently nothing abnormal.

The interval which elapsed between the discharge of the infecting cases and the onset of illness in the return case is given below:—

1 week.	1·2 weeks.	2·3 weeks.	3·4 weeks.
7	7	2	1

The monthly distribution throughout the year was as follows:—

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
83	74	67	51	53	75	80	109	151	133	111	102	1,089

The age-incidence of the cases and deaths was as follows:—

Ages,	-1	1·5	5·15	15·25	25·45	45·65	65 +	All Ages.
Cases,	7	283	717	65	15	2	—	1,089
Deaths,	1	11	12	2	1	—	—	29

The distribution of the disease according to locality and other data connected with the outbreaks are discussed according to parish.



**Avondale.**—19 cases; no deaths. A case of scarlet fever occurring at Farm M. gave rise to a secondary case. These were two in a series of nine cases occurring in the parish between 29/11/12 and 7/1/13. The onset of illness and the distribution of the cases suggested infection to have been got at school and so disseminated, but this was not proved, though the Asst. Medical Officer visited and examined the scholars in Gilmourton and Drumclog Schools. Infection from Bellshill gave rise to three cases in Farm C. in this district. The farmer in this case chose to ignore the instructions given to safeguard the milk supply, which accordingly was stopped till he proved more reasonable. Two cases, M. R. and A. W., one secondary, occurred at a dairy farm. The first case was probably infected while visiting, at Cambuslang, two children recently returned from hospital. One of these was afterwards examined, and found to have a nasal discharge. A case occurring at Farm B., Strathaven, was thought to have been infected at school, as none of the children had been off the farm except at school for some time previously. The Asst. Medical Officer therefore visited Gilmourton School, which these children attended, but could obtain no satisfactory evidence of infection there. This case gave rise to another at a house on the same farm. A case occurred at Farm R., Strathaven, in a child of 5 years, who had not been from home for a considerable period. The parents were anxious that the source of infection should be found, as this was the second outbreak on their farm, but no source could be discovered.

**East Kilbride.**—12 cases; 1 death. An outbreak occurred in a dairy farm in this district, the farmer and three of his children being affected. No definite source of infection could be discovered, though various families in the neighbourhood were visited. There had been a number of visitors at the farm from various districts, and probably the first case—a child—had been infected from these. As the cases occurred they were removed to hospital. Three weeks after the return from hospital of two of the children a sister took scarlet fever and died. The Asst. Medical Officer visited the farm and found these two children, one with copious purulent nasal discharge, and the other with an eczematous condition round the nostrils. Measures were taken to safeguard the milk supply, which was sent to Glasgow under contract.

**Glasford.**—6 cases; no deaths. 3 cases at Farm R. could be traced to those occurring at the dairy farm at East Kilbride. The inmates of these two farms are closely related, and an interchange of visits had taken place while there was infection at the farm in East Kilbride. While visiting in this district in connection with some cases



of mumps the Sanitary Inspector found a child desquamating. This child attended the same school as the children in Farm R., and took sick seven days after these patients had returned to school. The Asst. Medical Officer visited Chapelton School to examine these children, but both appeared healthy, and had no nasal or aural discharge.

**Stonehouse.**—16 cases; 1 death. In this district 4 cases were probably infected while from home, and from these two secondary cases occurred. One patient attended Hamilton Academy, where cases of scarlet fever were known to have occurred. The remaining cases were most probably infected at school, but the source could not be traced, though schools in Stonehouse were visited several times by the Sanitary Inspector with a view to obtaining this.

**Blantyre.**—57 cases; no deaths. The cases were distributed as follows:—Auchentibber, 4; Haughhead, 3; High Blantyre, 20; Low Blantyre, 2; Stonefield, 28.

*Auchentibber.*—The cases occurred in December. In the course of a house-to-house inspection it was found that a child, aged 8, had had a mild illness suggestive of scarlet fever, but as he was practically recovered he was allowed to remain at home. The other cases occurred within one week after removal of the first.

*Haughhead.*—A child, aged 3, was probably infected in Uddingston. 2 children in the neighbouring cottage sickened four days later.

*High Blantyre.*—The cases, which occurred towards the end of the year, were grouped together in Main Street and Broompark Road, the infection being spread by personal contact between the children residing in neighbouring houses. Several house-to-house visits were made, and several mild cases thus found were examined by their medical attendant or the Asst. Medical Officer.

*Stonefield.*—The cases were scattered throughout the district, and occurred at intervals throughout the year.

**Bothwell.**—314 cases; 6 deaths. The cases were distributed as follows:—Bellshill, 65; Bothwell, 16; Carfin, 10; Chapelhall, 10; Holytown, 3; Newarthill, 9; New Stevenston, 8; Palace Colliery, 99; Tannochside, 15; Uddingston, 79.

*Bellshill.*—Most of the cases occurred in the latter half of the year, and the disease was of a mild type. 1 case was not notified till desquamation occurred, and gave rise to 2 secondary cases in one



family and 1 in another. In 1 case, a female, 20 years, the notification was not received till three days after the patient had died. She had apparently succumbed after an illness of four days' duration. 3 were "return cases," 2 occurring in the same family. 1 case contracted the disease outwith the district.

*Bothwell.*—3 cases were notified in January, and no further cases occurred till July, when 6 were notified. Of these 6 cases, 4 occurred in the same family and 2 in different families. All three families resided near each other, and the children were playmates. Notifications were from time to time received during the rest of the year, with the exception of November. In most of the cases infection was traced to personal contact. One was a "return case," and one contracted the disease in a neighbouring district.

*Chapelhall.*—In two families the primary cases were followed by secondary cases in the same families, and secondary cases in different families with whom they were friendly. 1 case was found to be suffering from chickenpox in addition to scarlet fever.

*New Stevenston.*—1 case died twenty-four hours after onset of illness. Of 3 cases which occurred in the same row, 2 occurred in the same family. 1 case notified as scarlet fever was found to be suffering from tonsillitis.

*Palace Colliery.*—The greatest number of notifications were received in August and September. From October to December the numbers gradually lessened, and in December only 2 notifications were received. The disease was of a mild type, and thus great difficulty was experienced in diagnosing the nature of the illness at the onset of the disease. The following note by a medical practitioner on the back of a notification certificate illustrates this difficulty:—"P. M'G., age 5 years, was seen daily for some time past, but although rash suggested scarlet fever no sore throat was present, and fever only once. To-day desquamation and enlargement of cervical glands confirm suspicion of scarlet fever." The following cases are also of interest:—C. L., 8 years, was noticed by her mother to be desquamating about 19/7/13, but did not trouble to call in a doctor as patient appeared to be quite well. When desquamation commenced on the hands the medical attendant was summoned, and at once pronounced the child to be suffering from scarlet fever. Apart from the desquamation, there was said to have been no history of illness. The patient was running about, and was attending the local picture theatre. A boy, R. G., 7 years, was sick and vomiting on 12/8/13, and complained of sore throat. He attended school up till 19/8/13, when he appeared so ill in the class that the teacher sent him home. He was removed to hospital on 20/8/13. Another child, G. A., 5 years, attended school



for two days after the onset of illness. Repeated house-to-house visitations were carried out by the local Sanitary Inspector and the Asst. Medical Officer, who also visited the local school and excluded 8 suspicious cases. Three cases notified as scarlet fever proved to be suffering from diphtheria, and 4 cases notified as scarlet fever were found to be suffering from complaints other than scarlet fever. There were 3 "return cases."

*Tannochside.*—3 cases occurred in the same family. One case notified as scarlet fever was found to be suffering from German measles, while another showed no sign of the disease. One was a "return case."

*Uddingston.*—One case, a girl, J. D., 5 years, occurred in a ploughman's house at Farm E. The Asst. Medical Officer visited, and examined the other inmates. One of them, a boy, R., 3 years, suffered from sore throat before the girl, J., sickened. On examination he showed no sign of desquamation, and there was no discharge from ears or nose. The mother was a milker. The necessary precautions for safeguarding the milk supply were carried out by the farmer. Several cases of sore throat illnesses occurred among the Polish population in Uddingston, but in many instances the doctor was not consulted by the patients lest their children might be removed to hospital. Three cases notified were doubtful, and two showed no evidence of scarlet fever. One case isolated at home subsequently proved to be measles, and one case suffered from chickenpox in addition to scarlet fever. Eleven were return cases. One family contributed 3 and other two families each contributed 2. Two of these families were visited by the Asst. Medical Officer.

*Cambuslang.*—150 cases; 5 deaths. The cases were distributed as follows:—Cambuslang, 77; Halfway, 27; Newton, 46. The disease was most prevalent during the autumn months. The investigations made show that in the great majority of the cases infection was conveyed by personal contact. Although careful inquiries were made regarding the possibility of children attending school in an infectious condition, no such case was found during the year.

*Cambusnethan.*—153 cases; 4 deaths. The cases were distributed as follows:—Bonkle, 1; Morningside, 39; Netherton, 15; Newmains, 68; Overtown, 5; Stane, 20; Waterloo, 5.

*Morningside.*—The greatest number of notifications were received in September, and it was apparent that school infection was occurring. On 10th September the Asst. Medical Officer, accompanied by the local Sanitary Inspector, visited Morningside School and examined



all the scholars. It was found necessary to exclude 16 because of suspicious symptoms or signs. The homes of those excluded were also visited. During the home visitation the Asst. Medical Officer met one of the local medical practitioners, who stated that in many cases of sore throat illnesses, at that time so prevalent in the district, he experienced great difficulty in deciding whether or not the illnesses were scarlatinal in nature, the disease being so mild. After the visitations the notifications gradually lessened, only 7 cases occurring in the last quarter of the year.

*Netherton.*—2 cases, members of the same family, were desquamating on notification. One case died before the notification was sent in. One case proved to be measles, and 3 other cases were suffering from illnesses other than scarlet fever.

*Newmains.*—The greatest number of notifications were received in September, and school infection was suspected. On the 8th September the Asst. Medical Officer, accompanied by the local Sanitary Inspector, visited Newmains R.C. School and examined all the scholars. Only one scholar presented suspicious signs, and he was excluded for a fortnight. 4 cases occurred in one family.

*Overtown.*—One case had whooping-cough in addition to scarlet fever.

*Stane.*—Most of the cases occurred during the latter half of the year. The disease was of a mild type. There was one "return case."

*Dalserf*—30 cases; no deaths. The cases were distributed as follows:—Birkenshaw, 1; Larkhall, 28; Swinhill, 1. The cases were of a very mild type, and in several the diagnosis was doubtful. In one case in which there was delay in notification, three other children in the house contracted the disease.

*Dalziel.*—10 cases; 1 death. All the notifications were received in the latter half of the year. 2 cases occurred in the same family.

*Hamilton.*—32 cases; 2 deaths. The cases were distributed as follows:—Cadzow, 2; Eddlewood, 13; Ferniegair, 7; Limekilnburn, 4; Meikle Earnock, 1; Merryton, 2; Quarter, 3.

*Eddlewood.*—9 of the cases occurred in March. It was found that many children residing in the Rows had had a sore throat illness. The Asst. Medical Officer made a house-to-house inspection, and the children who showed signs of scarlet fever were isolated, while several others whose illness was suggestive of scarlet fever, but who showed no signs of the disease, were excluded from school until the period of possible infection had passed.



**New Monkland.**—67 cases; no deaths. The cases were distributed as follows:—Airdrie, 10; Annathill, 3; Caldercruix, 2; Darngavil, 5; Glenboig, 2; Glenmavis, 2; Greengairs, 16; Longriggend, 6; Moffat Mills, 4; Plains, 5; Riggend, 1; Standrigg, 1; Wattstown, 8; White-rigg, 2.

*Airdrie.*—In one case isolation was permitted at home, and a secondary case occurred in a neighbouring family. There were two other secondary cases, while one case contracted the disease outwith the district.

*Glenboig.*—One case, T. O., aged 22, was removed to hospital on 22nd February. He sickened on 19th February, and appeared to be a typical case of scarlet fever. A few days later, however, he developed typhoid symptoms, and his blood proved positive to Widal's reaction—a case of enteric fever with a well-marked prodromal scarlatiniform rash.

*Greengairs and Wattstown.*—Most of the cases occurred during the summer months. The disease was of mild type, and appears to have been spread by personal contact. On 27th May the Asst. Medical Officer visited Greengairs School, when all the scholars were examined, and in one case, a child, aged 5 years, who gave a history of having had a sore throat four weeks previously, showed evidence of desquamation on the hands. She and the other children of the family were excluded from school.

**Old Monkland.**—75 cases; 4 deaths. The cases were distributed as follows:—Baillieston, 19; Barrachnie, 3; Bargeddie, 4; Calderbank, 7; Carmyle, 18; Drumpellier, 4; Gartcosh, 2; Kirkstyle, 3; Mount Vernon, 4; Tolleross, 11.

*Calderbank.*—Four of the seven cases occurred in March. One case gave rise to three secondary cases, of which two in the same family died.

*Drumpellier.*—The first case was not notified till desquamation set in and infected three other cases in the same house.

*Carmyle.*—One case which was "missed" gave rise to three others in the same family, and also infected three children of a neighbouring household, in which a "return case," the fourth, occurred later. Out of the 18 cases 9 were secondary.

**Shotts.**—148 cases; 3 deaths. The cases were distributed as follows:—Caldercruix, 1; Cleland, 18; Gartness, 4; Harthill, 17; Hartwood, 2; North Linrigg, 2; Northrigg, 13; Plains, 1; Salsburgh, 9; Shotts, 79; West Benhar, 2.



*Cleland.*—In one case in which isolation was permitted at home three other members of the family contracted scarlet fever. There was one return case, and one, a male, aged 20, in which the disease actually present was found to be German measles.

*Harthill.*—All the cases were mild, and in four instances the nature of the disease was not recognised till desquamation had set in. There were 1 return and 5 secondary cases. Two cases occurred on a dairy farm, M., and were both removed to hospital on 21st February, having been notified the same day. The first case, a boy aged 3, sickened on 8th February, but the disease was not recognised as scarlet fever till after the second case sickened on 17th February. None of the other members of the household showed any illness, and there was no evidence that the milk supply, which was retailed in a neighbouring village, had become infected.

*Shotts.*—With two exceptions all the cases occurred in the latter half of the year, and, except in one instance, all were removed to hospital. The disease was of mild type, and primary cases were frequently "missed." On four occasions the Asst. Medical Officer visited the schools in the district and examined the scholars in the affected classes, but in no instance was any definite case of scarlet fever discovered. Several suspicious cases were, however, found and excluded. In many cases the disease was spread by direct contact.

### **Typhus Fever.**

One case was notified in the Parish of *Bothwell*. The patient, a nurse in Merryflats Poorhouse Hospital, Govan, had been nursing there two cases which were subsequently removed to Ruchill Hospital, where they were found to be suffering from typhus fever. She came home to Uddingston on 14th March not feeling well. On the morning of the 18th March a communication was received from the Medical Officer of Health, Glasgow, stating that the nurse had gone to Uddingston, and that the two cases with whom she had been in contact were suffering from typhus fever. The local medical practitioner was communicated with, who diagnosed typhus fever, and the case was removed the same day to hospital. Disinfection of the house was carried out with a Lingner's apparatus, and no further cases occurred.

TABLE D4.—TYPHOID FEVER.

YEAR.	NUMBERS.		RATES.		
	Cases Notified.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)
1891	417	61	14.62	2.9	4.2
1892	374	58	15.50	2.5	3.9
1893	776	74	9.53	5.1	4.9
1894	333	47	14.11	2.1	3.0
1895	425	38	8.94	2.7	2.4
<i>Average,</i>	<i>465</i>	<i>56</i>	<i>11.95</i>	<i>3.0</i>	<i>4.2</i>
1896	361	35	9.7	2.2	2.1
1897	269	42	15.61	1.6	2.5
1898	486	56	11.52	2.9	3.3
1899	404	56	13.86	2.3	3.2
1900	232	34	14.65	1.3	1.9
<i>Average,</i>	<i>350</i>	<i>45</i>	<i>12.73</i>	<i>2.0</i>	<i>2.6</i>
1901	471	53	11.25	2.6	2.9
1902	231	41	17.77	1.2	2.2
1903	247	42	17.00	1.3	2.2
1904	149	23	15.43	0.8	1.2
1905	371	40	10.8	1.9	2.0
<i>Average,</i>	<i>294</i>	<i>40</i>	<i>13.54</i>	<i>1.5</i>	<i>2.1</i>
1906	341	44	12.90	1.7	2.2
1907	150	17	11.33	0.7	0.8
1908	183	18	9.83	0.9	0.9
1909	185	9	4.86	0.9	0.4
1910	172	9	5.23	0.8	0.4
<i>Average,</i>	<i>206</i>	<i>19</i>	<i>9.40</i>	<i>1.0</i>	<i>0.9</i>
1911	154	22	14.28	0.7	1.0
1912	117	17	14.53	0.5	0.8
1913	100	6	6.00	0.4	0.2

**Typhoid Fever.**

Cases, 100 ; deaths, 6 ; fatality, 6.00 per cent.

The number of cases removed to hospital was 96, or 96 per cent. of the total.



The age incidence of cases and deaths was as follows :—

Ages,	—1	1-5	5-15	15-25	25-45	45-65	65+	All Ages.
Cases,	—	13	42	16	25	3	1	100
Deaths,	—	1	2	1	2	—	—	6

Table D4 shows the annual prevalence since 1891.

The number of cases notified during the year is by far the lowest yet recorded. The fatality-rate given in column 4 is also lower than the two previous years. Personal contact was found to be the main factor in the spread of the disease, and it is only by careful and thorough investigation into all suspicious illnesses among contacts during an outbreak that the mild cases, which are often unrecognised, can be discovered and the outbreak checked. Several such cases were discovered by the Asst. Medical Officers of Health. There was no evidence that infection had been spread by means of water or milk.

A large number of specimens for Widal's test was received from medical practitioners, and the result of this test is a considerable aid to diagnosis and early recognition of the disease. A short account of the investigations made and preventive measures adopted in each parish will now be given.

**Avondale.**—1 case. The disease in this case was probably contracted outwith the district. Twelve days before she showed symptoms patient had been visiting at a house in Hamilton on the same day that an inmate of that house had been removed to hospital.

**East Kilbride.**—No cases were notified.

**Glasford.**—No cases were notified.

**Stonehouse.**—3 cases, no deaths. The cases occurred in three families closely related. The first patient had been ill for fourteen days before enteric fever was suspected, and had been visiting the other two families while in an infective condition. In one house, on investigation by the Asst. Medical Officer, the specimens of blood taken from the two inmates were found to give a positive Widal's reaction, though exhibiting no symptoms. They were removed to hospital for observation.

**Blantyre.**—5 cases, 1 death. The cases all occurred in the *Stonefield* district of the parish. 2 of the cases notified proved not to be suffering from enteric fever. The first case contracted the disease while on a visit to Portobello, and when removed to hospital was very seriously ill. He died three days after admission. The other two cases occurred in the same neighbourhood.



**Bothwell.**—24 cases, 1 death. The cases were distributed as follows:—Bellshill, 12; Bothwell, 2; Carfin, 2; Newarthill, 3; New Stevenston, 4; Uddingston, 1.

*Bellshill.*—A case, A. M., 4 years, Main Street, was removed to hospital on 4th October. A specimen of blood received the previous day proved positive. He sickened on 29th August. The Asst. Medical Officer visited, and blood specimens were taken from the other members of the household, with negative result. As he was apparently quite well on admission, and because of the long interval that had elapsed since the onset of illness, he was discharged in four days. After leaving hospital he did not feel well, and was unable to resume work till 10th November. On 11th November the Asst. Medical Officer again visited the house, and found A. M., junr., 16 years, sitting by the fire obviously ill. He sickened about 4th November. A blood specimen taken by the doctor proved negative, but another was taken, and proved positive. He was removed to hospital on 13th November. In the house next door, occupied by a Polish family, a case, J. S., 25 years, occurred. He sickened about 28th October, and was removed to hospital on 11th November. The Asst. Medical Officer visited, and blood specimens were taken from the 9 inmates, 4 of which were children and 3 lodgers. The specimens from 2 lodgers also proved positive, but as they were well and there was no history of recent illness they were not removed to hospital. One was a "missed case," and gave rise to 2 secondary cases, one in the same district and one in New Stevenston. 2 cases, notified as typhoid fever, proved to be catarrhal jaundice. One case contracted the disease outwith the county.

*Bothwell.*—One of the two cases was doubtful, while the other probably contracted the disease outwith the district.

*Carfin.*—Both cases contracted the disease outwith the district. When the Asst. Medical Officer visited the house of one of the cases the father refused to allow specimens of blood to be taken either from himself or his children.

*Newarthill.*—2 cases occurred in the same family. The Asst. Medical Officer visited, and blood specimens were taken from the rest of the family, but with negative results. The source of infection was not found. One case proved to be pneumonia.

*New Stevenston.*—One case was secondary to a Bellshill case, while another was associated with the Ravenscraig outbreak reported in last annual report. Two contracted the disease outwith the district, and in one case the source of infection was not traced.



**Cambuslang.**—3 cases, no deaths. All the cases were in the town of *Cambuslang*. One of the cases notified was found to be suffering from pulmonary tuberculosis, and was subsequently admitted to a sanatorium. Two sisters, aged 9 and 2 years respectively, contracted enteric fever, and were removed to hospital. Although these children had not been out of *Cambuslang*, the source of infection was not found.

**Cambusnethan.**—24 cases, no deaths. The cases were distributed as follows:—*Morningside*, 3; *Newmains*, 6; *Stane*, 14; *Waterloo*, 1.

*Morningside.*—In one family the primary case was followed by a secondary case. The source of infection was not traced. One, "a missed case," was discovered by the Asst. Medical Officer, after a secondary case had occurred in the same household.

*Newmains.*—4 cases occurred in the family C., *Brown Street*. The history of the outbreak was described in the Annual Report for 1912, page 184. The other two cases occurred in a family, H., *Manse Road*. Both sickened on 2nd October, and were removed to hospital on the 15th October. The Asst. Medical Officer visited on 17th October, and it was learned that a child, 10 months, died in this house on the 7th October of an illness said to be tuberculosis of the bowels. Though no history of recent illness was obtained among the other members of the family, blood specimens were taken, but proved negative to Widal's test. No other cases occurred.

*Stane.*—11 of the cases occurred at *Stane Place*. One family contributed 2 and another 3 cases. Two cases occurred in a family, B, in which a girl, M., 6 years, sickened on 17/1/13. This case gave rise to a secondary one in the family, a boy, J., 2½ years. Both were removed to hospital. The case of the boy is of special interest. His stay in hospital was protracted because of the persistence of typhoid bacilli in the urine. After a residence of five months he was discharged with the bacilli still present in the urine. The parents received careful instructions about the disinfection of the urine and fæces, and the child was also to sleep in a bed by itself. The health visitor called frequently, and monthly specimens of urine were sent to the laboratory for examination. These were still found to contain numerous typhoid bacilli. Three months after the child went home the Asst. Medical Officer visited the house. The whole family were well, but it was thought advisable to take specimens of blood from those who had escaped the disease—the father, mother, and four children. All proved negative to Widal's test. The source of infection in the primary case was not traced.

In a family, R., a boy, J., 11 years, sickened on 25/8/13, and was removed to hospital on 6/9/13. The Asst. Medical Officer visited on 8/9/13. It was learned that a baby in the house, M., 6



weeks, died on 23/8/13, and in the Registrar's returns the death was certified as "diarrhœa—7 days." The rest of the inmates were said to have had no recent illness, but specimens of blood were taken, and two proved positive—those of the mother and a daughter, J., 9 years. Specimens of urine and fæces from these two cases were examined, and typhoid bacilli were discovered in the fæces of the mother, but in the case of the daughter the results were negative. Mrs. R. was instructed regarding the disinfection of excrement. On 13/9/13 a specimen of blood from a girl, M. K., 11 years, proved positive, and she was removed to hospital the same day. She sickened on 5/9/13. The house is situated two doors from the family R. The Asst. Medical Officer visited on 13/9/13. Mrs. K. stated that no recent illness had occurred in the family, and denied any intercourse with the family R., but at the time of visit Mrs. R. came into this house. Specimens of blood were taken from the whole family, but proved negative. It was obvious that attempts were being made to withhold information, and a house-to-house visitation was made in the neighbourhood (23 houses visited), but with negative results.

The other cases presented no feature of special interest.

**Dalserf.**—5 cases, no deaths. All the cases occurred in the town of *Larkhall*. The first case occurred in the month of March, and probably contracted the disease outwith the district. In the other cases no definite sources of infection could be found, although all the other inmates of the houses were examined and all suspicious illnesses in the neighbourhood investigated. The affected families were kept under observation for a fortnight after the removal of the patients, but no secondary cases occurred.

**Dalziel.**—13 cases, 1 death. All the cases occurred in *Ravenscraig*, and as the outbreak was associated with cases which occurred in 1912, the narrative was printed in the Annual Report for that year.

**Hamilton.**—2 cases, no deaths. 1 case occurred in *Cadzow*, and 1 in *Ferniegair*.

**New Monkland.**—2 cases, no deaths. 1 case occurred at *Airdrie*, and 1 at *Wattstown*. The source of infection in the *Airdrie* case could not be traced, and the diagnosis of enteric fever was considered doubtful. While in hospital he was found to be suffering from pulmonary tuberculosis. The *Wattstown* case was that of a boy, aged 3 years, who had come from outwith the district, after having been in contact with an enteric fever patient.

**Old Monkland.**—13 cases, with 1 death. The cases were distributed as follows:—Baillieston, 1; Bargeddie, 10; Carmyle, 2.



*Bargeddie.*—10 cases occurred in the latter half of the year, and in separate families, living closely together. The first 2 cases, F. D., aged 14, and A. M'V., aged 22, both residing at Gairbraid Place, were removed to hospital on 1st and 3rd September respectively, suffering from enteric fever. The Asst. Medical Officer visited and examined both families. There had been no recent illness among the members of the former family, and specimens of blood proved negative, but it was found that among the latter Mrs. M'V. had been complaining of general malaise and headache for several days, and a blood specimen taken from her proved positive. She was removed to hospital on 3rd September. The other inmates were well, and specimens of blood examined for Widal's reaction all gave negative results. On 6th November J. R., aged 37, lodging with Mrs. H. at Gairbraid Place, was removed to hospital suffering from enteric fever. On visiting it was found that there had been no recent illness among the members of the family, and that at time of visit all were in good health. Specimens of blood were taken, and that from Mrs. H. proved positive. She showed no clinical evidence of disease, but it was learned that three years previously, when her husband had had enteric fever, she also gave a positive blood, though apparently in good health. Specimens of excreta were examined bacteriologically for B. Typhosis, but with negative result. A house-to-house inspection was made, and several cases of suspicious illness were discovered. In one family all the members had had slight illnesses in August, but in this case permission to take specimens of blood was refused. In another the mother, Mrs. B., aged 35, was thought to have been suffering from influenza for four weeks, but examination of her blood proved positive to Widal's test. She was removed to hospital, and her four children were also removed for observation. None of the children developed the disease. On 10th November F. M'P., aged 12, Telfer's Land, was removed to hospital suffering from enteric fever. The Asst. Medical Officer visited and examined the other inmates, none of whom showed any evidence of illness, but one had had a slight illness five weeks previously. Specimens of blood were taken, and in three cases, viz., Mrs. M'P. and two lodgers, I. S. and J. S., proved positive. In another family from which H. C., aged 12, was removed to hospital on 15th November, a brother and sister gave bloods positive to Widal's test, without having had any history of illness, while in the last case which occurred, that of M. B., aged 5, Gairbraid Place, a specimen of blood, taken from a brother who had been apparently in ordinary health, proved positive.

A feature of the outbreak was the considerable number of cases discovered, giving either (1) a history of suspicious illness with symptoms so slight as to be altogether neglected or unrecognised, and yet giving bloods positive to Widal's test, or (2) a positive Widal



without any history of illness at all. Those mild and ambulant cases, together with the privy midden system in vogue in the district, undoubtedly explain the spread of the disease. In every case in which blood was obtained positive to Widal's test, specimens of excreta were submitted for bacteriological examination, but in no case was the presence of *B. Typhosis* demonstrated. The insanitary conditions found in the dwelling-houses were taken up by the Sanitary Inspector.

*Carmyle.*—The source of infection in 1 case was not traced, while in the other, a coal trimmer, who was employed in the s.s. "Saturnia," the earliest symptoms manifested themselves two days before he left his ship.

**Shotts.**—5 cases, with 2 deaths. The cases were distributed as follows:—Cleland, 1; Harthill, 2; West Benhar, 2.

*Cleland.*—G. J., aged 38, Main Street, was removed to hospital on 20th August, suffering from enteric fever. The Asst. Medical Officer visited the home, and examined the other inmates, all of whom were well, and all gave specimens of blood, which proved negative to Widal's reaction. It was learned that the patient, who turned ill on 11th August, had been at Portobello on 23rd July, and had partaken of shellfish.

*West Benhar.*—Two brothers, J. M'C. and G. M'C., were removed to hospital on 29th and 30th April respectively, suffering from enteric fever, and both died in hospital, the former from double pneumonia, and the latter after operation for perforation. In the case of the latter, blood submitted for examination proved negative to Widal's reaction, but the Asst. Medical Officer had the case removed on clinical grounds, and subsequent *post-mortem* examination verified the diagnosis. The source of infection could not be traced.

### **Cerebro-Spinal Fever or Meningitis.**

During the year 13 cases were notified.

Tables B and E show the prevalence of cerebro-spinal fever in each parish, and Table D5 shows the annual prevalence of the disease since 1906.



TABLE D5.—CEREBRO-SPINAL FEVER.

YEAR.	NUMBERS.		RATES.		
	Cases Notified.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)
1906	33	25	75.7	0.16	1.28
1907	175	135	77.1	0.88	6.85
1908	104	70	67.3	0.52	3.53
1909	12	5	41.6	0.06	0.25
1910	9	6	66.6	0.04	0.29
<i>Average,</i>	<i>66</i>	<i>48</i>	<i>72.3</i>	<i>0.33</i>	<i>2.42</i>
1911	8	3	37.5	0.03	0.14
1912	4	3	75.0	0.01	0.14
1913	13	6	46.1	0.06	0.28

**Puerperal Fever.**

In all, 17 cases were brought under notice during the year, 3 of which were not notified.

*Deaths.*—10 deaths were registered from puerperal fever, 1 of which was not notified. The ages of the patients were:—

From 20-25 years,	...	...	...	...	1 case.
25-30    ,,	...	...	..	...	2 cases
30-35    ,,	...	...	...	...	3    ,,
35-40    ,,	...	...	...	...	3    ,,
40-45    ,,	...	...	...	...	1 case.

**Erysipelas.**

There were 165 cases brought under notice in the course of the year, and 5 of these were fatal. 13 cases were removed to hospital.

**Pulmonary Tuberculosis.**

Cases notified, 369. Deaths registered, 176.

This year this disease has been made the subject of a special report.

**Ophthalmia Neonatorum.**

This disease, if strictly defined, would apply only to inflammation of the eyes, due to a specific infection from venereal disease. As the diagnosis of such a condition necessitates the sending of a specimen



to the Bacteriological Laboratory, and as such delay is not desirable before notification is made, many medical practitioners notify all forms of inflammation of the eyes occurring in an infant after birth. We find, however, that medical practitioners throughout the district do not all adopt this procedure.

Of the 43 cases notified, 33 were found to be suffering from slight inflammation or discharge from the eyes, which subsided within a few days, while in several cases the eyes were found to have quite recovered when the health visitor saw the case on receipt of notification. Of these 33 cases, 18 were notified by one practitioner.

Of the remaining 10 cases, in which the inflammation of the eyes was severe in 1, the practitioner in attendance requested that the health visitor should not attend. The cases treated by the health visitors, under supervision of the doctor in attendance, therefore, numbered 9. 8 of the cases recovered without impairment of the vision, while the remaining case which had been affected for a month before notification died of malnutrition. The average duration of treatment was 22 days, and the average number of visits paid by the health visitor to each case was 13. In 5 of the cases a medical practitioner was in attendance at birth, in 2 a midwife, and in 2 a handy-woman.

The routine treatment carried out by the health visitor, in conjunction with the mother or attendant, consists of half-hourly, hourly, or two-hourly douching of the eyes with 9 per cent. saline solution, according to the severity of the case, and the installation of argyrol, 25 per cent., after each washing. In order that this treatment may be satisfactorily carried out, the nurses were provided with an ophthalmia outfit, detailed on page 223.

#### **Acute Poliomyelitis or Infantile Paralysis.**

3 cases were notified, 2 residing in Shotts and 1 in West Maryston. The patients were aged 6 months, 11 months, and 11 months, and had been ill for one week, three weeks, and five weeks respectively.

#### **Tetanus.**

2 cases; both died. A girl, aged 10, residing in Greengairs, who had received a cut on the knee 10 days before sickening, was removed to the Royal Infirmary, Glasgow, when symptoms appeared, and died there four days after admission.



**Anthrax or Malignant Pustule.**

A butcher, aged 26, was examined by the Asst. Medical Officer, at the request of his medical attendant, and was found to be suffering from malignant pustule of the forehead. He was removed to the County Hospital, Motherwell, where the pustule was excised and Sclavum's serum administered. The patient made an uninterrupted recovery.

**Diarrhœal Diseases.**

Average annual number of deaths and death-rates per 1,000 of the population for four quinquennial periods, and for each of the subsequent years :—

	1891-1895.	1896-1900.	1901-1905.	1906-1910.	1911.	1912.	1913.
Deaths, -	151	226	250	212	240	94	200
Death-rate } per 1,000, }	0.994	1.33	1.34	1.07	1.18	0.46	0.96

The mortality from this group of diseases, like measles and whooping-cough, varies enormously from year to year through circumstances and conditions over which Local Authorities exercise little control. Fatal forms of diarrhœal diseases occur mostly in infants under one year of age, and the incidence was most marked in the autumn months. The yearly variation and autumnal incidence is illustrated by the records for the years 1912 and 1913, which were as follows :—

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
1913,	5	4	3	11	9	6	25	45	44	29	12	7	200
1912,	5	3	4	5	7	5	10	17	13	11	8	6	94

**Measles.**

The importance of measles as a cause of death will be realised from Table D6, which shows that 76 children died from measles during 1913. This gave a death-rate of 0.36 per 10,000 of the population.

TABLE D6.—MEASLES.

YEAR.	NUMBERS.		RATES.		
	Cases Estimated.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)
1891	1,620	81	5.0	11.2	5.6
1892	3,240	162	"	22.0	11.0
1893	3,560	178	"	23.3	11.8
1894	1,660	83	"	10.7	5.3
1895	3,960	198	"	25.1	12.5
<i>Average,</i>	<i>2,808</i>	<i>140</i>	"	<i>18.6</i>	<i>9.3</i>
1896	800	40	"	4.9	2.4
1897	820	41	"	4.9	2.4
1898	5,100	255	"	30.2	15.1
1899	640	32	"	3.7	1.8
1900	3,740	187	"	21.2	10.6
<i>Average,</i>	<i>2,220</i>	<i>111</i>	"	<i>13.0</i>	<i>6.5</i>
1901	980	49	"	5.4	2.7
1902	2,120	106	"	11.4	5.7
1903	1,420	71	"	7.5	3.7
1904	1,700	85	"	8.8	4.4
1905	1,660	83	"	8.6	4.3
<i>Average,</i>	<i>1,576</i>	<i>78</i>	"	<i>8.4</i>	<i>4.2</i>
1906	1,940	97	"	9.9	4.9
1907	480	24	"	2.4	1.2
1908	5,300	265	"	26.7	13.3
1909	240	12	"	1.2	0.6
1910	3,460	173	"	17.1	8.5
<i>Average,</i>	<i>2,284</i>	<i>114</i>	"	<i>11.5</i>	<i>5.7</i>
1911	920	46	"	4.5	2.2
1912	3,400	170	"	16.7	8.3
1913	1,520	76	"	7.3	3.6

**Whooping-cough,**

The remarks with regard to measles apply with equal force with regard to whooping-cough. This is the most fatal form of infectious disease which affects children under five years of age. The disease was more or less prevalent throughout the whole year, as shown by the following monthly statistics. Table B shows the incidents according to parish, while Table D7 shows the prevalence in past years:—

Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Tl.
9	10	11	18	18	18	5	3	2	4	1	4	103



The following Table D7 shows the prevalence of the disease in previous years :—

TABLE D7.—WHOOPING-COUGH.

YEAR.	NUMBERS.		RATES.		
	Cases Estimated.	Deaths Registered.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)
1891	960	48	5.0	6.6	3.3
1892	1,700	85	"	11.5	5.7
1893	1,820	91	"	12.1	6.0
1894	2,760	138	"	17.9	8.9
1895	2,120	106	"	13.4	6.7
<i>Average.</i>	<i>1,872</i>	<i>93</i>	"	<i>12.4</i>	<i>6.2</i>
1896	1,280	64	"	7.9	3.9
1897	2,240	112	"	13.6	6.7
1898	1,980	99	"	11.7	5.8
1899	2,580	129	"	14.9	7.4
1900	960	48	"	5.4	2.7
<i>Average,</i>	<i>1,808</i>	<i>90</i>	"	<i>10.5</i>	<i>5.2</i>
1901	3,000	150	"	16.6	8.3
1902	2,100	105	"	11.3	5.6
1903	2,220	111	"	11.7	5.8
1904	1,920	96	"	10.0	5.0
1905	1,560	78	"	8.15	4.7
<i>Average,</i>	<i>2,160</i>	<i>108</i>	"	<i>11.5</i>	<i>5.7</i>
1906	1,920	96	"	9.8	4.9
1907	1,740	87	"	8.8	4.4
1908	2,700	135	"	13.6	6.8
1909	1,960	98	"	9.8	4.9
1910	1,400	70	"	6.9	3.4
<i>Average,</i>	<i>1,944</i>	<i>97</i>	"	<i>9.7</i>	<i>4.8</i>
1911	2,840	142	"	13.9	6.9
1912	1,920	96	"	9.4	4.7
1913	2,060	103	"	9.9	4.9

### Ringworm.

136 cases of ringworm were brought under the notice of the Department, and 17 successfully treated with X-rays at the Middle Ward Hospital, Motherwell.



### Scabies.

During the year 124 cases were reported. As it is often difficult to prevent the spread of this disease and to get the treatment satisfactorily carried out at home, hospital treatment was offered where this was considered necessary.

### School Closure.

**School Closure.**—The following applications were made during the year for certificates of closure to satisfy the requirements of Article 30 of the Scotch Education Code :—

School.	Parish.	Disease Prevalent.
Barnock Public, ... ..	Avondale,	Whooping-cough.
Drumclog Public, ... ..	Avondale,	Whooping-cough.
Mount Vernon Public, ... ..	Old Monkland,	Measles.
Caldercruix Public, ... ..	New Monkland,	Measles.

**Exclusion of Scholars.**—A special certificate giving the names of scholars excluded from school under the Public Health Act, is forwarded weekly to the Headmaster for the purposes of the Scotch Education Code, Article 19F.

### Anthrax.

Under the Diseases of Animals Act, 1894, 7 outbreaks of this disease, affecting 7 cattle, were reported by the Inspector under the Anthrax Order. The outbreaks were distributed as follows:—Avondale, 2; East Kilbride, 2; Glasford, 1; Bothwell, 1; and Cambuslang, 1.

### Hospitals and Sanatoria.

All the hospitals and sanatoria were occupied during the year. Table F (a) and (b) summarises the work done, and the details will be found in the reports of the individual institutions. The reports of the County Hospital, Motherwell, and of the Joint-Hospital at Lightburn will be found at the end of this report. The reports of the sanatoria are being issued in a special report under the heading Tuberculosis.

All acute infectious diseases were provided for at the County Hospital, Motherwell, and at Lightburn Joint-Hospital. In addition, for the last three months of the year the County Hospital, Bellshill, acted as an overflow for the County Hospital, Motherwell, and admitted patients from certain parts of Bothwell Parish. With regard to Lightburn Joint-Hospital, it will be noted that consequent to the passing of the Glasgow Boundaries Act, 1912, the Hospital Sub-Committee had under consideration the altered circumstances which now obtained with respect to the interests in this institution, compared with the conditions which existed when the agreement between the Middle and the Lower Ward District Committees was entered into in 1897. This matter is still under consideration.



**Table F.—Hospitals and Sanatoria.**  
(a)—PATIENTS ADMITTED FROM MIDDLE WARD DISTRICT.

HOSPITALS AND SANATORIA.	Cases in Hospital at the beginning of year.	Admitted during year from the Middle Ward.	Dis- charged.	Died.	Cases remaining in Hospital at the close of year.	NATURE OF CASES ADMITTED DURING YEAR.									Total.		
						Diphtheria.	Scarlet Fever.	Typhoid Fever.	Cerebro-spinal Fever.	Puerperal Fever.	Erysipelas.	Measles.	Other Diseases.	Pulmonary Tuberculosis.		Tuberculosis other than Phthisis.	Skin Diseases.
Motherwell,	152	1,157	1,147	45	117	188	746	83	7	6	10	2	43	13	37	22	1,157
Lightburn,	41	232	230	11	32	59	135	11	...	3	3	2	8	11	...	...	232
Shotts, ...	15	79	67	5	22	...	1	...	...	...	...	...	...	77	1	...	79
Stonehouse,	16	81	71	2	24	...	...	...	...	...	...	...	...	79	2	...	81
Longriggend,	13	77	67	5	18	...	...	...	...	...	...	...	...	76	1	...	77
Bellshill, ...	29	151	150	14	16	...	79	...	...	...	...	...	5	65	1	1	151
Dalserf, ...	5	31	28	...	8	...	...	...	...	...	...	...	18	9	4	...	31
Blantyre, ...	5	28	24	1	8	...	...	...	...	...	...	...	1	22	5	...	28
	276	1,836	1,784	83	245	247	961	94	7	9	13	4	75	352	51	23	1,836

Table F—Hospitals and Sanatoria.—Continued.  
 (b)—PATIENTS ADMITTED FROM AREAS OUTWITH THE MIDDLE WARD DISTRICT.

AUTHORITY.	COUNTY HOSPITAL, MOTHERWELL.						COUNTY SANATORIUM.				
	Diphtheria.	Scarlet Fever.	Enteric Fever.	Skin X-Ray.	Erysipelas.	Pulmonary Tuberculosis.	Shotts.	Stonehouse.	Uppertown.	Bellshill.	Blantyre.
Upper Ward, ...	2	...	1	1	1	...	1	4	...	...	...
Lower Ward, ...	...	...	...	4	...	2	2	...	8	1	2
Airdrie, ...	...	...	...	2	...	...	...	...	5	...	...
Coatbridge, ...	...	...	...	...	...	...	4	1	7	2	...
Hamilton, ...	37	85	8	21	2	2	3	4	...	3	13
Lanark, ...	...	...	...	14	...	...	...	...	...	...	...
Motherwell, ...	3	1	...	1	...	...	...	...	...	...	...
Rutherglen, ...	...	...	...	...	...	1	2	1	1	2	1
Wishaw, ...	...	1	2	...	...	...	...	1	1	...	1
Clydebank, ...	...	...	...	...	...	...	1	3	...	2	...
Ayrshire, ...	...	...	...	...	...	...	...	1	...	...	...
Clackmannan and Kinross, ...	...	...	...	...	...	...	2	1	...	...	...
Glasgow, ...	...	...	...	...	...	...	3	...	...	...	...
Kincardine, ...	...	...	...	...	...	...	...	2	...	...	...
Mid-Lothian, ...	...	...	...	...	...	...	3	...	...	...	...
Renfrewshire, ...	...	...	...	1	...	...	...	...	...	...	...
Argyle, ...	...	...	...	...	...	...	1	...	...	...	...
	42	87	11	44	2	6	22	18	22	10	17



TABLE G.—BIRTHS NOTIFIED DURING 1913 UNDER THE NOTIFICATION, &c.,  
OF BIRTHS ACT, 1907.—VISITS MADE BY HEALTH VISITORS, &c.

REGISTRATION DISTRICT.	BIRTHS NOTIFIED.	FIRST VISITS.	RE-VISITS FOR			METHOD OF FEEDING INFANT.					IN ATTENDANCE.		
			Infant.	Mother.	Other Reasons.	Breast only.	Breast and Bottle.	Breast and Food.	Cow's Milk.	Patent Food.	Doctors.	Midwives.	Handywomen.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Avondale, - -	100	88	61	...	...	66	1	2	19	...	87	...	1
East Kilbride, -	67	28	11	...	...	25	2	...	1	...	24	...	4
Glasford, - -	31	15	3	1	...	13	...	...	...	2	14	...	1
Stonehouse, - -	100	101	67	14	1	75	6	2	8	7	98	...	3
Blantyre, - -	633	588	511	49	3	527	8	2	17	3	125	407	56
Bothwell, - -	625	491	407	51	9	419	12	10	21	4	182	110	199
Bellshill, - -	692	581	317	29	5	524	9	10	21	7	197	198	186
Holytown, - -	510	486	308	43	4	434	18	1	21	...	306	75	105
Cambuslang, - -	772	571	378	59	2	497	3	5	25	6	408	71	92
Cambusnethan, -	413	324	111	5	2	270	14	2	23	2	304	5	15
Calderhead, - -	102	90	3	...	...	81	2	...	4	...	88	1	1
Dalserf, - -	126	123	257	15	3	103	9	1	7	1	80	11	32
Larkhall, - -	487	474	677	114	4	375	23	8	48	3	366	90	18
Dalziel, - -	99	78	4	...	...	71	...	1	2	2	48	14	16
Hamilton, - -	266	242	222	22	4	204	4	4	17	...	77	131	34
New Monkland, -	349	333	298	27	1	292	6	1	21	3	201	115	17
Old Monkland— Eastern, - -	80	89	33	...	3	80	3	...	5	...	82	5	2
Coatbridge, - -	64	57	77	...	...	51	2	...	2	...	13	42	2
Western, - -	366	319	503	50	3	280	8	2	9	...	141	126	52
Shotts—Eastern, -	129	102	24	...	...	82	5	...	11	...	89	3	10
Middle, - -	57	48	3	...	...	42	3	...	2	...	46	...	2
Calderhead, - -	247	187	86	4	...	168	4	...	11	1	185	2	...
Western, - -	146	115	24	...	...	104	3	...	8	...	106	4	5
Northern, - -	22	19	7	...	...	15	2	...	...	1	9	10	...
	6,483	5,549	4,392	483	44	4,798	147	51	303	42	3,276	1,420	853



### Health Visitors.

The staff of Queen's Nurses attached to the Public Health Department was increased to five in February, 1913. The arrangements made with the District Nursing Associations at Motherwell, Strathaven, and Tollcross continue.

The areas which were assigned to each Health Visitor is briefly indicated in the following tabular statement:—

Health Visitor.	Residence.	Area.
(1) Nurse McNeill,	Uddingston,	Uddingston, Bothwell, and Bellshill.
(2) Nurse Strath,	Hamilton,	Blantyre, Cambuslang, Hamilton (S.), East Kilbride, and Glasford.
(3) Nurse Ross,	Larkhall,	Larkhall, Dalserf, Hamilton (E.), and Stonehouse.
(4) Nurse Stewart,	New Stevenston	Cambusnethan, Shotts (E. M. & W.), Calderhead, and Mossend.
(5) Nurse Arnott,	Shettleston,	New Monkland, Old Monkland (E. C. & W. part), and Shotts (N.).

#### *District Nursing Associations,—*

(6) Motherwell,	Motherwell,	Landward portion of Dalziel Parish.
(7) Strathaven,	Strathaven,	Avondale Parish.
(8) Tollcross,	Tollcross.	Old Monkland Parish (W. part).

**Infant Mortality.**—The deaths of infants under one year of age numbered 842, and from the details given in Table B1 it will be found that of these deaths 197 took place during the first week of life, 42 in the second, 37 in the third, and 40 in the fourth, making a total of 316 deaths during the first four weeks. After the first four weeks the deaths are classified in monthly groups; thus within the period 1-3 months 130 deaths occurred; 3-6 months, 135; 6-9 months, 121; and 9-12 months, 140. In the following table infant deaths are classified in groups according to cause:—

	1913.	1912.
1. Prematurity, 125; Congenital Malformations, 50; Atelectasis, 12; Injury at Birth, 6, ...	193	192
2. Diarrhœa, 167; other Digestive Diseases, 27; Atrophy, Debility, and Marasmus, 126,	320	218
3. Pneumonia, 72; Bronchitis, 35; other Respiratory Diseases, 2, ... ..	109	197
4. Tuberculosis—Pulmonary, 2; Meningeal, 18; Abdominal, 21; other forms, 3, ... ..	44	24
5. Meningitis, 27; Convulsions, 16; other Nervous Diseases, 3, ... ..	46	40
6. Measles, 13; Whooping-Cough, 63; Diphtheria, 3; Scarlet Fever, 1; Syphilis, 2, ...	82	90
7. Violence, 6; Suffocation (overlying) 1, ...	7	7
8. All other causes, ... ..	41	36
	<hr/> 842	<hr/> 804



In the first group 125 deaths were certified due to prematurity, and most of these occurred within the first week of life (see Table B1). In Group II. atrophy, debility, and marasmus were the certified cause of 126 deaths. These cases combined are responsible for 251 deaths, and give an indication of the waste of infant life, which is known to vary very much in the different districts throughout the Middle Ward. This is shown in the following table:—

## DEATHS PER 1,000 BIRTHS.

Registration Districts.	Prematurity.	Atrophy, Debility, Marasmus.	Total.
Avondale, ... ..	—	—	—
East Kilbride, ... ..	19	—	19
Glasford, ... ..	—	—	—
Stonehouse, ... ..	9·4	18·8	28·2
<i>1st Division</i> , ... ..	<i>6·6</i>	<i>6·3</i>	<i>12·9</i>
Blantyre, ... ..	21·6	23·2	44·8
Bothwell, ... ..	23·6	6·3	29·9
Bellshill, ... ..	10·2	23·0	33·2
Holytown, ... ..	13·1	24·6	37·7
Cambuslang, ... ..	18·8	8·8	27·6
Cambusnethan, ... ..	43·3	14·4	57·7
Calderhead, ... ..	30·5	15·3	45·8
Dalserf, ... ..	18·3	24·5	42·8
Larkhall, ... ..	15·1	15·1	30·2
Dalziel, ... ..	21·7	21·7	43·4
Hamilton, ... ..	22·6	22·6	45·2
<i>2nd Division</i> , ... ..	<i>20·0</i>	<i>17·1</i>	<i>37·1</i>
New Monkland, ... ..	11·1	28·4	39·5
Old „ E., ... ..	21·3	10·6	31·9
„ „ C., ... ..	—	36·2	36·2
„ „ W., ... ..	26·6	26·6	53·2
Shotts, E., ... ..	—	41·1	41·1
„ M., ... ..	24·7	24·7	49·4
„ Calderhead, ... ..	9·1	22·7	31·8
„ W., ... ..	6·2	37·5	43·7
„ N., ... ..	—	32·3	32·3
<i>3rd Division</i> , ... ..	<i>13·6</i>	<i>28·5</i>	<i>42·1</i>

A reference to Table B1 shows that diarrhœa caused the death of 200 children under two years of age, 167 of them being under one year. As a cause of death at all ages, this is exceeded only by circulatory diseases, 295; and pneumonia, 237. In a great many



—perhaps a majority—of these 200 deaths from diarrhoea in young children the illness was caused by improper feeding, want of cleanliness in handling food and feeding utensils and infection with specific organisms causing summer diarrhoea. As no such preventable causes exist in circulatory diseases or in pneumonia, we are compelled to regard diarrhoea as the most important cause of death, and as the one which is capable of reduction to a greater extent than any other.

**Notification of Births.**—The notifications received during the year under the Notification of Births Act, which was adopted and came into operation on 15th May, 1910, amounted to 6,483. The number received each month was as follows:—

January, - - -	482	July, - - -	540
February, - - -	462	August, - - -	461
March, - - -	531	September, - - -	595
April, - - -	585	October, - - -	578
May, - - -	571	November, - - -	585
June, - - -	550	December, - - -	543

Comparing the notifications received with the births registered, we find that 92·6 per cent. of the total births have been notified either by the medical attendant, midwife, or by one of the parents. In 1911 and 1912 the ratio of births notified to those registered was about 83 per cent. and 80 per cent. respectively. In cases where births were not notified, circular letters were addressed to the parents calling their attention to the provisions of the Act. These letters were responded to in almost every instance.

*Still-Births.*—As still-births do not require to be registered, there is no means of checking the notifications which we receive. The total number notified was 105; but there is reason to believe that the number of still-births that actually occur is greatly in excess of this.

**Work of Health Visitors.**—The notifications as received were arranged according to area and handed to the visitors. The work done has been summarised in Table G. Column 2 shows that the number notified was 6,483; column 3 shows that the first visits numbered 5,549; so that the proportion of babies visited at their homes amounted to 85·6 per cent. of the total notified.

With regard to professional attendance, of the 6,483 cases notified, 4,106 or 63·3 per cent. had been attended by medical practitioners, and 2,377 or 36·7 per cent. by midwives and handywomen. Comparing these figures with the figures for last year, there is an increase of 8·8 per cent. in the number of cases medically attended. This increase is probably due to the introduction of the National Insurance Act.



The information in columns 7 to 11 of Table G relates to enquiries made at the first visit. The statistics show that by far the largest number of infants were breast fed. Of the 5,549 infants visited, 4,798 or 86·5 per cent. were wholly fed on the breast; 147 or 2·7 per cent. breast and bottle; 51 or 0·9 per cent. breast and food; 303 or 5·5 per cent. cow's milk; and 42 or 0·7 per cent. on patent foods.

In 103 or 1·8 per cent. of the homes visited the child had died before the visits were made.

The health visitors were indefatigable in their endeavours to instruct mothers with regard to proper feeding. Breast feeding was always advocated as the best means of rearing infants, and every opportunity was taken to dissuade the frequent use of "saps" and biscuits. Where it was not considered advisable to keep the infant on the breast, detailed instructions on feeding were given.

It was distressing to find so many long-tubed bottles in use. The reasons given by mothers were that this type of bottle was the only one obtainable at the chemists, and also that they had not time to sit and hold the bottle while feeding the infant. Another evident reason why there is so much bottle feeding is that a large number of nursing mothers are employed during the day, and consequently have to leave the infant in the charge of some other person. The dummy teat is still largely used to keep the child from crying, but one great improvement observed was the diminution in the use of alcohol to make the child sleep.

During the visitation it was found advisable to instruct mothers with regard to their own health and general care. This had very satisfactory results. In cases where serious symptoms were evident, the nurses were able to persuade mothers to see a doctor at once.

Throughout the year material assistance was rendered during convalescence to mothers in poor circumstances by the Maternity Benefit provided under the National Insurance Act. In previous years difficulties were always met with when visits were made to necessitous cases, but these have now been greatly overcome.

*Home Conditions.*—The nurses obtained and recorded information as to the number and condition of the apartments in the home. The Census Returns show the houses in Civil parishes classified according to their size, and the percentage proportions in the Middle Ward District have been extracted as follows:—

Apartments,	1	2	3	4 & over.	
Houses, -	9,234	19,022	4,316	5,872	= Total houses, 38,444.
Percentage,	24·0%	49·5%	11·2%	15·3%	

It is well known that in mining districts, where the birth-rate is very high and marriage takes place early in life, a great number of young married couples live in one-apartment dwellings. It is, there-



fore, not surprising to find that of the visits made by the nurses, 41·5 per cent. were to one-apartment dwellings; 52·4 per cent. to two-apartment dwellings; and 5·11 per cent. to three-apartments and over. It should be remembered, of course, that the nurses do not make visits to houses other than those of the working classes; in other words, their visits are to selected cases.

*Ophthalmia Neonatorum.*—The notifications of this disease are dealt with in another portion of the Report, but it will be here noted that 43 first visits and 222 re-visits were made by the Nursing Staff. The number of re-visits in each case depends upon the severity of the disease—in one instance as many as 40 visits were made. Two of the cases were not notified, and the disease was detected during visitation.

The following table shows the attendant at birth:—

Doctors,	...	...	...	...	...	...	29
Midwives,	...	...	...	...	...	...	8
Handywomen,	...	...	...	...	...	...	4
							<hr/>
							41

In addition to these, there was also 1 case of which we have no record of the attendant, the child being born in London.

In every instance where the eyes were found to be discharging swabs were taken by the health visitors for bacteriological examination, and of the 24 swabs taken in this manner only 9 proved positive.

In cases where a doctor was in attendance the nurse assisted the person in charge of the child in carrying out the doctor's orders. Where there was no medical attendant the nurse impressed upon the people the serious nature of the disease, and advised that medical advice should be got at once.

All the cases responded well to treatment with the exception of one, in which both eyes were lost. In this case the onset of the disease occurred about four or five weeks after birth. From the evidence available it would appear that this child had been infected outwith this district, and there had been delay in seeking medical advice.

There was also 1 case of a child, aged 1½ years, in which a specific ophthalmia occurred.

In order that the nurses may be able to cope with the disease more efficiently, they were supplied with a special treatment outfit. It was also considered advisable that the person in charge of the child should be supplied with a simple apparatus, in order that the treatment might be carried out regularly at stated intervals and with the best prospects of success.



The following is a short description of the outfit and method of treatment carried out:—

#### OUTFIT.

(The outfit consists of three parts.)

(a) Leather case containing:—

1. Cocain solution, 2 per cent.
2. Argyrol solution, 20 per cent.
3. Argyrol and atropine ointment.
4. Boracic ointment.
5. Glass rods for applying ointment to eyes; one rod for each ointment; rods in separate tubes.
6. Tube containing nozzles for douching apparatus.
7. Metal box containing brush and soap.
8. Tube of perchloride of mercury tabloids for disinfection of hands, &c.
9. Tube of sodium chloride tabloids for making saline solution.
10. Wooden box containing two swabs for cultures and two slides for smears.  
The box is enclosed in envelope, and sent to bacteriologist.
11. Kidney dish.
12. Douching apparatus.
13. Apron made of "Battist" for nurse.
14. Sheet of same material for child.
15. Towel for nurse's hands.
16. Bag containing rubber gloves and cotton wool.

*Note.*—Goggles are used by the nurse, but are not carried in case.

(b) Steriliser of the ordinary pattern, and kept by the nurse.

(c) Apparatus left in child's home:—

Tube containing sodium chloride tabloids for making saline solution.  
Argyrol solution.  
Douching apparatus.

#### METHOD OF TREATMENT.

The nurse, having prepared the normal saline solution, and filled the douching apparatus, puts on her apron, goggles, and gloves, and then adjusts the protecting sheet round the child. The child is placed so that its head is between the nurse's knees, while its body and limbs are held by an attendant. Any purulent material about the eyelids is removed by cotton wool mops, which are deposited in the kidney dish and subsequently burned. The eyelids are gently opened, and the corneae carefully inspected for ulceration. Swabs are next taken, and smears made for bacteriological purposes. A few drops of cocain solution are introduced into both eyes, which are then separately douched with saline solution, the latter ultimately finding its way into a basin at the nurse's feet. The eyelids are dried, several drops of argyrol solution introduced, and lastly a small quantity of argyrol and atropine ointment. If at the next visit the nurse finds the pupils dilated, boracic ointment is substituted for that of argyrol and atropine. The nurse's apron, sheet for child, nozzle of douche, ointment rods and rubber gloves are soaked in 1 in 1000 solution perchloride of mercury.

The person in charge of the child is instructed by the nurse to carry out frequent douching by means of apparatus supplied. This douching is carried out every half to four hours, according to severity of the case.

**Other Cases.**—A number of visits were also made in connection with infectious or contagious diseases, which might be classified as follows:—

Pulmonary Tuberculosis,	1,326	Conjunctivitis,	-	98
Measles, - - - -	2	Surgical Cases,	-	2
Scabies, - - - -	1	Skin Diseases,	-	6
Trachoma, - - - -	2	Typhoid Fever (convalescent),	24	



### III.—GENERAL SANITATION.

#### Housing.

The Housing, Town Planning, &c., Act, 1909, greatly increased the powers and duties of County Local Authorities in Scotland, with the result that during the last three years great activity has been displayed in dealing with insanitary property. As the extent and nature of the defects vary enormously, so must the remedies suggested and the procedure adopted.

Administrative action falls naturally into three groups :—

(1) Should the houses present such serious sanitary defects that remedies cannot be carried out without the houses being rendered vacant, procedure is then taken under Section 17 of the Housing, Town Planning, &c., Act, 1909, with a view to obtaining a Closing Order. Such houses are certified unfit for human habitation, and there is often the greatest difficulty experienced in determining what is to be done. The results are often disappointing. In many cases it has been found better to put a period to the life of the dwelling, and give time for the erection of new dwellings, rather than attempt to modernise old ones. Action taken under this section of the Act can be followed up by demolition, and that is sometimes necessary to prevent disused houses from becoming a nuisance.

(2) When the sanitary defects found are not of such a serious nature, and the remedies necessary do not involve internal structural repairs and alterations, but external repairs and the provision of proper domestic and sanitary conveniences, action has been taken under Section 15 of the said Act, in respect that the houses were *not in all respects reasonably fit for human habitation*. Action under this section has not been attended with much success, however, the Court having held that a property in which the situation and construction were of an urban character did not necessarily require to have a water supply and slop sinks within the dwelling to make them reasonably fit for human habitation.

(3) When the defects relate to want of proper means of drainage, want of proper water supply, or want of proper sanitary conveniences, action is often taken under Section 16 of the Public Health Act, *in respect that the premises are of such construction or in such a state as to be a nuisance*. Although this nuisance section is not so specific as that in the Act of 1867, yet in a considerable portion of the housing improvements which have been carried out, and even where workmen's dwellings have been closed, the action was taken under this section.



The remedial measures suggested have aimed at a high standard of sanitation. This has led to the closure of many dwellings that were quite capable of repair. There has not been much difficulty in obtaining Closing Orders, but the greatest difficulty in getting new dwellings provided. Employers of labour would much prefer to have all their workmen housed in dwellings provided by private enterprise, and some workmen would rather live in houses not attached to any particular employer, but the employers' housing is generally much cheaper.

The improvement of workmen's dwellings in our industrial communities has not only concern with matters of construction, as structural alterations have often been carried out at great expense, and serious nuisances have afterwards arisen through the fault of the occupiers. Thus water-closets used in common by two or more tenants have often been found choked by disused household articles or rubbish of all sorts, which showed a tremendous lack of appreciation of the conveniences provided. This has led to the conclusion that each dwelling should have its own sanitary conveniences, and this is the position at the present day. Yet even where each house has its own water-closet, scullery, and slop sink, the drains are frequently choked through improper use, so that with a water carriage system of conveniences the Local Authority has not only to deal with the owners, but also with the occupiers.

The efforts that have been made in recent years towards social reform among industrial communities have been based upon better conditions of employment, higher wages, and shorter hours of labour. The question of improved housing is to a large extent an economic question, and not merely a question of sanitation, but of comfort and convenience, which make household work lighter and more pleasant. Simple questions of sanitation, such as the absence of dampness, sufficiency of light and ventilation, open spaces, an adequate supply of wholesome water, and proper drainage arrangements, are never in dispute. In country districts some of these requisites, such as water and drainage, are not so easily obtained as in urban communities, yet every owner of property admits their necessity. Good housing, even in County districts, suitable to the needs of an industrial community, is at the present day supposed to include not only proper sanitary arrangements, but also domestic conveniences. It is not only sanitation that is wanted, but sanitation made easy. In order to give modern sanitary conveniences, such as baths with hot water supply, houses are being built of much cheaper structure.

In many industrial communities there is, however, reason to fear that a large section of the workmen are not anxious or willing to pay



for the increased domestic comforts and conveniences above mentioned. I think it will be generally admitted that labour in our country has never been better organised, so that workmen can now obtain compliance with demands that at one time would have been considered unreasonable; yet we seldom hear any real demand for better housing conditions, even where the housing is provided by the employer of labour. Still, workmen's representatives are keenly alive to this aspect of the question, and are urging Local Authorities to a high standard of housing, in the hope that workmen will in time be educated to a better appreciation of the comforts and conveniences provided, yet the outlook at present is full of anxiety. Meanwhile, it is common to find employers' dwellings let at an inclusive rental of 2s. 6d. to 3s. 6d. per week, although the household income may be from 30s. to £3 per week.

Not only are Local Authorities concerned with the supervision of dwellings provided by private enterprise, but they are also empowered by the Housing Acts to provide Houses, with the approval of the Local Government Board. Up till now I am not aware that a single County Local Authority has found it necessary to avail themselves of such powers, but the Middle Ward District Committee, in order to obtain first-hand knowledge as to the state of the housing of the working classes in their area, and more especially in districts where Closing Orders had been made, agreed to hold several local inquiries of an informal character, in order to collect evidence from employers of labour, representatives of miners, and working-class residents in the district, and from any others who might be interested in the subject. Public inquiries of this nature have already been held at Cleland and Harthill, and the evidence collected was laid before the District Committee, with the result that it was decided to build 150 workmen's dwellings in these areas—50 at Cleland and 100 at Harthill.

The houses will be laid out on town-planning principles, built in pairs, with a good garden plot back and front, and are in every way to be up-to-date, with all modern conveniences. The three types of houses proposed to be erected are described as follows:—

Type A is a one-storey house, containing front lobby, kitchen, scullery, coal-house, larder, bath with hot water supply, and water-closet, and a good-sized bedroom. Estimated cost, £187 each; probable weekly rental, 5s. each.

Type C is a two-storey cottage, containing kitchen, scullery, coal-house, larder, bath with hotwater supply, and water-closet on the ground floor, and two bedrooms over. Estimated cost, £214 each; probably weekly rental, 5s. 3d. each.



Type D has similar accommodation to type C, but a small third bedroom can be provided. Estimated cost, £207 each; probable weekly rental, 5s. 3d. each.

Although 5s. 3d. per week is the maximum rental estimated, it is quite probable that, through increased costs, 3d. more a week may be required, making 5s. 6d. As the occupier's rates and taxes are estimated about 3s. in the £1, this will make an additional charge of about 10d. per week. Thus these proposals contemplate a rental of over 6s. per week. The houses are being built in mining districts, and to provide this class of workmen's dwellings in such numbers is greatly in advance of anything that has hitherto existed. Such houses are considered models, not only of sanitary arrangements, but of all the domestic conveniences and comforts of a model dwelling. The question naturally arises whether workmen will be found who have both the ability and the willingness to pay such a charge. If it could be argued that such a standard of sanitation were to be provided for all classes of workmen, and that in cases where they could not afford to pay such a rent at the present rate of wages, some subsidy should be obtained from the State, a new aspect of the housing question would at once be opened up.

From a public health standpoint, little evidence has been obtained in country districts that warrants a Local Authority in urging the provision of all such forms of conveniences. On general grounds it may be said that a water supply with a slop sink inside the dwelling must save the mother of the household considerable labour, and perhaps tend to the prolongation of life; in the same way a hot-water supply for the slop sink and for bathing purposes must also lead to a considerable saving of labour, but it can hardly be said that they are necessary for a wholesome dwelling. Success in housing our industrial communities does not lie simply in providing the dwellings with the conveniences of modern town houses.

Summarising the more important aspects of the housing question, as it affects industrial communities in Lanarkshire, we find—

(1) Public Health Authorities have obtained increased powers in dealing with insanitary dwellings, and are demanding remedial measures of a high standard.

(2) Private enterprise, either as employer of labour, speculative builder, or householder, is not able to cope with the situation that has arisen owing to the increased demands of Public Health Authorities, increased cost of building, increased taxation, and inadequate rents, to give a sufficient return for the money invested.

(3) Public Health Authorities seem obliged to take action in the provision of dwelling-houses, and the State may also be summoned to their aid.



(4) A large proportion of the working classes are either indifferent or careless about good housing, and require education as to the proper use and appreciation of good housing, and a willingness to pay for the conveniences and comforts provided.

(5) Insanitary conditions in dwellings are not always due entirely to structural defects, but largely to the habits and character of the occupiers.

*Building Bye-laws.*—Under the bye-laws 173 sets of plans were lodged and reported upon. The usual statistical Tables I., II., and III. are given in the Annual Report of the District Sanitary Inspector, so will not be reproduced here. Table I. shows the number of plans lodged month by month, classified according to parish. Table II. shows the nature of the buildings to be erected, and may be summarised thus:—The erection of new buildings under Bye-law No. 41—Houses and shops, 77; workshops, 10; public buildings, 2; other buildings, 14. Total plans, 103. Alterations on mode of occupancy of existing buildings under Bye-law No. 51—Houses and shops, 46; workshops, 6; public buildings, 12; and other buildings, 6—total, plans, 70. Table III. shows the number of houses classified according to size and the parish in which they were to be erected.

The number of houses to be erected, as shown on the plans lodged during 1913, was 372. During the five years 1899-1903 the average annual number of houses to be erected under the plans submitted was 1,270. During the next five years, 1904-8, the average number was 831, and during the five years, 1909-13, the average number was 431.

*Prosecutions.*—With reference to the contravention of the Building Bye-laws committed by owners of a two-storey tenement property situated in Chapel Street, Bellshill, in respect that they had converted three two-apartment houses into six single-apartment houses, and a three-apartment house into one single-apartment and one two-apartment house, without submitting plans or receiving the sanction of the Local Authority, and the prosecution following thereon, referred to on page 208 of last Annual Report, it was found that the undertaking given by the owners for the restoration of the premises had not been implemented, notwithstanding repeated requests, and it was, therefore, necessary to again institute legal proceedings, when the Sheriff imposed a further penalty of £3, with the alternative of 10 days' imprisonment.

*One-Apartment Dwellings.*—In Table J the houses erected year by year are classified according to size, and in the last column the percentage proportion of one-apartment houses is given. This for the year 1913 is shown to be 7·2. These were erected as follows:—Blantyre, 1; Bothwell, 11; Dalserf, 1; Dalziel, 6; Old Monkland, 4; and Shotts, 4.



TABLE J.—SHOWING NUMBER AND SIZE OF HOUSES SET FORTH IN PLANS SUBMITTED UNDER BYE-LAWS REGULATING THE BUILDING OR RE-BUILDING OF HOUSES OR BUILDINGS DURING EACH OF THE FIFTEEN YEARS, 1899-1913.

YEAR.	One Apartment.	Two Apartments.	Three Apartments.	Four Apartments.	Five Apartments and Upwards.	Total Houses.	Percentage proportion of One-Apartment Houses.
1899,	147	608	110	78	78	1,021	14·4
1900,	98	871	127	40	84	1,220	8·0
1901,	83	714	238	125	71	1,231	6·7
1902,	230	927	229	85	137	1,608	14·3
1903,	175	754	157	27	155	1,268	13·8
1904,	149	395	144	46	159	893	16·7
1905,	107	337	84	59	143	730	14·6
1906,	111	548	99	76	142	976	11·3
1907,	101	397	126	27	101	752	13·4
1908,	114	410	164	52	68	808	14·1
1909,	82	394	89	47	52	664	12·3
1910,	130	205	57	24	73	489	26·5
1911,	72	270	34	28	40	444	16·2
1912,	7	117	23	11	32	190	3·6
1913,	27	237	70	12	26	372	7·2

The following table, extracted from the Census Report, Vol. I., part 24, page 1539, shows the number of houses with the number of windowed rooms, classified according to parish. As many dwellings are used as summer residences, especially in the parishes of the First Division, and as the census is taken in the month of April when such houses are empty, a considerable number of dwellings are returned in the census as unoccupied, whereas in the Valuation Roll they are returned as occupied :—

PARISH.	APARTMENTS.							TOTAL.
	One.	Two.	Three.	Four.	Five.	Six.	Seven and up.	
Avondale, - -	134	362	218	140	121	95	113	1,183
East Kilbride, - -	129	243	118	89	86	75	129	869
Glasford, - -	31	107	48	36	30	16	17	285
Stonehouse, - -	208	339	105	66	31	14	28	791
FIRST DIVISION, -	502	1,051	489	331	268	200	287	3,128
Blantyre, - - -	966	1,539	384	134	72	41	50	3,186
Bothwell, - - -	2,357	5,409	1,106	420	207	144	538	10,181
Cambuslang, - -	621	2,460	535	279	233	198	394	4,720
Dalserf, - - -	1,092	1,756	410	166	76	51	54	3,605
Dalziel & Cambus- nethan, - -	702	1,699	359	141	79	56	88	3,124
Hamilton, - - -	387	722	130	47	27	25	37	1,375
SECOND DIVISION, -	6,125	13,585	2,924	1,187	694	515	1,161	26,191
New Monkland, -	817	1,168	293	129	74	47	53	2,581
Old Monkland, -	971	1,551	255	146	152	105	210	3,390
Shotts, - - -	819	1,667	355	134	60	53	66	3,154
THIRD DIVISION, -	2,607	4,386	903	409	286	205	329	9,125
TOTAL, - - -	9,234	19,022	4,316	1,927	1,248	920	1,777	38,444
PERCENTAGE, - -	24·01	49·47	11·22	5·01	3·24	2·39	4·62	...

*Domestic and Sanitary Conveniences.*—Wherever an efficient system of sewerage and sewage disposal has been provided, the introduction of water-closets has always been suggested, but when the number and arrangement were such as to allow only one closet for every four families, and these closets were placed at a distance from the dwellings, the result has usually been very unsatisfactory. After long experience, it has been found that the only satisfactory way of



providing suitable domestic and sanitary conveniences for workmen's dwellings is to have separate sanitary conveniences for each house. This is of far more importance than the particular type of closet provided.

The following Table L shows the nature of the sanitary conveniences provided for dwelling-houses of one, two, and three apartments, according to the plans passed during the year. It will be seen that nearly all the water-closets provided were either inside or directly attached to the dwelling :—

TABLE L.—SHOWING THE NATURE OF THE SANITARY CONVENIENCES PROVIDED FOR DWELLING-HOUSES OF ONE, TWO, AND THREE APARTMENTS DURING 1913.

PARISH.	Houses of 1, 2, and 3 Apartments.	SANITARY CONVENIENCES.			
		Water-Closets.			Privies.
		Inside.	Attached.	Detached.	
Avondale, - -	4	1	3	...	...
East Kilbride, -	11	10	...	...	1
Glasford, - -	...	...	...	...	...
Stonehouse, - -	4	2	...	1	...
Blantyre, - -	4	2	...	...	...
Bothwell, - -	35	24	6	2	...
Cambuslang, -	20	20	...	...	...
Cambusnethan, -	61	59	1	...	1
Dalserf, - -	10	8	1	...	...
Dalziel, - -	52	14	30	...	...
Hamilton, - -	...	...	...	...	...
New Monkland, -	4	1	...	...	2
Old Monkland, -	43	42	1	...	...
Shotts, - -	86	76	5	1	2
Total, -	334	259	47	4	6

*School Buildings.*—The plans relating to schools are here tabulated with a description of the buildings :—

School Board.	School.	Description.
Old Monkland,	- Mt. Vernon Public,	- Two Buildings (1 storey) consisting of (1) cookery room, laundry room, and lavatory, and (2) woodwork room, wood store, and lavatory.
Bothwell,	- Carnbroe,	- Rearranging 4 class rooms and providing Headmaster's and teachers' room
Bothwell,	- Chapelhall,	- Additions to teachers' room and new lavatory.
Shotts,	- Shotts Kirk New,	- School House (1½ storeys), 1 six apartment house with bathroom and scullery.
Cambuslang,	- Gateside,	- Public School (3½ storeys), consisting of class accommodation for 1,170 scholars, with manual instruction, laundry and cookery rooms, &c.
Blantyre,	- Hunthill Road,	- Providing Headmaster's new room with W.C., &c., rearranging assistant teachers' room.
Blantyre,	- Auchenraith,	- Rearranging existing class room and providing new store for Janitor.
Blantyre,	- Low Blantyre,	- Converting part of class room and passage into central hall, &c.
Cambusnethan,	- Waterloo,	- Converting class rooms into manual instruction, cookery, and laundry rooms, with necessary conveniences.
Bothwell,	- Mossend,	- Altering class room into teachers' room, with lavatory accommodation.
Bothwell,	- Newarthill,	- Alterations and additions providing class room accommodation for 360 scholars.



With regard to existing buildings, an immense amount of work has been done by the Sanitary Staff in their endeavours to abolish common midden privies in populous places. Where special scavenging districts have been formed the invariable rule has been to insist upon the provision of water-closets with portable dust-bins. The progress made in this direction is shown in the following statement, which gives the position before special scavenging districts were formed, and what has since been accomplished:—

STATEMENT SHOWING THE NUMBER OF PRIVIES WHICH EXISTED IN SPECIAL SCAVENGING DISTRICTS PRIOR TO FORMATION OF SAME, ALSO THE NUMBER SINCE CONVERTED INTO W.C's.

Special District.	Privies.	W.C's.
Baillieston, - - - -	145	20
Bellshill, - - - -	382	380
Blantyre, - - - -	251	250
Bothwell, - - - -	100	88
Cambuslang, - - - -	212	212
Carmyle, &c., - - - -	50	20
Dalzell, &c., - - - -	30	30
Gartlea, - - - -	4	2
Holytown, &c., - - - -	155	150
Strathaven, - - - -	460	460
Uddingston, - - - -	102	100
Total, - - - -	1,891	1,712

The work done under the Housing Acts is roughly indicated in the information supplied to the Local Government Board, in terms of Article 5 of the Board's regulations under and for the purpose of Section 17 (1) of the Housing, Town Planning, &c., Act, 1909, which is given in the following tabular statement and subsequent paragraphs; but in connection with the preparation of evidence for the Housing Commission, the tables given on pages 241 and 242 were made up, which give detailed information as to what has been accomplished since the passing of the Act:—

	1 Apt.	Houses of 2 Apts.	3 Apts.	4 Apts.	Total Houses
Number of dwelling-houses inspected, - - -	309	676	44	3	1,032
*Houses found unfit for human habitation, - -	21	73	—	—	94
Representations to Local Authority, - - -	6	73	—	—	79
Closing Orders made, - - - -	6	73	—	—	79
Defects remedied after making Closing Orders, -	—	—	—	—	—
Defects remedied without making Closing Orders, -	—	195	15	—	210
Houses closed voluntarily without making Closing Orders, - - - -	15	—	—	—	15
Remedies in progress, - - - -	34	12	—	—	46
Remedies agreed to, - - - -	—	16	—	—	16
Remedies being arranged for, - - - -	275	438	29	3	745

\* The figures under this heading only include houses with regard to which representations were made under the Housing Acts.



*Hairstocks.*—The repairs and improvements on the dwelling-house at Hairstocks, in the Parish of East Kilbride, referred to in last Annual Report, page 211, have now been completed.

*Low Blantyre Village.*—The insanitary conditions existing at the 6 one-apartment and 11 two-apartment houses known as Shuttle Row, Low Blantyre, have been the subject of correspondence with the owner's agents. The property has since changed hands, and the matter will be taken up with the new owners.

*New Rows, Nackerty.*—The repairs and improvements at New Rows, Nackerty, in the Parish of Bothwell, referred to in last Annual Report, page 212, are proceeding.

*Jerviston Square.*—With reference to the insanitary condition of the 56 dwellings situated at Jerviston Square, New Stevenston, and the Closing Order made in connection therewith, referred to in last Annual Report, page 212, the negotiations with the new owner of the property as to the repairs and improvements necessary to render the houses reasonably fit for human habitation, were continued. Certain repairs and improvements have since been carried out, and the owner has made application to the Local Authority to withdraw the Closing Order, but as the defects existing in the property had not all been remedied, the Local Authority agreed that they could not consider as to withdrawing the Closing Order. Further improvements have now been made, and the whole matter will again be brought before the Local Authority for their consideration.

*High Biggins.*—The repairs and improvements on the 8 two-apartment and 16 single-apartment back-to-back houses situated at High Biggins in the Parish of Bothwell, referred to in last Annual Report, page 213, have now been completed.

*Hamilton's Land, Carnbroe.*—The question of repairs and sanitary improvements necessary on the 7 one-apartment and 4 two-apartment houses known as Hamilton's Land, Carnbroe, has been taken up with the owners, and is in negotiation.

*Hamilton Palace Colliery.*—The question of providing modern sanitary conveniences for the 79 one-apartment, 349 two-apartment, 27 three-apartment, and 3 four-apartment workmen's dwellings, referred to in the Special Report on Housing, page 114, situated at Hamilton Palace Colliery, in the Parish of Bothwell, including the provision of a scullery, wash-house, water-closet, and coal cellar for each dwelling, the removal of the existing conveniences from the courts, and the substitution for the open channels of an underground drainage system, was taken up with the Colliery Company. The



company intimated that they were anxious to co-operate with the Local Authority, and willing to comply with any reasonable demands in the matter of providing drainage facilities for the houses, but could not undertake the formation of an outfall sewer for the disposal of the sewage. The question of forming a special drainage district at the place is presently under the consideration of the Local Authority.

*Old Mill Road, Uddingston.*—The 6 dwellings known as Braidwood's Land, 111/121 Old Mill Road, Uddingston, were found to be in a most insanitary condition, the chief defects being damp walls, broken plaster, windows not made to open, insufficient water-closet accommodation, want of proper drainage, and chimney-heads dilapidated. Arrangements have now been made for the necessary repairs being carried out.

*Napier Square.*—The insanitary conditions existing at 54 one-apartment and 9 two-apartment houses, known as Napier Square and Burn Row, New Stevenston, were the subject of correspondence and meetings with the owners, but nothing has yet been arranged. The defects included walls partly embedded, dampness of walls, 16 houses back-to-back, and without means of through ventilation, defective roofs, eaves gutters dilapidated and without proper conductors, windows not properly hung, window frames dilapidated, plaster work dilapidated, and floors dilapidated.

*Thankerton No. 2, Mossend.*—The owners of the 10 two-apartment and 4 one-apartment houses at No. 2 Pit, Thankerton, referred to in the Special Report on Housing, page 119, agreed to provide for the two-apartment houses, a scullery with sink, water supply and water-closet for each dwelling, also coal cellars and wash-houses, and to demolish the 4 one-apartment houses, which were in a dilapidated condition. The work is in progress.

*Old Rows, Nackerty.*—With reference to the repairs and improvements being carried out on certain of the houses situated at Old Rows, Nackerty, referred to in last Annual Report, page 211, a further instalment of improvements are now being carried out, including the conversion of 24 one-apartment back-to-back houses into 12 two-apartment houses, and the provision of a scullery fitted with washing-boiler, sink and gravitation water supply for each dwelling, with a water-closet for every two dwellings.

*Metal Row, Newarthill.*—The six one-apartment dwellings known as Metal Row, and situated on Cleland Estate, were inspected, and the owners informed that the sanitary defects were so serious that a representation might be made under the Housing Acts with a view to



a Closing Order. These defects included dampness, floors dilapidated, plaster dilapidated, windows not made to open, roofs defective, chimney-heads defective, no eaves gutters, no coal cellars, no wash-houses, privies and ashpits foul and dilapidated, want of proper drainage and water supply. The owners have since intimated their intention of closing the houses.

*Lee's Land, Thorniewood.*—The owners of the 12 two-apartment dwellings known as Lee's Land, Thorniewood, have agreed to provide improved water-closet accommodation.

*Rowantree Row, Chapelhall.*—Complaint was made as to the insanitary condition of the 8 single-apartment dwellings known as Rowantree Row, Chapelhall, including dampness, defective floors, windows not made to open, plaster dilapidated, roofs and chimney-heads defective, eaves gutters dilapidated, coal cellars dilapidated, ashpit dilapidated, and privy foul, want of proper drainage, and no water supply. The property subsequently changed hands, and the new owner has submitted plans for the provision of a scullery with sink and water supply, water-closet and coal cellar for each house, with ample wash-house and ashpit accommodation.

*Newmains.*—As the result of negotiations, the owners agreed to make certain sanitary improvements at the 62 two-apartment dwellings in Manse Road, Brown Street, and Hope Street, Newmains, referred to in the Special Report on Housing, page 140, including the provision of a water-closet, slop sink with water supply, and washing-boiler for each dwelling, all within the main walls of the existing buildings. The work is in progress.

*Gillhead Rows, Waterloo.*—The owners of 29 one-apartment dwellings known as Gillhead Rows, Waterloo, were communicated with regarding the sanitary defects existing on the properties, including embedding of walls, dampness, defective roofs, want of proper rhones and conductors, want of through ventilation, want of proper drainage, and want of proper domestic and sanitary conveniences. The matter is presently in negotiation.

*Pather Buildings, Wishaw.*—These buildings were erected about twelve years ago, and contain 32 two-apartment houses, each house having a scullery with sink, water supply, and coal cellar. The sanitary conveniences originally provided were 8 privies and 4 ashpits, but the privies have now been abolished, and each dwelling provided with a water-closet.



*Allanton Rows.*—Further progress has been made during the year with the improvements and the provision of proper domestic and sanitary conveniences at Allanton Rows, in the Parish of Hamilton, referred to in last Annual Report, page 214, the work at Boiler Row and Top Row having been completed. With regard to Double Row, a representative of the Colliery Company, at a meeting with the Medical Officer, expressed the opinion that these houses were not worth the expense of improvements on the same lines as had been carried out at the other two Rows, and that if these were insisted upon by the Local Authority he would prefer to close the houses. Following this interview, the Medical Officer of Health sent the Colliery Company a plan, showing how the occupancy of the houses could be satisfactorily altered by converting the existing 20 houses into 10 three-apartment houses, with the provision of two wash-houses, a coal cellar for each house, and a water-closet for every two houses. After some further negotiations, the Company agreed to execute these suggested remedial works, and these are now nearly completed.

*Quarter.*—The repairs and improvements carried out at the houses in the village of Quarter, belonging to the Colliery Company, referred to in last Annual Report, page 214, are not quite satisfactory, and the matter has been taken up with the Company.

*Nisbet's Buildings, Ferniegair.*—This property contains 12 one-apartment dwellings, and at the close of the year a meeting was held at the property with the factor regarding insanitary conditions. A note of the repairs necessary to render the houses reasonably fit for human habitation was made up, and the matter is still in negotiation.

*Cadzow Rows.*—With reference to the insanitary conditions existing at the dwellings known as Cadzow Rows, in the Parish of Hamilton, and the unsuccessful action taken against the Colliery Company under Section 15 of the Housing, Town Planning, &c., Act, 1909, referred to in the Annual Report for 1911, page 221, on 4th June, 1913, the Colliery Company lodged plans showing conveniences proposed to be provided for the houses in Wilson Terrace, part of the property regarding which the legal action, already referred to, had been taken. These improvements included the provision of a scullery with boiler and water supply, and also a water-closet for each house. These plans were approved by the Committee, and the work has since been completed. On 13th May, 1914, a further plan was approved by the Committee, showing another instalment of improvements proposed to be carried out on 48 two-apartment houses situated in Moore Street, including the provision of a scullery with boiler and water supply, and a water-closet and coal cellar for each house. These improvements are now proceeding.



*East and West Longrigg.*—With reference to the insanitary conditions existing at the houses in the villages of East and West Longrigg, belonging to the Colliery Companies, referred to in last Annual Report, page 214, and the recommendations made by the Medical Inspector of the Local Government Board, it was found that the repairs and improvements being carried out at East Longrigg were not satisfactory, but after some negotiations matters were adjusted, and the work was carried out.

With regard to West Longrigg, the Colliery Company intimated that they were unwilling to carry out improvements on the dwellings, as the colliery would only go for about two years, and after that the houses would probably have to be removed. In view of the correspondence which had already taken place with the Local Government Board on this subject, the attitude taken up by the Colliery Company was communicated to the Board, who afterwards expressed the opinion that the removal of the houses after two years was only probable, and in any case they could not regard this as a sufficient reason for allowing the continuance of such grossly unhealthy and insanitary conditions, and that accordingly the Company should be pressed to improve the houses on the lines indicated by the Board's Medical Inspector. The Colliery Company were again pressed to have the improvements carried out, and although certain work was done by them, this was not of such a nature as to remedy the defects complained of, and on the further correspondence with the Company being submitted to the Board it was arranged that the Medical Inspector should again visit the *locus*. This inspection was made towards the close of the year, and the following extracts from the Medical Inspector's report show the condition of matters existing:—

“ *West Longrigg.*—Twenty-four houses are inhabited (on December 5th). About one-half of these have been considerably improved by wood lining of walls, repair of windows and of roofs; but in none is there a window which can be opened otherwise than one corner pane. For none of these houses is a privy provided such as any adult could be expected to use, and about twelve of the inhabited houses are back-to-back houses. In short, while the most of them have been improved, no endeavour has been made to remedy the defects mentioned in my Report of October, 1912, which was submitted to the Local Authority with the Board's approval.

“ Mr. Wilson and I are of opinion that the rows which are already entirely evacuated should be demolished.

“ In the village of East Longrigg a number of repairs have been carried out. A tile drain has been laid round the foundations of the houses; and the external walls, with the exception of the east gable of the eastern row and the back wall of the western row, have been covered with two coats of cement plaster. Floors have been repaired or are being repaired where they require it; all the front windows have been made to open to the extent of their upper third, which is



hinged so as to open inwards, hopper-wise. The roofs have been repaired where that was necessary; two additional stand-pipes have been provided, so that the furthest distance between any one stand-pipe and any single house is much less than formerly; and privy middens have been provided in the proportion of one privy to every two households.

"These are substantial improvements. It is true that the application of cement directly to the internal wall instead of the provision of lath and plaster is not very satisfactory, and that it would have been better had the back as well as the front windows of the double houses been made to open freely. Nevertheless, the fact remains that in respect of privies, windows, water supply, general repair and otherwise, this village has at least received a fairly satisfactory measure of improvement."

In their letter transmitting a copy of the above report the Board stated they understood that the Darngavil Coal Company were prepared to enter into an agreement with the Local Authority, whereby they would undertake to terminate the occupancy of all the West Longrigg houses by 1st January, 1916, or alternatively to put them in repair to the satisfaction of the Local Authority and the Board, but in view of the protracted negotiations, extending over a period of eleven years, the Board cannot agree to the suggested further delay. Although this decision of the Board was communicated to the Company, the necessary work was only commenced on 14th May, 1914, and then only after considerable pressure.

*Greenwood Terrace, Glenmavis.*—This is a two-storey stone-built property, containing 6 two-apartment and 2 three-apartment houses, and as a result of negotiations the owner has provided a scullery for each house, fitted with a sink and water supply, with a water-closet for every two houses.

*Marshall's Land, Plains.*—As the result of negotiations, the owner of the 4 one-apartment, 11 two-apartment, and 2 three-apartment dwellings, known as Marshall's Land, Plains, agreed to have these put into a thoroughly sanitary condition, including the conversion of the 4 back-to-back houses into two-apartment dwellings, and the provision of water-closet and wash-house accommodation. The work is in progress.

*Annathill.*—When this recently erected mining village, referred to in the special report on Housing, page 168, was inspected by the Committee, it was found that at the 127 two-apartment and 13 one-apartment dwellings, comprising the first built rows, the midden privies were in such a state that they could be certified as a nuisance, and the Medical Officer was instructed to take the matter up with the Colliery Company, with the result that arrangements were afterwards made for the provision of water-closets in the proportion of one for every two houses, so that the whole village is now provided with water-closet accommodation.



*Campsie View, Longriggend.*—This property consists of 2 back-to-back one-apartment houses and 5 two-apartment houses, and as the property was in an insanitary condition it was suggested that the owners might convert the 2 back-to-back houses into a two-apartment dwelling, and carry out improvements on all the dwellings as follows:—Windows to be properly hung, external walls to be rough-cast, rhones and conductors renewed and connected to a proper drain, closet and ashpit accommodation to be provided, also improved drainage and water supply. The improvements are awaiting the consent of one of the principals, who is presently abroad.

*Kenmuir Rows.*—With reference to the sanitary defects in the 26 one-apartment and 13 two-apartment dwellings, known as Kenmuir Rows, referred to in last Annual Report, page 216, the owners having intimated that they would rather demolish the houses than incur the expenditure necessary to carry out the improvements asked for, the Local Authority are presently considering the advisability of making a Closing Order.

*Baillieston.*—The question of proper domestic and sanitary conveniences for 59 dwellings, belonging to the United Collieries, Limited, and situated in Main Street, Dyke Street, and Buchanan Street, Baillieston, referred to in the special report on Housing, page 189, has been taken up, and is in negotiation.

*Smithy Row, Gartgill.*—This row of 6 single-apartment dwellings, situated on the south side of the highway leading from Gartsherrie Station to Glenboig, was found to be unfit for human habitation, owing to dampness, dilapidation, and want of proper domestic and sanitary conveniences. The matter was taken up with the owners, who afterwards closed the houses.

*Northrigg.*—The improvements referred to in last Annual Report, page 217, have now been completed.

*Harthill.*—With regard to the insanitary conditions existing at the property in Main Street, Harthill, known as "Teapot Close," referred to in last Annual Report, page 217, some of the repairs and improvements have been carried out, and the owners are being pressed to have the work completed.

*West Benhar.*—In continuance of the narrative in last Annual Report, page 218, regarding the proceedings under Section 16 of the Public Health Act, against the owner of West Benhar Rows, in the Parish of Shotts, for the removal of nuisance conditions and the provision of proper domestic and sanitary conveniences, in compliance with the Sheriff's Interlocutor plans were lodged by the defender



showing his proposals for the remedy of the nuisance, several meetings afterwards took place between parties with the view to a settlement of the matter, and an agreement was ultimately arrived at, and submitted for the approval of the Court. Questions were, however, raised by the Superiors of the land with regard to the matter of sewage disposal, and although the Local Authority did everything in their power to facilitate an arrangement between the defender and the Superiors the negotiations fell through, and accordingly on 30th January, 1914, the Sheriff issued an Interlocutor ordaining the defender, on or before 28th May, 1914, to close the houses for human habitation. Overtures were afterwards made to the Local Authority to have the time given in the Closing Order extended, in view of the scarcity of houses in the locality, until such time as the houses proposed to be built by the Local Authority in this area might be ready for occupation. Application was again made to the Sheriff, who issued an Interlocutor of consent superseding the date of closing of the houses as set forth in his Interlocutor of 30th January, 1914, and ordaining the defender on or before 28th May, 1915, to close the premises for human habitation or use until the prohibition is altered or revoked by a further Order of the Court.

*Omoa Road, Cleland.*—The repairs and improvements at this property, referred to in last Annual Report, page 219, have now been completed.

*Hawkwoodburn.*—9 old dwelling-houses, situated at Hawkwoodburn, came into possession of the Local Authority when acquiring the necessary land for purification works for the Shotts Special Drainage District. The tenants have all been warned out, and it is intended to have the premises demolished.

#### HOUSES CLOSED SINCE PASSING OF HOUSING ACT, 1909.

	No. of Houses.		No. of Houses
Auchenlea, ... ..	24	Macfarlane's Land, Baillieston, ...	28
Old Rows, Newton, ... ..	80	Stand Row, ... ..	9
Sauchiebog, Cambuslang, ... ..	5	Raploch, ... ..	7
Flat Row, West Benhar, ... ..	48	Sighthill, Salsburgh, ... ..	2
Ross Street, Ferniegair, ... ..	33	Hawkwoodburn, ... ..	9
South Stanrigg, ... ..	32	Thankerton No. 2, Mossend, ...	4
Omoa Square, ... ..	138	Metal Row, Newarthill, ... ..	6
Kerr's Land, Tollcross, ... ..	23	Smithy Row, Gartgill, ... ..	6
West Benhar, ... ..	155	Nackerty, ... ..	2
Greenhill, Netherburn, ... ..	2	Sweethills, Carnbroe, ... ..	2
Mossend (Brick Buildings, &c.), ...	12	Jerviston Square, New Stevenston, ...	56
Black Land, Bellshill, ... ..	16		
		Total, ... ..	699



## SANITARY IMPROVEMENTS COMPLETED.

	No. of Houses.		No. of Houses.
Morningside Square,...	32	Nimmo's Rows, ...	107
New Logan's Rows, ...	106	Low Row, Flemington, ...	32
Drumshangie, New Monkland, ..	3	High Biggins,...	24
Mossend, ...	163	Ladylands, Hartwood, ...	11
Castlehill Feus, ...	10	Burnside Row, Newmains, ...	33
Allanton Rows, Ferniegair,...	64	Scott's Property, Omoa, ...	28
Baird's Square, Holytown, ...	78	Greenwood Terrace, Glenmavis, ...	8
Newton Rows, ...	276	Annathill, ...	140
Woodside Rows, ...	30	Pather Buildings, Wishaw,...	32
Doctor's Land, Bellshill, ...	14	Low Biggins, ...	13
Towie Place, Uddingston, ...	25		
		Total, ...	1,229

## SANITARY IMPROVEMENTS IN PROGRESS.

	No. of Houses.		No. of Houses.
Main Street, Harthill, ...	50	Old Rows, Nackerty, ...	24
Thorniewood Rows, Uddingston, ...	69	Lee's Land, Thorniewood, ...	12
Cadzow Rows, ...	204	Rowantree Row, Chapelhall, ...	8
New Rows, Nackerty, ...	38	Muirside, Baillieston, ...	6
Quarter, ...	224	Camp Road, Baillieston, ...	16
Hairstocks, East Kilbride, ...	1	Eastfield, ...	16
East Longrigg, ...	35	Caldervale, ...	40
West Longrigg, ...	32	Harthill, ...	124
Howlethole, ...	8	Northrigg Rows, ...	22
Newmains, ...	62	Muir's Land, Newarthill, ...	7
Old Mill Road, Uddingston, ...	6	M'Ghie's Land, Baillieston, ...	3
Northrigg Rows, ...	22	Church Street, Baillieston, ..	9
Thankerton No. 2, Mossend, ...	10	Eastfield, Longriggend, ...	20
Marshall's Land, Plains, ...	17		
		Total, ...	1,085

## SANITARY IMPROVEMENTS UNDER NEGOTIATION.

	No. of Houses.		No. of Houses.
Ross Street, Ferniegair, ...	9	Kenmuir Rows, Carmyle, ...	39
Airdrie Hill Square, ...	49	Nisbet's Buildings, Ferniegair, ...	12
Udston Rows, Hamilton, ...	43	Campsie View, Longriggend, ...	7
Clyde Iron Works, ...	97	Glenboig, ...	30
Carnbroe, ...	130	Gairbraid Place, Drumpark, ...	32
Ashgillhead, Dalserf,...	92	Society Row, Baillieston, ...	7
Burntbroom, ...	9	Newlands Square, ...	52
Hamilton's Land, Carnbroe, ...	11	Longmuir Square, Bargeddie, ...	56
Low Blantyre, ...	17	Merryton Rows, ...	22
Hamilton Palace Colliery, ...	458	Blackship Row, Carfin, ...	8
Baillieston, ...	59	Pillan's Land,...	9
Napier's Square, ...	63	Addie's Square, Bellshill, ...	25
Gillhead Rows, Waterloo, ...	29		
		Total, ..	1,365

## SUMMARY.

Houses closed, ...	699
Sanitary Improvements completed, ...	1,229
Sanitary Improvements in progress, ...	1,085
Sanitary Improvements under negotiation, ...	1,365
Total, ...	4,378



**Town Planning.**—In continuance of the remarks in last Annual Report, page 220, regarding the formation of a Town Planning Scheme for the Hamilton Road District, in the Parish of Dalziel, a plan was prepared showing the area proposed to be included, extending to 362 acres, 57 of which were in the Burgh of Motherwell, and the Town Council gave their approval to the scheme, so far as the burgh area was concerned. Application was afterwards made to the Local Government Board for authority to prepare a Town Planning Scheme. The Board held a local inquiry in connection therewith on 15th January, 1914, and have since issued an Order authorising the preparation of the scheme.

Application was also made to the Local Government Board for authority to prepare a Town Planning Scheme for an area extending to about 996 acres, lying partly in the Parishes of Shotts and Cambusnethan, and after the usual statutory procedure the Board, on 1st December, 1913, issued an Order authorising the preparation of a scheme.

The Local Authority had also under consideration the preparing of Town Planning Schemes for the Strathaven District, also for the area between Cambuslang and Rutherglen.

**Houses Let in Lodgings.**—The bye laws regulating houses let in lodgings, or occupied by members of more than one family, have been found useful in preventing overcrowding, especially in mining districts. The number of houses on the register at the end of the year was 372, and inspections were made periodically by the Sanitary Staff with a view to detecting overcrowding.

**Tents, Vans, and Sheds.**—The bye-laws regulating tents, vans, and sheds, are also applicable to sheds used for the boarding of berry pickers during the season, but so far as ascertained there are no places in the Middle Ward area where such workers are housed, the labour being supplied from populous places in the neighbourhood, where the workers can return to their homes each evening. The bye-laws have been useful in dealing with travelling vans, mostly connected with shows or places of amusement, and in the course of the year 85 inspections of these were made. The premises were found clean, and no overcrowding detected.

**Workshops.**—The number of registered workshops at the beginning of the year was 446. During the course of the year 30 were added to and 11 removed from the register, leaving at the close of the year 465 workshops registered. This number includes 69 retail bakehouses, of which only one is considered underground.

The number of notices received from the Factory Inspector during the year was as follows :—

Commencement to occupy a Workshop, ...	36 Notices.
Change of Occupancy, ... ..	— „
Sanitary Defects, ... ..	4 „
Sanitary Accommodation Order, ... ..	— „

*Outworkers.*—No lists were received from employers throughout the year.

The names and addresses of 18 outworkers under Section 107 of the Factory and Workshops Act were received from the City of Glasgow Local Authority, and one list containing two outworkers from the Lower Ward Local Authority. Two of the outworkers received from Glasgow were resident in the Lower Ward, and their addresses were accordingly forwarded there. Inspections were made of all the premises, and these were found in a satisfactory condition.

The inspections made by the Sanitary Staff, the defects found, and the action taken were as follows :—

#### I.—INSPECTION.

Including Inspections made by the Sanitary Inspectors.

PREMISES.	NUMBER OF—		
	Inspections.	Written Notices.	Prosecutions.
Factories (including Factory Laundries), .	...	...	...
Workshops (including Workshop Laundries),	194	5	...
Workplaces (other than Outworkers' Premises included in Part III. of this Report), .	...	...	...
Total, . . . . .	194	5	...



## 2.—DEFECTS FOUND.

PARTICULARS.	NUMBER OF DEFECTS.			Number of Prosecutions.
	Found.	Remedied.	Referred to H. M. Inspector.	
Nuisances under the Public Health Acts :—				
Want of cleanliness, - - -	1	1	...	...
Want of ventilation, - - -	2	1	...	...
Overcrowding, - - - -	...	...	...	...
Want of drainage, - - - -	...	...	...	...
Other nuisances, - - - -	...	...	...	...
Sanitary Accommodation, { Insufficient, -	...	...	...	...
{ Unsuitable, or	...	...	...	...
{ Defective, -	...	...	...	...
{ Not separate for sexes, - -	...	...	...	...
Offences under the Factory and Workshop Act :—				
Illegal occupation of underground bakehouse (S. 101), - - -	...	...	...	...
Breach of special sanitary requirements for bakehouses (SS. 97 to 100), - - - - -	2	2	...	...
Other offences (excluding offences relating to outwork, which are included in Part III. of this report), - -	...	...	...	...
Total, - - - - -	5	4	...	..

## 3.—HOMEWORK.

Lists received from Employers, - - - - -	0
Notices served on Occupiers, - - - - -	0
Prosecutions, - - - - -	0
Outwork in Unwholesome Premises, - - - - -	0
Do. Infected Premises, - - - - -	0

## 4.—REGISTERED WORKSHOPS.

Total Number of Workshops on Register at end of 1913, - 465

## 5.—OTHER MATTERS.

Matters notified to H.M. Inspector of Factories, - -	0
Notified by H.M. do., - - -	4
Underground Bakehouse in use at end of year, -	1

A detailed tabular statement, prepared from the Register of Workshops, classified according to the trade or industry, is here given, along with a note of the number of employees:—

LIST OF WORKSHOPS, INCLUDING RETAIL BAKEHOUSES AND LAUNDRIES,  
CLASSIFIED ACCORDING TO THE NATURE OF THE INDUSTRY.

PARISH AND LOCALITY.	Dressmakers.	Tailors.	Milliners.	Bakers.	Boot and Shoe-makers.	Saddlers.	Blacksmiths.	Joiners.	Cabinetmakers.	Silk Weaving.	Other Manufactures.	TOTAL.						
BOTHWELL—																		
Bothwell, - - -	3	1	1	1	1	...	...	1	...	...	...	8						
Uddingston, - - -	6	4	...	3	5	1	...	1	1	...	4	25						
Bellshill and Mossend, - - -	17	15	1	4	7	2	1	2	1	...	2	52						
Holytown, New Stevenston, and Newarthill, - - -	3	1	...	5	...	...	2	1	...	...	2	14						
Chapelhall, - - -	...	...	...	...	...	...	...	...	...	...	...	...						
BLANTYRE—																		
High and Low Blantyre, Stonefield, &c., - - -	9	10	2	13	8	1	2	...	...	...	5	50						
CAMBUSLANG—																		
Cambuslang, - - -	14	9	2	8	5	1	1	...	1	...	1	42						
DALSERF—																		
Larkhall, - - -	16	17	5	9	7	1	1	2	2	...	13	73						
AVONDALE—																		
Strathaven, &c., - - -	5	14	1	8	6	2	2	5	...	...	9	52						
STONEHOUSE—																		
Stonehouse, - - -	2	3	...	5	...	...	2	1	...	20	2	35						
SHOTTS—																		
Dykehead, Harthill, &c., - - -	16	12	2	3	9	...	4	4	...	...	2	52						
CAMBUSNETHAN—																		
Newmains, Stane, Overtown, &c., - - -	6	7	1	4	1	...	...	...	...	...	2	21						
OLD MONKLAND—																		
Baillieston, - - -	4	1	...	1	1	...	...	...	...	...	...	7						
EAST KILBRIDE—																		
East Kilbride, - - -	1	2	...	1	...	...	...	...	...	...	...	4						
OTHER LOCALITIES,	9	8	1	4	1	...	3	3	...	...	1	30						
TOTAL WORKSHOPS, -	111	104	16	69	51	8	18	20	5	20	43	465						
Number of Employees (Male and Female) in above Workshops, -	M. 405	F. 241	M. 135	F. 43	M. 204	F. 9	M. 111	F. 15	M. 57	F. 72	M. 13	F. 4	M. 19	F. 16	M. 68	F. 87	M. 800	F. 699



**Special Districts.**

The extent to which local administration contributes to the advancement of general sanitation may be realised from the number of districts formed for special purposes—Water Supply, Drainage and Sewage Disposal, Scavenging and Lighting. The number of districts so formed are, for convenience, shown in the following tabular statement, where a blank space in the assessment column will be understood to show that no special district has been formed for the purpose indicated. The districts might be grouped according to the number of special purposes for which they have been formed :—

Water Supply, - - - -	A public water supply has been provided for the whole Middle Ward District, under special legislation.
Drainage, Lighting, and Scavenging, -	Strathaven, Blantyre, Bellshill, Bothwell, Holytown, New Stevenston, and Carfin ; Uddingston, Cambuslang, Dalziel and Netherton, Baillieston, and Carmyle.
Drainage and Lighting, - - -	Busby, East Kilbride, Stonehouse, Aitkenhead and Tannochside, Newmains, Larkhall, Cleland and Omoa, and Shotts and Dykehead.
Drainage and Scavenging, - -	Hamilton Road, Mount Vernon, and Newton and Flemington.
Lighting and Scavenging, - -	Gartlea.
Drainage, - - - -	Chapelhall.
Lighting, - - - -	Bothwellpark, Newarthill, Calderbank, Glengowan and Caldercruix, North Mount Vernon.
Scavenging, - - - -	Salsburgh.

TABLE M.—LIST OF Special Districts WITHIN THE Middle Ward AND RATES LEVIED (AS ASCERTAINED FROM THE COUNTY CLERK) FOR THE YEAR 1913-1914.

District.	Parish.	Public Water Supply.	RATE OF ASSESSMENT PER £.			
			Water.	Drainage.	Lighting.	Scavenging.
Strathaven,	Avondale,	Middle Ward Water,	1/- & 3d.	11d.,	4d.	2d.
Busby,	East Kilbride,	Do.,	Do.,	11 <sup>6</sup> / <sub>10</sub> d.	4d.	...
East Kilbride,	Do.,	Do.,	Do.,	1/1	4 <sup>6</sup> / <sub>10</sub> d.	...
Stonehouse,	Stonehouse,	Do.,	Do.,	5d.	2d.	...
<sup>1</sup> Blantyre,	Blantyre,	Do.,	Do.,	4d.	2 <sup>3</sup> / <sub>10</sub> d.	6d.
<sup>2</sup> Bellshill,	Bothwell,	Do.,	Do.,	6d.	3 <sup>8</sup> / <sub>10</sub> d.	8d.
<sup>3</sup> Bothwell,	Do.,	Do.,	Do.,	2 <sup>6</sup> / <sub>10</sub> d.	5d.	4 <sup>6</sup> / <sub>10</sub> d.
Bothwell Park,	Do.,	Do.,	Do.,	...	6d.	...
Chapelhall,	Do.,	Do.,	Do.,	1/2	...	...
Holytown,	Do.,	Do.,	Do.,	4d.	3 <sup>6</sup> / <sub>10</sub> d.	8d.
New Stevenston,	Do.,	Do.,	Do.,	1 <sup>6</sup> / <sub>10</sub> d.	3 <sup>6</sup> / <sub>10</sub> d.	8d.
Newarthill,	Do.,	Do.,	Do.,	...	5d.	...
Aitkenhead and Tannochside,	Do.,	Do.,	Do.,	2 <sup>6</sup> / <sub>10</sub> d.	4d.	...
<sup>4</sup> Uddingston,	Do.,	Do.,	Do.,	3d.	3 <sup>4</sup> / <sub>10</sub> d.	5d.
Carfin,	Do.,	Do.,	Do.,	8d.	3 <sup>6</sup> / <sub>10</sub> d.	8d.
<sup>5</sup> Cambuslang,	Cambuslang,	Do.,	Do.,	4d.	5 <sup>4</sup> / <sub>10</sub> d.	5 <sup>6</sup> / <sub>10</sub> d.
Newton and Flemington,	Do.,	Do.,	Do.,	6d.	...	5 <sup>6</sup> / <sub>10</sub> d.
Newmains,	Cambusnethan	Do.,	Do.,	4d.	2 <sup>3</sup> / <sub>10</sub> d.	...
Dalzell and Nethererton,	Cambusnethan and Dalziel,	Do.,	Do.,	6d.	2d.	1 <sup>6</sup> / <sub>10</sub> d.
Hamilton Road,	Dalziel,	Do.,	Do.,	2d.	...	2d.
Larkhall,	Dalserf,	Do.,	Do.,	5 <sup>3</sup> / <sub>10</sub> d.	2 <sup>3</sup> / <sub>10</sub> d.	...
Gartlea,	New Monkland	Airdrie and Coatbridge,	1/8d.	...	4d.	4d.
Baillieston,	Old Monkland,	Airdrie and Coatbridge,	Do.,	3d.	3d.	6d.
Calderbank,	Do.,	Do.,	Do.,	...	1 <sup>6</sup> / <sub>10</sub> d.	...
Mount Vernon,	Do.,	Glasgow,	10d.	3d.	...	2 <sup>6</sup> / <sub>10</sub> d.
Carmyle,	Do.,	Do.,	Do.,	3d.	2d.	2 <sup>6</sup> / <sub>10</sub> d.
N. Mount Vernon,	Do.,	Do.,	Do.,	...	3d.	...
Cleland and Omoa,	Shotts,	Middle Ward Water,	1/ & 3d.	1/1 <sup>3</sup> / <sub>10</sub> d.	3d.	...
Shotts and Dykehead,	Do. and Cambusnethan	Do.,	Do.,	5d.	3 <sup>6</sup> / <sub>10</sub> d.	...
Salsburgh,	Shotts,	Do.,	Do.,	...	...	6d.
Glengowan and Caldercruix,	Do. and New Monkland	Do.,	Do.,	...	4d.	...

<sup>1</sup> Lighting, - - - 2<sup>6</sup>/<sub>10</sub>d.  
Electric Lighting, - 1<sup>3</sup>/<sub>10</sub>d.  
2<sup>3</sup>/<sub>10</sub>d.

<sup>2</sup> Lighting, - - - 2d.  
Electric Lighting, - 1<sup>8</sup>/<sub>10</sub>d.  
3<sup>3</sup>/<sub>10</sub>d.

<sup>5</sup> Lighting, - - - 3<sup>6</sup>/<sub>10</sub>d.  
Electric Lighting, - 2d.  
5<sup>6</sup>/<sub>10</sub>d.

<sup>3</sup> Lighting, - - - 3<sup>6</sup>/<sub>10</sub>d.  
Electric Lighting, - 1<sup>6</sup>/<sub>10</sub>d.  
5d.

<sup>4</sup> Lighting, - - - 2d.  
Electric Lighting, - 1<sup>4</sup>/<sub>10</sub>d.  
3<sup>4</sup>/<sub>10</sub>d.



### Water Supply.

**Public Supplies.**—The waterworks of the district have continued to receive careful administration, and the Medical Officer of Health has from time to time been consulted with regard to certain aspects of the work. The daily sampling at Glasford Filters has been continued, and the results of examination in the chemical laboratory will be found in the County portion of this report.

For the purpose of carrying out certain of the recommendations made by Sir Alexander R. Binnie, Past President, Inst. C.E., in the report made by him in 1912 on the Middle Ward Water Undertaking, further Parliamentary powers were obtained, including power to construct a large reservoir on the Camps Water, in the Parish of Crawford. The preliminary survey work is now proceeding, and it is intended that no time will be lost in completing the proposed new works. The new scheme will afford an additional supply of between eleven and twelve million gallons per day.

In the Draft Order, as lodged, the District Committee sought powers—following on the decision in the Cadzow Rows case, referred to in the Annual Report for 1911, page 221—to have owners of property required, where practicable, to introduce a water supply to each house. Petitions, however, were lodged against the proposal by a large number of coalowners and proprietors, and eventually the clause had to be dropped.

*Omoa Foundry.*—Complaint was made as to the unsatisfactory nature of the water supply for the seven houses situated at Omoa Foundry, Newarthill, which was obtained from a well, and the matter was taken up with the owners and lessee. After some correspondence a gravitation water supply was introduced.

*Rowantree Row.*—Complaint was made regarding the lack of water supply to eight houses at Rowantree Row, Chapelhall, and the whole question of the insanitary conditions existing at the property was taken up and dealt with. The property subsequently changed hands, and the new owner has submitted plans for the necessary improvements, including the introduction of a gravitation water supply to each dwelling.

*North Lodge, Muirburn.*—The water supply to the North Lodge, Muirburn, near Glasford, having been found inadequate, a notice was served on the owner under Section 16 of the Public Health Act, and after some delay a gravitation water supply was introduced from the Committee's main, which passes quite close to the dwelling.

*Sandford.*—The gravitation water supply from the Middle Ward water main, referred to in last Annual Report, page 226, has now been introduced to the village of Sandford.



**Private Supplies.**—Samples from certain private water supplies were taken by the Sanitary Officers in their routine work. The results of analysis are given in table N. The reports and proceedings are here briefly summarised:—

*Princess Lodge, Dalserf.*—Sample No. 1 was obtained by the County Staff from the supply to this lodge, on a complaint as to alleged contamination of the water. The matter is still under consideration.

*Whitecraigs Farm, Glasford.*—Two samples, Nos. 2 and 3, were taken from the private supply, but on analysis these afforded no evidence of contamination.

*Lady Mary Lodge, Quarter.*—Sample No. 4 showed no evidence of organic pollution, but the water was unsuitable for domestic purposes on account of excessive hardness.

*Waird's Lodge, Hamilton.*—Samples Nos. 5, 6, 7, and 8 were obtained by the County Staff, on a complaint as to alleged pollution by water from a neighbouring colliery. The matter is still *sub judice*.

TABLE N.—SAMPLES OF WATER ANALYSED IN THE PUBLIC HEALTH LABORATORY.

*Results of Analysis stated as Parts per 100,000.*

No.	Chlorides as Cl.	Nitrates as Nitrogen.	AMMONIA AS NITROGEN.		Oxygen Absorbed.	Total Hardness.	Total Solids.	Colour, Platinum Standard.	Water Supply.
			Free.	Albuminoid.					
1	4.3	.540	.001	.006	.355	19.0	43.4	1.2	Princess Lodge, Dalserf.
2	2.2	.009	.000	.003	.235	15.0	22.2	1.9*	Drain, north of Whitecraigs Farm, Glasford.
3	1.2	.007	.000	.001	.150	16.5	16.0	1.6	Pump well do. do.
4	2.3	Nil.	.003	—	.085	76.0	97.4	2.0	Water, Lady Mary Lodge, Quarter.
5	3.5	.000	.001	.002	.110	30.0	48.4	1.5	Well, Waird's Lodge, Hamilton.
6	2.8	.000	.001	.007	.160	22.0	39.0	1.6	Filter, do. do.
7	2.0	.000	.000	.016	.275	16.0	38.2	3.5*	Tap in House, do.
8	2.9	.000	Nil.	.001	.150	22.4	38.0	1.4	Tank at Filter, do.

\* Filtered through Paper before colour was estimated.

Nitrites were present in Nos. 1, 5, and 6.



**Drainage and Sewage Disposal.**

The question of the provision of proper means of drainage and sewage disposal for villages and groups of houses outwith Special Drainage Districts, and the recommendations made by the Chairman of the District Committee, the District Clerk, and the Medical Officer of Health in their report of June, 1911, were again under consideration, the report having been reprinted and issued to the members of the District Committee. The proposals were afterwards fully discussed, and the conclusions set forth in the report were approved of, namely, that the Local Authority should agree to exercise the powers available to them under the Public Health Act to provide out of the general Public Health Rate (levied for the purpose only on the area of the Middle Ward so far as outwith Special Drainage Districts) sewerage systems for such places as cannot of themselves provide and maintain a scheme, with the proviso, however, that the properties drained should meet the expenditure up to an amount equal to a rate of 1s. 3d. per £, and that no suitable area or district requiring a sewerage system should have the same provided out of the general Public Health Rate if it could of itself provide a scheme at an assessment not exceeding 1s. 3d. per £.

*Aitkenhead and Tannochside.*—In connection with the introduction of modern sanitary conveniences to certain houses in the north-west corner of this district, it was found necessary to construct certain sewers and a settling tank, and negotiations are presently proceeding for the necessary wayleave.

*Meikle Earnock.*—Complaint was made as to the unsatisfactory nature of the arrangements for drainage and sewage disposal in the village of Meikle Earnock, there being no proper drainage system, the drain which is used for conveying the sewage having originally been put in for carrying road surface water. As the formation of a Special Drainage District was meantime out of the question, owing to the low valuation of the village, it was arranged with the interested parties to carry out certain remedial measures, which would have the effect of removing the existing nuisance conditions.

*Newarthill.*—Complaint having been made as to the existing drainage arrangements at Newarthill, it was found that there was need for some efficient system of sewerage being provided in the Newarthill District, and on the question being brought before the Committee the District Engineer was instructed to submit a report on the matter.

*Pather.*—The question of drainage facilities at Wemysshill Road, Pather, near Overtown, which was reported on in the year 1911, was



again raised in connection with the proposed introduction of water-closets to 32 houses there. Arrangements were made for a temporary drainage outlet being got meantime, leaving the question of drainage facilities in this neighbourhood to be discussed later.

*Bothwell Park Rows.*—Complaint was made as to the pollution of the Pow Burn by sewage from the miners' rows at Bothwell Park, which was also referred to in the Annual Report for the year 1911, page 239, and the question of the formation of a Special Drainage District to include these dwellings has been under consideration.

*Waterloo School, &c.*—The need for better facilities for sewage disposal in Waterloo district was again particularly brought under the notice of the Department in connection with a proposal by the School Board to introduce water-closets at Waterloo School. It was found that a temporary outlet could be got by means of an estate drain, which also serves as an outlet for the drainage from other properties in the neighbourhood. This sewer, however, was choked, and accordingly a meeting with the parties interested was arranged, with the result that an agreement was arrived at for having the drain cleared out, each party bearing his share of the expense according to the valuation of the property affected. This work has now been done, and the school drains have been connected up.

*Carnbroe.*—The question of the formation of a Special Drainage District to include the village of Carnbroe, in the Parish of Bothwell, was under the consideration of the Committee, and a report thereon was submitted by the District Engineer.

*Chapelhall.*—With reference to the paragraph in the Annual Report for the year 1911, page 239, regarding the condition of an old built sewer which passes through the grounds of a mansion house in Chapelhall, another complaint was received as to illness in the family, alleged to have been caused by the condition of the culvert. A report on the matter was submitted by the District Engineer, who was afterwards instructed to have certain work carried out, with a view to obviating further complaint.

*Hamilton Palace Colliery.*—The formation of a Special Drainage District to include the colliery houses situated at Bothwell Haugh has been under consideration, and the District Engineer has submitted a report on the subject. The matter is still under consideration.

*Salsburgh Drainage.*—The provision of proper means of drainage and sewage disposal was again taken up with the Water Trust, and after inspecting the *locus*, and several meetings during the current year, it was agreed that a Drainage District should be formed, and



that such sewers should be laid as would convey the greater portion of the sewage to lands below the intake to the reservoir, where a tank and means of irrigation on land would be provided. The tenant of Longacre Farm was also to receive a water supply for certain fields from the Trust, and a water supply to the steading from the Local Authority.

### Scavenging.

No new Special Scavenging Districts were formed during the year, the number of Special Districts in the Middle Ward District remaining at 13. Reports were submitted by the District Sanitary Inspector dealing with the formation of Special Scavenging Districts at Newmains, Barrachnie, and Larkhall.

*Carmyle.*—Complaints were received from the City of Glasgow authorities with regard to a sand pit, situated at the north side of the main street, Tollcross, between Springfield Road and Carmyle Avenue, which was being used by the Middle Ward Local Authority as a coup for domestic refuse, the site being within the City area, with the request that the further use of the sand pit should be discontinued. Although several inspections were made, it was found that no objection on public health grounds could be taken to the condition of the coup, and the City authorities were informed accordingly. The Local Authority have had under consideration the formation of a scavenging scheme for an enlarged area, including the provision of a refuse destructor, and if such a scheme be agreed upon the present coup will be abandoned.

*Glasford.*—In connection with a complaint regarding the unsatisfactory arrangements for the removal of refuse from the village of Glasford, the District Sanitary Inspector, on making enquiry, found that objection was taken by summer visitors to the existing open ashpits and privies. He afterwards submitted a report on the subject, stating that the provision of scavenging facilities was quite practicable, provided a suitable coup could be found for the refuse, and the matter is still under consideration.

*West Benhar.*—A requisition was received from Parish Electors, calling upon the Local Authority to consider the propriety of forming a Special Scavenging District to include the village of West Benhar, in the Parish of Shotts. In view, however, of the action against the principal owner of this village under Section 16 of the Public Health Act for the removal of nuisance conditions being still *sub judice*, consideration of the matter was delayed.



### Private Streets.

A number of private streets were inspected, and are briefly referred to as under :—

*Chapelhall.*—A private road or street, known as Woodneuk Street, Chapelhall, was found to be without proper means for carrying off surface water, deeply rutted, and altogether in a very unsatisfactory state. The matter was brought under the notice of the Road Surveyor, who is endeavouring to arrange with the owners to have the street put into such a state of repair as will qualify it to be taken over as a public highway.

*Blantyre.*—The insanitary condition of Craig Street, Blantyre, referred to in last Annual Report, page 232, was again under consideration, and, after considerable correspondence, the necessary repairs were executed by the parties interested.

*Larkhall.*—Action was taken under Section 16 of the Public Health Act against the owners of certain private streets in Larkhall, and is dealt with on page 255 of this report.

### Nuisances.

The method in operation for the issue of statutory notices for the compulsory removal of nuisances is still continued, and a few of the more important nuisances dealt with during the year will be here referred to.

*Prosecutions.*—It was found necessary to institute proceedings in Court in connection with the following :—

- (1) Duke Street, Larkhall.—Dilapidated and foul privy and ashpit.
- (2) Meadowhill Rows, Larkhall.—Back courts, footpaths, and ground surrounding dwellings foul and miry.
- (3) Muir Street, Larkhall.—Back court foul and miry.
- (4) Victoria Street, Larkhall.—Choked drain.
- (5) Victoria Street, Larkhall.—Water-closet dilapidated.
- (6) Crosskeys, Stonehouse.—Premises damp and dilapidated.

The proceedings were successful in every case.

*Myres Burn, Uddingston.*—A complaint was received as to flooding of garden ground off Bellshill Road, Uddingston, by an overflow from the Myres Burn, which, it was alleged, contained pollution from the Bothwell and Uddingston Gas Works. On an inspection being made it was found that the complaint referred to a portion of the water



course which had been piped in with a 22-inch pipe by the feuars many years ago, and that the flooding had taken place during excessive rain, but there was no evidence of any pollution. The conditions complained of not being such as to constitute a nuisance within the meaning of the Public Health Act, no further action was taken in the matter.

*Church Street, Larkhall.*—Complaints were made by the owner of a dwelling-house alleging that a serious nuisance was caused by sewage leaking from a pipe under the property, which also created smells in the dwelling. The nuisance complained of relates to a sewer common to the whole row of houses on the north side of Church Street, which were erected by a building society some fifty years ago. This sewer is a 9-inch spigot and faucet pipe with clay joints, laid originally at some distance from the back wall of the dwellings. The complainer had made certain additions at the back of her property, with the result that the pipe now passes underneath these. Several inspections and meetings have taken place in connection with the complaint, and as no evidence of leakage could be found, the complainer was advised to have all the joints of the pipe made tight where it passes under her property, but she insisted on the pipe being taken away altogether. The whole circumstances were reported to the Local Authority, who decided that there was no call for further action being taken by them.

*Forrest Street, Blantyre.*—Notice having been served under Section 16 of the Public Health Act on the owners of certain property in Forrest Street, Blantyre, requiring them to remove nuisance conditions, consisting of choked and defective drains and choked water-closets, the owners stated that the conditions complained of were caused by the tenants making improper use of the conveniences supplied, and they requested that the District Committee should put in force the powers contained in the Public Health Act for the removal of the nuisance conditions.

The position taken up by the Department was that the conveniences at the property were insufficient in number and structurally defective, and that, in these circumstances, it was not reasonable to expect the tenants to make proper use of the conveniences.

The nuisances were afterwards removed by the owners.

*Claude Street, &c., Larkhall.*—The legal proceedings taken under Section 16 of the Public Health Act against the owners of Claude Street, Academy Street, Percy Street, and North Street, Larkhall, to have same repaired and made good, referred to in last Annual Report, page 234, were successful, and the streets have since been put into proper order. At one property in Percy Street, however, the work had to be done by the Local Authority under warrant of the Court, and steps are being taken to recover the expenses incurred.



The **Interments** carried out at the expense of the Local Authority, under Section 69 (1) of the Public Health Act, numbered 19. Of these, 8 were infants, the remaining 11 being adults.

*Medico-Legal Cases.*—7 of these were primarily dealt with by the Constabulary, 3 being from natural causes, 2 being from accident, and 2 murder cases. In connection therewith the police station mortuaries were used in 7 cases—at Bellshill (1), at Coatbridge (1), at East Kilbride (1), at Uddingston (3), and at Wishaw (1).

The number of interments in each parish, distinguishing juvenile cases from adults, and cases first dealt with by the police from those dealt with by the Sanitary Staff, are given in the following table:—

TABLE O.—INTERMENTS CARRIED OUT BY THE LOCAL AUTHORITY DURING THE YEAR 1913.

PARISH.	Infants and Juveniles.	Adults.	Police Cases.	Sanitary Cases.
Avondale, ... ..	...	2	...	2
East Kilbride, ... ..	1	1	1	1
Bothwell, ... ..	3	4	2	5
Cambuslang, ... ..	1	...	...	1
Cambusnethan, ... ..	...	2	1	1
Dalziel, ... ..	1	...	...	1
New Monkland, ... ..	...	1	...	1
Old „ ... ..	2	1	3	...
Total, ... ..	8	11	7	12
	19		19	

### Dairies.

In connection with the erection and occupation of new dairies and dairy premises, ten plans were submitted to the Local Authority to give effect to the provisions of Article 7 (1) of the Order of 1885, and facilitate the lawful occupancy of such premises. The plans were examined by the Sanitary Inspector, and, after being made conform



to the Order and Regulations, reported to the Committee for approval. The plans lodged were allocated thus:—in the Parish of East Kilbride, 2; Glasford, 1; Blantyre, 1; Bothwell, 1; Cambusnethan, 1; Hamilton, 2; New Monkland, 1; and Shotts, 1.

*Dairy Regulations.*—The proposed new regulations under the Dairies, Cowsheds, and Milkshops Order, 1885, were adjusted with the Local Government Board, and duly advertised. Objections to the proposed regulations by certain proprietors and tenants of dairy farms in the district were, however, lodged with the Board. A statement prepared by the District Clerk dealing with the objections, and giving the Local Authority's observations thereon, was afterwards forwarded to the Board, but so far the regulations have not yet been confirmed.

*Prosecution.*—Proceedings were instituted against the tenant of Chapel Farm, Avondale, in respect that he had allowed a maid in his service, who had been in contact with another person, also in his service, found to be suffering from scarlet fever, to milk cows and handle vessels used for containing milk. After proof the Sheriff convicted, and imposed the full penalty of £5, with £3 of expenses, the alternative being 30 days' imprisonment.

### **Veterinary Inspection of Dairy Herds.**

The veterinary inspection of dairy herds was carried out by the County Veterinary Officer and an assistant as in the preceding year.

The records show that 995 dairy herds, containing 18,265 cows, were examined. As on former occasions, samples of milk were drawn from all udders, which, upon examination, showed conditions suspicious of tubercle. In this way 64 samples of milk were taken, and sent to the bacteriological laboratory, where, after examination, 25 were found to contain tubercle bacilli.

In all positive cases certificates were granted by the Veterinary Surgeon, in terms of Article 3 of the Dairies, Cowsheds, and Milkshops Order, 1899.

Since the Tuberculosis Order, 1913, came into operation on 1st May, 1913, the Veterinary Inspector, when he comes across a cow with tuberculous udder, deals with her at once under the Order in his capacity as Inspector under the Contagious Diseases of Animals Acts, and a copy of his report is furnished to the Sanitary Authority.

At seven farms the dairy animals were found to be in a dirty condition, and notices were served on the occupiers to have the animals properly cleaned and groomed.



Cows with abnormal condition of the udder other than tubercle were also recorded, and the results are as shown in the following table :—

INSPECTION OF DAIRY HERDS, 1913-14, CLASSIFIED ACCORDING TO PARISH.

PARISH.	Herds.	Cows.	Suspected Tubercle.						Cows with Abnormal Conditions of Udder.					
			Samples of Milk.	Result.				Tubercle.	Atrophy.	Mammitis.	Induration N.T.	Eruption on Teats.	Total.	
				Smear.		Biological.								
				+	-	+	-							
Avondale, - -	176	3,738	9	3	6	...	6	3	153	33	77	23	289	
East Kilbride, -	148	3,423	17	1	16	2	13	3	118	32	73	17	243	
Glasford, - -	63	1,211	4	...	4	...	4	...	33	12	27	1	73	
Stonehouse, -	46	886	2	...	2	...	2	...	27	4	20	1	52	
<i>First Division, -</i>	433	9,258	32	4	28	2	25	6	331	81	197	42	657	
Blantyre, - -	31	425	...	...	...	...	...	...	16	4	8	5	33	
Bothwell, - -	89	1,419	5	4	1	...	1	4	50	7	22	3	86	
Cambuslang, -	31	731	2	1	1	1	...	2	34	5	20	7	68	
Cambusnethan, -	61	996	5	3	2	...	1	3	33	7	16	2	61	
Dalserf, - -	35	585	2	1	1	...	1	1	11	4	7	1	24	
Dalziel, - -	8	196	...	...	...	...	...	...	7	...	5	...	12	
Hamilton, - -	56	1,305	4	...	4	1	3	1	56	9	33	10	109	
<i>Second Division, -</i>	311	5,657	18	9	9	2	6	11	207	36	111	28	393	
New Monkland, -	92	1,141	8	4	4	...	3	4	26	6	19	6	61	
Old Monkland, -	47	787	3	1	2	...	2	1	21	9	11	4	46	
Shotts, - -	112	1,422	3	3	...	...	...	3	41	14	15	6	79	
<i>Third Division, -</i>	251	3,350	14	8	6	...	5	8	88	29	45	16	186	
<i>Middle Ward, -</i>	995	18,265	64	21	43	4	36	25	626	146	353	86	1,236	

When the smear proved positive no biological examination was done.

The total figures for abnormal conditions of udder include 39 cases of suspected tubercle, which gave negative results, and are therefore classified as induration.



These abnormal conditions, and the number of cows affected, were as follows:—Atrophy, 626; mammitis, 146; induration, N.T., 353; and eruption on teats, 86—total, 1,211. Adding to these figures the 25 affected with tubercle, the number of cows presenting abnormal conditions of the udder was 1,236, or 6·7 per cent.

### **Public Slaughter-houses.**

The new public slaughter-house at Strathaven was opened for business on 26th May, and that at Shotts on 2nd June. The six public slaughter-houses now in operation belonging to the Local Authority are situated as follows:—Bellshill, Blantyre, Larkhall, Shotts, Stonehouse, and Strathaven, and Mr. Cameron of Bellshill assisted the Department in exercising general supervision over these.

An order was granted by the Local Authority sanctioning the establishment of a public slaughter-house at Baillieston, and the premises are now in course of erection.

The work done at the various slaughter-houses during the year 1913 has been briefly summarised from the reports by each Superintendent, and will be found on the following pages.

**Bellshill.**—The tables given in the report show in detail the class of animals slaughtered, and the extent to which disease was prevalent. From Table I. it will be seen that, during the year, the total number of animals slaughtered was 9,647, being a decrease of 304 from 1912. It was found necessary to condemn either the organs or some portion of the carcasses of 1,483 animals. Of the 1,483 animals, 586 were affected with tuberculosis, and the table shows to what extent the disease was present in each class of animal. The organs of sheep condemned were mostly livers affected with distomatosis.

*Bellshill.*—TABLE I.—ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
		Carcases.		Organs only.	Carcases.		Organs only.
Class.	Number.	Wholly.	Partially.		Wholly.	Partially.	
Cows, -	406	12	46	257	4	1	113
Heifers, -	402	2	17	104	—	—	50
Bulls, -	141	—	2	45	—	—	16
Bullocks, -	875	2	6	116	—	—	184
Calves, -	2,247	27	—	—	5	—	4
Sheep, -	5,159	—	—	—	2	—	515
Swine, -	417	1	—	49	2	—	1
Total, -	9,647	44	71	471	13	1	883

*Bellshill.*—TABLE II.—OTHER DISEASES FOR WHICH CARCASSES WERE TOTALLY OR PARTIALLY CONDEMNED.

DISEASE.	Cows.	Calves.	Sheep.	Swine.	Total.
Septicæmia, - - -	1	3	...	...	4
Septic Peritonitis, - - -	...	1	...	...	1
Dropsy, - - -	2	...	...	...	2
Septic Metritis, - - -	1	...	...	...	1
Gastro-Enteritis, - - -	...	...	1	2	3
Braxy, - - -	...	...	1	...	1
Abscess, - - -	1	...	...	...	1
Injury, - - -	...	1	...	...	1
	5	5	2	2	14

**Blantyre.**—The tables given in the report show in detail the class of animals slaughtered and the extent to which disease was prevalent. From Table I. it will be seen that, during the year, the total number



of animals slaughtered was 6,463, being an increase of 1,316 from 1912. It was found necessary to condemn either the organs or some portion of the carcasses of 1,333 animals. Of the 1,333 animals, 1,290 were affected with tuberculosis, and the table shows to what extent the disease was present in each class of animal. The organs of sheep condemned were mostly livers affected with distomatosis.

*Blantyre.*—TABLE I.—ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcasses condemned wholly or partially. Carcasses in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
Class.	Number.	Carcasses.		Organs only.	Carcasses.		Organs only.
		Wholly.	Partially.		Wholly.	Partially.	
Cows, -	2,348	131	143	1,021	36	2	—
Heifers, -	343	1	4	—	1	—	—
Bulls, -	33	—	1	—	—	—	—
Bullocks, -	590	—	1	—	—	1	—
Calves, -	20	—	—	—	—	—	—
Sheep, -	3,064	—	—	—	3	—	—
Swine, -	65	—	—	—	—	—	—
Total, -	6,463	132	149	1,021	40	3	—

*Blantyre.*—TABLE II.—OTHER DISEASES FOR WHICH ANIMALS WERE TOTALLY OR PARTIALLY CONDEMNED.

DISEASE.	Cows.	Heifers.	Bullocks.	Sheep.	Total.
Peritonitis, - - -	2	...	...	...	2
Emaciation, - - -	17	...	...	...	17
Septic Mastitis, - - -	1	...	...	...	1
Septic Metritis, - - -	2	...	...	...	2
Septicæmia, - - -	2	...	...	...	2
Parturition, - - -	1	...	...	1	2
Moribund Condition, - - -	1	...	...	...	1
Drowned, - - -	1	...	...	...	1
Pyæmia, - - -	1	...	...	...	1
Johnes Disease, - - -	5	...	...	...	5
Milk Fever, - - -	1	...	...	...	1
Pleuritis, - - -	1	...	...	...	1
Paralysis of Brain, - - -	1	...	...	...	1
Injury, - - -	2	...	1	...	3
Braxy, - - -	...	...	...	2	2
Gastritis, - - -	...	1	...	...	1
	38	1	1	3	43

**Larkhall.**—The tables given in the report show in detail the class of animals slaughtered and the extent to which disease was prevalent. From Table I. it will be seen that, during the year, the total number of animals slaughtered was 4,579, being an increase of 576 from 1912. It was found necessary to condemn either the organs or some portion of the carcasses of 1,034 animals. Of the 1,034 animals, 697 were affected with tuberculosis, and the table shows to what extent the disease was present in each class of animal. The organs of sheep condemned were mostly livers affected with distomatosis.

**Larkhall.**—TABLE I.—ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcasses condemned wholly or partially. Carcasses in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
		Carcasses.		Organs only.	Carcasses.		Organs only.
Class.	Number.	Wholly.	Partially.		Wholly.	Partially.	
Cows, -	835	16	138	408	11	1	138
Heifers, -	254	2	7	36	—	—	36
Bulls, -	29	—	—	7	1	—	4
Bullocks, -	591	—	3	72	—	—	80
Calves, -	90	1	—	—	2	—	—
Sheep, -	2,618	—	—	—	1	—	62
Swine, -	162	—	1	6	—	—	1
Total, -	4,579	19	149	529	15	1	321

**Larkhall.**—TABLE III.—OTHER DISEASES FOR WHICH CARCASSES WERE TOTALLY OR PARTIALLY CONDEMNED.

DISEASE.	Cows.	Bulls.	Calves.	Sheep.	Total.
Braxy, - - -	...	...	...	1	1
Injury, - - -	1	...	...	...	1
Umbilical Pyæmia, - -	...	...	1	...	1
Black Leg, - - -	...	1	...	...	1
Gastritis, - - -	1	...	...	...	1
Septic Metritis, - -	4	...	...	...	4
Fibrous Sarcoma, - -	1	...	...	...	1
Septic Mastitis, - -	1	...	...	...	1
Septicæmia, - - -	1	...	1	...	2
Retention of Placenta, -	3	...	...	...	3
	12	1	2	1	16



**Shotts.**—The tables given in the report show in detail the class of animals slaughtered and the extent to which disease was prevalent. From Table I. it will be seen that, during the year, from 2nd June, 1913, the total number of animals slaughtered was 1,182. It was found necessary to condemn either the organs or some portion of the carcasses of 60 animals. Of the 60 animals, 39 were affected with tuberculosis, and the table shows to what extent the disease was present in each class of animal. The organs of sheep condemned were mostly livers affected with distomatosis.

*Shotts.*—TABLE I.—ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcasses condemned wholly or partially. Carcasses in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
Class.	Number.	Carcasses.		Organs only.	Carcasses.		Organs only.
		Wholly.	Partially.		Wholly.	Partially.	
Cows, -	1	1	—	—	—	—	—
Heifers, -	46	—	—	7	—	—	1
Bulls, -	—	—	—	—	—	—	—
Bullocks, -	450	—	2	28	—	—	20
Calves, -	22	—	—	—	—	—	—
Sheep, -	659	—	—	—	—	—	—
Swine, -	4	—	—	1	—	—	—
Total, -	1,182	1	2	36	—	—	21

**Stonehouse.**—The tables given in the report show in detail the class of animals slaughtered and the extent to which disease was prevalent. From Table I. it will be seen that, during the year, the total number of animals slaughtered was 1,187, being a decrease of 12 from 1912. It was found necessary to condemn either the organs or some portion of the carcasses of 264 animals. Of the 264 animals, 175 were affected

with tuberculosis, and the table shows to what extent the disease was present in each class of animal. The organs of sheep condemned were mostly livers affected with distomatosis.

*Stonehouse.* — TABLE I. — ANIMALS SLAUGHTERED — NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
		Carcases.		Organs only.	Carcases.		Organs Only.
Class.	Number.	Wholly.	Partially.		Wholly.	Partially.	
Cows, -	214	4	7	138	—	—	29
Heifers, -	122	—	—	7	—	—	15
Bulls, -	32	—	—	—	—	—	4
Bullocks, -	85	—	—	2	1	—	1
Calves, -	39	—	—	—	—	—	—
Sheep, -	565	—	—	—	—	—	38
Swine, -	130	—	—	17	—	—	1
Total, -	1,187	4	7	164	1	—	88

One bullock was totally condemned for black leg.

**Strathaven.**—The tables given in the report show in detail the class of animals slaughtered and the extent to which disease was prevalent. From Table I. it will be seen that, during the year, from 26th May, 1913, the total number of animals slaughtered was 1,707. It was found necessary to condemn either the organs or some portion of the carcasses of 335 animals. Of the 335 animals, 179 were affected with tuberculosis, and the table shows to what extent the disease was present in each class of animal. The organs of sheep condemned were mostly livers affected with distomatosis.



*Strathaven.* — TABLE I.— ANIMALS SLAUGHTERED, NUMBER HAVING CARCASSES WHOLLY OR PARTIALLY CONDEMNED, AND NUMBER HAVING ORGANS ONLY CONDEMNED.

Animals Slaughtered.		Carcases condemned wholly or partially. Carcases in which the Organs only were condemned.					
		Tuberculosis.			Other Diseases.		
Class.	Number.	Carcases.		Organs only.	Carcases.		Organs only.
		Wholly.	Partially.		Wholly.	Partially.	
Cows, -	236	11	18	96	2	—	70
Heifers, -	179	1	2	32	—	—	14
Bulls, -	28	—	—	10	—	—	3
Bullocks, -	63	—	—	3	—	—	3
Calves, -	12	—	—	—	—	—	—
Sheep, -	1,041	—	—	—	—	—	64
Swine, -	148	—	—	6	—	—	—
Total, -	1,707	12	20	147	2	—	154

Two cows were totally condemned for other diseases, one due to dropsy, and the other to parasitic abscess and emaciation.

### Offensive Businesses.

**Knackery.**—The business carried on at Omoa as a knackery, where some of the material is prepared for manure, has been regularly and frequently inspected, especially by the Veterinary Staff, in connection with the disposal of carcasses of animals affected with anthrax, glanders, and tuberculous disease, and found to be conducted in a satisfactory manner.

There is also a disused manure work at Tillanburn, Holytown, for which application for the annual slaughter-house license continues to be made, although no business has been done for years.

**Slaughter-houses.**—The total number of private slaughter-houses at the beginning of the year was 14, and of public slaughter-houses 4. The private slaughter-houses are situated thus:—East Kilbride, 1; Newarthill, 2; Chapelhall, 1; Cleland and Omoa, 4; Caldercruix, 1; Longriggend, 1; Baillieston, 2; and Harthill, 2.

Inspections of these private slaughter-houses were made from time to time by the Sanitary Staff, and amounted to 130. The premises were all found in a satisfactory condition.

*Unsound Food.*—Inspections for the detection of unsound or diseased butcher meat were made by the Sanitary Inspectors as opportunity occurred. Three seizures were made, but it was not considered necessary to institute legal proceedings in any case.



MIDDLE WARD HOSPITAL  
AND  
LIGHTBURN JOINT-HOSPITAL.

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Annual Reports for 1913.

## COUNTY HOSPITAL

## FOTHEB W B L

ANNUAL REPORT BY THE  
MANAGING DIRECTOR

## MIDDLEBURY HOSPITAL

MANAGING DIRECTOR

## LIGHTBURN HOSPITAL

Report on the total admissions for the year, 1912, 1913, 1914, 1915, the total admissions for the year 1912, nearly 1,500, or 12.5 per cent of the total population.

At the 1912 year arrangements were made with the County Hospital, which would treat cases of the number of High cases will be seen in the following table.

The number of cases admitted at each level was 20-25. There were 22 more cases admitted in the year 1912.

The year shows were in hospital 155 per cent. The number of cases in hospital at the end of the year, 1912, was 1,500, or 12.5 per cent of the total population. The number of cases discharged, measured at the end of the year, 1912, was 1,500, or 12.5 per cent of the total population. The number of cases admitted on the 2nd of the year, 1912, was 1,500, or 12.5 per cent of the total population.

The number of cases admitted during the year 1912, was 1,500, or 12.5 per cent of the total population. The number of cases admitted during the year 1913, was 1,500, or 12.5 per cent of the total population. The number of cases admitted during the year 1914, was 1,500, or 12.5 per cent of the total population.



## COUNTY HOSPITAL,

NEAR

## MOTHERWELL.

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SEVENTEENTH ANNUAL REPORT BY THE  
PHYSICIAN-SUPERINTENDENT.

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September, 1914.

TO THE CHAIRMAN AND MEMBERS  
OF THE HOSPITAL COMMITTEE.

GENTLEMEN,

I have the honour to submit the Annual Report of the County Hospital, Motherwell, for the year 1913.

Last year it was noted that the total admissions for the year had surpassed all previous records. This year, 1913, the total admissions are practically the same as for the year 1912, namely, 1,368, or 16 in excess of the previous number.

In the latter part of the year arrangements were made with the Burgh of Hamilton whereby the County Hospital would treat their acute infectious diseases. The number of Burgh cases will be seen on Table VI.

The number of cases admitted notified as scarlet fever was 50 less than that of last year. There were 53 more cases admitted notified as diphtheria, and 20 more as enteric fever.

*At the beginning of the year* there were in hospital 155 patients, and 1,368 cases were admitted, making a total of 1,523 under treatment. Of these, 1,316 cases were discharged recovered or improved, and 55 died, leaving 152 patients in hospital at the end of the year.

*The greatest number of patients admitted on any one day* throughout the year was 14. This occurred on the 3rd September.

*The greatest number admitted during one week* was 53, in the week ending 6th September, and *during one month* was 176 in October.

Those numbers slightly exceed the corresponding ones of last year.

The average number of cases admitted each month was 114. In April, May, June, and July the number of admissions was slightly less than 100.

*The average daily number of patients resident was 131.25—a decrease of 11.2 on last year's number.* The earlier dismissal of patients is responsible for this considerable decrease in the average daily number resident. The largest number resident on any one day was 187, on 9th September. The smallest number resident on any one day was 93, on the 5th, 6th, and 9th of June. On 13 days only, throughout the year, was the number of patients under treatment less than 100.

*The average duration of residence of all patients discharged was 37.9 days, of all recovered cases 38.9 days, and of all fatal cases 13 days.*

The first two numbers include 59 ringworm cases, who were resident 1 day only.

The fatality rate, calculated on all the discharges, was 4.0 per cent., a decrease of 0.5 per cent. on the previous year's rate. Excluding 8 cases who died within 48 hours of admission to hospital, the fatality rate falls to 3.4 per cent.

The diagnosis of the medical attendant before admission was revised in 249 cases, or 18.1 per cent. of the discharges. All contact and bacteriological cases without clinical symptoms are included in this number.

The following table has been brought up to date, showing the Annual Fatality Rates for the three principal diseases treated.



YEAR.	ENTERIC FEVER.		SCARLET FEVER.		DIPHTHERIA.	
	Cases discharged.	Case Mortality per cent.	Cases discharged.	Case Mortality per cent.	Cases discharged.	Case Mortality per cent.
1898	178	12·9	308	3·8	11	0·0
1899	222	10·3	554	3·6	19	21·0
1900	148	9·4	607	2·4	18	11·1
1901	230	9·1	662	3·3	27	25·9
1902	202	12·3	451	4·4	12	16·6
1903	148	13·5	183	2·2	15	20·0
1904	101	12·8	178	3·9	53	16·9
1905	263	8·3	114	4·3	50	16·0
1906	211	9·0	245	1·6	55	20·0
1907	100	9·0	322	2·7	208	7·6
1908	120	10·8	433	1·8	187	9·0
*1909	102	2·9	805	2·9	145	11·0
*1910	122	4·0	694	2·3	248	8·8
†1911	89	12·3	635	2·8	250	7·2
†1912	68	14·7	770	2·8	151	9·9
†1913	92	5·4	739	2·0	163	7·9

\* Includes contact cases.

† Excludes „ „

A reduction in the fatality rates of the three diseases has occurred during the year. In scarlet fever the drop is almost 1 per cent., in diphtheria it is 2 per cent., and in enteric fever 9·3 per cent.

The reductions in the fatality rates are difficult to explain, as the number of severe cases, in each of the diseases mentioned, was in excess of the previous year's number. In enteric fever, however, a new departure in regard to treatment was carried out during the year. The influence of this in regard to the death-rate will be discussed later.

The Average Fatality Rates for the period 1898 to 1913 are:—

Enteric Fever.	Scarlet Fever.	Diphtheria.
9·8	2·9	13·0

Request for removal of patients to hospital was made by the medical practitioner in attendance in 48·2 per cent. of cases, by the Sanitary Inspector in 41·1 per cent., and by the Public Health Office in 10·7 per cent. of cases.

Bellshill Hospital received 80 local cases of scarlet fever between September and the end of the year to relieve the congestion in the scarlet fever pavilions.

**Scarlet Fever.**

There were in hospital on January 1st, 1913, 117 cases of scarlet fever. During the year, 838 cases of that disease were admitted notified as such. Of these, 131 were found to be suffering from other diseases, or were classified as doubtful. Of the 131, 7 contracted scarlet fever during their residence in hospital, while 7 cases notified as diphtheria were really cases of scarlet fever. Thus, there were 838 genuine cases of scarlet fever under treatment during the year, and of these, 724 were discharged well, 15 died, and 99 were remaining in hospital at the end of the year.

REMOVAL TO HOSPITAL was carried out in 92·5 per cent. of cases in the first week of illness, in 2·8 per cent. in the second week, and in 4·6 per cent. during the third week of illness and later.

The AVERAGE DURATION OF RESIDENCE of all cases discharged was 42·1 days, of recovered cases 42·8 days, and of fatal cases 14·2 days.

The following table has been drawn up to show after what period of residence the 724 recovered cases were discharged. It will be noted (in comparison with last year's figures) that not only is the average duration of residence lessened, but also that a greater number of cases have been dismissed prior to the completion of the sixth week of residence :—

Week of discharge.	No. of days in residence when discharged.							No. of cases in each day.							No. of cases in each week.
Under fifth, - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	21
Fifth, - - -	29	30	31	32	33	34	35	5	6	17	4	23	27	29	111
Sixth, - - -	36	37	38	39	40	41	42	43	56	40	41	52	31	14	277
Seventh, - - -	43	44	45	46	47	48	49	42	24	23	19	23	20	11	162
Eighth, - - -	50	51	52	53	54	55	56	16	9	9	4	13	3	4	58
Ninth, - - -	57	58	59	60	61	62	63	8	6	3	1	9	2	2	31
Tenth, - - -	64	65	66	67	68	69	70	3	6	1	...	...	3	...	13
Over ten weeks,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	51
Total No. of cases,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	724

The FATALITY RATE, as calculated on the discharges, was 2·0 per cent.



TYPE OF THE DISEASE.—605, or 81·8 per cent. of the cases discharged, were classified as mild; 64, or 8·6 per cent., as moderately severe; and 70, or 9·4 per cent., as very severe.

One death occurred in each of the first two classes, and 13 among the cases classified as very severe. The number of very severe cases exceeded last year's number by 24.

The FATAL CASES comprised 4 males and 11 females. The average age of the 15 fatal cases was 6 years. The youngest was 2, and the oldest 13 years of age.

The average duration of illness on admission was 5·5 days. Four cases were in the second day of the disease, and one in the twenty-eighth. In the first quarter of the year 3 died, in the second 3, in the third 4, and in the fourth 5.

In 5 cases the patient was overcome by the toxæmia without any marked local manifestation; in 7 others a severe septic throat was the starting point of a septicæmia. All the septic cases received a large dose of diphtheria antitoxin. One case only was treated with antistreptococcic serum.

STREPTOCOCCAL MENINGITIS.—A female, aged 6, was sent into hospital with the history that she had had a sore throat and a scarlatiniform rash a few days before. When admitted the only noticeable signs were enlargement of the cervical glands and a temperature of 100·4° F. Next day the temperature dropped to normal, and remained so for two days. The child seemed perfectly comfortable. Next day, however, the temperature went up to 102·2° F., the glands of the neck were somewhat more swollen, and the pulse remained between 100 and 120 per minute. The patient vomited several times without any apparent cause; she complained of severe headache, occipital in distribution; the pupils were equal and active, and there was no squint. It was, however, noticed that paresis of the left side of the face had developed. At this stage the left ear began to discharge. There was no earache prior to the otitis media, and no mastoid tenderness at any time during the course of the illness. Marked restlessness developed, vomiting and muscular irritability continued, retraction of the neck muscles and Kernig's sign were present. Consciousness remained until twenty-four hours before death. Six days before the child died signs of a lobar pneumonia developed. The cerebro-spinal fluid was not under pressure. It contained many polymorphonuclear leucocytes, comparatively fewer mononuclears, some large endothelial cells, and abundant chains of streptococci. The case was treated by frequent lumbar puncture, draining off as much fluid as possible, and injecting antistreptococcic serum intradurally.



The temperature gradually ascended from the onset until it reached 105° at death, which occurred 17 days after admission. In addition to the comparative rarity of the complication, it is interesting from the etiological point of view. Was it a direct infection from the ear or a hæmic infection?

Infections of a cardiac, rheumatic, or nephritic nature are common enough in the convalescent stage of scarlatina. On the other hand, direct infections from the naso-pharynx are much more common. The presence of otitis media would certainly favour the direct route; but, on the other hand, there was no mastoid involvement which is usually got in secondary pyogenic brain affections. There was no pain before the discharge commenced, and which continued to run freely.

No *post-mortem* was allowed.

**CORRECTED DIAGNOSES.**—Of the cases notified as scarlet fever, 131, or 15·6 per cent., were wrongly diagnosed. This figure is 26 in excess of last year's number. It is unfortunate that this number is so large, for, with limited isolation accommodation, some of them are certain to become infected in hospital. Such cases are almost invariably severe, and death not infrequently follows. Fortunately the 7 cases who took the disease in hospital recovered.

In 44 instances it was doubtful whether the patient had had scarlet fever or not, some sign or symptom, which may or may not have been the result of the disease, being present. In 20 cases no disease was present.

The altered diagnoses were as follows:—adenitis, 13; rhinitis, 10; sore throat, 9; tonsillitis, 4; otitis media, 1; laryngeal tumor, 1; bronchitis, 1; erythema, 1; sweat rash, 1; leucoderma, 1; impetigo, 1; eczema, 2; abscesses, 1; rickets, 1; German measles, 3; chicken-pox, 2; diphtheria, 4. 3 fatal cases had broncho-pneumonia, and 1 lobar pneumonia.

**COMPLICATIONS.**—*Renal.*—A distinction, although an artificial one, has been made between albuminuria and nephritis. In 23 cases albuminuria of a mild and transient nature, unaccompanied by the presence of blood, and tube casts, occurred. In 10 other cases albuminuria was accompanied by blood, and renal casts. These latter cases have been classified as nephritis. 14 of the albuminuric cases occurred within the first week of the disease. One of the cases of nephritis was of an unusually severe nature.

A boy, aged 10 years, came into hospital with the history that a month before he had been sick; it was also noticed that the face was swollen; however, no rash was observed. The diagnosis of scarlet fever was not made until the day before patient came into hospital,



when it was seen that he was peeling. When admitted, characteristic desquamation was taking place on the hands and feet. The face was oedematous about the eyelids. The heart was enlarged towards the left side, and a faint A.S. murmur was present at the apex. The bases of both lungs were dull, and the breath sounds feeble. The urine contained one and a-half parts per thousand of albumen. There was also a considerable quantity of blood and tube casts in the urine. The temperature was normal. Next day the child complained of severe headache, and was very restless. A well-marked uræmic fit occurred. Although energetic treatment was resorted to, from the time of admission, and no more fits occurred, the lungs became clogged up, and the boy died after a residence of 5 days. The amount of urine secreted per day was 15 ounces.

*Cardiac.*—Organic disease of the mitral valve was noted in 4 instances. The murmur persisted during the residence of the patient, but no signs of failure of compensation occurred. In 23 instances functional derangement of the heart was present, a V.S. murmur was present in 20 cases, a V.D. in 1 case, and marked irregularity in 2 cases.

*Pulmonary.*—A lobar pneumonia developed in 2 cases, bronchopneumonia in 3, one of whom died. In 1 case bronchitis was present.

*Ear.*—Otitis media developed in 72 cases, or 9·7 per cent. of the total discharges. In 6 of the fatal cases otitis media purulenta was present. An abscess with all the signs of acute mastoid involvement developed in 5 cases. A free incision revealed the presence of pus and bare bone in all the cases. In no case was the radical mastoid operation necessary. After discharging for a number of weeks they all healed up quite nicely. In 1 case a sequestrum about half an inch square came away. After this operation, really performed by nature, the wound healed up. No facial paralysis or deafness remained.

*Rhinorrhœa.*—This troublesome complication was present in 104, or 14 per cent., of the cases. It is due to the presence of excess of lymphoid tissue in the naso-pharynx, and is responsible for the long detention in hospital of some cases. Even after discharge, a slight cold very often brings on the discharge, what may be infectious for a considerable time.

*Adenitis.*—In 278 cases, or 36·2 per cent., there was some enlargement of the cervical glands. Only in 6 instances did suppuration occur. This is a very large percentage of gland cases, but it includes 239 cases in which the glands were either enlarged on admission or did so during the first week. Many of those, no doubt, were not due to scarlet fever.



Oral sepsis, carious teeth, enlarged tonsils, and adenoids were extremely common in the cases admitted to hospital.

*Rheumatic.*—Joint pains of a transient nature were present in 17 cases. No case of true scarlatinal rheumatism occurred.

*Eye.*—Conjunctivitis was present in 12 cases, blepharitis marginalis in 8, and dacryocystitis in 1.

*Septic.*—Abscesses 10, perionychia 6, septic toes 5, septic arthritis (knee) 1, cellulitis 1, meningitis 1, severe diarrhoea 4.

*Skin.*—Eczema 9, urticaria 2. In 1 case typical desquamation occurred twice, and 7 cases of typical scarlet fever failed to desquamate. 34 cases were dismissed before the epidermis was completely off the feet.

*Other conditions* present on admission not the result of scarlet fever:—Alopecia areata 1, burns 4, goitre 1, inguinal hernia 1, hordeolum 1, impetigo 5, infantile paralysis 1, nævus 2, otitis media chronica 4, pulmonary tuberculosis 1, tinea circinata 2, tinea tonsurans 3.

The following tables show the age periods and week of illness respectively at which the complications occurred:—

AGE.	Cervical Adenitis.		Otitis Media Purulenta.	Cardiac Complications.		Rhinitis.	Joint Pains.	Nephritis.	Albuminuria.
	Suppurative.	Non-suppurative.		Organic.	Functional.				
Under 1 Year, ...	...	...	...	...	...	...	...	...	...
1 - 2 Years, ...	2	...	1	...	...	...	...	...	...
- 3 " ...	1	9	7	...	1	4	...	...	...
- 4 " ...	...	26	11	...	1	19	...	...	2
- 5 " ...	...	30	8	...	...	19	...	2	...
- 6 " ...	1	38	16	...	4	18	1	2	3
- 7 " ..	1	31	8	1	1	11	1	2	2
- 8 " ..	...	31	10	1	3	10	1	..	3
- 9 " ..	...	19	3	...	2	7	1	1	4
- 10 " ...	...	26	2	1	2	6	3	1	2
- 15 " ...	...	47	1	...	6	6	5	2	6
- 20 " ...	...	10	3	1	3	3	1	...	1
Over 20 " ...	1	5	2	...	...	1	4	...	...
	6	272	72	4	23	104	17	10	23



Week of Occurrence.	Cervical Adenitis.		Otitis Media Purulenta.		Cardiac Complications.		Mastoiditis.	Joint Pains.	Nephritis.	Albuminuria.
	Sup-purative.	Non-sup-purative.	1st Ear.	2nd Ear.	Organic.	Functional.				
First, ... ..	1	238	22	9	3	...	...	10	3	14
Second, ... ..	...	17	23	6	...	5	2	3	...	4
Third, ... ..	2	10	1	...	...	1	...	4	3	2
Fourth, ... ..	...	4	6	2	1	8	1	...	1	3
Fifth, ... ..	2	1	1	1	...	6	...	...	3	...
Sixth, ... ..	1	1	1	...	...	1	...	...	...	...
Seventh, ... ..	...	...	...	...	...	2	1	...	...	..
Eighth, ... ..	...	...	...	...	...	...	...	...	...	...
Over eighth week,	..	1	...	...	...	...	...	...	...	...
	6	272	54	18	4	23	4	17	10	23

**MIXED INFECTION.—Diphtheria.**—In 10 instances post-scarlatinal diphtheria occurred; in 30 other instances antidiphtheritic serum was given. These include all cases with a severe and persistent rhinitis, whether the culture contained a diphtheroid organism or not. It was found that the serum had a salutary effect on many of those troublesome cases. On an average, those 40 cases received 9,000 units; 7 of the fatal cases received on an average 12,000 units of antitoxin.

**Chickenpox.**—In 2 cases scarlet fever and chickenpox were present on admission; 2 other cases were incubating the disease on admission. From those, 8 others were infected.

**Whooping Cough.**—Whooping cough and scarlet fever were present in 1 case.

**German Measles.**—German measles and scarlet fever were present in 1 case.

**RETURN CASES.**—Throughout the year 17 cases were dismissed who were supposed to have infected 22 other persons. Of the former number, 3 came back as diphtheria 10 to 15 days later. On dismissal they were apparently clean. The throats, however, were not swabbed before discharge. Although it is not impossible that they were infected before dismissal, the chances of them being infected later were equally great. The average duration of residence of the infecting cases was 42·7 days, as compared with 38·9 days for the recovered cases, the maximum being 54 days, and the minimum 26 days. On

discharge all the infecting cases were apparently clean. While in hospital 4 of the cases had adenitis, and only 2 had rhinitis. While at home 5 of them caught a cold, and developed rhinitis. The average interval between the primary case going home and the onset of disease in the return case was 11.1 days. The lowest was 4 days, and the maximum 4 weeks.

The time of the year in which the "infecting" cases were discharged was as follows:—

Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
9	2	1	—	—	—	—	1	2	—	—	2

Days elapsing between discharge of "infecting" cases and onset of "return" cases:—

First Week.		Second Week.		Third Week.	
Days Elapsing.	Cases.	Days Elapsing.	Cases.	Days Elapsing.	Cases.
1	...	8	4	15	2
2	...	9	...	16	2
3	...	10	1	17	...
4	1	11	...	18	1
5	...	12	3	19	...
6	1	13	...	20	...
7	4	14	1	21	...

In 2 cases 28 and 31 days elapsed.

The following table summarises the last five years' figures in regard to the infectivity and fatality rates:—

	1909.	1910.	1911.	1912.	1913.	Total.
Number of Scarlet Fever patients discharged recovered,	781	678	617	748	724	3,548
Number of presumably infectious cases discharged,...	31	32	26	33	17	139
Infectivity Rate, ...	3.9	4.7	4.2	4.4	2.3	3.6
Number of deaths from Scarlet Fever, ...	24	16	18	22	15	95
Fatality Rate, ...	2.9	2.3	2.8	2.8	2.0	2.6
Average duration in days of the cases discharged, ...	41.8	50.1	48.3	45.06	42.8	...



### Diphtheria.

At the beginning of the year there were in hospital 8 cases of diphtheria, and during the year 246 cases were admitted notified as such.

On observation, however, 58 cases were found not to be suffering from true diphtheria. This figure includes 34 patients who were sent into hospital on account of a positive swab being obtained from the throat, but who exhibited no clinical symptoms of true diphtheria. Post-scarlatinal cases are accounted for under scarlet fever. Four cases of diphtheria were notified as scarlet fever. There were thus 200 clinical cases of diphtheria treated throughout the year. Of these, 150 were dismissed well, 13 died, and 37 were in hospital at the end of the year.

REMOVAL TO HOSPITAL was carried out in the first week of illness in 92 per cent. of the cases, but 40·4 per cent. were not removed until the fourth day of the disease or later. These figures show a slight improvement on last year's corresponding numbers.

DURATION OF RESIDENCE.—The average duration of residence of all cases discharged was 29·6 days, of recovered cases 31·2 days, and of fatal cases 10·5 days.

### TYPE OF DISEASE.

FAUCIAL DIPHTHERIA.—In 94 cases, including 2 fatal ones, the faucial region of the throat was affected primarily.

*Mild.*—In 73 instances the exudation was of a very limited extent, and there was little toxæmia. The average amount of serum given was 7,000 units. One case only received antitoxin before admission.

*Complications and Sequelæ.*—V.S. murmur present at apex of heart 3, otitis media 1, adenitis 4, rhinitis 1, albuminuria 3, rashes 4, eczema 1, abscess 1.

*Moderate.*—In 14 patients a definite and adherent membrane was accompanied by considerable constitutional symptoms. Only 7 of those cases were admitted on or before the third day of illness. The average amount of serum given was 10,000 units. Two cases received 4,000 and 8,000 units respectively of serum before admission to hospital.

*Complications and Sequelæ.*—Adenitis 5, rhinitis 2, V.S. murmur at apex of heart 1, rash 1, albuminuria 1, palatal paralysis 1, cardiac failure 1.



*Severe.*—9 cases, including 2 fatal ones, belong to this group. The extent of the membrane and exudation was considerable, and the toxæmia was great. The average amount of serum administered was 24,000 units. No case received antitoxin before admission. With the exception of 2 cases, all were sent to hospital after the fourth day of illness.

*Complications and Sequelæ.*—Adenitis 5, rhinitis 1, otitis media 1, palatal paralysis 2, cardiac failure 1.

LARYNGEAL DIPHTHERIA.—42 cases were classed in this group, 37 recovered, and 5 died. For convenience of classification, the group is divided into mild, moderate, and severe types.

*Mild.*—In 12 cases the signs of involvement of the larynx were of the mildest nature. After the administration of antitoxin they all recovered rapidly. In 2 cases antitoxin was given before admission to hospital. The average amount given in this group was 8,000 units. All the cases except one had been ill three or more days before admission to hospital.

*Complications and Sequelæ.*—Albuminuria 2, rhinitis 1, adenitis 1, bronchitis 1, eczema 1, whooping-cough 1.

*Moderate.*—11 cases showed signs of moderate laryngeal obstruction. They all recovered. The average amount of serum given was 15,000 units. Two patients received 2,000 units before admission.

*Complications and Sequelæ.*—Adenitis 1, rhinitis 2, rashes 2. 1 case was incubating measles.

*Severe.*—In 19 cases the signs of obstruction and the toxæmia were of a profound nature. Of these, 5 were fatal. The operation of tracheotomy was performed in all the cases of this group. The average amount of antitoxin given was 19,000 units. Only 1 case received 2,000 units before admission to hospital.

*Complications and Sequelæ.*—Broncho-pneumonia 2, diffuse bronchitis 1, rhinitis 3, albuminuria 2, otitis media 1, palatal paralysis 1.

FAUCIAL AND LARYNGEAL DIPHTHERIA.—In 7 instances this combination was present. 2 were *mild*, 3 *moderate*, and 3 *severe*. In 1 case tracheotomy was performed. The average amount of serum given was 11,000 units.

*Complications and Sequelæ.*—Adenitis 1, bronchitis 1, otitis media 1, rash 1.

NASAL DIPHTHERIA.—The naso-pharynx was the seat of the disease in 4 cases. In 2 instances the symptoms were *mild*. 1 case of *moderate* severity developed palatal and ciliary paralysis, and also nephritis. The *severe* case received in all 44,000 units of antitoxin. In the second week of illness nephritis developed, and the patient died.



**FAUCIAL AND NASAL DIPHThERIA.**—This combination was very fatal. Of 13 cases, 8 recovered and 5 died. In 1 case the disease was *mild*, 1 *moderate*, and 11 *severe*. The average amount of antitoxin given was 27,700 units.

*Complications and Sequelæ.*—Adenitis 6, albuminuria 6, palatal paralysis 1.

**FAUCIAL, NASAL, AND LARYNGEAL DIPHThERIA.**—1 case only presented this combination. 16,000 units of serum were injected. The case recovered.

**VAGINAL DIPHThERIA.**—A girl, aged 3, was notified as vaginal diphtheria. There was a considerable discharge, which contained a diphtheroid organism. The condition cleared up rapidly with local measures.

**EYE DIPHThERIA.**—A boy, aged 5, was sent to hospital as diphtheria on account of a severe conjunctivitis. The secretion contained a diphtheroid bacillus in too few numbers to be isolated for animal inoculation. The eye was not damaged in any way, and made a perfect recovery.

In neither of those latter cases was the throat positive.

The following table summarises the sites of membrane in the total discharges:—

Site of Membrane.	Mild.		Moderate.		Severe.		TOTAL.	
	Recovered.	Died.	Recovered.	Died.	Recovered.	Died.	Recovered.	Died.
Faucial, . . .	73	—	14	—	5	2	92	2
Laryngeal, . . .	12	—	11	—	14	5	37	5
Nasal, . . . .	2	—	1	—	—	1	3	1
Faucial and Laryngeal, .	2	—	2	—	3	—	7	—
Faucial, Nasal, and Laryngeal,	1	—	—	—	—	—	1	—
Eye, . . . . .	1	—	—	—	—	—	1	—
Vaginal, . . . .	—	—	1	—	—	—	—	—
Faucial and Nasal,	1	—	1	—	6	5	8	5
							150	13

**DIPHThERITIC PARALYSIS.**—A remarkably small percentage of the cases developed paralysis. Only 7, or 4·2 per cent., of all the clinical cases discharged showed signs of this complication. It should, how-

ever, be noted that certain forms, such as ciliary paralysis and paresis of lower limbs, may be missed in young children who cannot read, and who are in bed for several weeks. Only 4.2 per cent. of the faucial cases showed signs of this complication, 2.3 per cent. of the laryngeal cases, and 11.1 per cent. of the cases with nasal involvement.

Table showing the relation of the post-diphtheritic paralysis cases and of the fatal cases to date of disease when antitoxin serum was administered:—

Day of Injection of Serum.	In all Cases.	Paralysis Cases.	Percentage.	Deaths.	Percentage.
First Day, - - -	1	...	...	...	...
Second Day, - - -	38	...	...	...	...
Third Day, - - -	49	2	4.0	6	12.2
Fourth Day, - - -	23	...	...	1	4.3
Fifth Day, - - -	24	3	12.5	2	8.3
Sixth Day, - - -	10	1	10.0	2	20.0
Seventh Day and after, -	18	1	...	2	11.1

The following table shows the relative frequency of each form of paralysis, with date of onset:—

Week of Onset.	Palatal.	Palatal and Ciliary.	Cardiac.
1	—	—	1
2	2	—	—
3	—	—	—
4	—	1	—
5	1	—	—
6	1	—	1
Total,	4	1	2
Percentage Frequency, }	2.4	.6	1.2

CORRECTED DIAGNOSES.—Broncho-pneumonia 3 (2 of whom died), bronchitis 1, laryngismus stridulus 1, rhinitis 1, sore throat 2, nil 6, chickenpox 1, whooping cough 1, measles 1, scarlet fever 7.

34 cases were notified as diphtheria on account of a positive swab being obtained from the throat. The diphtheroid organism in 3 cases only was tested for virulence, 2 were pathogenic, and 1 non-pathogenic.



**FATALITY RATE.**—Calculated on the total discharges, the fatality rate was 7·9 per cent. If 2 cases which died within 24 hours of admission be excluded, the fatality rate is reduced to 6·7 per cent.

**FATAL CASES.**—Of 163 clinical cases of diphtheria discharged, 13 were deaths—5 males and 8 females. The average age of all fatal cases was 4 years. The average duration of the disease on admission was 5 days. None of them came under treatment earlier than the third day of illness. Six of them had been ill 3 days, and one as long as 10 days.

**TREATMENT.**—Tracheotomy was performed in 28 cases (including the 6 cases remaining in hospital)—18 males and 10 females. Diphtheria was present in 26, non-diphtheritic laryngitis in 1, and a new growth in 1. 15 recovered, 7 died, and 6 were remaining in hospital at the end of the year. Of those 6, at the time of writing 5 were discharged well, and 1 died of late cardiac failure. The recovery rate is, therefore, 71·5 per cent. of all cases in which the operation was performed. The average age of patients operated on was 3 years, the youngest being 9 months, and the oldest 8 years. The average day of disease of the diphtheria cases requiring operation was 4·9 days. On an average they received 20,800 units of antitoxin. The average duration of residence of the recovered cases was 43·6 days.

**AN UNUSUAL CASE REQUIRING TRACHEOTOMY.**—A female, aged 3, was admitted to hospital notified as scarlet fever. There was a history of sickness and cough. A rash was thought to be present. It was afterwards ascertained that the child had been very hoarse for 2 years, and had been unable to speak for some time previous. She had also taken occasional choking fits. On admission no evidence of scarlet fever was detected, but there was considerable laryngeal obstruction, the pulse was small and rapid, the temperature 97° F. Nothing abnormal was detected on the throat. Although the diagnosis was doubtful, 12,000 units of serum were given, and a large poultice applied to the upper chest. The symptoms, however, did not improve. The difficulty in breathing became so urgent that a tracheotomy was performed during the night. When the trachea was opened no membrane was seen. The insertion of the tube gave instant relief. The temperature gradually ascended, until on the seventh day of residence it was 104°, and a well-marked measles eruption developed. A few days later a broncho-pneumonia developed. For the next fortnight the child was seriously ill. She, however, began to improve at the end of a month. It was two weeks before the child was able to do without the tube. Diphtheria bacilli were never detected in the swabs obtained from fauces and larynx. The probable condition of matters was that a



tumour of a benign nature involved the glottis region. This would account for the child's long-standing hoarseness and aphonia, and that a pre-eruptive measles laryngitis, which frequently does occur, completed the obstruction. As a direct examination of the vocal cords was unable to be made, the child was sent to the Throat Department of the Glasgow Royal Infirmary.

Table showing day of disease in which operation was performed :—

Probable day of disease,	2	3	4	5	6	7	8	9	10	14
Fatal cases, - -	1	3	...	...	1	...	...	...	1	...
Recovered cases, -	3	6	5	1	3	1	...	...	...	1

The following table gives the age, sex, and result of diphtheria cases operated on :—

AGE.	Number Operated on.		Died.	
	Males.	Females.	Males.	Females.
Under 1, - - - -	...	...	1	2
1 and under 2, - - -	5	...	1	...
2 „ 3, - - - -	4	2	1	...
3 „ 4, - - - -	3	...	1	...
4 „ 5, - - - -	...	4	...	...
5 „ 6, - - - -	...	...	...	...
6 „ 7, - - - -	...	...	...	...
7 „ 8, - - - -	2	...	...	...
Total, - - - -	14	6	4	2

ANTITOXIN.—Last year 33 cases received antitoxin before admission; this year in 8 instances only was there a history that serum had been given. After admission all cases of diphtheria and all positive swabs, and all scarlet fever cases with a positive swab or bad rhinitis, received antitoxin. Over all an average of 9,000 units were given. This may seem a large amount, but no case was seen during the year where it was thought too much had been given. On the other hand, there are always cases where it was afterwards thought that a larger dose might have been given with better results.

Burroughs, Wellcome, & Company's concentrated serum continues to produce satisfactory results. Of the 237 discharges who received serum, only 12, or 5 per cent., exhibited serum after-effects. In those



12 instances the sequelæ did not seem to have any relation to the type of the disease. Last year sequelæ were more frequent after small doses of serum. This year sequelæ followed larger doses oftener. The types of disease showing after effects were—faucial, 6 cases; faucial and nasal, 1 case; faucial and laryngeal, 1 case; and laryngeal, 1 case.

Five cases were mild in degree, 3 moderate, and 4 severe. The amount of serum given was 4,000 units in 1 case, 6,000 units in 1 case, 8,000 units in 3 cases, 16,000 units in 4 cases, 20,000 units in 2 cases, 24,000 units in 1 case.

The interval between the administration of serum and the appearance of symptoms was 6-26 days. The average was 11.3 days.

The temperature in 2 cases was not above normal, although a well-marked urticarial rash was present. In one of them a secondary morbilliform rash came out one day later. In all the other cases a moderate degree of pyrexia was present. One case, a moderate faucial and laryngeal case, received 16,000 units; 11 days later an urticarial rash involved the limbs, the face was puffy, and the temperature reached  $103.4^{\circ}$  F., the wrists became swollen and tender. In 4 cases only, where the temperature was  $99.6^{\circ}$  F. or over, was there joint pains. Two of them had a moderate degree of swelling of the joints. Another one had swollen knees but no pain. The eyelids were puffy in 2 cases, but no albumen was present in the urine. Itchiness accompanied the rash in 5 cases.

An urticarial rash appeared in 6 cases alone. A general erythema preceded the urticaria in 1 instance, in another the erythema persisted on the limbs, while the face and trunk presented an urticarial appearance. In 2 cases a morbilliform eruption followed the urticaria.

Five days after a laryngeal case received 16,000 units the temperature rose to  $100.8^{\circ}$  F., and an urticarial eruption appeared on the trunk and face. It lasted 3 days. Next day a morbilliform rash appeared, accompanied by sickness and diarrhoea, sweating, and general pains. In another case the rash was composed of large bluish blotches, involving the buttocks, limbs, and face. The rash in another instance was distinctly punctate. In no case did desquamation follow the eruption.

The following table gives a summary of the serum after-effects in the 12 cases :—

Patient.	Type of Disease.	Site of Membrane.	Serum given.	Symptoms appeared in	Temperature.	Type of Rash, etc.
S. M'L.	Severe	Faucial and Nasal	Units. 24,000	10 days	98°	Urticarial and Morbilliform.
G. G.,	Moderate	Laryngeal	16,000	5 „	100·8°	Urticarial and Morbilliform.
T. A.,	Mild	Faucial	8,000	10 „	99·6°	Urticarial, some pain.
M. S.,	Moderate	Faucial and Laryngeal	16,000	11 „	103·4°	Urticarial, pain and swelling.
M. B.,	Mild	Faucial	4,000	7 „	100·4°	Urticarial and Erythematous.
J. B.,	„	„	6,000	6 „	98°	Urticarial.
J. S.,	Severe	Laryngeal	20,000	7 „	99°	Urticarial and Erythematous.
E. M.,	Mild	Faucial	8,000	22 „	99·6°	Urticarial, aedema Eyelids
G. M.,	„	„	8,000	12 „	102·4°	Large blotches, itchy.
M. M'N.,	Severe	„	16,000	13 „	100°	Course punctate.
A. B.,	Moderate	Laryngeal	16,000	26 „	99·8°	Urticarial, itchy.
M. B.,	Severe	„	20,000	7 „	99·6°	„ „

### Enteric Fever.

There were in hospital at the beginning of the year 19 cases of enteric fever. Throughout the year 126 cases were notified as such, making 145 cases under treatment. Of these, 45 (including 27 contact cases) were found not to be suffering from enteric fever. The total number, therefore, of genuine clinical cases treated throughout the year was 100. Of these, 87 were discharged well, 5 died, and 8 were remaining in hospital at the end of the year.



The following table has been brought up to date :—

YEAR.	PERCENTAGE OF PATIENTS DISCHARGED.			CASE MORTALITY PER CENT.	
	Under 5 years of age.	Under 10 years of age.	Under 15 years of age.	Under 15 years of age.	15 years of age and over.
1898,	3·3	19·0	37·0	3·0	18·7
1899,	5·7	25·3	43·1	6·1	14·0
1900,	10·1	30·4	46·6	1·4	18·8
1901,	13·0	39·5	53·5	2·4	16·8
1902,	7·1	27·6	39·5	4·8	18·1
1903,	6·7	35·9	53·6	11·3	18·4
1904,	7·9	30·7	50·5	11·7	14·0
1905,	11·8	28·9	46·2	4·9	11·3
1906,	6·16	26·0	42·1	5·6	11·4
1907,	12·0	26·0	37·0	5·4	11·1
1908,	12·2	27·3	41·5	6·4	13·8
1909,	8·8	35·2	54·9	...	6·5
1910,	6·5	29·5	52·4	1·5	6·8
1911,	6·7	30·3	43·8	...	28·2
1912,	5·9	30·8	47·0	6·2	22·2
1913,	7·6	30·4	55·4	3·9	7·3

REMOVAL TO HOSPITAL was carried out during the first week in 26 cases, or 28·2 per cent.; during the second week in 47 cases, or 51 per cent.; during the third week in 9 cases, or 9·7 per cent.

THE AVERAGE DURATION OF RESIDENCE of all cases discharged was 59·8 days; of recovered cases, 62·6 days; and of fatal cases, 11·8 days.

FATALITY RATE.—A fatal issue resulted in 5 cases, giving a fatality rate calculated on the discharges of 5·4 per cent. It will be noted that this rate is considerably less than half of what it was the previous year.

The following table gives the age, sex, and cause of death of the fatal cases :—

Age.	Sex.		Days in Hospital.	Day of Disease on Admission.	Type of Disease.	Cause of Death.
	M.	F.				
10	...	1	22	5	Severe	Toxæmia.
15	1	...	16	8	„	Double pneumonia.
18	1	...	9	16	„	Perforation.
24	...	1	9	15	„	Toxæmia.
39	...	1	3	28	„	Perforation and pneumonia.

Two of the cases died from toxæmia, and another from pneumonia involving both lungs.

Perforation of the intestine occurred in 2 cases only. The one was a male, aged 39, who had been ill for about a month before admission to hospital. For two weeks, however, he had been seriously ill. On admission to hospital he was in a dying condition, suffering from peritonitis and lobar pneumonia. No operation was performed. He lived for two days after admission.

The other case was a boy, aged 18 years, who came into hospital on the 16th day of a severe attack of enteric fever. Five days after admission a perforation was diagnosed. Within a short time the abdomen was opened, and a large perforation of the small intestine, 12 inches from the ileo-cæcal valve, was discovered and stitched up. Although the abdomen was freely drained, the patient died in 4 days.

TYPE OF DISEASE.—Twenty-nine cases, presenting slight constitutional disturbance, were classed as mild, 21 were of moderate severity, and in 42 instances the attack was severe.

Table showing type of disease and time of admission to hospital:—

WEEK OF ILLNESS.	MILD.		MODERATE.		SEVERE.				Total Cases and Week of Illness.	
					Recovered.		Died.			
	Number of Cases.	Per- centage.	Number of Cases.	Per- centage.	Number of Cases.	Per- centage.	Number of Cases.	Per- centage.	Number of Cases.	Per- centage.
1st	8	27·5	6	28·5	11	29·7	1	20	26	28·2
2nd	14	48·2	12	51·1	20	54·0	1	20	47	51·0
3rd	3	10·3	2	9·5	3	8·1	2	40	10	10·0
4th	4	13·7	1	4·7	3	8·1	1	20	9	9·7
Total,	29	31·5	21	22·8	37	4·0	5	5·4	92	

The majority of cases in each group came under observation in the second week of illness. In the previous year the number of mild and severe cases were almost equal. The moderately severe cases were 16 per cent. less. This year the cases of mild and moderate severity are almost equal, while the severe cases are twice as many as the latter group. This increase in the number of serious cases and the great reduction in the fatality rate is rather remarkable.

COMPLICATIONS.—*Gastro-intestinal*.—Perforation of intestine, 2 cases; intestinal hæmorrhage, 5 cases.



*Pulmonary.*—Lobar pneumonia, 3 cases—2 afterwards died; pleural effusion, 1 case; severe bronchitis, 3 cases.

*Nervous.*—Delirium, 1 case. In another case signs of meningeal irritation were so marked that the cerebro-spinal fluid was drawn off with good result. The fluid was sterile.

*Other Complications.*—Albuminuria 11, bacilluria 6, white leg 1.

*Bacilluria.*—This complication was present in 6 instances. The organism present in 3 cases was *B. typhosus*, and a coliform in 3 other cases.

**A PERSISTENT CASE OF BACILLURIA.**—A male, aged 4 years, was notified as enteric fever on account of a positive Widal reaction. It was found that the symptoms were negative, nor had there been any history of illness. In the routine examination of the excreta *B. typhosus* was detected in large numbers in the urine. Associated with the bacilluria was a mild degree of albuminuria. The reaction of the urine was acid. During the time patient was in hospital the following varieties of treatment were tried without avail:—Urotropine in an acid urine; urotropine in an alkaline urine; helmitol in an acid urine; helmitol in an alkaline urine; salol in an acid urine; methyl green in an acid urine; diuretic mixture; vaccine.

RELAPSES occurred in 4 cases, or 4·3 per cent. of the discharges. The primary attack in all cases was severe.

(I.) A male, aged 39, came under treatment on the 10th day of disease. For the next 16 days the patient was very ill; the temperature ranged between 101° and 103° F. In other 7 days it had reached normal, and the patient felt better. For the next 8 days the course was uneventful, but on the 9th day the temperature began to swing in the evening. Three days later it had reached 102° F., then began to decline. It was not until fully a fortnight after the onset of the relapse that the temperature remained normal.

(II.) A male, aged 18, had been ill for 10 days before coming into hospital. The attack was sharp, and the temperature reached 104° F. in the evenings of the first 4 days. At the end of a fortnight it was normal, and remained so for 5 days, then ascended fairly rapidly until it reached 104° F. again. The relapse lasted 2 weeks, and was as severe as the primary attack.

(III.) A female, aged 44, came into hospital towards the end of the primary attack, and was fairly comfortable. However, during the second week of residence a relapse occurred. The temperature in 4 days reached 104° F., and she rapidly became worse. During the 3 weeks the relapse lasted the patient was seriously ill. Although she remained in the "typhoid state" for a few days, she ultimately recovered.



(IV.) A female, aged 9, was ill for four weeks; the temperature swung in an irregular manner for five weeks, then remained between 97° F. and 99° F. for 6 days. In this case the temperature reached its maximum, 102·6° F., in 2 days, then took a week to reach normal again. This patient remained in hospital for 3 months.

**CORRECTED DIAGNOSES.**—In 27 cases a positive Widal reaction without clinical symptoms was present. Those cases may or may not have had the disease previously. They are not grouped with the clinical cases of enteric fever.

The other cases of altered diagnoses are :—

	Cases.	Deaths.
Catarrhal jaundice, ... ..	1	—
Constipation, ... ..	1	—
Contact, blood negative, ... ..	3	—
Influenza, ... ..	—	1
Pneumonia, ... ..	3	—
Erysipelas, ... ..	1	—
Tuberculous meningitis, ... ..	—	2
Pulmonary tuberculosis, ... ..	1	—
Tuberculous kidney, ... ..	1	—
Nil, ... ..	4	—

### Puerperal Fever.

One case of puerperal fever was remaining in hospital at the beginning of the year, 6 cases were admitted as such, 6 were discharged, and 1 was still in hospital at the end of the year.

The following is a summary of the cases discharged :—

Age.	Day of Disease.	Pregnancy.	Person in Attendance.	Days in Hospital.	Complications at Labour.	Complications.	Result.
—23	7	1	Doctor	74	Instruments	Sapraemia, pulmonary tuberculosis	Improved
—26	18	1	„	36	Nil	Perineal laceration	Well
—28	5	7	„	25	Miscarriage	Pernicious anaemia	Died
—29	6	7	Midwife	7	Nil	Septicæmia	„
—34	9	6	Doctor	7	Abortion	Toxaemia	„
—36	7	5	Midwife	10	Nil	Septicæmia	„



Four of the 6 cases discharged died—2 from septicæmia, 1 toxæmia, 1 pernicious anæmia and cardiac disease. Two of the fatal cases were attended by medical practitioners, and 2 by midwives. In 2 of them the disease followed a full-time labour, and in the other 2 a miscarriage.

The average day of illness, when admitted, in all cases was 8·6 days; in recovered cases, 12·5 days; and in fatal cases, 12·2 days.

CASE I.—The patient was a primipara, and difficulty was experienced at the labour. The child was still-born. When admitted the patient looked typically septic. There were great vaginal and cervical lacerations. The blood was sterile. In addition she had signs of an active tuberculous lesion, involving the upper lobe of the right lung. At the end of 74 days she was taken home, the septic condition having cleared up, but the lung condition still active.

CASE II.—This was a mild case, the sepsis having originated from a perineal tear. The patient went home well.

CASE III.—The patient had suffered from anæmia for some time before the miscarriage. The child had been dead for 3 weeks. The septic condition had cleared up, but the anæmia, which was of the pernicious variety, progressed. In addition, there were signs of well-marked aortic disease. Death occurred at the end of 25 days.

CASE IV.—This patient was a 7-para, and was delivered by a midwife. There were no apparent lacerations, but the infection was of a virulent type. Streptococci were cultivated from the blood.

CASE V.—In this case a macerated 7 months' foetus was delivered. The placenta and membranes were not removed until 4 days later, when patient began to have rigors. Although the uterus was cleared out, the rigors continued, and the patient died 7 days after admission.

CASE VI.—This case was also delivered by a midwife. Two days after the confinement headache and abdominal pains commenced. When admitted to hospital a considerable amount of debris was removed from the uterus. The blood contained streptococci, from which an autogenous vaccine was prepared. She, however, dropped into the typhoid state, and died on the 10th day.

### **Erysipelas.**

Throughout the year 12 cases were notified as erysipelas. One of these cases was found to be suffering from specific disease. One patient notified as enteric fever was suffering from erysipelas alone. Twelve cases of true erysipelas were treated during the year, 11 were dismissed, and 1 was remaining in hospital at the end of the year.



The following table summarises the cases:—

Age.	Sex.	Situation of Lesion.	Type.	Day of Disease.	Days in Hospital.	Result.	Complications.
- 1	F.	Trunk	Severe	8	13	Died	Broncho-pneumonia
- 17	F.	Face and Head	,,	14	25	Well	
- 23	F.	Face	Mild	4	23	,,	2nd attack
- 25	F.	,,	,,	7	15	,,	Relapse and Albuminuria
- 53	F.	,,	Severe	7	40	,,	Traumatic axillary abscess
- 71	F.	Head	Moderate	8	44	,,	,,
- 12	F.	Arm	Mild	14	88	,,	
- 41	M.	Face and Head	Severe	9	18	,,	Scalp wound
- 41	M.	Face	Mild	3	13	,,	Albuminuria
- 43	M.	,,	,,	5	16	,,	
- 49	M.	Face and Head	,,	5	13	,,	Scalp wound

The face alone was affected in 5 cases, the head in 1, the face and head in 3, the trunk in 1, and the arm in 1.

THE TYPE OF DISEASE.—Mild, 6; moderate, 1; severe, 4.

The average age of all cases affected was 34·1 years. 7·6 days was the average day of disease on admission to hospital.

THE AVERAGE DURATION OF RESIDENCE of all cases was 28 days.

In 4 of the cases the disease was secondary to a noticeable wound. In 1 instance a relapse occurred, and in 3, albuminuria.

M. M'D., aged 7 months. Eight days before admission an erysipelatous condition had started on the left arm. In a short time it had spread over the whole of the left side of trunk and face. When admitted to hospital a dull red raised condition involved the skin of the left leg, left side of trunk and left arm, and both sides of face and neck. The edges of the eruption were well defined and distinctly raised. The general appearance was that of a wide-spread and fading erysipelus. The condition gradually subsided, but signs of a broncho-pneumonia developed. The patient died 13 days after admission. There was no apparent cutaneous lesion.



### Cerebro-Spinal Meningitis.

Seven cases were notified as cerebro-spinal meningitis. The diagnoses on observation were as follows:—Chronic cerebro-spinal meningitis 1, gastro-intestinal toxæmia 1, toxic headache 1, lobar pneumonia 2, tuberculous meningitis 2 (both died).

CHRONIC CEREBRO-SPINAL MENINGITIS.—D. M'A., male, aged 15. A month previously the patient took suddenly ill. He awakened up one night shivering, was sick several times, and complained of intense frontal headache. During the next two weeks rigors occurred frequently. The headache was not occipital in distribution, but was so intense that delirium followed. The posterior cervical muscles were stiff and the head retracted. The symptoms gradually subsided. A month after the onset he came into hospital. He was then quite comfortable but very pale, and the muscles were greatly wasted. The temperature was normal. Next day, however, he took a rigor, and the temperature reached 104° F. During the next 5 weeks, with the exception of slight exacerbations, the temperature swung between 97° and 98·4° F. The erythrocytes were reduced to 3½ millions, and the leucocytes numbered 7½ thousands. The blood was sterile. On two occasions lumbar puncture was performed. The fluid was not under pressure, was slightly opalescent, and contained a greater number of polymorphonuclear and mononuclear leucocytes than was normal. No organism was seen and the fluid was sterile. At the end of 5 weeks the patient was apparently well, and showed no after effects of the meningeal inflammation.

### Typhus Fever.

This patient was a nurse in another hospital. She had received and nursed a patient whose illness afterwards proved to be typhus fever. Within a fortnight she felt seedy and run down. Her own medical attendant discovered that she had signs of pneumonia at one base and a rash resembling that of typhus fever. When admitted to hospital on the fifth day of illness she presented the appearance of one suffering from a severe toxæmia. The facies were not "bloated," and the conjunctivæ were free from injection. The pupils were normal in size. The rash very much resembled that of enteric fever. The majority of the elements were pinkish, faded on pressure, and were not raised. No petechiæ were observed. The distribution of the rash was fairly general. It, however, was very well marked on the front and sides of the neck, front of chest, and anterior axillary borders. Over the anterior abdominal wall a marbled appearance was very noticeable. In both flanks, over lower lumbar and sacral regions, the eruption was profuse and deeper in colour than in any other parts.



Well-marked "rose spots" were present on the dorsal aspects of hands and feet. The patient appeared dull but not dazed, headache was not severe, but insomnia was troublesome. At one base there was dullness and considerable crepitations. The temperature for ten days varied from  $101^{\circ}$  to  $104^{\circ}$ . Five days after admission numerous petechiae developed, the conjunctivæ became injected, and the pupils contracted. For several days a low form of delirium was present, and the patient was in a very precarious condition. The temperature came down by a rapid lysis, and was normal in the beginning of the third week of residence. For several days deafness was present. This, however, cleared up. The patient made a good recovery, and went home after a residence in hospital of forty days.

#### **Anthrax (Malignant Pustule).**

The patient, a male, aged 27 years, was a butcher who went to market twice a week. There he handled live cattle only.

One day he noticed a few red spots on the left forehead. They gradually fused together to form a large papule, which soon developed a black top. The pustule increased in size, and some œdema developed, involving the eyelids of both eyes and the nose. Beyond feeling a little out of sorts, he had had no constitutional disturbance.

On the ninth day after the onset the lesion on the left forehead measured one by an half inch, and was covered by a black crust. Surrounding the eschar were a number of small blisters. The eyelids of the left eye and the lower of the right were distinctly swollen and œdematous.

Immediately on admission to hospital the pustule was excised by an elliptical incision wide of the margin, and taking the whole thickness of tissue down to the bone. 40 c.c. of Sclavo's serum were given into the vein. Next day 40 c.c. more were given subcutaneously. The wound healed up by first intention, and the patient went home in 11 days.

**BACTERIOLOGY.**—Direct smears from pustule showed a few faintly stained bacilli and many polynuclear leucocytes. The culture resulted in a typical growth of a sporing bacillus morphologically identical with *B. anthracis*. An animal inoculated with a scraping from the tissue died within 36 hours. Another inoculated with the pure culture also died. The *post-mortem* appearances were typical of anthrax. The same organism was recovered from the tissues.



**X-Ray Department.**

**TINEA TONSURANS.**—Throughout the year 61 cases, 33 males and 28 females, were treated. The average age of all cases treated was  $8\frac{1}{2}$  years, 4 or 6·5 per cent. were under five years of age, 42 or 68·8 per cent. were between five and ten years, and 15 or 24·5 per cent. were between ten and fifteen years.

In 48 instances the whole head was rayed, and in 13 instances only a part required treatment.

*Source of Infection.*—In 33 cases the infection was got at the school, in 10 cases from other members of the same family, in 2 cases the barber was supposed to be the cause of the infection, and in 16 instances the source of infection was unknown.

**DURATION OF RESIDENCE.**—It frequently happens that a head is not in a suitable condition for raying, and requires several weeks' local treatment to allay the inflammation. Such cases could not be admitted during the year, as the skin pavilion was fully occupied with other cases. Consequently 59 cases were rayed and discharged the same day. One case was 2 days, and another 6 days in hospital.

The duration of the disease is shown in the following table :—

Duration in Months.	Number of Cases.	Duration in Months.	Number of Cases.
1 Month	17	9 Months	1
2 Months	11	10 „	3
3 „	4	11 „	1
4 „	5	12 „	3
5 „	2	24 „	2
6 „	5	30 „	1
7 „	2	36 „	2
8 „	1	84 „	1

**THE RESULTS OF TREATMENT** were excellent. Fifty-five of the 61 cases were seen at intervals of from four to six months after exposure to the rays.

Districts from which the cases come were :—Bellshill 2, Blantyre 4, Bothwell 1, Cambuslang 5, Giffnock 1, Mossend 3, Stonehouse 1, Uddingston 1, Lower Ward 4, Burghs of Airdrie 2, Hamilton 20, Lanark 16, Motherwell 1.

**TUBERCULOUS ADENITIS.**—Four suitable cases were treated with X-rays. All of them had tuberculin also. Three were greatly improved on dismissal.



**LUPUS VULGARIS.**—Four cases were treated. The situation of the disease was—face in 2 cases, arm in 1 case, and ear in 1 case. Two cases in which the face was affected received tuberculin also.

The ear case was an old one, which had received treatment before. That case was ultimately quite cured.

In one case, a male, aged 17, both cheeks and whole of neck, back, and front were affected with lupus vulgaris of four years' duration. A large part of the cheek and neck was ulcerated and painful. After a few weeks of treatment the ulcerated part was quite healed. Altogether this patient received seven doses (2 H) of X-rays. He went home greatly improved.

**LUPUS ERYTHEMATOSUS.**—This case, mentioned later, received eight doses of (2 H) X-rays with marked improvement.

**ECZEMA BARBÆ.**—One case was completely cured after three applications (2 H) of X-rays.

### **Measles.**

Two cases were admitted. One, a child under one year, had acute laryngitis, necessitating tracheotomy. The patient died three days later from broncho-pneumonia.

Another case notified as measles had an abscess of the neck only.

### **Unclassified Diseases.**

These were—Tonsillitis 1, German measles 1, malnutrition 1, alopecia totalis 1, constipation 1, scabies 4.

### **Grounds and Buildings.**

Along the western boundary (Tinkers Lane) a new road has been completed. The embankment along this boundary has been extended out to give a planting surface 33 feet wide on the top. This embankment has also been continued along the northern boundary between the hospital grounds and the tramway power station for 180 feet. The remaining part is being completed with made soil.

The western embankment has now (March 1914) been planted with hardwood trees and shrubs.

A new road has been made from the engine-house to Crawford Street on the north side. This road is 20 feet wide, and is intended for heavy traffic. The borders have been effectually laid off and planted with tall poplars transplanted from other parts of the grounds.



On the other side of Airbles Road a strip of land, the length of the hospital frontage, and 150 feet in breadth, has been taken over to preserve the amenity of the hospital in the southern direction.

**ENGINE ROOM.**—At the biannual inspection the boilers and electrical plant were found to be in order.

**LAUNDRY.**—The ceiling and walls of the laundry were whitewashed in the autumn of the year. The new drying chamber, calender, and collar and cuff ironing machines have been working satisfactorily.

### **Ambulance Work.**

The ambulance work during the year has increased considerably. This is partly due to the amount of tuberculosis work in connection with other hospitals, and to the greater number of patients who are taken home when dismissed from hospital. The work also necessitates both ambulances working at one time. On 59 occasions 100 miles or more were run on one day.

The total mileage run by both ambulances was 20,936 miles, or 6,648 miles in excess of last year's figure. 904 journeys were made for admissions, 147 taking patients home, 80 removing tuberculosis patients to and from other hospitals, and 102 on various other business—1,233 journeys in all, or 269 journeys in excess of last year's total runs.

For the S.C.A.T. car a back axle and star piece for the differential gearing were renewed. In the Arrol-Johnston car the ball bearings were replaced by timkin roller bearings.

The districts to which the patients were taken home last year are as follows :—

District.	Number of Patients.	District.	Number of Patients.
Airdrie, - - -	8	Hirst, - - - -	1
Auldhous, - - -	1	Larkhall, - - -	1
Bellstane, - - -	1	Luggiebank, - -	1
Blantyre, - - -	5	Limekilburn, - -	3
Bothwell, - - -	2	Longriggend, - -	5
Caldercruix, - -	8	Moffat Mills, - -	4
Cadzow, - - - -	2	Newton, - - - -	3
Cleland, - - - -	2	Netherburn, - -	1
Calderbank, - -	1	Newmains, - - -	2
Cambuslang, - -	3	Northrigg, - - -	5
Chapelhall, - - -	4	Old Monkland, -	1
Chapelton, - - -	1	Plains, - - - -	5
Dalserf, - - - -	2	Salsburgh, - - -	10
Darngavil, - - -	3	Shotts, - - - -	54
East Kilbride, - -	8	Strathaven, - -	23
Ferniegair, - - -	2	Stonehouse, - -	10
Glassford, - - -	2	Ravensraig, - -	1
Gartness, - - -	1	Tannochside, - -	6
Greengairs, - - -	20	Uddingston, - -	2
Hartwood, - - -	1	Wattstown, - -	1
Harthill, - - -	17	West Benhar, - -	6



## Operations during the Year.

A few major operations and a considerable number of minor ones were performed during the year.

These are given in the following table, with the results:—

Initials.	Sex.	Age.	Operation.	Primary Disease.	Reason for Operation.	Anæsthetic.	Result.
R. P.	M.	43	Incision	Scarlatina	Multiple abscesses	Ethyl Cl	Well
J. F.	M.	5	Incision	Scarlatina	Mastoiditis	Ethyl Cl	Well
B. S.	F.	6	Incision	Scarlatina	Mastoiditis	Ethyl Cl	Well
A. B.	M.	4	Incision	Scarlatina	Glandular abscess	Ethyl Cl	Well
T. F.	F.	2	Incision	Scarlatina	Glandular abscess	CHCl <sub>3</sub>	Well
A. M.	M.	4	Incision	Scarlatina	Angina of neck	CHCl <sub>3</sub>	Died
H. L.	F.	5	Incision	Scarlatina	Glandular abscess	Ethyl Cl	Well
A. T.	F.	2	Incision	Scarlatina	Glandular abscess	CHCl <sub>3</sub>	Well
M. C.	M.	7	Incision	Scarlatina	Glandular abscess	Ethyl Cl	Well
B. M.	F.	3	Incision	Scarlatina	Mastoiditis	Ethyl Cl	Well
I. D.	F.	3	Incision	Scarlatina	Glandular abscess	Ethyl Cl	Well
A. G.	M.	3	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Died
J. S.	M.	4	Tracheotomy	Diphtheria	Laryngeal obstruction	CHCl <sub>3</sub>	Well
J. R.	M.	2	Tracheotomy	Diphtheria	Laryngeal obstruction	CHCl <sub>3</sub>	Well
N. O.	F.	5	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Well
W. C.	M.	1½	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Well
C. G.	F.	5	Tracheotomy	Diphtheria	Laryngeal obstruction	CHCl <sub>3</sub>	Well
J. S.	M.	3	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Well
W. W.	M.	4	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Well
N. M.	F.	3	Tracheotomy	Diphtheria	Laryngeal obstruction	Ethyl Cl	Well
A. H.	M.	1½	Tracheotomy	Diphtheria	Laryngeal obstruction	Ethyl Cl	Died
J. H.	F.	1	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Died
A. P.	M.	2½	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Well
E. H.	F.	1½	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Died
J. W.	M.	4	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Died
E. H.	M.	4	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Well
J. S.	M.	1½	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Well
M. B.	F.	3	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Well
W. P.	M.	8	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Well
A. B.	M.	9½	Tracheotomy	Diphtheria	Laryngeal obstruction	CHCl <sub>3</sub>	Died
W. S.	M.	3	Tracheotomy	Diphtheria	Laryngeal obstruction	CHCl <sub>3</sub>	Well
J. M.	M.	1½	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Died
W. M.	M.	8	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Well
A. D.	F.	4½	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Well
J. F.	F.	1½	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Well
A. W.	M.	3	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Well
W. S.	M.	2	Tracheotomy	Diphtheria	Laryngeal obstruction	Nil	Well
R. H.	M.	9	Tracheotomy	Measles	Acute laryngitis	Nil	Died
M. R.	F.	3	Tracheotomy	Laryngeal tumor	Laryngeal obstruction	Nil	Improved
G. M'C.	M.	18	Laparotomy	Enteric	Perforation	CHCl <sub>3</sub>	Died
J. R.	M.	26	Excision	Anthrax	Malignant pustule	CHCl <sub>3</sub>	Well
Mrs. F.	F.	35	Curetting	Puerperal	Exploration	Nil	Died
J. W.	F.	22	Curetting	Puerperal	Exploration	Nil	Well
Mrs. D.	F.	28	Curetting	Puerperal	Exploration	Nil	Died
S. M.	F.	23	Incision	Pyelitis	Axillary abscess	Ethyl Cl	Well
A. B.	M.	4	Scraping	Tuberculosis femur	Removal of granulations	CHCl <sub>3</sub>	Improved
M. F.	M.	21	Aspiration	„ spine	Abscess	Cocaine	I. S. Q.
W. M.	M.	34	Scraping	„ femur	Removal of granulations	CHCl <sub>3</sub>	Improved
J. M'D.	F.	14	Scraping	„ os calcis	Removal of granulations	CHCl <sub>3</sub>	Improved
M. D.	F.	20	Aspiration	„ sacro-iliac joint	Abscess	Cocaine	Well
A. P.	M.	7	Incision	„ glands	Abscess	CHCl <sub>3</sub>	Well
J. M'G.	M.	10	Scraping	„ „	Abscess	CHCl <sub>3</sub>	Well
P. S.	M.	17	Scraping	„ „	Abscesses and sinus	CHCl <sub>3</sub>	Improved
W. H.	M.	26	Incision	„ „	Abscess	Ethyl Cl	Improved
J. M'P.	F.	6	Scraping	„ „	Sinuses	CHCl <sub>3</sub>	Improved
A. A.	F.	11	Excision	„ „ & phthisis	Glands	CHCl <sub>3</sub>	Well
J. S.	F.	14	Incision	„ „	Sinus	CHCl <sub>3</sub>	Well
F. S.	F.	27	Incision	Phthisis & empyema	Abscess	CHCl <sub>3</sub>	Died
J. C.	F.	15	Incision	„ „	Abscess	Ethyl Cl	Improved
H. M'D.	M.	5	Excision	Tuberculosis skin	Ulcer	CHCl <sub>3</sub>	Well
M. G.	F.	20	Scraping	„ „	Ulcer	Ethyl Cl	I. S. Q.
Mrs. M.	F.	30	Incision	„ breast	Abscess	Ethyl Cl	Improved
M. R.	F.	2	Incision	„ peritoneum	Sinus	CHCl <sub>3</sub>	Died



### The Staff.

On December 31st, 1913, the resident staff consisted of 1 physician-superintendent, 1 matron, 1 night sister, 5 ward sisters, 11 certificated nurses, 21 probationer nurses, 1 sewing maid, 1 cook, 1 kitchen maid, 1 scullery maid, 4 housemaids, 4 laundry maids, 6 ward maids, and 1 gardener.

The non-resident staff consisted of 1 engineer, 2 firemen, 2 chauffeurs, 2 assistant gardeners, and 1 clerk.

In August an assistant chauffeur was appointed. The total staff at the end of the year numbered 67.

*Lectures.*—Two course of lectures, each of seven months' duration, were given by the physician-superintendent—one on fevers and fever nursing to the senior nurses; and one on anatomy and physiology and hygiene to the probationers. In addition to these, a shorter course of lectures on medical and surgical nursing was given, with the view of encouraging the seniors to enter for the Local Government Board certificate.

Nurse Austin in the senior and Nurse Cooper in the junior division were successful in obtaining first prize in the class examinations.

*Final Examination.*—At the end of the year 9 nurses, after examination by the County Medical Officer and the Physician-Superintendent, were successful in obtaining the certificate of the hospital. Nurse Struthers was awarded first prize.

Nurse Wilson obtained the Local Government Board certificate for fever nursing.

*Staff Illnesses.*—During the year these were:—

Anaemia,	-	-	1 nurse.	Measles,	-	-	1 nurse.
Aphonia,	-	-	1 nurse.	Otitis media,	-	-	1 nurse.
Gastritis,	-	-	1 maid.	Septic finger,	-	-	1 maid.
German measles,	-	-	1 nurse.	Sore throat,	-	-	1 nurse.
Pleurisy,	-	-	1 nurse.	Sprained wrist,	-	-	2 nurses.

The usual statistical tables dealing with the year's work are appended. In concluding the seventeenth Annual Report, this opportunity is taken of thanking the matron, nurses, and outdoor staff for their help in carrying out the work of the hospital throughout the year.

I have the honour to be,

GENTLEMEN,

Your obedient Servant,

J. REID.



TABLE I.

ADMISSIONS (AS NOTIFIED) AND DISCHARGES DURING 1913, WITH THE NUMBERS IN HOSPITAL AT THE BEGINNING AND END OF THE YEAR.

DISEASE.	Remaining in Hospital, 1st January, 1913.		Admitted.		Discharged.				Remaining in Hospital, 31st Dec., 1913.	
	M.	F.	M.	F.	Recovered.		Died.		M.	F.
Enteric Fever, ...	6	13	72	54	71	58	5	3	2	6
Scarlet Fever, ...	53	64	386	452	383	453	6	14	50	49
Diphtheria, ...	4	4	113	133	95	108	7	7	15	22
Erysipelas, ...	...	...	6	6	5	5	...	1	1	...
Puerperal Fever, ...	...	1	...	6	...	2	...	4	...	1
Measles, ...	...	...	2	...	1	...	1	...	...	...
Surgical Tuberculosis,	8	1	14	23	21	23	...	1	1	...
Pulmon. Tuberculosis,	1	...	11	5	9	4	3	1	...	...
Cerebro-Spinal Meningitis, ...	...	...	4	3	4	1	...	2	...	...
Typhus Fever, ...	...	...	...	1	...	1	...	...	...	...
Specific Disease, ...	...	...	2	...	...	...	...	...	2	...
Anthrax, ...	...	...	1	...	1	...	...	...	...	...
Tinea, ...	...	...	33	28	33	28	...	...	...	...
Others, ...	...	...	4	9	4	6	...	...	...	3
Total, ...	{ 72 83 155 }		{ 648 720 1,368 }		{ 627 689 1,316 }		{ 22 33 55 }		{ 71 81 152 }	

TABLE II.

ADMISSIONS AND DISCHARGES IN EACH MONTH OF THE YEAR 1913.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Admitted, ...	110	101	98	62	82	85	79	153	158	167	133	140	1,368
Discharged—													
Recovered,	107	101	104	97	73	82	76	113	123	146	164	130	1,316
Died, ...	4	3	3	6	4	5	2	1	10	5	10	2	55

TABLE III.

AGE AND SEX OF PATIENTS DISCHARGED DURING THE YEAR 1913,  
WITH THE FATALITY RATE.

AGE	ENTERIC FEVER.								
	MALE.			FEMALE.			TOTAL.		
	Recovered.	Died.	Fatality per cent.	Recovered.	Died.	Fatality per cent.	Recovered.	Died.	Fatality per cent.
0-5,	2	...	...	5	...	...	7	...	...
-10,	9	...	...	11	1	8.3	20	1	4.7
-15,	16	1	5.8	6	...	...	22	1	4.3
-20,	7	1	12.5	1	...	...	8	1	11.1
-25,	4	...	...	1	1	50.	5	1	16.6
-30,	2	...	...	3	...	...	5	...	...
-35,	4	...	...	1	...	...	5	...	...
-40,	5	1	16.6	3	...	...	8	1	11.1
-45,	1	...	...	1	...	...	2	...	...
-50,	...	...	...	3	...	...	3	...	...
50 and over,	...	...	...	2	...	...	2	...	...
Total,	50	3	5.6	27	2	5.1	87	5	5.4

SCARLET FEVER.									
0-1,	...	...	...	...	...	...	...	...	...
-2,	3	...	...	2	...	...	5	...	...
-3,	13	1	7.1	14	...	...	27	1	3.5
-4,	28	1	3.4	26	3	10.3	52	4	7.1
-5,	38	1	2.5	35	1	2.7	73	2	2.6
-6,	36	...	...	51	1	1.8	90	1	1
-7,	42	...	...	35	3	7.8	77	3	3.7
-8,	40	...	...	47	...	...	87	...	...
-9,	35	...	...	30	1	3.2	67	1	1.4
-10,	31	...	...	28	...	...	59	...	...
-15,	59	1	1.6	78	2	2.5	137	3	2.1
-20,	10	...	...	21	...	...	31	...	...
20 and over,	8	...	...	11	...	...	19	...	...
Total,	343	4	1.1	381	11	2.8	724	15	2.03

DIPHTHERIA.									
0-1,	3	1	25.	1	2	66.6	4	3	42.8
-2,	7	1	12.5	1	...	...	8	1	11.1
-3,	11	...	...	8	...	...	19	...	...
-4,	14	1	6.6	7	...	...	21	1	4.5
-5,	10	2	16.6	10	3	23.	20	5	20.
-6,	11	...	...	8	1	11.1	19	1	5.
-7,	4	...	...	4	1	20.	8	1	11.1
-8,	5	...	...	3	1	25.	8	1	11.1
-9,	5	...	...	8	...	...	13	...	...
-10,	1	...	...	10	...	...	11	...	...
-15,	4	...	...	8	...	...	12	...	...
-20,	2	...	...	3	...	...	5	...	...
20 and over,	...	...	...	2	...	...	2	...	...
Total,	77	5	6.	73	8	9.8	150	13	7.9



TABLE IV.—THE STAGE OF THE DISEASE IN WHICH PATIENTS  
DISCHARGED IN 1913 WERE ADMITTED TO HOSPITAL.

DISEASE.	DAYS OF 1ST WEEK.							WEEK OF ILLNESS.				TOTAL.
	1	2	3	4	5	6	7	1st.	2nd.	3rd.	4th and over	
Enteric Fever, -	...	...	6	4	5	5	6	26	47	10	9	92
Scarlet Fever, -	18	145	182	177	100	48	14	684	21	17	17	739
Diphtheria, -	1	38	48	22	25	10	6	150	12	1	...	163

TABLE V.—COMPLICATIONS OBSERVED IN PATIENTS DISCHARGED DURING 1913.

ENTERIC FEVER.					Perforation.	Hæmorrhage.	Pneumonia.	Bronchitis.	Albuminuria.	Nephritis.	Phthisis.	Diarrhoea.	Otitis.	Superficial Abscesses.	Phlebitis.
In 89 Recovered Cases, - - - -	...	5	1	3	11	...	...	5	...	...	...	...	...	...	...
„ 5 Fatal Cases, - - - -	2	...	2	...	...	...	...	1	...	...	...	...	...	...	...
In 92 Cases, - - - -	2	5	3	3	11	...	...	6	...	...	...	...	...	...	...
Percentage, - - - -	2.1	5.4	3.2	3.2	11.9	...	...	6.5	...	...	...	...	...	...	...

SCARLET FEVER.	Suppurative Cervical Adenitis.	Non-Suppurative Adenitis.	Otitis Media Purulenta.	Rhinorrhœa.	Endocarditis.	Nephritis.	Rheumatism and transitory joint pains.	Mastoiditis.	Pulmonary Complications.	Gastro-intestinal Complications.	Eczema and other Skin conditions.
In 724 Recovered Cases, -	6	266	4	90	27	8	17	2	5	3	24
„ 15 Fatal Cases, -	...	6	68	7	...	2	...	...	1	1	...
In 739 Cases, - - -	6	272	72	97	27	10	17	2	6	4	24
Percentage, - -	.8	35.4	9.7	12.9	3.5	1.3	2.2	.2	.8	.5	3.1

DIPHTHERIA.	Adenitis.	Rhinitis.	Otitis media.	Cardiac Involvements.	Broncho-Pneumonia.	Bronchitis.	Eczema.	Palatal Paralysis.	Ocular Paralysis.	Albuminuria.
In 150 Recovered Cases, - - - -	20	7	4	4	...	3	2	4	1	8
„ 13 Fatal Cases, - - - -	3	4	...	2	2	...	...	2	...	6
In 163 Cases, - - - -	23	11	4	6	2	3	2	6	1	14
Percentage, - - - -	14.1	6.7	2.4	3.6	1.2	1.8	1.2	3.6	.6	8.5



TABLE VI.

PARISH.	LOCALITY.	CASES REMOVED.													
		Enteric Fever.		Scarlet Fever.		Diphtheria.		Cerebro-Spinal Meningitis.		Tinea.		Other Diseases.		Total.	
		Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
AVONDALE,	Strathaven, -	1	...	17	...	5	1	...	...	...	...	...	...	23	1
BLANTYRE,	High Blantyre, -	...	...	25	...	5	...	2	...	2	...	9	4	43	4
	Low Blantyre, -	1	...	1	...	3	...	...	...	...	...	3	1	8	1
	Stonefield, -	7	1	14	1	13	1	3	...	2	...	5	3	44	6
	Springwell, -	...	...	2	...	1	...	...	...	...	...	...	...	3	...
BOTHWELL,	Bellshill, -	7	...	25	...	25	2	...	...	2	...	13	...	72	2
	Uddingston, -	1	...	56	...	18	1	...	1	...	...	3	...	79	1
	Bothwell, -	...	...	100	1	55	1	...	...	1	...	5	1	161	3
	Tannochside, -	...	...	12	...	1	...	...	...	...	...	...	...	13	...
	Newarthill, -	5	...	4	...	3	...	...	...	...	...	1	1	13	1
	Holytown, -	...	...	3	...	3	...	...	...	...	...	...	...	6	...
	Chapelhall, -	...	...	10	...	3	...	...	...	...	...	2	...	15	...
	Carnbroe, -	...	...	...	...	4	...	...	...	...	...	1	1	5	1
	Carfin, -	2	...	9	1	...	...	...	...	...	...	...	1	11	2
	New Stevenson, -	5	...	7	...	1	...	...	...	...	...	2	...	15	...
	Mossend, -	7	1	5	...	3	...	...	...	3	...	3	...	21	1
CAMBUSLANG,	Cambuslang, -	3	...	37	1	6	...	...	...	4	...	13	2	63	3
	Newton, -	...	...	34	1	8	...	...	...	...	...	1	...	43	1
CAMBUSNETHAN,	Overtown, -	...	...	5	...	2	...	...	...	...	...	...	...	7	...
	Newmains, -	12	...	85	1	3	...	...	...	...	...	1	1	101	2
	Netherton, -	...	...	12	...	5	...	...	...	...	...	...	...	17	...
DALSERF, -	Larkhall, -	8	...	21	...	5	1	1	...	...	...	5	2	40	3
	Dalsersf, -	...	...	...	...	2	1	...	...	...	...	2	...	4	1
DALZIEL, -	Dalziel, -	18	1	8	...	1	...	...	...	...	...	1	...	28	1
	Hospital, -	...	...	1	...	...	...	...	...	...	...	6	...	7	...
EAST KILBRIDE,	East Kilbride, -	...	...	10	1	1	...	...	...	...	...	1	...	12	1
GLASFORD,	Glasford, -	...	...	...	...	1	...	...	...	...	...	...	...	1	...
	Chapelton, -	...	...	5	...	1	...	...	...	...	...	...	...	6	...
GLASGOW,	Giffnock, -	...	...	...	...	...	...	...	...	1	...	...	...	1	...
HAMILTON,	Quarter, -	...	...	7	2	2	...	...	...	...	...	...	...	9	2
	Cadzow, -	2	...	3	...	3	...	...	...	...	...	...	...	8	...
	Ferniegair, -	2	...	4	...	2	...	...	...	...	...	...	...	8	...
	Eddlewood, -	...	...	13	...	1	...	...	...	...	...	...	...	14	...
NEW MONKLAND,	Greengairs, -	...	...	14	...	3	...	...	...	...	...	...	...	17	...
	Longriggend, -	...	...	3	...	...	...	...	...	...	...	1	...	4	...
	Glenboig, -	...	...	2	...	1	...	...	...	...	...	...	...	3	...
	Darnagail, -	...	...	1	...	3	...	...	...	...	...	...	...	4	...
	Glenmavis, -	...	...	...	...	...	...	1	...	...	...	...	...	1	...
	Airdrie, -	1	...	14	...	2	...	...	...	...	...	...	...	17	...
	Caldercruix, -	...	...	1	...	...	...	...	...	...	...	...	...	1	...
OLD MONKLAND,	Calderbank, -	...	...	6	2	1	...	...	...	...	...	1	...	8	2
	Drumpellier, -	...	...	4	...	...	...	...	...	...	...	...	...	4	...
	Old Monkland	...	...	...	...	1	...	...	...	...	...	...	...	1	...
	Moffat Mills, -	...	...	3	...	...	...	...	...	...	...	...	...	3	...
	Bargeddie, -	7	...	...	...	...	...	...	...	...	...	...	...	7	...
SHOTTS, -	Shotts, -	15	2	101	1	5	...	...	...	...	...	1	...	122	1
	Cleland, -	1	...	8	...	3	...	...	...	...	...	1	1	13	1
	Harthill, -	4	...	29	...	1	...	...	...	...	...	...	1	34	1
	Salsburgh, -	...	...	7	...	1	...	...	...	...	...	...	...	8	...
	Gartness, -	...	...	6	1	...	...	...	...	...	...	...	1	4	2
STONEHOUSE,	Stonehouse, -	5	...	9	...	...	...	...	...	1	...	...	...	5	...
BURGHs, -	Hamilton, -	9	...	93	3	38	4	...	...	21	...	5	2	166	9
	Wishaw, -	1	...	1	...	...	...	...	...	...	...	...	...	2	...
	Motherwell, -	...	...	1	...	3	...	...	...	1	...	...	...	5	...
	Airdrie, -	...	...	...	...	...	...	...	...	2	...	...	...	2	...
LOWER WARD,		...	...	...	...	...	...	...	...	4	...	2	...	6	...
UPPER WARD, -		2	...	...	...	...	...	...	...	16	...	2	...	20	...
Total Number	of Cases, -	126	5	836	16	248	12	7	...	61	...	90	22	1368	55



TABLE VII.

ADMISSIONS (AS NOTIFIED) SINCE OPENING OF HOSPITAL.

YEAR.	Enteric Fever.	Scarlet Fever.	Measles.	Diphtheria.	Erysipelas.	Phthisis.	Surgical Tuberculosis.	Other Diseases.	Quarantine.	Cerebro-Spinal Meningitis.	Tinea.	TOTAL.
1897 from October 2nd)	22	70	9	...	1	...	...	...	2	...	...	104
1898	216	353	13	12	2	...	...	3	12	...	...	611
1899	235	571	1	21	5	...	...	4	12	...	...	849
1900	145	638	6	21	6	...	...	10	6	...	...	832
1901	291	621	...	31	7	...	...	...	14	...	...	964
1902	160	431	6	16	12	...	...	12	74	...	...	711
1903	174	187	2	22	14	...	...	3	15	...	...	417
1904	112	155	3	53	13	...	...	13	317	...	...	666
1905	300	114	1	66	12	23	...	9	88	...	...	613
1906	214	283	6	72	8	76	...	9	9	8	...	685
1907	99	317	2	283	9	106	...	10	10	94	...	930
1908	131	508	9	206	14	53	...	13	16	61	...	1,011
1909	109	834	3	164	11	1	...	16	3	10	...	1,151
1910	148	696	1	267	16	27	...	27	...	5	...	1,187
1911	122	670	4	248	16	...	...	59	...	7	67	1,193
1912	106	888	5	193	11	5	13	56	...	2	73	1,352
1913	126	838	2	246	12	16	37	23	...	7	61	1,368
	2,710	8,174	73	1,921	169	307	50	267	578	194	201	14,644

TABLE VIII.

DISCHARGES SINCE OPENING OF HOSPITAL.

YEAR.	ENTERIC FEVER.		SCARLET FEVER.		MEASLES.		DIPHTHERIA.		ERYSIPELAS.		PHTHISIS.		OTHER DISEASES.		QUARANTINE.		TOTAL.	
	Recovered.	Died.	Recovered.	Died.	Recovered.	Died.	Recovered.	Died.	Recovered.	Died.	Discharged.	Died.	Recovered.	Died.	Recovered.	Died.	Recovered.	Died.
1897 from Oct. 2nd)	11	1	43	2	1	1	...	...	1	...	...	...	2	1	...	...	58	5
1898	155	23	296	12	16	4	11	...	1	1	...	...	10	...	9	...	498	40
1899	201	24	533	20	...	...	15	4	3	1	...	...	42	...	16	1	810	50
1900	134	14	592	15	7	...	16	2	5	...	...	...	25	4	6	...	785	35
1901	209	21	640	22	1	...	20	7	8	1	...	...	17	...	13	...	908	51
1902	181	27	436	20	6	...	14	2	10	1	...	...	10	...	74	...	731	50
1903	140	24	180	4	2	...	15	3	13	2	...	...	3	...	10	...	363	33
1904	87	13	175	7	1	1	44	9	12	...	...	...	32	5	321	...	672	35
1905	241	22	109	5	4	4	42	8	12	1	21	1	23	4	88	...	540	45
1906	192	19	241	4	6	...	44	11	4	2	62	13	57	8	9	...	615	57
1907	91	9	313	9	2	1	192	16	9	1	77	19	111	64	11	...	806	119
1908	107	13	425	8	9	2	170	17	12	3	55	10	64	38	16	...	858	91
1909	99	3	781	24	3	...	129	16	10	1	1	...	63	11	3	...	1089	55
1910	117	5	678	16	7	...	226	22	13	1	28	...	58	18	...	...	1127	62
1911	78	11	617	18	3	...	232	18	18	...	1	1	192	14	...	...	1141	62
1912	58	10	748	22	6	...	136	15	11	...	2	2	309	11	...	...	1270	60
1913	87	5	724	15	1	1	150	13	10	1	11	3	353	17	...	...	1316	55
Total,	2188	244	7531	223	75	14	1456	163	152	16	258	49	1371	195	576	1	13587	905
Fatality per cent., }	10.0		2.8		15.7		10.0		9.5		15.6		12.4		.17		6.2	

DISTRICTS OF THE LOWER AND MIDDLE WARDS OF THE  
COUNTY OF LANARK, AND THE CITY OF GLASGOW.

LIGHTBURN JOINT-HOSPITAL.

EIGHTEENTH ANNUAL REPORT BY THE  
PHYSICIAN-SUPERINTENDENT.

LIGHTBURN HOSPITAL,  
*February, 1914.*

TO THE MEMBERS OF THE  
HOSPITAL COMMITTEE.

GENTLEMEN,

I have the honour to submit for your consideration the Annual Report of the work done in this hospital during the year 1913.

There were in the hospital, at the beginning of the year, 104 patients, and during the year 657 patients were admitted (including two cases of scarlet fever, one of whom was admitted twice, and the other admitted three times), making the total number under treatment 761. Of these, 653 were dismissed, 34 died (9 within 48 hours of admission), leaving 74 in hospital on 31st December, 1913:

Of those admitted, 256 came from the Lower Ward, 232 from the Middle Ward, 168 from the Shettleston and Tollcross Ward of Glasgow, and 1 (an insured phthisis patient) from the Burgh of Greenock.

Of the cases admitted, 15 were non-infectious on admission, and other 10 were suffering from an infectious disease other than that notified.

	REMAINING FROM 1912.		ADMITTED AND DISCHARGED DURING 1913			REMAINING TO 1914.
	Recovered.	Died.	Recovered.	Died.	Contacts.	
Infectious,	102	2	529	32	...	74
Non-infectious,	...	...	15	...	7	...
	104		583			74
	761					



*Monthly Rate of Admission.*—The average monthly rate of admission, to the nearest number, was 60, a decrease of 6 on last year. The largest number admitted in any one month was 88, in November, an increase of 6; the lowest, 28, in February, a decrease of 11. Exactly a hundred fewer cases of scarlet fever were admitted than in 1912, the monthly average being 31·9, as compared with 40·2. The lowest number of scarlet fever cases admitted was 17, in February, and the highest 53, in October. There was an increase of 6 in the number of diphtheria cases admitted, the monthly average being 14·8, as compared with 14·3 in 1912. The number of cases of enteric—19 in all—was again very small, being only 1 more than in 1912, which was the lowest on record.

The large decrease in the number of cases admitted was due to two factors. In the early months of the year the wards were being painted, and during that time practically only Lower Ward cases were taken in; also, throughout the year, when the wards became busy, no cases were admitted from the Glasgow area.

*Number of patients resident daily.*—The daily average number of patients resident in the hospital was 78, a decrease of 17 on 1912. The highest number resident on one day was 111, on December 4th, a decrease of 1 on last year; the lowest number was 45, as compared with 59 in 1912.

On 20 days the number resident was less than	50	
On 53 days the number resident was between	50 and	60
„ 63	„ „ „ „	60 „ 70
„ 69	„ „ „ „	70 „ 80
„ 30	„ „ „ „	80 „ 90
„ 68	„ „ „ „	90 „ 100
„ 61	„ „ „ „	100 „ 110
„ 1 day	„ „ „ „	110 „ 120

The daily average number of scarlet fever patients was 49; of diphtheria, 13; of enteric, 2; of phthisis, 10; of others, 2.

*The average duration of residence* of all cases (including infectious non-infectious, contacts, and fatal cases) was 40·1 days; of all recovered cases, 42 days; of fatal cases, 14·3 days.

The average duration of residence of undoubted infectious cases (including 4 non-infectious cases who took scarlet fever while in hospital) was 42·1 days; of non-infectious cases (including contacts), 24·8 days.

*Fatality Rate.*—The fatality rate for the year (calculated on all discharges) was 4·9 per cent, a decrease of 0·9 per cent on 1912.



Excluding 9, who died within 48 hours of admission, the corrected rate is 3·7 per cent., a decrease of 0·3 per cent. on 1912. The fatality rate of undoubted infectious cases (excluding contacts) was 5 per cent.; but excluding those who died within 48 hours of admission, 3·8 per cent.

*Cases wrongly notified.*—There were 26 cases wrongly notified. Of these, 15 were not suffering from any infectious disease, and 11 were suffering from an infectious disease other than that notified. Of the 15 non-infectious cases, 10 were sent in as scarlet fever (4 of whom took scarlet in hospital), 3 were notified as diphtheria, 1 as enteric, and 1 as phthisis. Of the others, 6 were notified as scarlet, of whom 3 proved to be measles, 1 diphtheria, 1 chickenpox, and 1 enteric; 4 were notified as diphtheria, of whom 1 proved to be scarlet fever, 2 measles, and 1 whooping-cough; 1 reported German measles proved to be measles.

*Mixed Infections.*—In addition to the undoubted cases of infectious disease admitted, there were 37 cases of mixed infections, as follows:—

8	cases of scarlet fever	had also diphtheria.
6	"	" " chicken-pox.
5	"	" " measles.
4	"	" " German measles.
3	"	" " whooping-cough.
3	"	" " scabies.
1	"	" " erysipelas.
3	cases of diphtheria	had also measles.
1	case of	" " scarlet fever.
1	"	" " chicken-pox.
1	"	" " scabies.
1	" whooping-cough,	" diphtheria.

*Cross Infections.*—During the year, 12 cases of cross-infections occurred in hospital, as follows:—1 case of scarlet fever developed chicken-pox, 1 measles, and 1 German measles; 8 cases of diphtheria developed measles (5 of whom remained till 1914), and 1 scarlet fever.

### Scarlet Fever.

There remained in hospital, at the close of 1912, 76 cases, notified as scarlet fever.

During the year, 383 patients were admitted, notified as suffering from this disease, but of these 16 were found, after observation, not to have scarlet fever, while 3 were classed as very doubtful.



Of these 19, 4 developed scarlet fever in hospital. Thus, 364\* undoubted cases were admitted during the year, and 444 undoubted cases (including those who took the disease in hospital) were treated. To this figure should be added 1 case, notified as diphtheria, which proved to be scarlet fever, 3 cases who had both diphtheria and scarlet fever on admission, but were notified as diphtheria, and 1 case of diphtheria who was cross-infected with scarlet fever, making a total of 449 patients treated.

Excluding these last cases, of the 444 cases treated, 384\* were discharged recovered, 1 patient was taken home very ill, at the parents' request, and 12 died (4 within 48 hours of admission), leaving 47 in the hospital at the end of the year.

The number of cases admitted is exactly 100 less than that in 1912.

AVERAGE MONTHLY RATE OF ADMISSION of scarlet fever cases was 32, a decrease of 8.2 compared with 1912. The average number resident on one day was 49, as compared with 69 in 1912. The smallest number resident on one day was 25, in the month of April, and the largest number was 84, in the month of October, the figures for 1912 being 35 and 81 respectively.

REMOVAL TO HOSPITAL.—Of the 361 undoubted cases admitted (excluding readmissions), removal to hospital was carried out in 98 per cent. of the cases during the first week of illness. The majority of the patients (58 per cent.) were admitted on the second or third day of illness.

AVERAGE DURATION OF RESIDENCE of all cases discharged was 45.2 days, a slight increase on the 1912 figure; of recovered cases, 48.9 days, an increase of 4.6 days; of fatal cases, 9.7 days, a decrease of 5.3 days as compared with 1912.

The longest stay of any one patient was 164 days, due to double otorrhœa. Another patient was resident 146 days because of rhinorrhœa. Other two were resident 118 and 114 days respectively, because of otorrhœa; 3 were resident between 90 and 100 days, the causes being nephritis and periostitis in one case, and rhinorrhœa in the other two.

TYPE OF THE DISEASE.—Of all cases discharged (including those who took the disease in hospital), the attack was mild in 68.8 per cent.; of moderate severity in 22.3 per cent.; and of great severity in 8.9 per cent. 12 of the severe cases were fatal. Among the mild cases, 19 were desquamating on admission.

\* Includes 3 patients readmitted.



CAUSE OF DEATH.—Of the 12 fatal cases, 2 had malignant scarlet fever. Both were admitted in a state of collapse, and one of them, a girl, aged 3 years, died 26 hours after admission, while the other, a boy, aged 9 years, died 24 hours after admission. The other 10 cases all had anginose scarlet fever. One case, a child, aged 11 months, developed gangrenous stomatitis on the 20th day, and died on the 27th; one case, a boy, aged 1 year, was just recovering from measles, and had broncho-pneumonia on admission—he was resident 40 hours. Another boy, aged 3 years, was also just recovering from measles. He died in 8 hours.

One case had a mixed infection, with diphtheria, and another had chicken-pox at the time of admission.

To the deaths should be added that of a boy, aged 5, who was notified as diphtheria, but proved to be scarlet fever. He developed a post-pharyngeal abscess, and died on the 32nd day after admission.

The average age of the fatal cases (sent in as scarlet) was 4 years. 1 was under 1 year, 1 was between 1 and 2, 2 were 2 years, 2 were 3 years, 2 were 4 years, 2 were 5 years, 1 was 6 years, and 1 was 9 years.

6 of the patients were males, and 6 were females. 1 was admitted on the first day of illness, 3 on the second day, 2 on the third day, 4 on the fourth day, 1 on the fifth day, and 1 on the seventh day. The average day of illness on admission was the third.

The fatality rate, calculated on undoubted cases discharged, was 3.02 per cent., as compared with 2.07 in 1912, and 2.14 in 1911. Excluding 4 cases, who died within 48 hours of admission, the fatality rate is 2.02 per cent.

COMPLICATIONS.—(a) *Acute nephritis* occurred in 8 cases. In 1 case it was present on admission. In 1 case it appeared on the 22nd day, in 2 cases on the 23rd day, in 1 case on the 24th day, in 1 case on the 26th day, 1 case on the 30th day, and 1 case on the 35th day. Albumen was present in the urine in 1 case for 5 days, in 2 cases for 7 days, in 1 case for 8 days, in 1 for 17 days, in 1 for 23 days, in 1 for 25 days, and in 1 for 43 days; the average being 17 days. Slight albuminuria during convalescence occurred in other 8 cases, but called for no special treatment.

(b) *Otitis Media Purulenta* was present in 50 cases, in 13 of whom both ears were affected, and in 37 of whom one ear was affected.

Among the cases with mild attacks of scarlet fever, 7 had double otitis and 19 had single otitis. Among cases with moderate attacks, 3 had double and 8 had single. Among the severe cases, 3 had double and 10 had single otitis. Of those with one ear affected, 10 had the



complication on admission, in 5 it appeared in the first week, in 6 in the second week, in 7 in the third week, in 1 in the fourth week, in 3 in the fifth week, and in 5 in the sixth week or later.

Of those with double otitis, it appeared in the first week in 2 cases, in the second week in 7 cases, in the third week in 3 cases, in the fourth week and in fifth week in 1 case.

Of the fatal cases, 2 had single otitis on admission.

(c) *Rhinorrhœa* occurred in 51 cases, 27 of whom had mild attacks of scarlet fever, 13 had moderately severe attacks, and 11 had severe attacks. In 26 cases, the complication was present on admission, in 5 it appeared in the first week, in 4 in the second week, in 8 in the third week, in 3 in the fourth week, in 2 in the fifth week, and in 3 in the sixth week or later.

Of those with mild scarlet fever, 8 had rhinorrhœa on admission. Of those with moderate attacks, 4, and of those with severe attacks, 10, had the condition on admission.

Of 27 cases with mild attacks of scarlet fever, complicated with rhinorrhœa, 3 had also double otitis media, and 2 single.

Of 13 cases with moderately severe attacks, complicated with rhinorrhœa, 1 had single otitis.

Of 11 cases with severe scarlet fever with rhinorrhœa, 2 had double and 1 had single otitis.

There were thus 11 patients in whom both complications were present.

(d) *Mastoiditis*, requiring a simple operation, developed in 1 case.

(e) *Non-suppurative Adenitis* was present in 48 cases, in 20 of whom it was present on admission.

(f) *Suppurative Cervical Adenitis*, requiring incision, occurred in 5 patients, the majority of whom were operated on under chloroform.

(g) *Secondary Sore Throat* occurred in 8 cases.

(h) *Pains in Joints* (usually ankles, knees, and wrists) occurred in 7 cases.

(i) *Heart murmurs* occurred in 14 cases, in 7 of whom the condition was present on admission.

OTHER COMPLICATIONS.—*Conjunctivitis*, 4 cases. *Facial eczema* (on admission), 5 cases. *Pyuria*, 1 case. *Epistaxis*, 2 cases. *Perionychia*, 4 cases. *Gumboil*, 2 cases. *Parotitis*, 4 cases. *Bronchitis*, 5 cases, in all of whom the condition was present on admission. *Broncho-pneumonia* (present on admission), 2 cases. *Gangrenous stomatitis* 1 case. *Urethritis*, 1 case. *Vaginitis*, 1 case. *Sore on Heel* (present on admission), 1 case. *Wound on Hand*, 1 case. *Sprained Ankle*, 1 case. *Teno-Synovitis*, 1 case. *Burns* (present on admission), 5 cases.



*Tonsillar Ulcer*, 1 case. *Tubercular Ulcer on Neck*, 1 case. *Epilepsy*, 1 case.

There was also a patient who was insane. The authorities of Gartloch Asylum (from which she was sent) also sent two nurses, who had entire charge of the patient during her stay in hospital.

RETURN CASES.—11 cases dismissed presumably gave rise to 15 others, as follows:—

A.S. was admitted 38 days after the discharge of a brother who had been resident 48 days, and who had had rhinorrhœa, which was dry at the time of dismissal.

M.W. and E.W. (sisters). M.W. was admitted 16 days, and E.W. 38 days, after discharge of a sister. This sister had been resident 57 days, and had had otorrhœa. The discharge had disappeared before her dismissal.

G.B., admitted 15 days after dismissal of brother, who had been resident 37 days, and had had no discharges.

A.E., admitted 18 days after discharge of brother, who had been resident 38 days and never had any discharges.

M.D. and A.D. (brother and sister), admitted 22 days, and E.D. admitted 26 days, after discharge of brother, who had been resident 38 days, and had had no discharges.

M.B., admitted 5 days after dismissal of brother, who had been resident 39 days. He had had otorrhœa, but there was no discharge at the time of dismissal.

J.C., admitted 2 days after discharge of brother, who had been resident 48 days, and had had no discharges.

G.J., admitted 21 days after discharge of brother, who had been resident 44 days, and had had no discharges.

M.M'K., admitted 18 days after discharge of sister, who had been resident 38 days, and had had no discharges.

D.B., admitted 28 days after discharge of a brother, who had been resident 37 days, and had had no discharges.

G.B., admitted 12 days after discharge of brother and sister, who had been resident 44 days, and had had no discharges. As these children came from a farm, the consent of the Medical Officer of Health was obtained before they were sent home. They were readmitted, along with G.B., it being found that R.B.'s nose had begun to discharge after he went home. B.B. was discharged again after a further residence of 31 days. G.B. and R.B. were detained 70 days, because of rhinorrhœa. Three days later another brother, T.B., was admitted, and R.B. again readmitted because his nose was found to be discharging. Thus, R.B. gave rise to a return after he had been in



hospital 114 days, and all the precautions that the special circumstances of the case demanded had been taken. R.B.'s third residence lasted 49 days, making a total of 163 days.

It will be seen that, of the 11 patients who gave rise to return cases, 8 had never had any discharges during their stay in hospital. The average duration of residence of these cases was 40·5 days. Counting R.B.'s second residence as a separate case, 4 patients had discharges—2 rhinorrhœa and 2 otorrhœa, and their average length of stay in hospital was 53 days. The average number of days which elapsed between the dismissal of a patient and the admission of a return was 18, the shortest being 2 days and the longest 38 days.

*Cross-infections* were as follows :—

With chicken-pox, ...	...	...	...	1 case.
„ measles, ...	...	...	...	1 case.
„ German measles, ...	...	...	...	1 case.

*Mixed infections*—

With chicken-pox, ...	...	...	...	6 cases.
„ measles, ...	...	...	...	5 cases.
„ German measles, ...	...	...	...	4 cases.
„ diphtheria, ...	...	...	...	8 cases.
„ whooping-cough. ...	...	...	...	3 cases.
„ scabies, ...	...	...	...	3 cases.
„ erysipelas, ...	...	...	...	1 case.

**CORRECTED DIAGNOSIS.**—Of cases admitted during the year, notified as scarlet fever, 3 were classed as being very doubtful, and 16 were found not to have scarlet fever. The following shows the corrected diagnosis :—

Measles, ...	...	...	...	3
Diphtheria, ...	...	...	...	1
Chicken-pox, ...	...	...	...	1
Enteric, ...	...	...	...	1
Non-infectious, ...	...	...	...	10
				—
				16

One of the non-infectious cases was said to be a second attack.

Of the 16 wrongly diagnosed cases, 4 took scarlet in hospital, all of whom recovered.

Apart from 9 cases clinically recognisable as diphtheria, swabs were taken from the throats of 15 others, of whom 9 were negative and 6 positive.



22 patients, admitted as scarlet fever, got anti-diphtheritic serum, the average amount being 4,000 units.

2 patients had a considerable degree of respiratory obstruction, and received steam inhalations.

**SECOND ATTACKS.**—Two patients admitted were said to be suffering from a second attack of scarlet fever. One of these proved not to be suffering from an infectious disease, the other was a genuine second attack, the previous one being well authenticated.

Two patients took undoubted second attacks in hospital, one on the 32nd day and one on the 35th day.

### **Diphtheria.**

There remained in hospital at the close of 1912, 9 cases notified as diphtheria, all of which were undoubted cases.

During the year 1913, 178 cases were admitted, notified as suffering from diphtheria, and of these, 7 had been wrongly diagnosed, 1 of whom died from scarlet fever present on admission.

Excluding 4 cases admitted as contacts, there were thus 176 undoubted cases of diphtheria, admitted as such, treated during the year, and of that number 10 died (5 within 24 hours of admission), 147 were discharged recovered, and 19 remained in hospital at the end of the year. In addition, 1 case sent in as scarlet fever proved to be diphtheria, and 8 cases with scarlet fever had diphtheria in addition when admitted, so that there were in all 187 cases of diphtheria treated during the year.

The number of diphtheria cases admitted shows an increase of 6 on the number for 1912. During the months of August, November, and December, the admissions were, respectively, 20, 28, and 30. The largest number resident on one day was 40, in the month of December. The average number resident was 13. The severity of the disease was much the same as in 1912.

**REMOVAL TO HOSPITAL.**—Table VI. in the Appendix shows in detail the day of the disease on which patients were admitted to hospital. 90.5 per cent. of all undoubted cases admitted were brought in during the first week of illness, but of these, 39 per cent. were not admitted till after the third day of illness. The largest number (30 per cent.) was admitted on the 2nd day of illness, while 9 per cent. had been ill 7 or more days. The average day of illness of the 10 fatal cases was the 6th. 4 of the patients were admitted on or before the 4th day of illness, while other 2 were said to have been ill 9 and 16 days respectively.



AVERAGE DURATION OF RESIDENCE of 151 cases discharged well was 28·8 days, and 3·5 days for fatal cases. With the sanction of the County Authorities, some patients were sent home from whose throats the swabs were persistently positive. So far as is known, the cases did not give rise to any others.

FATALITY RATE, calculated on undoubted cases of diphtheria discharged, was 6·3 per cent., as compared with 7·9 per cent. in 1912 and 11·2 per cent. in 1911. If we omit 5 patients who died within 24 hours of admission, the fatality rate was 3·2 per cent.

The site of the disease and severity of the attack in 157 cases (excluding contacts) discharged were as follows:—

18 had injected fauces, but without any membrane, at least on or after admission.

26 had mild or ordinary attacks, with the presence of membrane.

63 had moderately severe attacks.

50 had severe or very severe attacks (with 10 deaths).

Excluding the 18 cases without membrane, the site and severity of the disease are indicated in the following table:—

	MILD.		MODERATE.		VERY SEVERE.		TOTAL.
	Recov.	Died.	Recov.	Died.	Recov.	Died.	
Fauces, . . . .	22	...	47	...	23	2	94
Larynx, . . . .	3	...	5	...	3	4	15
Fauces and Larynx, .	1	...	7	...	1	1	10
Fauces and Nose, .	...	...	4	...	13	2	19
Fauces, Larynx, and Pharynx, . . . .	...	...	...	...	...	1	1
	26		63		50		139

COMPLICATIONS AND SEQUELÆ.—(a) *Otorrhœa* occurred in 2 cases, in both of whom one ear was affected. (b) *Enlarged cervical glands* occurred in 23, in all of whom the condition was present at the time of admission. (c) *Severe Epistaxis* in 1 case. (d) *Secondary Sore Throat* in 2 cases. (e) *Gumboil* in 1 case. (f) *Conjunctivitis*, present on admission, 1 case. (g) *Heart murmurs*, present on admission, 3 cases. (h) *Facial eczema*, present on admission, 1 case. (i) *Pneumonia* (lobar), present on admission, 1 case. This patient died after a residence of 13 days. (j) *Broncho-pneumonia*, present on admission, 1 case (fatal). (k) *Pleurisy*, present on admission, 1 case. (l) *Paralysis of the Palate*. 8 cases, in 3 of whom it was unaccompanied by other paralyses. Paralysis appeared on the 13th, 17th, 18th, 23rd, 27th, 31st, 36th, and 37th days, respectively. Of the 5 cases who had other paralyses in addition, 3 had *Squint*, of whom 2 had also *Paralysis of accommodation*; 3 had *Pharyngeal paralysis*; 1 had *Paralysis of Arms and*



*Legs*; 1 had *Paralysis of the Diaphragm*. This last case developed a twang on the 23rd day, regurgitation on the 38th day, squint on 45th day, paralysis of accommodation on 47th day, and paralysis of the diaphragm on the 54th day. He made a good recovery, and was discharged after a residence of 93 days. The average duration of cases with paralysis was 77 days, and the average amount of serum given was 27,000 units. (m) *Chorea* occurred in 1 case, appearing on the 21st day and lasting for 10 days.

TRACHEOTOMY.—This operation was performed on 8 patients (4 males and 4 females) during the year, of whom 4 died and 4 recovered. The day of illness on admission of these cases was as follows:—4 on the 2nd day (3 of whom recovered and 1 died), 2 on the 4th day (1 recovered and 1 died), 1 on the 5th day, and 1 on the 6th day (both fatal). It will be seen that, of the 4 fatal cases, 3 had been ill at least 4 days prior to admission, and all these patients were in a state of extreme exhaustion.

The ages of the patients operated on were as follows:—1 was 11 months, 1 was 1½ years, 2 were 2 years, 3 were 3 years, and 1 was 4 years.

Seven were operated on on admission, with 4 deaths. 1 was operated on 10 hours after admission, and recovered. Of the fatal cases, 2 died immediately, 1 lived for 22 hours, and 1 for 28 hours.

The recovered cases were resident, on an average, for 28 days.

The causes of death were as follows:—3 died of toxæmia, and 1 of broncho-pneumonia, present on admission.

The length of time for which the tracheotomy tube was in varied. 1 had it in for 2 days, 1 for 3 days, and 2 for 4 days.

From 3 cases no swabs were got, from 3 cases the swabs were negative, and from the other 2 positive.

The average amount of serum administered in all the tracheotomy cases was 10,000 units. One of the fatal cases got none.

Apart from the tracheotomy cases, 13 patients were put on steam inhalation.

FATAL CASES.—There were 10 deaths during the year. Those occurring after tracheotomy have been dealt with above.

Of the other 6, the causes of death were as follows:—toxæmia in 5, 1 of whom died 10 minutes after admission, and another 9 hours after admission. Lobar-pneumonia in 1, in whom the complication was present on admission.

CORRECTED DIAGNOSIS.—7 cases, sent in to hospital as diphtheria, had been wrongly notified. Of these, 1 patient had scarlet fever, of which he died, after a residence of 32 days, the immediate cause of



death being post-pharyngeal abscess. 2 patients were suffering from measles, 1 from whooping-cough, 1 from a chronic laryngitis, and 2 from simple sore throat.

**MIXED INFECTION.**—Among the patients admitted with diphtheria were 6 cases suffering from some other infectious disease in addition at the time of admission. Thus, 3 patients had measles, 1 had scarlet fever, 1 had chicken-pox, and 1 had scabies. Of these, 4 were dismissed well; 1 patient, with measles, died within 10 minutes after admission, and 1 remained in the hospital at the end of the year.

**CROSS-INFECTION.**—There were 9 cases of cross-infection during the year, 1 scarlet fever and 8 measles. The patient with scarlet fever was dismissed well, as were also 3 of the measles patients. The other 5 measles patients remained till 1914.

**TREATMENT.**—The quantity of serum administered varied from 2,000 units up to 42,000 units. On an average, each recovered patient got 12,000 units, and each fatal case got 9,000. Mild cases got, on an average, 5,000 units; moderately severe cases got 8,000 units, and very severe cases got 14,000. The averages are much the same as in 1912. There were 9 patients who got no serum, and 9 who had received it prior to admission (usually 2,000 units).

The administration of the serum was continued over a lengthy period in those cases in which paralysis appeared, with excellent results. It is noteworthy that there was not a single death due to cardiac paralysis. Two patients got over 40,000 units each, while several got close on 30,000 units. A serum rash appeared in only 4 cases, the day on which it appeared being the 6th, 12th, 13th, and 15th, respectively. In 2 patients the rash was accompanied by mild attacks of arthritis, on the 12th and 15th days respectively. No treatment was necessary.

The total number of swabs taken from the throats of patients discharged during the year was 399, of which 202 were negative and 199 positive. There were 20 patients from whom no swab was obtained, 30 from whom a positive swab had been got before admission, and 35 from whom no positive was got after admission, though there was, in most of them, no doubt as to the correctness of the diagnosis.

**SECOND ATTACKS.**—One child, a girl of 3 years, was admitted twice during the year, with diphtheria.

### **Enteric Fever.**

There remained in the hospital at the close of 1912 five cases of enteric fever, admitted as such. During the year 19 cases were sent in,



notified as suffering from this disease, though 3 were really only contacts, with positive Widal's. Of the remaining 16, 1 had been wrongly diagnosed, so that only 15 undoubted cases, notified as enteric, were admitted during the year. In addition, a patient, sent in as scarlet fever, proved to be a case of enteric, so that 21 cases were treated. Of that number, 15 were discharged recovered, 2 died, and 4 remained in hospital till 1914.

REMOVAL TO HOSPITAL.—Of the 15 undoubted cases admitted during the year, removal to hospital was carried out as follows:—

- In 1 case during the 1st week of illness.
- In 8 cases during the 2nd week of illness.
- In 5 cases during the 3rd week of illness.
- In 1 case later than the 3rd week of illness.

Of the fatal cases, 1 was admitted on the 9th day of illness, and 1 on the 13th day.

AVERAGE DURATION OF RESIDENCE of all cases discharged (including contacts) was 35·6 days; of all cases (excluding contacts), 40·3 days; of all recovered cases, 42·8 days; of fatal cases, 21 days; of contacts, 10 days.

TYPE OF THE DISEASE.—In 4 cases the attack was mild, in 3 cases it was moderately severe, and in 10 cases (including the patient sent in as scarlet fever), it was very severe.

A positive Widal had been obtained in 4 cases before admission. All the others gave positive Widal's during residence.

In 13 cases, the characteristic rose spots were observed, and in 4 of these they were abundant.

FATAL CASES.—Two patients died during the year. The causes of death were as follows:—1, a girl, aged 3 years, had a relapse on the 25th day, and died from perforation on the 32nd day. A girl, aged 14, died from toxæmia on the 10th day of residence.

THE FATALITY RATE, calculated on discharges, was 11·8 per cent., but the smallness of the number of cases treated makes such a figure misleading.

COMPLICATIONS.—*Relapse* occurred in 2 cases, 1 on the 25th day (fatal), and the other on the 33rd day (recovered). In the latter case, the relapse lasted for 22 days. *Laryngitis* occurred in 1 case, *Severe Epistaxis* in 1 case, *Sore Throat* in 1 case, *Bronchitis* in 2 cases.

CORRECTED DIAGNOSIS.—1 patient sent in as enteric had been wrongly diagnosed. She was a woman, aged 45, who had given a



positive Widal before admission, but she had had enteric a year or two previously. She was not suffering from any infectious disease.

### Cerebro-Spinal Fever.

A boy, aged 4 months, was admitted suffering from this disease. The characteristic symptoms of meningitis were present. A lumbar puncture was performed, and a quantity of turbid, sanguineous, spinal fluid obtained, which, on examination, was found to contain many meningococci. The patient died after a residence of 31 days.

### Erysipelas.

At the beginning of the year there were 2 cases of erysipelas in hospital. During the year, 14 patients were admitted, suffering from this disease, so that 16 cases were treated. Of that number, 11 were discharged well (8 males and 3 females), 2 died (both males), and 3 remained in hospital till 1914.

The ages of the patients discharged varied from 16 to 75. 2 were under 20, 3 between 20 and 30, 4 between 30 and 40, 2 between 40 and 50, 1 between 50 and 60, and 1 was 75. 8 of the cases were removed to hospital in the 1st week of illness, and 5 in the 2nd week.

AVERAGE DURATION OF RESIDENCE of cases discharged recovered was 21 days; of fatal cases, 1 was resident 3 days and the other 8 days.

5 patients had mild attacks, 3 had moderately severe attacks, and 5 had very severe attacks.

In only 2 was there a history of a wound or scratch.

In 10 of the cases the face was affected, and in 3 cases the leg.

In 2 patients there was a history of a previous attack.

COMPLICATIONS.—*Extensive Cellulitis* of the leg occurred in 1 case. Numerous incisions were necessary. This patient was discharged well after a residence of 62 days. *Arthritis*, affecting the ankles and knees, occurred in 1 case. *Suppurative adenitis*, 1 case. *Gangrenous cellulitis of leg*, present on admission, in 1 case. The patient died after a residence of 3 days. *Pericarditis*, present on admission, in 1 case. This patient had also severe cellulitis of the face. He died after a residence of 8 days.

### Puerperal Fever.

1 case of this disease remained from 1912, and 6 cases were admitted during 1913, so that 7 patients were under treatment. 4 were discharged, and 3 died. Of the former, 2 went home at their own request, after being in hospital 15 hours and 2 days respectively. The other



2 were resident 31 days each. The average residence of the fatal cases was 14 days.

In 4 cases a midwife, but no doctor, had been present at the confinement. Of these, 1 died.

In 3 cases a doctor had been present. Of these, 2 died. Of the fatal cases, the ages were 20, 21, and 25 years, respectively, and the duration of residence 2 days, 3 days, and 23 days respectively.

2 of the recovered cases had *Venous Thrombosis* on admission.

### Measles.

During the year, 9 patients were admitted, suffering from this disease. In addition, 3 cases notified as scarlet fever proved to be measles; 5 cases of scarlet fever were incubating measles on admission; 1 case of scarlet fever became cross-infected with measles; 2 cases notified as diphtheria proved to be measles; 2 cases of diphtheria had also measles on admission; and 8 cases of diphtheria were cross-infected with measles; so that, in all 30 cases of measles were treated during the year.

Dealing only with the cases admitted as measles, 7 were discharged well, 1 died, and 1 remained till 1914.

The ages of the patients who were discharged recovered were 4, 5, 6, 25, 26, 27, and 31 years, respectively, and the average duration of residence was 18 days.

The fatal case was a child, aged 1 year, who was suffering from *Oedema Glottidis* on admission. Tracheotomy was performed, but the patient died after being in hospital 1 hour.

### Phthisis Pulmonalis.

At the end of 1912 there were 11 cases of phthisis in hospital. During the year, 45 patients (18 males and 27 females) were admitted, notified as suffering from this disease. Of that number, 1 proved to have been wrongly diagnosed; 2 died, and 44 were discharged. During the last four months of the year there were no phthisis patients admitted, as the accommodation was required for the acute infectious diseases.

Of those admitted, 9 had been in Lightburn Hospital previously, and 1 had been in Stobhill.

FAMILY HISTORY.—So far as could be ascertained, in 25 cases there was no history of tuberculosis in the family. In 14 cases there was a history of tuberculosis in the immediate family circle, and in other 3 cases among the collateral relatives. In addition to these, there was 1 patient whose husband and 1 of her children had suffered from



tubercle; 1 patient whose wife had died from the disease, and a third patient had nursed her father-in-law, who had phthisis. Reverting to those with a positive history in the immediate family circle, 1 patient had a history of a sister, a brother, and mother having had the disease. In another case, 3 brothers. In another, 2 brothers dead, 1 brother presently ill, and a daughter dead.

OCCUPATIONS.—*Males*—miners, 4; cobbler, 1; baker, 1; labourer (in steel work), 1; stoker, 1; lamplighter, 1; cable-maker, 1; wood-machiner, 1; toolmaker, 1; pit-head-boy, 1; telephone linesman, 1; chairmaker, 1; unrecorded, 2—total, 17.

*Females* (including previous occupations of married women)—school-girls, 6; ropeworkers, 5; housewives, 3; pithead-girls, 2; dye-worker, 1; cotton weaver, 1; farm worker (outdoor), 1; laundress, 3; paper mill worker, 1; reel winder, 1; dressmaker, 1; clerkess, 1; domestic servant, 1—total 27.

HOUSING ACCOMMODATION.—8 patients came from 1-apartment houses, with an average of 5 inmates; 27 from 2-apartment houses, with an average of 6 inmates; 2 from 3-apartment houses, with an average of 5.5 inmates; 1 from a 4-apartment house, with 6 inmates; and in 6 cases the housing conditions were not recorded.

AGE.—1 patient was under 10; 6 were between 10 and 15; 5 between 15 and 20; 13 between 20 and 30; 10 between 30 and 40; 7 between 40 and 50; 2 over 50. It will thus be seen that 66 per cent. of the cases were between 20 and 50 years of age.

Of the two fatal cases, 1 was 39 and the other 46.

AVERAGE DURATION OF RESIDENCE of all cases was 58 days. Excluding cases who were sent to other hospitals when the ward was closed for phthisis, and also 3 cases who left at their own request after a short stay, the average was 65 days. Of the fatal cases, one was resident 49 days and the other 63 days.

HISTORY OF THE DISEASE.—In 15 cases, according to the patient, the disease began with a cough; in 5, with listlessness; in 5, the patient had never regained strength after a confinement; in 4, with loss of appetite; in 4, with pleurisy; in 3, with hæmoptysis; in 1, with influenza; in 1, with pneumonia; in 1, with loss of weight; in 1, with fits of shivering; in 1, with a bad cold; and 1 patient dated his illness from the time of an accident. In 2 cases the onset was not recorded.

THE DURATION OF THE ILLNESS, according to the patient, was as follows:—less than 1 month, 2 cases; between 1 and 2 months, 3 cases;



between 2 and 3 months, 1 case; between 3 and 4 months, 2 cases; between 4 and 5 months, 2 cases; between 5 and 6 months, 3 cases; between 6 and 12 months, 8 cases; between 1 and 2 years, 6 cases; between 2 and 3 years, 4 cases; between 3 and 4 years, 1 case; 5 years and over, 5 cases; indefinite ("many years"), 6 cases.

*Tubercle Bacilli in the Sputum.*—At the time of admission, 19 cases had many tubercle bacilli in the spit; 9 had few; 15 had none; not recorded, 1.

During the year, 104 specimens of sputum were sent for examination, of which 44 were negative, 24 contained a few bacilli, and 36 contained many. 17 patients never gave a positive spit while in hospital. From 12 of these cases 7 days' specimens of sputum were examined, and all were negative.

**STAGE OF THE DISEASE AND RESULTS.**—Ascribing the stage of the disease according to the extent of the damaged lung, we find that, of the 55 patients who were either dismissed or died, 19 were in the first stage (total involvement less than half a lobe), 20 were in the second stage (total involvement equal to one lobe), and 16 were in the third stage (total involvement of one lung, or equivalent).

The following table indicates the relation of these cases to the amount of constitutional disturbance:—

	None, or very slight constitutional disturbance, with normal temperature.	Moderately severe constitutional disturbance.	Severe constitutional disturbance.
19 first stage, - - -	13	6	...
20 second stage, - -	13	4	3
16 third stage, - -	2	6	8

The results of treatment are indicated in the following table:—

	Arrested.	Improved.	Progressive.	Died.
19 first stage, - -	5	14	...	...
20 second stage, -	8	8	4	...
16 third stage, - -	3	6	5	2

8 of those under "improved" were very much improved, all of them having increased in bodily weight by over 20 lbs.



Classifying the cases as recommended in the Report of the Departmental Committee on Tuberculosis, they fall into the following groups :—

*Class I.*—Cases in which the disease can be diagnosed, or is strongly suspected, but in which there is no evident impairment of capacity for work. The number in this group was 5.

*Class II.*—Cases of recent onset, with some impairment of working capacity, but without marked evidence of ill-health—12.

*Class III.*—Cases of recent onset, with evidence of acute illness—7.

*Class IV.*—Cases of a longer history of illness. In some of these, permanent arrest may be hoped for, but in most the restoration of full working capacity for more than a comparatively short time is not to be looked for—15.

*Class V.*—Cases with permanent loss of working capacity. Many of these patients live for a considerable period in a condition of chronic ill-health—7.

*Class VI.*—Fatal termination probable in six months—9.

**FATAL CASES.**—2 patients died during the year. Both were men, 1 aged 39 and the other 46 years. The former was resident 63 days, the latter 49 days. Both had been in Lightburn Hospital before, and both were acutely ill on admission. 1 of them had severe epistaxis, large quantities of blood in the stools, and repeated hæmoptysis.

**COMPLICATIONS.**—*Laryngitis* occurred in 10 cases. *Hæmoptysis* (usually slight) in 5 cases; *Albuminuria* in 3 cases; *Pyuria* in 1 case; *Diabetes* in 1 case; slight attacks of *Pleurisy*, 2 cases; *Sore Throat*, 1 case; *Epistaxis*, 1 case; *Suppurating Axillary Glands*, 1 case; *Inflamed Inguinal Glands*, 1 case; *Ichthyosis*, 1 case. A girl of 12 had adenoids, and very large tonsils. These were removed in hospital.

**TREATMENT.**—In addition to the usual hygienic and dietetic measures, tuberculin was used throughout the year. Towards the end of 1912, Spengler's I.K. serum was in use, and, as stated in last year's report, the results were indefinite. The administration of this serum was continued for some time during 1913, 15 patients being treated with it, but as there was an entire absence of results of any kind, good or bad, its use was abandoned. During the rest of the year the tuberculins used were P.T.O. and Beraneck's tuberculin (T.Bk.). 19 patients received injections of P.T.O. Of these, 14 repeatedly had slight general reaction, 3 had only local reactions, and 2 never reacted at all.



22 patients received injections of T.Bk., of whom 10 gave slight general reactions.

9 patients, started on I.K. serum, were at a later stage put on T.Bk., while 4 patients started on T.Bk. were afterwards treated with P.T.O. 5 patients, of whom 4 had T.Bk. and 1 had P.T.O., had only a very few injections, and should really not be counted as having had tuberculin treatment. As to the result of tuberculin treatment it is almost impossible to speak. While it is true that the majority of these patients improved, the improvement is probably due as much to fresh air and abundant food as to the tuberculin.

**CORRECTED DIAGNOSIS.**—1 patient, sent in as phthisis, was found to be suffering from bronchitis and emphysema. He was sent home after being in hospital for 9 days.

### Other Diseases.

**WHOOPIING COUGH.**—1 case, notified as whooping cough, was admitted. On admission, it was found that the child, a girl aged 3, was also suffering from diphtheria. She was dismissed well, after a residence of 84 days.

**GERMAN MEASLES.**—A woman of 25 was admitted, having been notified as German measles. The case proved to be one of genuine measles. She was dismissed well after a residence of 21 days.

### Ambulance Work.

During the year the ambulance made 562 journeys, calling at 607 houses, and bringing in 650 patients.

Called at 1 house, and brought in 1 patient.		518 times.
1	2 patients.	27
1	3	7
2 houses,	2	22
2	3	1 time.
3	3	3 times.
607 houses.		649 patients.
		578 journeys.

In addition, 1 patient was met at and conveyed from Shettleston Station, and 3 journeys were made on which no patient was found. 6 phthisis cases walked to the hospital, and a scarlet fever patient was brought in in a private conveyance. During the year, the ambulance was also used to take patients to their own homes, a convenience which has been much appreciated by the friends. At the request of the



County Health Authorities, the ambulance was used to convey phthisis patients from Lightburn to other County Sanatoria, and also to take similar cases from their own homes to these sanatoria. In a few instances the return journey was made use of in taking patients home from these institutions. The total mileage, as recorded by the speedometer, was 7,580.

The following is an analysis of the mileage:—

650 patients brought into hospital—miles run,	5,311
246 patients taken to their own homes, „	1,786
10 „ „ Longriggend, „	388
7 „ „ Shotts, „	80
1 patient „ Blantyre, „	15
Total mileage,	<u>7,580</u>

The average number of miles per gallon of petrol is 13, the same as last year.

On 85 occasions an attendant, in addition to the nurse, accompanied the ambulance.

### Disinfection.

The disinfectors and destructor were in constant use throughout the year. In addition to what was required in hospital, there were 21 sets of bedding or clothing sent in for disinfection, and 2 to be destroyed. One of the sets of bedding consisted of almost 200 mattresses, with blankets, &c.

### Staff.

At the close of the year, the indoor staff consisted of a physician, matron, 4 sisters, 1 trained nurse, 15 probationers, 3 ward-maids, 3 house-maids, 2 laundry-maids, 1 cook, and 1 kitchen-maid—32 in all.

The out-door staff consisted of a mechanic, 2 assistant mechanics, a gardener, and a chauffeur—5 in all.

STAFF ILLNESSES.—Only 2 cases of serious illness occurred among the staff—both being nurses who took scarlet fever. 1 had a mild attack and the other a very severe attack, which unfortunately left her in such a condition that she had to give up nursing entirely.

During the year the usual course of lectures on anatomy, physiology, and fevers was given by the Superintendent, and all the nurses who came forward for examination were successful in obtaining their certificates. An additional course of lectures on general nursing

was given for those nurses who went in for the Local Government Board examination, and Sister Birrell also gave them a special course of practical instruction. The three nurses who went in for the second part of the examination (Infectious Diseases and General Nursing) were all successful, and thus obtained the certificates granted by the Local Government Board. Nurse Paul and Nurse Barclay passed in Fevers with distinction.

### **Grounds and Buildings, &c.**

The four large pavilions were in constant use throughout the year, and the observation wards were utilised to a very large extent. At the beginning of the year the interiors of the wards were all painted. Prior to this being done, the hot-water pipes were removed from their position near the ceiling of the ward, and transferred to the attics, new cisterns being provided to suit the altered circumstances.

Thermostatic valves were also attached to the calorifiers, and have proved to be a success.

An additional shelter was put up for the phthisis patients, and a small one-bed revolving shelter was purchased and erected in the grounds.

Numerous minor repairs were also carried out.

In July the motor was laid up for ten days for a thorough overhaul.

In concluding the year's report, I have again to thank the matron, sisters, nurses, and all the other members of the staff for their courtesy and assistance in carrying on the work of the hospital.

I am, GENTLEMEN,

Your obedient Servant,

ANDREW D. COWAN.



TABLE I.

CASES CLASSIFIED ACCORDING TO CONSTITUENT DISTRICTS.

DISEASE.	Lower Ward.	Middle Ward.	Glasgow.	Total.
Scarlet Fever, - - -	146	135	102	383
Enteric Fever, - - -	3	11	5	19
Diphtheria, - - -	71	67	40	178
Phthisis, - - - -	17	11	16	44*
Erysipelas, - - -	9	3	2	14
Puerperal Fever, - -	1	3	2	6
Whooping-cough, - -	0	0	1	1
Measles, - - - -	8	1	0	9
German Measles, - -	0	1	0	1
Cerebro-spinal Fever, -	1	0	0	1
Total, - - - -	256	232	168	656*

\* Add 1 phthisis admitted from Greenock.

TABLE II. (A).

ADMISSIONS (INCLUDING CONTACTS) AND DISCHARGES (ACCORDING TO NOTIFICATION) DURING 1913, WITH THE NUMBER OF PATIENTS IN HOSPITAL AT THE BEGINNING AND END OF THE YEAR.

DISEASE	In Hospital on 1st Jan- uary, 1913.	Admitted.	DISCHARGED.		Remaining in Hospital on 31st Decem- ber, 1913.
			Recovered.	Died.	
Scarlet Fever, - - -	76	383	400	12	47
Enteric Fever, - - -	5	19	18	2	4
Diphtheria, - - -	9	178	157	11	19
Erysipelas, - - -	2	14	11	2	3
Puerperal Fever, - - -	1	6	4	3	...
Cerebro-spinal Fever, - - -	...	1	...	1	...
Phthisis, - - -	11	45	54	2	...
Measles, - - -	...	9	7	1	1
Whooping-cough, - - -	...	1	1	...	...
German Measles, - - -	...	1	1	...	...
Total, - - -	104	657	653	34	74

TABLE II. (B).

ADMISSIONS AND DISCHARGES IN EACH MONTH OF YEAR 1913.

	Jan	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Admitted, - -	70	28	37	25	58	35	55	52	68	74	88	67	657
Discharged—													
Recovered, -	67	66	46	28	26	43	49	32	75	54	81	86	653
Died, - - -	4	1	2	3	2	2	1	1	1	4	4	9	34



TABLE III.—DISCHARGES AND DEATHS (UNDOUBTED CASES) CLASSIFIED ACCORDING TO AGE.

Scarlet Fever Discharged.			Enteric Fever Discharged.			Diphtheria Discharged.		
Age.	Recovered.	Died.	Age.	Recovered.	Died.	Age.	Recovered.	Died.
0-1,	2	1	0-5,	2	1	0-1,	1	2
-2,	9	1	-10,	3	1	-2,	13	...
-3,	17	2	-15,	5	...	-3,	14	...
-4,	27	2	-20,	...	...	-4,	8	4
-5,	39	2	-25,	3	...	-5,	11	1
-6,	31	2	-30,	1	...	-6,	16	1
-7,	44	1	-35,	...	...	-7,	12	...
-8,	37	...	-40,	1	...	-8,	6	1
-9,	24	...	-45,	2	...	-9,	13	...
-10,	41	1	-50,	...	...	-10,	7	...
-15,	83	...	55 and over,	...	...	10-15,	17	...
-20,	16	...				-20,	7	...
20 and over,	11	...				20 and over,	22	1
Total,	381	12		17	2		147	10
Average Fatality per cent.,	3.06			11.8			6.4	

TABLE IV.  
Complications OBSERVED IN CASES DISCHARGED IN 1913.  
SCARLET FEVER.

	Nephritis.	Otitis Media.	Mastoiditis.	Arthritis.	Adenitis.	Rhinorrhoea.	Suppurative Adenitis.	Perionychia.	Heart Murmurs.
Recovered Cases, 381, -	8	47	1	6	46	47	5	4	14
Fatal Cases, 12, -	...	3	...	1	2	4	...	...	...
Total Cases, 393, -	8	50	1	7	48	51	5	4	14
Percentage, -	2.04	12.7	.25	1.8	12.2	13.	1.2	1.	3.6

ENTERIC FEVER.

	Epistaxis.	Sore Throat.	Abscesses.	Bronchitis.	Suppurative Parotitis.	Relapse.	Perforation.
18 Recovered Cases, -	1	1	...	2	...	1	...
2 Fatal Cases, -	...	...	...	...	...	1	1
Total, 20 Cases, -	1	1	...	2	...	2	1
Percentage, -	5	5	...	10	...	10	5



TABLE V.

CASES CLASSIFIED ACCORDING TO LOCALITY AND DISEASE NOTIFIED.

		CASES CLASSIFIED ACCORDING TO LOCALITY AND DISEASE NOTIFIED.														
PARISH.	LOCALITY.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Phthisis.	Puerperal Fever.	Erysipelas.	Measles.	German Measls's.	Whooping-cough.	Scabies.	Infantile Diarr.	Ophthalmia.	Typhus.	Cerebro-Spinal.	TOTAL.
GLASGOW, -	Shettleston, -	59	31	4	14	2	2	...	...	1	...	...	...	...	...	113
	Tollcross, -	43	9	1	2	...	...	...	...	...	...	...	...	...	...	55
BARONY, - (Lower Ward)	Shettleston, -	40	33	...	2	...	...	4	...	...	...	...	...	...	...	79
	Barlinnie and Riddrie, -	2	...	...	1	...	3	3	...	...	...	...	...	...	...	9
	Mossbank & Millerston, -	5	...	1	...	...	...	...	...	...	...	...	...	...	...	6
	Lambhill, -	2	6	...	1	...	...	...	...	...	...	...	...	...	...	9
CADDY, -	Bishopbriggs and Auchinairn, -	23	3	...	1	...	...	...	...	...	...	...	...	...	...	27
	Lenzie and Auchinloch, -	7	...	...	1	...	2	...	...	...	...	...	...	...	...	10
	Stepps, -	5	2	...	...	...	1	...	...	...	...	...	...	...	...	8
	Chryston and Garnkirk, -	34	5	...	3	...	...	...	...	...	...	...	...	...	...	42
	Gartcosh and Gartloch, -	18	11	2	...	...	1	...	...	...	...	...	...	...	...	32
	Glenboig, -	2	4	...	...	...	...	...	...	...	...	...	...	...	...	6
	Mollinsburn and Moodiesburn, -	2	...	...	1	...	...	...	...	...	...	...	...	...	...	3
	Mavis Valley and Jelly Hill, -	...	...	...	1	1	...	...	...	...	...	...	...	...	1	3
RUTHERGLEN, -	Eastfield and Cambuslang, -	4	7	...	6	...	1	1	...	...	...	...	...	...	...	19
CARMUNNOCK, -	Carmunnock, -	2	...	...	...	...	1	...	...	...	...	...	...	...	...	3
CAMBUSLANG, -	Cambuslang, -	48	6	...	1	2	2	...	...	...	...	...	...	...	...	59
	Hallside and Newton, -	8	...	...	...	...	...	...	...	...	...	...	...	...	...	8
	Flemington & Halfway, -	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2
OLD MONKLAND,	Tollcross, -	10	...	...	...	...	...	...	...	...	...	...	...	...	...	10
	Carmyle and Mount Vernon, -	22	17	1	3	...	...	1	...	...	...	...	...	...	...	44
	Swinton and Easterhouse, -	4	1	...	1	...	...	...	...	...	...	...	...	...	...	6
	Baillieston and Barrachnie, -	12	7	1	5	1	...	...	...	...	...	...	...	...	...	26
	Bargeddie, -	2	3	4	...	...	...	...	...	...	...	...	...	...	...	9
	Cuilhill and Drumpark, -	1	...	5	...	...	1	...	...	...	...	...	...	...	...	7
	Old Monkland, -	5	...	...	...	...	...	...	...	...	...	...	...	...	...	5
	Glenboig and Annathill, -	4	30	...	...	...	...	...	...	...	...	...	...	...	...	34
	Broomhouse, -	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
EAST KILBRIDE,	Kittochside, -	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
BOTHWELL, -	Bothwell, -	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
BLANTYRE,	Blantyre and High Blantyre, -	14	3	...	...	...	...	...	...	...	...	...	...	...	...	17
OTHER PLACES,	Darngavil, -	1	1	...	...	...	...	...	...	...	...	...	...	...	...	2
	Plains, -	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
	Greenock, -	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
Totals, -		383	178	19	45	6	14	9	1	1	...	...	...	...	1	657

TABLE VI.

## ADMISSIONS SINCE OPENING OF HOSPITAL.

YEAR.	Scarlet Fever.	Enteric Fever.	Diphtheria.	Erysipelas.	Puerperal Fever.	Measles.	Whooping-cough.	Phthisis.	Cerebro-spinal Fever.	Typhus.	Quarantine.	Anthrax.	Skin Disease.	Other Diseases.	TOTAL.
*1896,	99	49	6	3	2	8	...	...	...	...	...	...	...	...	167
1897,	257	33	10	...	...	5	...	...	...	...	...	...	...	2	307
1898,	221	131	3	2	1	1	1	...	...	...	...	...	...	...	360
1899,	561	149	15	4	...	3	...	...	...	...	4	...	...	...	736
1900,	470	94	22	2	...	7	...	...	...	...	26	...	...	...	621
1901,	340	120	18	2	3	6	1	...	...	...	9	...	...	...	499
1902,	226	94	27	10	3	...	...	...	...	...	35	...	...	...	395
1903,	209	86	59	13	1	3	2	...	...	...	75	...	...	1	449
1904,	182	71	47	7	2	3	...	...	...	...	172	...	...	8	492
1905,	127	97	69	12	8	16	2	40	...	...	11	...	...	3	385
1906,	173	185	63	15	6	6	...	89	22	...	5	...	...	1	565
1907,	210	81	134	13	8	4	3	72	41	...	25	...	...	4	595
1908,	322	73	213	11	11	32	...	49	31	6	20	...	...	4	772
1909,	522	74	211	13	3	1	...	2	6	...	6	...	...	...	838
1910,	458	54	158	6	7	5	...	48	3	...	11	1	6	...	757
1911,	371	44	199	10	4	6	4	45	3	...	7	...	9	4	706
1912,	483	18	172	12	11	9	2	73	1	2	...	...	2	2	787
1913,	383	19	178	14	6	9	1	45	1	...	...	...	...	1	657
	5,614	1,472	1,704	149	76	124	16	463	108	8	406	1	17	30	10,088

\* From May 29th.



TABLE VII.—DISCHARGES AND DEATHS ACCORDING TO DISEASE NOTIFIED.

YEAR.	SCARLET FEVER.		ENTERIC FEVER.		DIPHTHERIA.		ALL OTHERS.	
	Recovered.	Died.	Recovered.	Died.	Recovered.	Died.	Recovered.	Died.
1896 (from May 29th), - - -	52	5	40	6	5	1	12	1
1897, - - - - -	186	5	30	2	7	3	5	2
1898, - - - - -	201	4	82	25	3	...	4	...
1899, - - - - -	480	23	136	27	12	3	7	1
1900, - - - - -	465	22	80	18	20	2	9	...
1901, - - - - -	366	10	90	17	16	2	9	2
1902, - - - - -	207	8	82	11	18	6	31	7
1903, - - - - -	198	5	75	17	44	7	21	2
1904, - - - - -	188	3	53	6	36	4	34	3
1905, - - - - -	131	3	68	17	60	10	61	6
1906, - - - - -	164	4	161	32	56	4	102	30
1907, - - - - -	198	6	76	13	121	10	136	40
1908, - - - - -	280	16	67	8	170	23	141	32
1909, - - - - -	503	17	67	9	210	16	25	4
1910, - - - - -	450	10	44	7	147	15	71	13
1911, - - - - -	361	9	42	4	151	19	92	11
1912, - - - - -	460	9	12	4	182	15	86	17
1913, - - - - -	400	12	18	2	157	11	78	9
TOTAL, - - - - -	5,290	171	1,223	225	1,415	151	924	170
Average Fatality per cent., - - -	3·25		18·4		10·6		1·8	

TABLE VIII.

PATIENTS CLASSIFIED ACCORDING TO THE DAY OF ILLNESS  
WHEN ADMITTED.

## SCARLET FEVER (361 undoubted cases).\*

Day of Illness,	-	1.	2.	3.	4.	5.	6.	7.	over 7.
Cases, -	-	25	123	85	58	28	17	18	7
Week of Illness,	-	-	-	-	-	I.	II.	III.	and over.
Cases, -	-	-	-	-	-	354	3	4	

\* Excludes 3 readmissions.

## ENTERIC FEVER (15 cases).\*

Week of Illness,	-	-	-	-	-	I.	II.	III.	and over.
Cases, -	-	-	-	-	-	1	8	6	

\* Excludes contacts.

## DIPHTHERIA (176 undoubted cases).

Day of Illness,	-	1.	2.	3.	4.	5.	6.	7.	over 7.
Cases, -	-	10	51	29	25	21	12	12	16



DISEASE.	PART A. CASES REMAINING FROM 1912 AND DISCHARGED DURING 1913.										PART B. ALL CASES ADMITTED UNDER DISEASE INDICATED DURING 1913.										PART C. CASES ADMITTED UNDER SOME OTHER INFECTIOUS DISEASE DURING 1913.									
	Admitted under Disease Indicated.					Admitted under some other Infectious Disease.					Discharged during 1913.					Remaining to 1914.					Discharged during 1913.					Remaining to 1914.				
	Correct Diagnosis.		Wrong Diagnosis.		Contacts.	Wrongly Notified.		Mixed Infection.		Cross Infection.		Correct Diagnosis.		Wrong Diagnosis.		Contacts.	Correct Diagnosis.	Wrong Diagnosis.	Contacts.	Total Admitted.	Wrongly Notified.		Mixed Infection.		Cross Infection.		Wrongly Notified.	Mixed Infection.	Cross Infection.	
	rec.	died	rec.	died		rec.	died	rec.	died	rec.	died	rec.	died	rec.	died						rec.	died	rec.	died	rec.	died				rec.
Scarlet,	75	1	...	...	..	...	...	...	...	...	...	306	11	19	...	47	...	...	383	1	1	3	...	1	...	...	...	...		
Enteric,	5	...	...	...	...	...	...	...	...	...	...	9	2	1	3	4	...	...	19	1	...	...	...	...	...	...	...	...	...	
Diphtheria,	9	...	...	...	...	...	...	...	...	...	...	138	10	6	1	4	19	...	178	1	...	8	...	...	...	...	...	...	...	
Erysipelas,	2	...	...	...	...	...	...	...	...	...	...	9	2	...	...	3	...	...	14	...	...	...	...	...	...	...	...	...	...	
Puerperal,	...	1	...	...	...	...	...	...	...	...	...	4	2	...	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	
Cerebro-spinal,	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	
Phthisis,	11	...	...	...	...	...	...	...	...	...	...	42	2	1	...	...	...	45	...	...	...	...	...	...	...	...	...	...	...	
Typhus,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	9	...	5	...	7	...	...	8	...	...	...	...	
Measles,	7	1	...	...	...	...	...	...	...	...	...	7	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	
Scabies,*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Ophthalmia,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Whooping Cough,	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	
German Measles,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	
	109	3	...	...	...	...	...	...	...	...	...	516	31	28	1	7	74	...	657	9	1	20	...	9	...	...	...	...	...	

JOHN R. WARD

Report for 1915



LOWER WARD.

---

Annual Report for 1913.

STAFF.  
PUBLIC HEALTH DEPARTMENT.  
LOWER WARD DISTRICT.

---

**County and District Medical Officer.**

JOHN T. WILSON, M.D., D.P.H.

**Tuberculosis Officer and Asst. M.O.H.**

ROBERT RICHARDS, M.A., M.B., Ch.B., D.P.H.

**District Sanitary Inspector.**

WILLIAM S. BRUCE, Chryston.

**Inspector of Buildings.**

MATTHEW UNDERWOOD.

**Sanitary Inspectors.**

JOHN PHILIP, Bishopbriggs.

ROBERT M'KENZIE, Govan.

**Health Visitor.**

NURSE WINCHESTER.

---

**Lightburn Joint-Hospital (60 Beds\*).**

Physician-Superintendent,     JAMES JOHNSTONE, M.B., Ch.B., D.P.H.

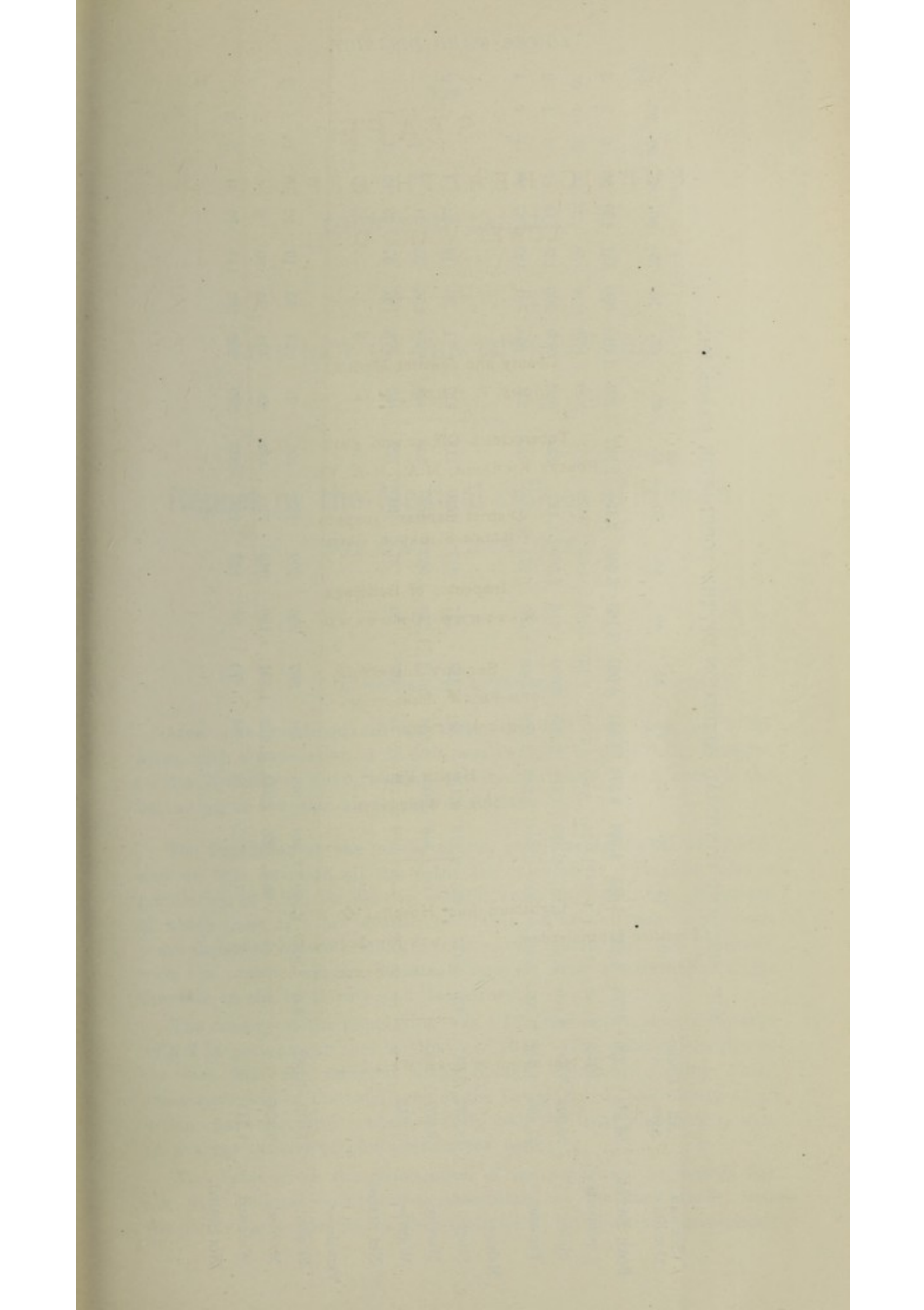
Matron,     Miss S. MONTGOMERY.

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\* 30 beds owned by Lower Ward District Committee.

*September, 1914.*









COUNTY OF LANARK.

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DISTRICT OF THE LOWER WARD.

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# Report by the Medical Officer of Health

## *FOR THE YEAR 1913.*

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### I.—VITAL STATISTICS.

**Area.**—As mentioned in the report for 1912, an area of 1,706 acres, with a population of 28,490, was annexed to the City of Glasgow on 5th November, 1912, leaving within the Lower Ward area at the beginning of the year an acreage of 24,669.

The **Population** at the middle of the year was estimated at 29,500, and on this estimate all the rates are calculated. This includes a population of 1,861 resident in institutions within the area, in certain of which there is a low death-rate. This population was in previous years deducted before calculating rates, but is now included to accord with the practice of the Registrar-General, with a consequent slight decrease in the birth-rate and death-rate.

The density of the population was 1·18 persons per acre, compared with 2·14 persons per acre for the year 1912. The difference is due to the fact that the annexed area, though representing only about one-seventeenth of the total area of the Lower Ward, was mostly of an urban character, and contained fully half the total population, with an average density of 16·6 persons per acre.

The Table gives the constitution of the population as regards age, sex, and conjugal condition as ascertained at the last census, with the percentage proportion of the population at quinquennial age-periods.

The number of occupied houses as taken from the Valuation Roll for the year 1913-14 was 5,802, an increase of 82 on the figures for the previous year; while the number of unoccupied houses was 149 as compared with 203.

**Statistical Tables.**—For the first time in the history of Local Government, returns of births and deaths have been supplied by the Registrar-General for each Burgh and each County district in Scotland. While these figures differ only slightly from those compiled in the Lower Ward office, they have been given also for sake of comparison in separate tables.

Table A shows birth-rate, death-rates for all causes, and infantile death-rates.

Table B contains a largely extended list of causes of death, with no reference to age, while Tables B1 and B2 classify the deaths according to age groups. In Table B1 the age groups are related to the cause of death, and in Table B2 the age groups are related to the place of death—the parish or registration district.

The **Births** registered amounted to **727**—males, 371; and females, 356. The birth-rate was 24·6 per thousand of the population, being the lowest birth-rate yet recorded. The annexed area, however, included that portion of the district which previously had the highest birth-rate. The average annual birth-rates for the four quinquennial periods 1891-1910 and for the last three years were as follows:—

1891-95.	1896-1900.	1901-05.	1906-10.	1911-13.
32·9	32·9	34·7	32·2	28·2

The **Deaths** registered amounted to **440**. After making corrections, for deaths which occurred in institutions and in other districts, as shown in the following tables, the deaths of persons belonging to the district numbered 353, and gave a death-rate of 11·9 per thousand of the population, or ·9 lower than the figure for 1912, the previous lowest death-rate in the Lower Ward area. The average annual death-rates for the four quinquennial periods from 1891-1910 and for the last three years show a steady decline from 16·7 to 12·6:—

1891-95.	1896-1900.	1901-05.	1906-10.	1911-13.
16·7	15·1	14·6	14·3	12·6



TABLE A.—ANNUAL BIRTH-RATES AND DEATH-RATES PER 1,000  
OF THE POPULATION. INFANTILE DEATHS PER 1,000 BIRTHS.

Year.	Births.	Birth-rate.	Nett Deaths	Death-rate.	Infants under 1 year.	
					Deaths.	Death-rate.
1891	994	33·5	539	18·1	125	125·7
1892	1,090	35·1	537	17·3	154	141·2
1893	1,100	33·8	551	16·9	129	117·2
1894	1,019	29·9	491	14·4	106	104·0
1895	1,162	32·6	604	16·9	148	127·3
1896	1,201	32·2	541	14·5	156	129·8
1897	1,217	31·7	598	15·6	162	133·1
1898	1,329	33·1	579	14·4	154	115·8
1899	1,396	33·1	635	15·0	176	126·0
1900	1,496	34·0	703	16·0	198	132·3
1891 to 1900 }	1,200	32·9	577	15·9	150	125·2
1901	1,487	34·3	755	17·4	212	142·5
1902	1,396	33·7	593	14·3	149	106·0
1903	1,561	36·4	576	13·4	165	106·0
1904	1,560	34·2	690	15·1	203	130·1
1905	1,586	34·8	585	12·8	166	104·6
1906	1,679	34·7	711	14·7	162	96·4
1907	1,573	31·7	730	14·7	160	101·7
1908	1,725	33·6	768	15·0	197	114·2
1909	1,603	30·8	708	13·6	167	104·1
1910	1,599	30·2	721	13·6	163	102·5
1901 to 1910 }	1,576	33·4	683	14·4	174	110·8
1911	1,641	30·1	722	13·2	197	120·05
1912	1,633	29·9	703	12·8	169	103·49
1913	727	24·6	353	11·9	59	81·1

Special mention might be made of the Cadder Pit disaster on 4th August, by which 22 men lost their lives, of whom 17 belonged to the Lower Ward area. The average age of these 17 was 27 years. This accident made an appreciable difference to the death-rate in the age group 15-25 in the West Cadder district.

PUBLIC INSTITUTIONS SITUATED WITHIN THE DISTRICT WHERE SOME PERSONS NOT BELONGING TO THE DISTRICT DIED, WHOSE DEATHS ARE EXCLUDED :—

INSTITUTIONS.	PARISH WHERE SITUATED.	POLICE CENSUS, DEC., 1913.	DEATHS.	
			Total.	Allocated to Lower Ward.
Gartloch Asylum, ... ..	Cadder East,	623	71	2
Gartloch Sanatorium, ... ..	Barony,	148	15	...
Lightburn Joint Hospital, ...	Do.	103	34	12
Epileptic Colony, Chryston, ...	Cadder East,	181	1	...
Lenzie Home, ... ..	Cadder West,	56	1	...
Barlinnie Prison, ... ..	Barony,	750	2	2
		1,861	124	16

PUBLIC INSTITUTIONS SITUATED OUTWITH THE DISTRICT WHERE SOME PERSONS BELONGING TO THE DISTRICT DIED, WHOSE DEATHS ARE INCLUDED :—

Glasgow Hospitals, &c., - - - -	22 deaths.
Asylums in Lanarkshire and elsewhere, -	8 „
Other Institutions, - - - -	12 „
Total, - - - -	<u>42 „</u>

The foregoing tables show that of 124 deaths occurring in institutions within the district, 108 were excluded, being deaths of persons not belonging to the Lower Ward; on the other hand, 42 deaths which occurred in various institutions outwith the district were included, being the deaths of persons whose usual residence was within the Lower Ward area. Similarly, 27 deaths were excluded of persons dying in private residences or elsewhere, and 6 such deaths were included.

**Deaths in relation to Age and Cause.**—The deaths are classified in Table B1, according to age and cause. The deaths are here arranged





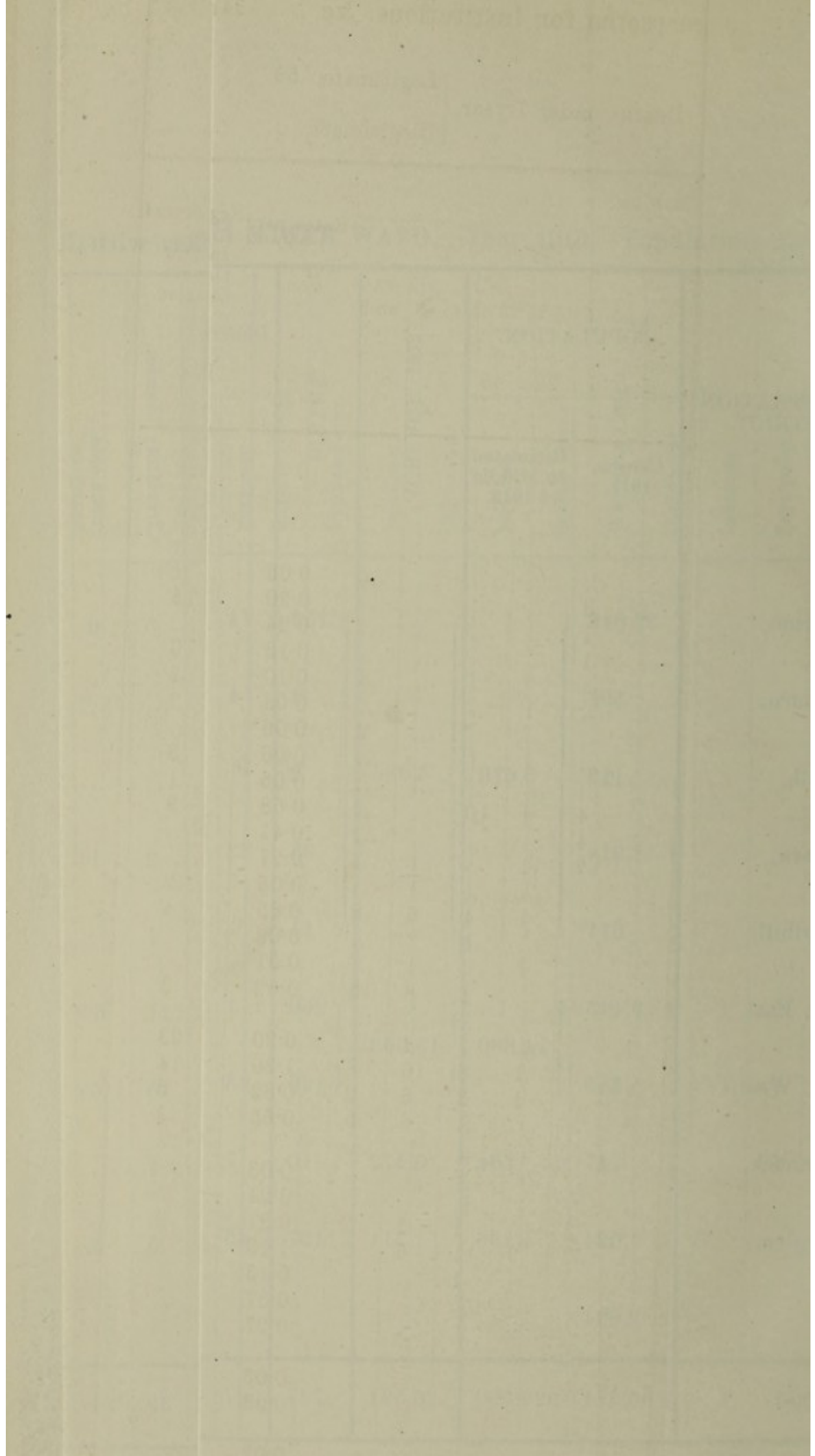




TABLE B<sup>1</sup>.—LOWER WARD.—Year 1913.—Deaths classified according to cause and age periods and corrected for Institutions, &c. 342B1

Population, 29,500    Acreage, 24,885.    Registered Births, { Legitimate, M., 359; F., 345;  
 { Illegitimate, M., 12; F., 11;    Total, 727.

Deaths under 1 year, { Legitimate, 58.  
 { Illegitimate, 1.

CAUSE OF DEATH.	Registered in District.	Transferred from other Districts.	Transferred to other Districts.	Nett Deaths.	NETT DEATHS AT DIFFERENT AGE PERIODS.																	Rates per 1,000 Population.	Registered in Institutions in District.
					Weeks.					Months.					Years.								
					-1	1-2	2-3	3-4	Total -4	1-3	3-6	6-9	9-12	Total -12	1-2	2-5	5-15	15-25	25-45	45-65	65 and over.		
All Causes, { Certified, - Uncertified, -	430 10	47 1	130 5	347 6	14 ...	1 ...	2 ...	2 ...	19 ...	11 ...	12 ...	10 ...	7 ...	59 ...	25 2	15 ...	26 ...	22 ...	49 1	71 2	80 1	12-00 0-20	124 ...
Enteric Fever, -	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Typhus Fever, -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox, -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chickenpox, -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0-06	1
Measles, -	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0-20	13
Scarlet Fever, -	14	...	8	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0-24	...
Whooping Cough, -	7	...	...	7	...	...	...	...	...	...	2	1	...	...	3	...	...	...	...	...	...	0-13	10
Diphtheria, -	12	...	8	4	...	...	...	...	...	...	...	1	1	2	...	...	1	1	...	...	...	0-10	2
Influenza, -	5	...	2	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	0-03	2
Erysipelas, -	2	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	0-06	...
Other Septic Diseases, -	1	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0-06	3
Puerperal Fever, -	5	...	3	2	...	...	...	...	...	...	1	1	...	2	...	...	...	...	...	...	...	0-06	1
Cerebro Spinal Fever, -	2	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0-68	9
Pulmonary Tuberculosis, -	24	4	8	20	...	...	...	...	...	...	1	...	...	1	1	...	4	4	10	...	...	0-41	...
Meningeal Tuberculosis, -	11	1	...	12	...	...	...	...	...	...	1	...	2	3	3	2	4	...	...	...	...	0-27	...
Abdominal Tuberculosis, -	8	1	1	8	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	...	0-06	2
Other Tuberculosis, -	3	1	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	4	6	8	0-65	4
Malignant Diseases, -	22	1	4	19	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	0-03	...
Rheumatic Fever, -	1	...	...	1	...	...	...	...	...	...	...	...	2	...	2	3	2	...	1	...	1	0-31	...
Meningitis (Simple), -	9	1	1	9	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	8	15	0-82	3
Cerebral Haemorrhage, -	23	3	2	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Convulsions, -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	0-20	23
Other Nervous Diseases, -	26	3	23	6	...	...	...	...	...	...	...	...	...	...	...	...	2	1	8	16	8	1-20	14
Circulatory Diseases, -	44	5	14	35	...	...	...	...	...	...	1	1	2	1	6	5	1	...	1	3	6	0-82	5
Pneumonia, -	27	2	5	24	...	1	...	...	...	...	1	1	2	1	5	2	1	...	...	6	5	0-65	3
Bronchitis, -	22	...	3	19	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Laryngitis, -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	0-03	...
Other Respiratory Diseases, -	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	0-24	...
Diarrhoea, -	8	...	1	7	...	...	...	...	...	...	1	...	3	2	6	...	1	2	...	1	3	0-31	1
Other Digestive Diseases, -	7	3	1	9	...	...	...	...	...	...	...	...	...	...	...	1	1	2	9	11	6	1-13	...
Violence, -	48	5	20	33	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	0-13	...
Congenital Malformations, -	3	1	...	4	3	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	0-37	...
Premature Birth, -	11	...	...	11	9	...	1	...	...	...	10	1	...	...	11	...	...	...	...	...	...	0-27	...
Atrophy, Debility, &c., -	8	...	...	8	1	...	...	...	...	...	2	4	1	...	7	1	...	...	...	...	...	...	...
Atelectasis, -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	0-03	...
Injury at Birth, -	1	...	...	1	1	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	0-03	...
Suffocation, overlying, -	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Syphilis, -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	0-07	...
Rickets, -	1	1	...	2	...	...	...	...	...	...	...	...	...	...	3	...	1	4	2	7	13	2-00	25
Other Defined Diseases, -	68	13	23	58	...	...	...	...	1	1	1	1	...	...	...	1	...	...	...	...	...	0-34	1
Ill defined Diseases, -	12	1	3	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total, -	440	48	135	353	14	1	2	2	19	11	12	10	7	59	27	15	25	22	51	74	80	12-17	124





TABLE B2.—LOWER WARD.—Year 1913.—Births and Deaths in each Registration District. 342B2  
Deaths classified according to age periods, and corrected for Institutions, &c.

REGISTRATION DISTRICTS.	Registered Births.	Nett Deaths.	NETT DEATHS AT DIFFERENT AGE PERIODS.																
			Weeks.					Months.					Years.						
			-1	1-2	2-3	3-4	Total -4	1-3	3-6	6-9	9-12	Total -12	1-2	2-5	5-15	15-25	25-45	45-65	65 and over.
Shettleston, - - -	153	74	5	...	1	...	6	3	3	1	3	16	10	1	4	3	7	18	15
Springburn, - - -	3	4	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	3
Maryhill, - - -	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Possilpark, - - -	35	22	...	1	...	...	1	...	1	...	...	2	...	1	1	3	5	3	7
Garngadhill, - - -	11	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Cadder, East, - - -	260	111	7	...	...	1	8	4	5	4	2	23	7	7	9	4	14	21	26
Cadder, West, - - -	126	87	1	...	1	1	3	1	2	5	1	12	7	4	3	8	16	21	16
Carmunnock, - - -	10	7	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	4
Rutherglen, - - -	127	46	1	...	...	...	1	3	1	...	1	6	3	2	7	3	7	9	9
Total, - - -	727	353	14	1	2	2	19	11	12	10	7	59	27	15	25	22	51	74	80

TABLE 1. - LOW-WATER-LEVELS AND TIDES  
 (Data obtained from U.S. Coast and Geodetic Survey)

STATION	LATITUDE	LONGITUDE	ELEVATION FEET	TIDE DATA	
				LOW WATER	HIGH WATER
1	34° 15' N	121° 00' W	10.0	1.0	1.5
2	34° 30' N	120° 45' W	10.0	1.0	1.5
3	34° 45' N	120° 30' W	10.0	1.0	1.5
4	35° 00' N	120° 15' W	10.0	1.0	1.5
5	35° 15' N	120° 00' W	10.0	1.0	1.5
6	35° 30' N	119° 45' W	10.0	1.0	1.5
7	35° 45' N	119° 30' W	10.0	1.0	1.5
8	36° 00' N	119° 15' W	10.0	1.0	1.5
9	36° 15' N	119° 00' W	10.0	1.0	1.5
10	36° 30' N	118° 45' W	10.0	1.0	1.5
11	36° 45' N	118° 30' W	10.0	1.0	1.5
12	37° 00' N	118° 15' W	10.0	1.0	1.5
13	37° 15' N	118° 00' W	10.0	1.0	1.5
14	37° 30' N	117° 45' W	10.0	1.0	1.5
15	37° 45' N	117° 30' W	10.0	1.0	1.5
16	38° 00' N	117° 15' W	10.0	1.0	1.5
17	38° 15' N	117° 00' W	10.0	1.0	1.5
18	38° 30' N	116° 45' W	10.0	1.0	1.5
19	38° 45' N	116° 30' W	10.0	1.0	1.5
20	39° 00' N	116° 15' W	10.0	1.0	1.5
21	39° 15' N	116° 00' W	10.0	1.0	1.5
22	39° 30' N	115° 45' W	10.0	1.0	1.5
23	39° 45' N	115° 30' W	10.0	1.0	1.5
24	40° 00' N	115° 15' W	10.0	1.0	1.5
25	40° 15' N	115° 00' W	10.0	1.0	1.5
26	40° 30' N	114° 45' W	10.0	1.0	1.5
27	40° 45' N	114° 30' W	10.0	1.0	1.5
28	41° 00' N	114° 15' W	10.0	1.0	1.5
29	41° 15' N	114° 00' W	10.0	1.0	1.5
30	41° 30' N	113° 45' W	10.0	1.0	1.5
31	41° 45' N	113° 30' W	10.0	1.0	1.5
32	42° 00' N	113° 15' W	10.0	1.0	1.5
33	42° 15' N	113° 00' W	10.0	1.0	1.5
34	42° 30' N	112° 45' W	10.0	1.0	1.5
35	42° 45' N	112° 30' W	10.0	1.0	1.5
36	43° 00' N	112° 15' W	10.0	1.0	1.5
37	43° 15' N	112° 00' W	10.0	1.0	1.5
38	43° 30' N	111° 45' W	10.0	1.0	1.5
39	43° 45' N	111° 30' W	10.0	1.0	1.5
40	44° 00' N	111° 15' W	10.0	1.0	1.5
41	44° 15' N	111° 00' W	10.0	1.0	1.5
42	44° 30' N	110° 45' W	10.0	1.0	1.5
43	44° 45' N	110° 30' W	10.0	1.0	1.5
44	45° 00' N	110° 15' W	10.0	1.0	1.5
45	45° 15' N	110° 00' W	10.0	1.0	1.5
46	45° 30' N	109° 45' W	10.0	1.0	1.5
47	45° 45' N	109° 30' W	10.0	1.0	1.5
48	46° 00' N	109° 15' W	10.0	1.0	1.5
49	46° 15' N	109° 00' W	10.0	1.0	1.5
50	46° 30' N	108° 45' W	10.0	1.0	1.5
51	46° 45' N	108° 30' W	10.0	1.0	1.5
52	47° 00' N	108° 15' W	10.0	1.0	1.5
53	47° 15' N	108° 00' W	10.0	1.0	1.5
54	47° 30' N	107° 45' W	10.0	1.0	1.5
55	47° 45' N	107° 30' W	10.0	1.0	1.5
56	48° 00' N	107° 15' W	10.0	1.0	1.5
57	48° 15' N	107° 00' W	10.0	1.0	1.5
58	48° 30' N	106° 45' W	10.0	1.0	1.5
59	48° 45' N	106° 30' W	10.0	1.0	1.5
60	49° 00' N	106° 15' W	10.0	1.0	1.5
61	49° 15' N	106° 00' W	10.0	1.0	1.5
62	49° 30' N	105° 45' W	10.0	1.0	1.5
63	49° 45' N	105° 30' W	10.0	1.0	1.5
64	50° 00' N	105° 15' W	10.0	1.0	1.5
65	50° 15' N	105° 00' W	10.0	1.0	1.5
66	50° 30' N	104° 45' W	10.0	1.0	1.5
67	50° 45' N	104° 30' W	10.0	1.0	1.5
68	51° 00' N	104° 15' W	10.0	1.0	1.5
69	51° 15' N	104° 00' W	10.0	1.0	1.5
70	51° 30' N	103° 45' W	10.0	1.0	1.5
71	51° 45' N	103° 30' W	10.0	1.0	1.5
72	52° 00' N	103° 15' W	10.0	1.0	1.5
73	52° 15' N	103° 00' W	10.0	1.0	1.5
74	52° 30' N	102° 45' W	10.0	1.0	1.5
75	52° 45' N	102° 30' W	10.0	1.0	1.5
76	53° 00' N	102° 15' W	10.0	1.0	1.5
77	53° 15' N	102° 00' W	10.0	1.0	1.5
78	53° 30' N	101° 45' W	10.0	1.0	1.5
79	53° 45' N	101° 30' W	10.0	1.0	1.5
80	54° 00' N	101° 15' W	10.0	1.0	1.5
81	54° 15' N	101° 00' W	10.0	1.0	1.5
82	54° 30' N	100° 45' W	10.0	1.0	1.5
83	54° 45' N	100° 30' W	10.0	1.0	1.5
84	55° 00' N	100° 15' W	10.0	1.0	1.5
85	55° 15' N	100° 00' W	10.0	1.0	1.5
86	55° 30' N	99° 45' W	10.0	1.0	1.5
87	55° 45' N	99° 30' W	10.0	1.0	1.5
88	56° 00' N	99° 15' W	10.0	1.0	1.5
89	56° 15' N	99° 00' W	10.0	1.0	1.5
90	56° 30' N	98° 45' W	10.0	1.0	1.5
91	56° 45' N	98° 30' W	10.0	1.0	1.5
92	57° 00' N	98° 15' W	10.0	1.0	1.5
93	57° 15' N	98° 00' W	10.0	1.0	1.5
94	57° 30' N	97° 45' W	10.0	1.0	1.5
95	57° 45' N	97° 30' W	10.0	1.0	1.5
96	58° 00' N	97° 15' W	10.0	1.0	1.5
97	58° 15' N	97° 00' W	10.0	1.0	1.5
98	58° 30' N	96° 45' W	10.0	1.0	1.5
99	58° 45' N	96° 30' W	10.0	1.0	1.5
100	59° 00' N	96° 15' W	10.0	1.0	1.5



TABLE B3.—Statistics Prepared and Published by the Registrar-General, Year 1913.

342B3

## LOWER WARD DISTRICT.

Population—Census 1911, - - -	28,484
" —Estimated to middle of year, - - -	29,127

## Numbers.

Births, corrected for transcripts, - - -	718
" illegitimate, corrected for transcripts, - - -	28
Marriages, uncorrected, - - -	118
Deaths, - - -	427
" transferred out, - - -	118
" in, - - -	48
" corrected, both sexes, - - -	357
" males, - - -	206
" females, - - -	151

## Rates per 1,000 of Estimated Population.

Birth-rate, corrected for transcripts, - - -	24.7
Marriage-rate, uncorrected, - - -	4.1
Death-rate, all causes, uncorrected, - - -	14.7
" " corrected for transfers, - - -	12.3
" " and adjusted for age and sex distribution, - - -	13.1
" phthisis, corrected for transfers, - - -	0.7
" all tuberculosis, corrected for transfers, - - -	1.3
" principal epidemic diseases (those asterisked below), corrected for transfers, - - -	0.9
Infantile mortality rate (deaths of children of under one year per 1,000 births), corrected, - - -	85
Illegitimate rate (illegitimate births per 100 total births), corrected for transcripts, - - -	3.9

## CAUSES OF DEATH (CORRECTED FOR TRANSFERS).

CODE NOS.		CAUSES OF DEATH.	ALL AGES.	AGES.											
Long List.	Short List.			1	5	10	15	25	35	45	55	65	75		
1	1	*Enteric Fever, ...	—	—	—	—	—	—	—	—	—	—	—		
2	2	Typhus Fever, ...	—	—	—	—	—	—	—	—	—	—	—		
5	3	Smallpox, ...	—	—	—	—	—	—	—	—	—	—	—		
6	4	*Measles, ...	2	2	—	—	—	—	—	—	—	—	—		
7	5	*Scarlet Fever, ...	5	3	2	—	—	—	—	—	—	—	—		
8	6	*Whooping-cough, ...	6	3	2	1	—	—	—	—	—	—	—		
9	7	*Diphtheria and Croup, ...	6	2	3	1	—	—	—	—	—	—	—		
10	8	Influenza, ...	3	—	—	—	—	—	—	—	—	1	2		
18	9	Erysipelas, ...	1	—	—	—	—	—	—	—	1	—	—		
28, 29a	10	Phthisis, Pulmonary Tuberculosis, ...	21	—	1	4	5	6	5	—	—	—	—		
30	11	Tuberculous Meningitis, ...	7	1	3	1	2	—	—	—	—	—	—		
31	12	Abdominal Tuberculosis, ...	7	2	2	1	—	—	—	1	—	—	—		
296, 32, 33, 35	13	Other Tuberculous Diseases, ...	2	—	—	—	—	1	—	1	—	—	—		
45	14	Cancer, Malignant Disease, ...	19	—	—	—	1	—	4	4	3	1	6		
47	15	Rheumatic Fever, ...	2	—	—	—	1	1	—	—	—	—	—		
61c	16	Meningitis, ...	14	5	6	1	1	—	—	1	—	—	—		
77-80	17	Organic Heart Disease, ...	31	1	—	1	1	2	4	7	8	2	4		
90	18	Bronchitis, ...	23	7	5	—	—	—	—	1	4	4	2		
91, 92	19	Pneumonia (all forms), ...	26	6	6	—	1	1	2	5	3	1	1		
86-88, 93-98b	20	Other Diseases of Respiratory Organs, ...	—	—	—	—	—	—	—	—	—	—	—		
104	21	*Diarrhoea and Enteritis (under 2 years), ...	6	6	—	—	—	—	—	—	—	—	—		
108	22	Appendicitis and Typhlitis, ...	1	—	—	—	—	—	1	—	—	—	—		
111-115	23	All Liver Diseases (not Malignant), ...	2	—	—	—	—	—	—	—	1	1	—		
99-103, 107, 109, 110, 116-118	24	Other Diseases of Digestive System (under 2 years), ...	—	—	—	—	—	—	—	—	—	—	—		
119, 120	25	Nephritis and Bright's Disease, ...	7	—	—	1	—	—	3	1	2	—	—		
137	26	Puerperal Sepsis, ...	—	—	—	—	—	—	—	—	—	—	—		
134-136, 138-141	27	Other Diseases and Accidents of Pregnancy and Parturition, ...	3	—	—	—	—	3	—	—	—	—	—		
150, 151	28	Congenital Debility and Malformation, including Premature Birth, ...	22	20	1	—	—	—	1	—	—	—	—		
164-186, 190	29	Violent Deaths, excluding Suicide, ...	36	2	2	2	9	8	3	5	2	3	—		
163	30	Suicide, ...	—	—	—	—	—	—	—	—	—	—	—		
All other Nos.	x	Other Defined Diseases, ...	94	6	5	1	4	2	3	1	9	17	18		
187-189	31	Diseases Ill-defined or Unknown, ...	11	—	2	—	—	—	1	3	—	4	1		
Total, ...			357	61	43	12	11	22	25	25	38	41	35	44	





in recognised age periods, and the percentage proportion of deaths at each age period given :—

	1913.		1912.
	Deaths.	Per cent.	Per cent.
Infant period—under 1 year, ...	59	16·7	24·0
Under school age—1·5 years, ...	42	11·9	14·6
School age—5·15 years, ...	26	7·4	4·8
Adolescence—15·25 years, ...	22	6·2	4·6
Early mature period—25·45 years, ...	50	14·1	14·2
Late mature period—45·65 years, ...	73	20·7	15·9
Post mature period—65 years and upwards, ...	81	23·0	21·6

The population at each of these age periods was obtained from the Registrar-General in the last Census Report, and from the figures given the percentage population at the various age groups was calculated. Taking it that the age grouping of the population in 1913 was the same as at the census, the population at these age groups was estimated for the year, and from these figures the death-rates calculated.

#### POPULATION, DEATHS, AND DEATH-RATES AT AGE PERIODS.

	Under 5	5-15	15-25	25-45	45-65	Over 65.
Population (estimated),	3,742	6,796	5,405	8,413	3,992	1,152
Deaths (year 1913), ...	101	25	22	51	74	80
Death-rate per 1000 of the population (1913), ...	27·0	3·7	4·07	6·06	18·6	69·4
Death-rate per 1000 of the population (1912), ...	37·6	2·5	3·1	6·1	14·5	68·2

There is a considerable drop in the death-rate for the year as compared with the preceding year, due largely to the greatly diminished infantile mortality-rate.

**Infectious Diseases.**—The number of deaths due to infectious diseases which are compulsorily notifiable was 35, made up as follows :—

Diphtheria, ...	4
Scarlet Fever, ...	6
Cerebro-Spinal Fever, ...	2
Puerperal Fever, ...	2
Erysipelas, ...	1
Pulmonary Tuberculosis, ...	20
Total, ...	<u>35</u>

The deaths from infectious diseases not compulsorily notifiable amounted to 38, made up thus:—Measles, 2; whooping-cough, 7; diarrhoea, 7; non-pulmonary tuberculosis, 22.

These diseases are all discussed under separate headings in Part II. of this report.

**Tuberculous Diseases.**—The total number of deaths from all forms of tuberculous disease was 42. These are dealt with in a special report on tuberculosis.

**Respiratory Diseases.**—Prior to 1906 deaths from pneumonia, from influenza with respiratory symptoms, and from bronchitis were included under this heading. Since that year the two former diseases have been classed separately, and since 1911 the last mentioned also. From 1910 broncho-pneumonia, which, in previous years, had been classed with respiratory diseases, has been classed with pneumonia. These changes in classification are indicated in the following tabular statements:—

#### OLD CLASSIFICATION.

##### ALL RESPIRATORY DEATHS.

Year.	Deaths.	Death-rate.	Year.	Deaths.	Death-rate.	Year.	Deaths.	Death-rate.
1891	123	4.14	1896	97	2.60	1901	128	2.95
1892	121	3.90	1897	116	3.02	1902	117	2.82
1893	127	3.90	1898	114	2.83	1903	113	2.63
1894	109	3.20	1899	119	2.82	1904	129	2.83
1895	142	3.98	1900	158	3.59	1905	99	2.17

#### NEW CLASSIFICATION.

Year.	Pneumonia.		Bronchitis.		Influenza.		Other Respiratory Diseases.	
	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.
1906	34	0.73	—	—	2	0.4	78	1.61
1907	40	0.80	—	—	10	0.20	64	1.29
1908	29	0.54	—	—	8	0.15	85	1.66
1909	64	1.23	—	—	4	0.07	72	1.38
1910	61	1.15	—	—	4	0.07	60	1.13
1911	74	1.35	58	1.06	8	0.14	3	0.05
1912	62	1.13	46	0.84	—	—	5	0.09
1913	24	0.81	19	0.64	3	0.10	1	0.03



**Pneumonia.**—Deaths from this disease have been classified separately since 1906. During the year 1913, 24 deaths occurred, giving a death-rate of '81 per thousand of the population, compared with 1'13 for 1912. Of the deaths, 6 occurred in Shettleston, 6 in Cadder East, 6 in Cadder West, 5 in Rutherglen, and 1 in Possilpark. Classified according to age, the deaths were as follows:—

Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65 and upwards.
6	5	1	—	1	3	6	2

**Bronchitis.**—This disease was responsible for 19 deaths during the year, giving a death-rate of '64 per thousand of the population. 13 of the deaths occurred in Cadder, and 4 in Shettleston. Classified according to age, the deaths were as follows:—

Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65 and upwards.
5	2	1	—	—	—	6	5

The heaviest mortality in both bronchitis and pneumonia is thus seen to fall on the two extremes of life.

**Influenza.**—Three deaths from this disease occurred during 1913—all in the age group 65 years and upwards—giving a rate of '10 per thousand. There were no deaths due to influenza in 1912, but from 1906, when influenza was first classed separately, to 1911 there was an average of 6 deaths.

**Other Respiratory Diseases.**—Only 1 death, that of a child of 1-2 years, fell under this heading during the year—death being due to empyema.

**Malignant Diseases.**—Including cancer, carcinoma, sarcoma, &c. The deaths from these diseases totalled 19, giving a death-rate of 0'64 per thousand, as against 38 deaths and a rate of 0'69 in 1912. 10 of these were certified as due to carcinoma, 4 to cancer, 4 indefinitely to malignant tumours or growths, and 1 to sarcoma. Classified according to age, the 19 deaths were distributed thus:—1 between 15-25, 4 from 25-45, 6 from 45-65, and 8 from 65 and upwards.

MALIGNANT DISEASE IN EACH REGISTRATION DISTRICT OF THE LOWER WARD.—AVERAGE ANNUAL NUMBER OF DEATHS FOR QUINQUENNIAL PERIODS OF 1891-1910, AND FOR EACH OF THE YEARS 1911, 1912, AND 1913; ALSO THE AVERAGE ANNUAL DEATH-RATE FOR THE SAID PERIOD IN THE LOWER WARD.

Registration District.	1891-1895.	1896-1900.	1901-1905.	1906-1910.	1911.	1912.	1913.
Shettleston, . . . . .	6·8	9·6	12·4	21·4	30	22	6
Springburn, . . . . .	...	...	...	0·4	1	...	...
Maryhill, . . . . .	0·4	0·6	0·8	0·2	...	...	...
Possilpark, . . . . .	...	...	...	1·6	...	3	1
Garngadhill, &c., . . . . .	...	...	0·4	...	...	...	...
Cadder East, . . . . .	2·4	3·8	2·8	7·2	7	7	4
Cadder West, . . . . .	1·8	3·0	1·6	4·0	2	3	2
Carmunnock, . . . . .	1·4	1·2	0·2	0·4	...	1	1
Govan, . . . . .	0·4*	1·8*	0·4	0·2	...	...	...
Rutherglen, . . . . .	1·2	1·0	1·8	2·4	2	2	5
Lower Ward District, . . . . .	14·4	21·0	20·8	37·8	42	38	19
Average Annual Death-rate per } 10,000 of the Population,	4·43	5·20	4·76	7·44	7·70	6·96	6·44

\* By an extension of the Burgh of Govan, 5,642 of the population were annexed as from 15th August, 1901.

**Rheumatic Fever.**—Only 1 death—a male, in age group 45-65—was credited to this cause during the year.

**Violence.**—33 deaths due to violence occurred in 1913, distributed according to age as follows:—

Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65 and upwards.
1	1	1	2	9	11	6	2

17 of the 33 deaths, or fully 50 per cent., were due to the Cadder Pit disaster, and the heavy incidence at ages 15-45 is due to the same cause—the average age of the 17 victims of the disaster being 27 years.

The death-rate from violence, per 1,000 of the population, was 1·1 as compared with an average figure of ·6 for the 5 preceding years, 1908-12.

**Circulatory Diseases.**—These diseases were responsible for 35 deaths, giving a death-rate of 1·18 per thousand, as compared with 1·37 and 1·26 for 1911 and 1912 respectively. 32 of the deaths were of persons over 25 years. In the year 1910 a change in the classification of deaths took place, whereby cerebral hæmorrhage, which previously had been classed under circulatory diseases, was included as a sub-heading class under nervous diseases. The result of this



change is seen in the following table, which shows that the death-rate from circulatory diseases, which averaged 2·1 per thousand in the years 1908-09-10, was reduced after this change of classification by nearly one-half to 1·2 per thousand, while the rate from nervous diseases was correspondingly increased from ·6 to 1·18 per thousand.

	CIRCULATORY DISEASES.		NERVOUS DISEASES.	
	No. of Deaths.	Death-rate.	No. of Deaths.	Death-rate.
1908 - - -	112	2·07	32	·60
1909 - - -	111	2·0	30	·54
1910 - - -	125	2·24	37	·66
<i>Average,</i> -	<i>116</i>	<i>2·10</i>	<i>33</i>	<i>·60</i>
1911 - - -	75	1·30	65	1·13
1912 - - -	69	1·20	63	1·10
1913 - - -	35	1·18	39	1·32
<i>Average,</i> -	<i>...</i>	<i>1·23</i>	<i>...</i>	<i>1·18</i>

## II.—PREVALENCE OF INFECTIOUS DISEASE.

The diseases included under this heading are classified in relation to notification, and are divided into groups. Group (1) includes diseases which are compulsorily notifiable (*a*) under the Notification Act, (*b*) by adoption under the Notification Act, and (*c*) by order of the Local Government Board; and Group (2) not compulsorily notifiable diseases. The diseases included in these groups are as follows :—

### GROUP I.

(A)	(B)	(C)
Smallpox.	<i>August, 1906.</i>	<i>1st August, 1912.</i>
Diphtheria.	Cerebro-spinal Meningitis.	Pulmonary Tubercu-
Scarlet Fever.	<i>24th October, 1912.</i>	losis.
Typhus Fever.	Opthalmia Neonatorum.	<i>1st July, 1914.</i>
Typhoid Fever.	Acute Poliomyelitis.	All forms of Tubercu-
Puerperal Fever.	Tetanus.	losis.
Erysipelas.	Anthrax.	
	Glanders.	
	Actinomycosis.	

### GROUP II.

Measles.	Chickenpox.	Ringworm.
German Measles.	Mumps.	Scabies.
Whooping Cough.		

Each notifiable disease is dealt with under a separate heading, but reference should be made to the statistical Tables B, D, and E. E shows for each disease the number of cases notified during the year, classified according to parish. The total number of cases amounted to 326, and the total deaths to 35. The deaths are given in detail in Tables B1 and B2.

TABLE E.—NUMBER OF CASES OF NOTIFIABLE INFECTIOUS DISEASE IN EACH PARISH DURING 1913.

PARISH.	Cerebro-Spinal Fever.	Diphtheria.	Scarlet Fever.	Ophthalmia Neonatorum.	Typhoid Fever.	Erysipelas.	Puerperal Fever.	Pulmonary Tuberculosis.	Total.
1. Barony, - -	...	46	71	3	1	7	...	4	132
2. Cadder, - -	2	27	87	2	1	19	3	12	153
3. Carmunnock, -	...	1	2	...	...	2	...	1	6
4. Rutherglen, -	...	8	6	1	1	4	1	14	35
Total for year 1913,	2	82	166	6	3	32	4	31	326
Total for year 1912,	1	121	361	6	10	83	13	98	698
Deaths in 1913, ...	2	4	6	...	...	1	2	20	35

A series of tables, lettered D, with a distinctive number for each disease, will be found throughout the report. These tables show, for the whole period of compulsory notification, not only the cases and deaths, but also the rates calculated therefrom.



**Smallpox.**

No cases occurred in any part of the district, but the following Table D1 shows the prevalence in previous years, and that the last case occurred in the year 1904 :—

TABLE D1.—SMALLPOX.

YEAR.	NUMBERS.		YEAR.	NUMBERS.	
	Cases.	Deaths.		Cases.	Deaths.
(1)	(2)	(3)	(1)	(2)	(3)
1892	...	...	1901	116	18
1893	17	1	1902	21	2
1894	...	...	1903	24	...
1895	3	1	1904	40	3
<i>Average,</i>	<i>5</i>	<i>0.5</i>	1905	...	...
1896	...	...	<i>Average,</i>	<i>40.2</i>	<i>4.6</i>
1897	5	1			
1898	...	...	1906 to	1911, no	Cases.
1899	...	...			
1900	24	4			
	...	...	<i>Average,</i>	...	...
<i>Average,</i>	<i>5.8</i>	<i>1</i>	1912	...	...
			1913	...	...

*The Vaccination (Scotland) Act, 1907*, which provides for returns of statutory declarations of conscientious objection to vaccination, came into operation on the 28th August of that year. Forms were prepared, duly approved by the Local Government Board, and issued to registrars during the month of December, 1907.

The returns received since that date are of considerable interest, and may be briefly summarised as follows:—

REGISTRATION DISTRICTS.	NO. OF DECLARATIONS.						
	Dec., 1907.	Year 1908.	Year 1909.	Year 1910.	Year 1911.	Year 1912.	Year 1913.
Shettleston, - - -	19	103	162	154	193	235	39
Springburn, - - -	...	...	...	1	2	...	2
Maryhill, - - -	...	...	...	...	...	...	...
Possilpark, - - -	...	3	4	4	13	7	10
Garngadhill, - - -	...	1	1	1	1	...	2
Cadder, Eastern, - - -	3	8	...	...	...	43	59
Cadder, Western, - - -	4	18	27	28	34	39	33
Carmunnock, - - -	1	2	3	1	2	1	2
Govan, - - -	...	1	2	3	3	7	...
Rutherglen, - - -	4	12	26	34	48	58	50
TOTALS, -	<u>31</u>	<u>148</u>	<u>225</u>	<u>226</u>	<u>296</u>	<u>390</u>	<u>197</u>

During the year 1913 the declarations numbered 197. A comparison of the number of births registered throughout the district since the Act came into operation, with the number of declarations made during each year, gives the following results:—

Year.	Number of Births.	Number of Declarations.	Percentage of Declarations to Births.
1908	1,735	148	8·5
1909	1,603	225	14·0
1910	1,599	226	13·5
1911	1,641	296	18·0
1912	1,633	390	23·8
1913	727	197	27·1

The percentage of declarations to births registered thus shows a steady rise since the year 1908 from 8·5 to 27·1. The ratio of unvaccinated to vaccinated in the population is thus increasing so rapidly that, in the event of a smallpox outbreak, it cannot fail to prove a grave menace to the health of the community.

### Diphtheria.

Cases, 82; deaths, 4; fatality, 4·8 per cent.

Table D2 shows the annual prevalence of diphtheria since 1891. The incidence of the disease was fairly high, but was maintained by a small milk epidemic in the Shettleston district towards the close of the year. The fatality-rate is the lowest on record, the previous lowest being 5·6 in 1909. In 1912 it was 11·5.

In addition to the above 4 deaths, 1 case notified as diphtheria died, the death being certified as due to scarlet fever. 1 death was transferred to Glasgow, and 1 case notified in 1913 died early in the current year.



*Bacteriological Examinations.*—During the year 75 swabs, excluding swabs from contacts, were received from medical practitioners for examination. Of these, 23 proved positive and 52 negative. 22 of the former and 6 of the latter were notified, and in 54 cases diagnosis and notification were made on clinical grounds alone. In the positive case unnotified, swabs were sent from the throat and ear, and it was the latter only which was positive.

The number of cases removed to hospital was 71, or 86·5 per cent. In 2 patients antitoxin was administered before removal, and of the 11 cases which were treated at home, 8 received antitoxin; of the 3 not so treated, 2 died before or shortly after being seen by the doctor, and 1 had practically recovered when first seen.

TABLE D2.—DIPHTHERIA.

YEAR.	NUMBERS.		RATES.		
	Cases	Deaths	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)
1892	15	6	40·0	0·48	1·9
1893	24	10	41·6	0·7	3·0
1894	26	11	42·3	0·7	3·2
1895	36	6	16·6	1·0	1·6
<i>Average,</i>	<i>25·2</i>	<i>8·2</i>	<i>32·6</i>	<i>0·75</i>	<i>2·47</i>
1896	36	6	16·6	0·9	1·6
1897	30	3	10·0	0·7	0·7
1898	21	3	14·2	0·5	0·7
1899	29	9	31·0	0·6	2·1
1900	55	14	25·4	1·0	3·1
<i>Average,</i>	<i>34·2</i>	<i>7·0</i>	<i>20·4</i>	<i>0·84</i>	<i>1·73</i>
1901	45	7	15·5	1·0	1·6
1902	25	3	12·0	0·6	0·7
1903	61	9	14·7	1·4	2·1
1904	56	6	10·7	1·2	1·3
1905	56	8	14·2	1·2	1·7
<i>Average,</i>	<i>48·6</i>	<i>6·6</i>	<i>13·5</i>	<i>1·1</i>	<i>1·5</i>
1906	61	5	8·1	1·2	1·0
1907	75	6	8·0	1·5	1·2
1908	192	15	7·8	3·7	2·9
1909	213	12	5·6	4·0	2·3
1910	137	11	8·0	2·6	2·1
<i>Average,</i>	<i>135·6</i>	<i>9·8</i>	<i>7·2</i>	<i>2·6</i>	<i>1·9</i>
1911	134	14	10·4	2·4	2·5
1912	121	14	11·5	2·2	2·5
1913	82	4	4·8	2·7	1·3

The age incidence of the cases and deaths during the year was as follows :—

Ages,	—1	1-2	2-5	5-15	15-25	25-45	over 45	Total.
Cases,	2	8	18	37	7	9	1	82
Deaths,	1	1	—	2	—	—	—	4

The distribution of the disease month by month and the parish and locality affected are shown in the following table :—

DIPHTHERIA IN THE LOWER WARD DURING 1913. DISTRIBUTION IN TIME AND SPACE. CASES AND DEATHS MONTH BY MONTH IN EACH LOCALITY AFFECTED.

LOCALITIES.		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Barony Parish—														
Shettleston,	C.	3	...	3	2	1	3	2	4	2	...	6	9	35
	D.	...	...	...	...	...	...	...	...	...	...	...	...	...
Millerston,	C.	...	...	...	1	...	...	...	...	...	...	...	...	1
	D.	...	...	...	1	...	...	...	...	...	...	...	...	1
Lambhill,	C.	1	...	...	...	...	...	...	...	...	2	...	2	5
	D.	...	...	...	...	...	...	...	...	...	...	...	1	1
North Mount Vernon,	C.	...	1	...	...	...	...	...	...	...	...	3	1	5
	D.	...	...	...	...	...	...	...	...	...	...	...	...	...
Cadder Parish—														
Auchinairn and Bishopbriggs,	C.	1	...	4	...	...	...	...	...	...	1	1	...	7
	D.	...	...	...	...	...	...	...	...	...	...	...	...	...
Glenboig and Gartcosh,	C.	1	2	...	...	...	...	1	1	1	2	1	6	15
	D.	...	...	...	...	...	...	...	1	...	...	...	...	1
Chryston and Garnkirk,	C.	...	1	2	...	1	...	...	1	...	...	...	...	5
	D.	...	1	...	...	...	...	...	...	...	...	...	...	1
Carmunnock.	C.	...	...	...	...	...	...	...	...	...	1	...	...	1
	D.	...	...	...	...	...	...	...	...	...	...	...	...	...
Rutherglen,	C.	2	1	...	...	...	1	...	1	...	...	2	1	8
	D.	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL,	C.	8	5	9	3	2	4	3	7	3	6	13	19	82
	D.	...	1	...	1	...	...	...	1	...	...	...	1	4

Some of the more important results of investigations made and action taken are now set forth.

**Barony.**—46 cases; 2 fatal. The distribution of the cases according to locality was as follows :—Shettleston, 23; Springboig, 9; North Mount Vernon, 5; Lambhill, 5—1 fatal; Garthamlock, 2; Millerston, 1—fatal; Barrachnie, 1.

**SHETTLESTON.**—23 cases. In Budhill Avenue 11 families were affected, with 15 cases; Balgair Terrace, 3 families, with 3 cases;



Gartocher Road, 1 family, with 2 cases; Carntyne, 2 families, with 2 cases; Easter Queenslie, 1 case.

*Budhill Avenue and Balgair Terrace.*—In March, 3 children, who sat beside each other in school, were affected, 2 sickening on the 3rd, and the other on the 7th. One of these was responsible for a "return" case. He was discharged from hospital on April 5th, and ten days later his sister sickened of diphtheria. In another family 3 cases were discovered. The first to sicken was a boy, aged 6, on August 8th, but no special attention was paid to his condition till his sister, aged 4, developed diphtheria on the 15th. A swab from the boy's throat proved positive, and he was also admitted to hospital. A week later, however, the mother also sickened, and was removed. A third family had 2 cases, but with three months' interval between them. There was nothing clinically to suggest that the first case was a carrier.

*CARNTYNE.*—A case occurred at Carntyne Farm, in a maid, aged 29. She sickened on June 3rd, three days after visiting a family in Glasgow, where 2 children were ill with "diphtheric" throats. The Glasgow authorities were communicated with, and on swabbing these children found one positive. All others at the farm were swabbed with negative result; and after disinfection of the dairy the milk supply was continued. A week later, however, a child of 4, residing at the farm cottages, contracted diphtheria. This family had had their milk served out to them personally by the previous case.

*SPRINGBOIG, NORTH MOUNT VERNON, AND SHETTLESTON.*—From 20th November to 4th December a series of 34 cases of diphtheria occurred in these districts. 15 of the cases were in the Lower Ward of Lanarkshire, 8 in the Middle Ward, and 11 in that part of Shettleston recently annexed to Glasgow. The cases occurred as follows:—

1 case sickened on 20th Nov.	5 cases sickened on 28th Nov.
2 cases " " 21st "	3 " " 29th "
1 case " " 24th "	5 " " 1st Dec.
7 cases " " 26th "	2 " " 2nd "
6 " " 27th "	2 " " 4th "

32 of these cases received their milk supply from the same dairy in Glasgow. 20 families in all were affected—24 being primary cases, and 8 secondary. Most of the cases were adults, only 2 being children under 10, and 2 between 10 and 14. An investigation of the milk supply was carried out jointly by the Assistant Medical Officers for Glasgow and the Lower Ward. The dairy in question had three sources of supply—from a farm in the Lower Ward, from a farm in the Middle Ward, and from a big city firm supplying sterilised milk. All the workers at the dairy and the two farms were examined and swabbed.

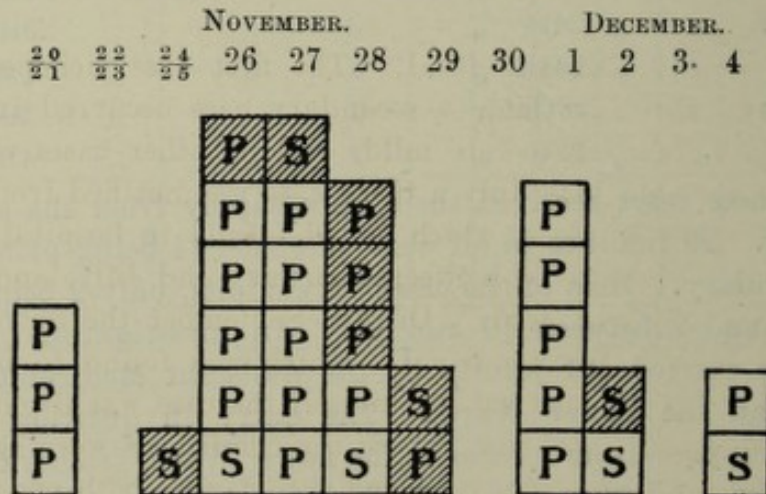


No history of actual illness could be elicited, except that 2 of the milk carriers (brothers) stated that their parents had had sore throats for 2-3 days, and had not had medical advice. This house was also visited and all inmates swabbed. In all, 33 swabs were taken from persons connected directly or indirectly with this milk supply; and of these 33, 9 proved positive. These 9 included the 2 milk-carriers and the 4 other members of their family, the dairy owner, the farmer from the Lower Ward farm who milked occasionally, and the son of a milker in the Middle Ward farm. These persons, though all connected directly or indirectly with the dairy, resided miles apart from each other. From an investigation of the source of the milk supplied to the infected families, it was found that only 3 of the 20 received milk through these two carriers. All the families, except two, received the whole or part of their milk from the Middle Ward farm, but this source was much the largest of the three, and this was the only milk that was sold unmixed, except for counter trade one hour in the morning. It is also difficult to see how the boy at the Middle Ward farm could infect the supply, as he was never near the milk himself, and his mother who milked gave negative swabs on three occasions. The diphtheria bacilli from the boy's throat were isolated, and twice tested for virulence by guinea-pig inoculation with negative results both times. It was thus found impossible to say definitely which was the actual source of contamination of the milk. All possible sources of infection were at once cut off, however, and the whole premises and utensils disinfected, and after this only one further primary case occurred.

#### SHETTLESTON.

##### *Diphtheria Outbreak associated with Milk Supply.*

Graphic Representation of the Occurrence of Cases in the Diphtheria Epidemic at Shettleston.



P. Primary Cases. Lanarkshire Cases—plain squares.

S. Secondary Cases. Glasgow Cases—shaded squares.



**LAMBHILL.**—5 cases; 1 death. The first case occurred on 4th January in Cambus Terrace. A brother of the patient had been discharged from hospital after scarlet fever on 21st December, and on 2nd January a sister had sickened of scarlet fever. There was no suggestion of mistaken diagnosis, the cases being fairly typical of the two diseases. Two cases were removed from one family in December. The first, a boy of 5, sickened on 22nd November, but no doctor was called in till December 1st. The child was very collapsed on admission, suffering from profound toxæmia, involving the heart, and died in hospital. Three other children from the same house were swabbed, and all three swabs were reported negative, but three days later one of them developed typical diphtheria.

**GARTHAMLOCK.**—A child of two years from this district sickened of diphtheria on 19th January, and was removed to hospital, where she remained till 12th February. From that time till the end of April she was in her usual health, but on the 27th April she developed a second attack of diphtheria. The same child in January of the current year has been readmitted to hospital with a third attack of the disease. Enquiry at the hospital shows that the disease has been definitely diphtheria—clinically, every time, but on each occasion bacteriological examination has been negative, four swabs in all having been examined.

**MILLERSTON.**—The fatal case was in a child of 16 months, who sickened on 17th April, and died the following day of toxæmia before removal to hospital could be arranged.

**Cadder.**—27 cases; 4 fatal, one of which died of scarlet fever. The distribution of the cases according to locality was as follows:—Gartcosh, 12 cases, 1 fatal; Auchinairn, 5 cases, 1 fatal; Glenboig, 3 cases, 1 fatal; Garnkirk, 3 cases, 1 fatal; Bridgend, 2; Bishopbriggs, 2.

**GARTCOSH.**—12 cases; 1 fatal. The first case sickened on 26th January, and five days later a secondary case occurred in the same family. Both these cases were mild, and no other cases were known in the vicinity. On 18th July a third case was notified from the same family, a very severe case, which ended fatally in hospital. No case of diphtheria had occurred between February and July, and no source of infection could be traced. On 8th September the School Medical Officer sent a swab from a boy L., which was found to be positive. The local doctor could not satisfy himself the case was diphtheria, but the boy was isolated at home, where the conditions were satisfactory. On 10th October swabs from nose and throat were both negative. The boy was allowed out about 20th October, and within a week 3 cases occurred in children from two neighbouring houses. The Assistant



Medical Officer visited these houses and swabbed the throats of all the children. The boy L. was found to have diphtheria bacilli still in his throat, and in one of the other families no fewer than 5 carriers were discovered. These children were all isolated, and swabs were taken from all these cases ten and fifteen days later. On the first occasion 2 cases were still positive, and on the second day all were negative. Two cases occurred in one family on 23rd and 24th December. Both were severe, one being a laryngeal case necessitating tracheotomy. This case died in hospital during the current year.

**GLENBOIG.**—The fatal case here was notified on 26th February. The child, aged 5, had been confined to bed for 2-3 weeks previously with "rehumatics." After removal to hospital the diagnosis was changed to scarlet fever, and while there the child developed a retro-pharyngeal abscess, which proved fatal. The death in this case was classified as scarlet fever.

**AUCHINAIRN.**—5 cases; 1 fatal. Three cases, including the fatal case, occurred in one family in March. The first child, aged 3½, had been unwell for a week or two, but no special notice was taken of his condition until 6th March, when he became suddenly ill and lapsed into unconsciousness. He died before the arrival of the doctor, who certified death to be due to diphtheria. On examining the other children he found two suffering from diphtheria. One of these was subsequently removed to hospital, the other being practically recovered by this time.

**GARNKIRK.**—3 cases; 1 fatal. The fatal case was in an infant of 10 months, who was removed to hospital within 24 hours of the onset of the disease, but who died the following day after tracheotomy had been performed.

**Carmunnock.**—1 case. All other inmates of the house from which this case was removed received prophylactic doses of antidiphtheritic serum.

**Rutherglen.**—8 cases. One secondary case occurred in a family in Anderson Place. The first case in this house had been one week ill before advice was sought, and by this time a second case had occurred. Two cases occurred in neighbouring houses in Glenpark Terrace in November. The medical attendant gave information also of a number of indefinite throat cases in the vicinity which he had seen. The households where these cases occurred were visited by the Assistant Medical Officer, and swabs were taken from 15 cases. In 1 case only was the diphtheria bacillus found.

#### **Scarlet Fever.**

Cases, 166; deaths, 6, including 1 case notified as diphtheria and 1 case notified in 1912; fatality, 3·6 per cent.



Table D3 shows the annual prevalence of scarlet fever since 1891. The number of cases removed to hospital, including 1 to Ruchill, was 144, being 86·7 per cent. of the total cases. There were also 3 readmissions to hospital.

The general prevalence of scarlet fever was fairly high, especially in Shettleston and in Chryston and neighbourhood. Small epidemics also occurred in St. Mary's Industrial School and at Millerston. Frequent visits of inspection were made by the Assistant Medical Officer to schools in the area, but it was not found necessary to close any on account of the prevalence of scarlet fever, with the exception of Gartcosh, which was closed for one week in January after the holidays, a continuation of a closure notice from the previous year.

The age incidence of cases and deaths was as follows:—

Ages—	1-2	2-5	5-15	15-25	25-45	Over 45	Total.
Cases,	3*	30	116	14	1	2	166
Deaths,	1	2	3*	...	...	...	6

\* Includes one notified as Diphtheria.

The distribution of the disease month by month and the parish or locality affected is shown in the following table:—

#### SCARLET FEVER.

Localities.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Barony Parish—													
Shettleston, - { C.	4	...	2	1	7	3	...	1	2	2	4	4	30
{ D.	1	...	...	...	...	1	...	...	...	...	...	...	2
Riddrie and Millerston, } { C.	1	...	...	...	...	...	...	4	7	3	1	1	17
{ D.	...	...	...	...	...	...	...	...	...	...	...	...	...
Bishopbriggs, - { C.	9	7	...	...	...	...	...	...	...	1	...	1	18
{ D.	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Localities, { C.	2	...	...	1	1	...	1	...	1	...	...	...	6
{ D.	...	...	...	...	...	...	...	...	...	...	...	...	...
Cadder Parish—													
Bishopbriggs, - { C.	...	...	...	2	4	...	...	...	...	...	...	1	7
{ D.	...	...	...	1	...	...	...	...	...	...	...	...	1
Gartcosh and Glenboig, } { C.	3	4	3	1	...	...	1	3	...	...	2	...	17
{ D.	1	...	1	...	...	...	...	...	...	...	...	...	2
Stepps, - { C.	1	...	...	...	3	2	...	1	...	1	6	1	15
{ D.	...	...	...	...	...	...	...	...	...	...	...	...	...
Lenzie, - { C.	2	...	1	...	1	...	...	...	...	...	...	2	6
{ D.	...	...	...	...	...	...	...	...	...	...	...	...	...
Chryston, - { C.	3	...	1	2	...	...	...	4	...	4	3	7	24
{ D.	...	...	...	...	...	...	...	...	...	...	...	...	...
Garnkirk, - { C.	1	...	6	3	5	...	...	2	...	1	...	...	18
{ D.	...	...	...	...	...	...	...	...	...	...	...	...	...
Carmunnock, - { C.	...	...	...	...	...	...	...	...	1	1	...	...	2
{ D.	...	...	...	...	...	...	...	...	...	...	...	1	1
Rutherglen, - { C.	...	...	...	...	2	...	1	...	...	1	1	1	6
{ D.	...	...	...	...	...	...	...	...	...	...	...	...	...
Total, - { C.	26	11	13	10	23	5	3	15	11	14	17	18	166
{ D.	2	...	1	1	...	1	...	...	...	...	...	1	6

The incidence of scarlet fever in each parish and the probable source of infection will now be considered.

TABLE D3.—SCARLET FEVER.

YEAR.	NUMBERS.		RATES.		
	Cases.	Deaths.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)
1892	183	7	3·8	5·8	2·2
1893	168	4	2·3	5·1	1·2
1894	232	9	3·8	6·8	2·6
1895	174	15	8·6	4·8	4·2
<i>Average,</i>	<i>189·2</i>	<i>8·7</i>	<i>4·6</i>	<i>5·6</i>	<i>2·6</i>
1896	188	7	3·7	5·0	1·8
1897	210	8	3·8	5·4	2·0
1898	157	4	2·5	3·9	0·9
1899	377	19	5·0	8·9	4·5
1900	292	12	4·1	6·6	2·7
<i>Average,</i>	<i>244·8</i>	<i>10·0</i>	<i>4·0</i>	<i>6·0</i>	<i>2·4</i>
1901	189	5	2·6	4·3	1·1
1902	129	6	4·6	3·0	1·4
1903	152	2	1·3	3·5	0·4
1904	141	3	2·1	3·0	0·6
1905	68	4	5·8	1·4	0·8
<i>Average,</i>	<i>135·8</i>	<i>4·0</i>	<i>2·9</i>	<i>3·1</i>	<i>0·9</i>
1906	127	...	...	2·6	...
1907	131	4	3·0	2·6	0·8
1908	175	9	5·1	3·4	1·7
1909	395	10	2·5	7·6	1·8
1910	293	8	2·7	5·5	1·5
<i>Average,</i>	<i>224·2</i>	<i>6·2</i>	<i>2·7</i>	<i>4·4</i>	<i>1·2</i>
1911	348	11	3·1	6·3	2·0
1912	361	9	2·4	6·6	1·6
1913	166	6	3·6	5·6	2·0

**Barony.**—27 cases; 2 deaths. The cases were distributed as follows:—Shettleston, 30; St. Mary's Industrial School, 16; Millerston, 14; Riddrie, 3; Mount Vernon, 2; Bishopbriggs, 2; Lambhill, 2; Stepps, 1; and Carntyne, 1.



SHETTLESTON.—30 cases; 2 deaths. The cases occurred fairly uniformly throughout the year, the largest number of notifications, viz., 7, being in May. 23 of the cases were in Budhill Avenue and adjacent tenement properties. 3 were secondary cases, 1 a "return" case, and 1 was infected outside the Lower Ward area. 1 case was notified only after desquamation had commenced.

19 of the cases were in children between the ages of 5 and 9, attending Eastbank School, but as the children resided quite close to each other, it is probable that the contact during play outside was more intimate than that in school. Of the 2 fatal cases, one was a child of 9, the other 1½ years. Both died of severe toxic scarlet fever within 48 hours of admission to hospital. 2 cases occurred in adults: the first, J., a man of 46, had an atypical attack. His doctor suspected scarlet fever, and called in a consultant, who thought it was not scarlet fever. Three weeks later a friend of this patient, F., aged 49, had a similar atypical attack, and by this time J. was desquamating freely. The Asst. Medical Officer of Health was asked to see them, and both were removed to hospital. Next day a daughter of J.'s had typical scarlet fever.

ST. MARY'S INDUSTRIAL SCHOOL.—An outbreak of scarlet fever occurred in this institution in January and February, 16 cases being notified between 10th January and 24th February. The first case sickened on 4th January, and there was no further case till the 20th, but from this date till the 25th 8 cases occurred. The remaining cases occurred with 2-3 days' interval up till the 22nd February. These cases were all removed to hospital, when later 5 of them were judged not to be scarlet fever.

The source of origin in the first case was not traced, and in several examinations of the boys no missed case was discovered to account for the length of time between the first and second cases. Personal contact was no doubt responsible for the continuance of the disease after the second case had occurred. An investigation of the milk supply to the institution failed to reveal anything suspicious.

This outbreak was complicated by the occurrence of a concurrent disease, which in its initial stages closely resembled scarlet fever. It also was epidemic in character, no fewer than 43 boys out of a total of 200 being affected between 20th January and 11th February. The symptoms were headache, a rise of temperature of from 1 to 5 degrees, pains in the limbs, frequently sickness with vomiting, and occasionally sore throat. The tongue was furred, the throat occasionally injected, and sometimes slight enlargement of the cervical glands was noted, and occasionally also a blush on the chest. Though the onset was usually acute, most of the cases practically recovered in 24 to 36



hours. These cases as they occurred were removed from the dormitories to a sick room in charge of a nurse, where they were kept under careful observation, being visited daily at first, and later every 2-3 days, both by the institution doctor and by the Assistant Medical Officer. From the sick room the patients were drafted into a convalescent ward, where they were further observed till it was certain that the disease was not scarlet fever.

As evidence of the fact that there were two distinct diseases, one may cite two of the cases who, after recovering completely from the one disease, developed typical scarlet fever.

**MILLERSTON AND RIDDRIE.**—17 cases, 4 of which were secondary. 14 of these cases occurred in the months of August, September, and October, one family having 3 cases, and two other families 2 each. A visit of inspection was made to Millerston Public School by the Asst. Medical Officer, who examined all the children in the school who had been absent through minor ailments during the preceding month. 1 case of scarlet fever was found in the desquamating stage. Visits were then made to the affected households, and 2 further unnotified cases were discovered, both desquamating. These cases were isolated, and during the rest of the year only 3 cases occurred, and in 2 of these the probable source of infection was a cousin, who had recently been discharged from hospital and had a profuse otorrhœa.

1 case of scarlet fever was found two days after admission to hospital to have typhoid fever as well.

**Cadder.**—87 cases and 1 death. The cases were distributed as follows:—Chryston and Muirhead, 15; Stepps, 15; Garnkirk, 14; Gartcosh, 14; Gartloch, 6; Bishopbriggs, 7; Lenzie, 6; Bridgend, 4; Glenboig, 3; Moodiesburn, 2.

**CHRYSTON, MUIRHEAD, AND GARNKIRK.**—29 cases. These cases were fairly evenly distributed throughout the year, and included 6 "return" cases and 2 secondary cases. One family was particularly unfortunate in having 4 "return" cases. The first case occurred on January 21st, and was discharged from hospital on 1st March. Ten days later he developed otorrhœa and rhinorrhœa, and on 21st March he slept with a brother and sister. Two days later both these developed scarlet fever, and were removed to hospital, and on 4th April a fourth case occurred. These cases were discharged from hospital, one on the 3rd and the other two on 11th May, and on the 25th May the only other child in the household developed scarlet fever. In this case the child discharged on 3rd May had also a nasal discharge for 2-3 weeks after leaving hospital. The other 2 "return" cases



occurred seven and three days respectively after the return of a previous case from hospital; in the former a discharging ear, and in the latter a discharging nose being the probable source of infection—both developing after patients left hospital.

3 of the Chryston cases and 2 from Stepps were taken ill after being at the same children's party; and several of the cases were traced to school infection, children occupying the same bench at school being affected within a day or two of each other in three instances. In connection with this the Asst. Medical Officer visited Chryston School in October, and examined all in the Infant Department, and all others from affected families. 1 case was excluded from school as suspicious.

**GARTCOSH.**—14 cases. This includes 4 secondary cases and 1 infected in Hamilton. Most of the cases were during the first three months of the year, and in March the Asst. Medical Officer made a house-to-house visitation in the affected area, and discovered 2 unnotified cases in one family, while other 3 members of the same family were suspicious. About the same time 5 cases occurred in a small row of cottages at Gartloch Asylum—3 in one family. These children attended Gartcosh School, and were in daily contact with the children of the affected families.

**LENZIE.**—6 cases. 4 of these occurred at a dairy farm, 2 of the cases being "return" cases. 2 cases sickened on 4th January, and were removed to hospital, and discharged on 20th February. These children were kept apart from the other members of the household while in the house, but seem to have played quite freely with them out of doors. On 3rd March a third case occurred, and as a precautionary measure the first two children were readmitted to hospital along with the new case. These cases were discharged—1 on 5th April, and the other 2 on 14th May. Though every precaution was taken in the way of isolating these children at home, and in keeping their eating utensils separate, a fourth case occurred on the 18th of May, which was removed along with one of the recently discharged cases.

**BISHOPBRIGGS.**—1 fatal case, a child of 4, occurred in a series of 4 cases notified from Auchinairn during the month of May. A visit of inspection was made by the Asst. Medical Officer to Auchinairn School, and 6 children with suspicious signs were excluded.

**Carmunnock.**—2 cases; 1 death. The fatal case was a girl, aged 6, admitted to hospital with a mild attack of scarlet fever on the 15th October. On the 19th November, three days before she was to have been dismissed, she developed a malignant form of scarlet fever, and by request was sent home by ambulance on 23rd November, where she died on 1st December.



**Rutherglen.**—6 cases. 3 other cases occurred in children from Rutherglen while on holiday, 1 at Airdrie, and 2 at Girvan, and were dealt with by those authorities.

**RETURN CASES.**—It will thus be seen that there were 9 return cases of scarlet fever in 1913—4 in one family, 2 in another, and 1 each in 3 others. The percentage of return cases to cases admitted to hospital was thus 6·2.

### **Typhoid Fever.**

Cases, 3; no deaths.

Table D4 shows the annual prevalence since 1892. The figures for 1913, even allowing for the decreased population, are the lowest on record. In addition to these 3 cases, a further case occurred in a patient admitted to Lightburn Hospital for scarlet fever. 2 positive contacts were also discovered by the Asst. Medical Officer in the course of his investigations, and 1 of these was admitted to hospital for observation. All 3 cases were admitted to hospital, 1 of these going to Belvidere, Glasgow.

*Bacteriological Examinations.*—During the year 9 specimens of blood were received from medical practitioners for examination, and 3 of these proved positive to Widal's reaction. All 3 cases were notified. 12 specimens of blood and 2 specimens of fæces were taken by the Asst. Medical Officer, 2 of the former proving positive; and 3 specimens of blood, 1 positive, were sent from hospital.

The incidence of the disease according to parish and the probable source of infection will now be briefly considered.

Barony.	Cadder.	Rutherglen.	Carmunnock.
2*	1	1	—

\* Includes the case admitted to hospitals with scarlet fever.



TABLE D4.—TYPHOID FEVER.

YEAR.	NUMBERS.		RATES.		
	Cases.	Deaths.	Deaths per 100 Cases.	Cases per 1,000 Population.	Deaths per 10,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)
1892	34	4	11.7	1.0	1.2
1893	37	6	16.2	1.1	1.8
1894	23	3	13.0	0.6	0.8
1895	99	17	17.1	2.7	4.7
<i>Average,</i>	<i>48.2</i>	<i>7.5</i>	<i>15.5</i>	<i>1.4</i>	<i>2.2</i>
1896	39	6	15.3	1.0	1.6
1897	19	2	10.5	0.4	0.5
1898	53	3	5.6	1.3	0.7
1899	86	12	13.9	2.0	2.8
1900	40	8	20.0	0.9	1.8
<i>Average,</i>	<i>47.4</i>	<i>6.2</i>	<i>13.0</i>	<i>1.1</i>	<i>1.5</i>
1901	61	10	16.3	1.4	2.3
1902	38	6	15.7	0.9	1.4
1903	37	7	18.9	0.8	1.6
1904	44	4	9.0	0.9	0.8
1905	22	...	...	0.4	...
<i>Average,</i>	<i>40.4</i>	<i>5.4</i>	<i>13.3</i>	<i>0.9</i>	<i>1.2</i>
1906	56	4	7.1	1.2	0.8
1907	42	8	19.0	0.8	1.6
1908	38	2	5.2	0.7	0.3
1909	29	3	10.3	0.5	0.5
1910	36	...	...	0.6	...
<i>Average,</i>	<i>40.2</i>	<i>3.4</i>	<i>8.4</i>	<i>0.8</i>	<i>0.6</i>
1911	26	4	15.3	0.4	0.7
1912	10	2	20.0	0.1	0.3
1913	3	—	—	0.1	—

**Barony.**—Both cases occurred in Millerston.

A miner, Q., aged 42, became ill on August 25th with a chill, severe headache, and epistaxis after a wetting, and later with intense occipital headache lasting for days. He had no diarrhoea or abdominal symptoms. A specimen of blood taken on 10th September was negative, but as the patient did not improve a second specimen was



taken on the 17th and found to be positive, and the patient was removed to hospital, where the disease ran a very severe course. Two years before this man's wife and son had typhoid fever, but blood taken from these 2 and from 4 other children gave a negative Widal reaction in every case. As her blood was negative it was considered unlikely that Mrs. Q. was a carrier, and a specimen of fæces taken to complete the examination was found to contain no typhoid bacilli.

The second case was a girl, M., aged 13. She had been ill for a month with "catarrh of the left lung." This illness began with headache, sickness, and shivering, and later pain in the chest. On 7th September she was found to have a rash over the body, and was removed to hospital for scarlet fever, which was prevalent in Millerston at this time. The attack of scarlet fever was of a mild type, but on 11/9/13 a specimen of blood sent from the hospital gave a positive Widal reaction, and the case thereafter ran a typical typhoid course.

The Asst. Medical Officer, in endeavouring to trace the origin of this case, learned that this girl's grandmother died of typhoid fever 18 months previously, and was nursed by the girl's mother. The latter suffered shortly after for 2-3 weeks from diarrhoea and malaise, and thought she was going to take typhoid fever, but was never confined to bed. Since that time she had never had even slight illness, but her blood gave a positive Widal reaction. A specimen of fæces, however, was also examined, but no typhoid bacilli were found. This woman, however, may have been an intermittent carrier.

**Cadder.**—1 case.

This case, a girl, aged 11, was reported from Gartcosh on 17th December after a positive blood reaction had been obtained. The patient had been off school only one week suffering from headache, sore throat, slight abdominal pain, and later pneumonic symptoms. The family consisted of father and mother and five children, and blood was taken from each of these by the Asst. Medical Officer. All were negative save one, viz., a boy of 9. He had never had typhoid fever, nor had any illness resembling it, and had been perfectly well for months. As a precaution he was removed to hospital for observation as a contact, but was discharged in three weeks, as he had shown no symptoms whatever. The source of infection was not traced.

**Rutherglen** —1 case.

The case here was in a nurse, aged 28, who had been nursing typhoid fever cases in Belvidere Hospital, and came to Rutherglen on 15th April to nurse a sister who was ill. Next day she herself became ill, and a week later, as her blood gave a positive Widal reaction, she was notified and taken back to Belvidere. As she had been nursing for some time in the typhoid ward, she would almost certainly be infected there.



**Measles.**

In the following table, D6, attention should be directed mainly to columns numbered (3) and (6). These show the epidemic character of this disease by the great variation in the number of deaths registered each year, and in the death-rate per ten thousand of the population. The actual number of deaths has varied from nil to 50, and averaged over 20 per annum. During 1913, 2 children died from measles

TABLE D6.—MEASLES.			TABLE D7.—WHOOPING-COUGH.		
YEAR.	NUMBERS.	RATES.	YEAR.	NUMBERS.	RATES.
	Deaths Registered.	Deaths per 10,000 Population.		Deaths Registered.	Deaths per 10,000 Population.
(1)	(3)	(6)	(1)	(3)	(6)
1892	17	5.4	1892	3	0.9
1893	28	8.3	1893	11	3.3
1894	16	4.9	1894	13	3.8
1895	9	2.5	1895	11	3.0
<i>Average,</i>	<i>17.5</i>	<i>5.2</i>	<i>Average,</i>	<i>9.5</i>	<i>2.8</i>
1896	27	7.2	1896	23	6.1
1897	44	11.4	1897	30	7.8
1898	27	6.7	1898	16	3.9
1899	16	3.8	1899	15	3.5
1900	13	2.9	1900	23	5.2
<i>Average,</i>	<i>25.4</i>	<i>6.2</i>	<i>Average,</i>	<i>21.4</i>	<i>5.3</i>
1901	35	8.0	1901	58	13.4
1902	11	2.6	1902	13	3.1
1903	12	2.8	1903	22	5.1
1904	35	7.6	1904	20	4.3
1905	14	3.0	1905	25	5.4
<i>Average,</i>	<i>21.4</i>	<i>4.8</i>	<i>Average,</i>	<i>27.6</i>	<i>6.3</i>
1906	19	3.9	1906	31	6.4
1907	6	1.2	1907	51	10.2
1908	50	9.7	1908	16	3.1
1909	...	0.0	1909	34	6.5
1910	39	7.4	1910	5	0.9
<i>Average,</i>	<i>22.8</i>	<i>4.5</i>	<i>Average,</i>	<i>27.4</i>	<i>5.4</i>
1911	14	2.5	1911	28	5.1
1912	24	4.3	1912	18	3.2
1913	2	.6	1913	7	2.3

**Whooping-Cough.**

The observations made with regard to measles are equally applicable to whooping-cough. The statistics given in Table D7 show the epidemic character of the illness, and special attention should be directed to columns numbered (3) and (6). The annual number of deaths have ranged from less than 10 to over 50 during the last 20 years. 7 deaths occurred during 1913.

**Diarrhœal Diseases.**

The number of deaths due to diarrhœal diseases during the year was 7, giving a rate of 2·41 per 10,000 of the population, compared with 4·88 for 1912 and 6·09 for the quinquennium 1906-10. This is the lowest rate ever recorded in the Lower Ward. The distribution of the deaths was as follows:—Shettleston, 1; Cadder East, 3; Cadder West, 1; Rutherglen, 2. 6 of the cases were in children under 1 year old, and the other case was a child between 2-5.

TABLE D8.—DIARRHŒA.

Year.	Numbers.	Rates.	Year.	Number.	Rates.
	Deaths.	Deaths per 10,000 population.		Deaths.	Deaths per 10,000 population.
(1)	(2)	(3)	(1)	(2)	(3)
1892	17	5·47	1901	56	12·94
1893	26	8·0	1902	30	7·25
1894	13	3·81	1903	31	7·23
1895	27	7·57	1904	41	9·01
<b>Average,</b>	<b>20·7</b>	<b>6·21</b>	1905	19	4·17
1896	18	4·83	<b>Average,</b>	<b>35·4</b>	<b>8·12</b>
1897	28	7·30	1906	32	6·61
1898	33	8·22	1907	23	4·63
1899	44	10·46	1908	44	8·59
1900	31	7·06	1909	20	3·84
<b>Average,</b>	<b>30·8</b>	<b>7·57</b>	1910	36	6·81
			<b>Average,</b>	<b>31·0</b>	<b>6·09</b>
			1911	51	9·35
			1912	27	4·88
			1913	7	2·37



**School Closure.**—The following schools were closed on account of infectious diseases, certificates being signed by two members of the Local Authority under the Scotch Education Code, Article 30 :—

School.	Parish.	Disease.	Period of Closure.
Gartcosh Public School,	Cadder.	Scarlet Fever.	6th Jan. to 10th Jan.
Gartcosh Public School (Infant and Junior I. Classes.)	„	Measles.	17th Nov. to 5th Dec.

**Exclusion of Scholars.**—Special certificates of exclusion of scholars under the Public Health Act were granted, in accordance with the requirements of the Scotch Education Code, Article 30, for the following cases of infectious or contagious diseases :—Scarlet fever, 218; diphtheria, 75; measles, 48; whooping-cough, 45; ringworm, 7; scabies, 4; conjunctivitis, 1; mumps, 1; typhoid fever, 1; eczema, 1.

### Cerebro-Spinal Fever or Meningitis.

Two cases of this disease were notified during the year. The first was a child of 4 months, from Mavis Valley. This case was admitted to hospital, where lumbar puncture was performed, and the diplococcus intracellularis found in large numbers in the cerebro-spinal fluid. The second case was a child of 5 months, from Jellyhill, but in this case there was no bacteriological confirmation of the diagnosis. Both cases were fatal.

The following table shows the prevalence of the disease since 1906 :—

TABLE D5.—CEREBRO-SPINAL FEVER OR MENINGITIS.

Year.	Cases.	Deaths.
1906	14*	15
1907	49	31
1908	23	11
1909	7	3
1910	2	1
<i>Average,</i>	19	12·2
1911	2	1
1912	1	1
1913	2	2

\* Notifiable since August.

**Erysipelas.**—32 cases; 1 death. 10 of the cases occurred in institutions, and 9 were treated in hospital. All cases were in adults. In 20 the disease affected the face, in 7 the arm or leg, and in 5 the part affected was not stated.



**Puerperal Fever.**—4 cases; 2 deaths. The cases occurred in the following localities:—Bishopbriggs, 2; Garnkirk, 1; and Burnside, 1. In 3 of the cases the labour was conducted by a midwife, the doctor being called in only when urgent symptoms presented themselves.

**Ophthalmia Neonatorum.**—6 cases. The onset of the trouble varied from 4-8 days after birth. In 4 cases the disease was mild, in 1 moderately severe, and in 1 very severe. Further details are given under the report on the work of the Health Visitor. In 3 of the 6 cases smears of the discharge were examined microscopically, but in only 1 was the gonococcus proved to be the causal organism. This was in the case which showed most severe symptoms.

### Health Visitor.

Notifications of Births Act, 1907.—This Act was adopted by the District Committee, and its provisions came into force on the 12th July, 1909. The notifications received during 1913 were as follows:—

January, - - -	46	July, - - -	63
February, - - -	51	August, - - -	49
March, - - -	55	September, - - -	52
April, - - -	74	October, - - -	60
May, - - -	69	November, - - -	48
June, - - -	46	December, - - -	57
		TOTAL, - - -	670

The number of births registered was 727, the proportion of births notified to births registered being thus 72·1 per cent., the figure remaining practically the same as in the preceding two years. The figures since 1910 have been:—

	Births Notified.	Births Registered.	Percentage of Notifications to Registrations.
1910, ...	1,265	1,599	79·1
1911, ...	1,641	1,512	92·1
1912, ...	1,388	1,466	91·2
1913, ...	670	727	92·1

**Work of Health Visitor.**—With the annexation of Shettleston and Tollcross the most fruitful source of work for the Health Visitor was removed, but in 1913 a large scattered area which had previously been left untouched was opened up and much good work carried out. This new area comprises Stepps, Chryston, Muirhead, Bridgend, Gartcosh, and Glenboig. The scattered nature of this new area and the comparatively small population, compared with the populous centres annexed has rendered the work of visitation much more difficult than



in former years, and though the number of first visits paid is inevitably considerably less, the actual work done is probably more. Certainly no true comparison can be drawn between the figures for 1913 and those of the preceding three years. In breaking this new ground where no health visiting had previously been done the nurse had to face up to all the old difficulties she encountered when she first started work in 1909, particularly the ignorance, apathy, and prejudice shown by some of the mothers. Prejudice against "official" visits disappears very quickly once the benefits of skilled help are recognised, but there is in this new area, as in the older area, a section of the mothers so indifferent to the welfare of their infants, or so ignorant of the first principles of ordinary domestic hygiene, and so unreceptive of information given on this subject, that it requires constant visitation by the nurse to ensure even a measure of care for the infants. Fortunately in the minds of the most careless mothers there is a certain amount of wholesome dread lest the conditions found in the home by the Health Visitor should be reported to a higher authority, and as nurse makes unexpected visits this by itself is often very useful.

From Table G it will be seen that nurse made 1,686 visits in connection with this branch of her work, the majority of these being in Chryston and Muirhead, Shettleston, Rutherglen, and Lambhill. 442 first visits were paid, but in 15 of these cases the children were still-born. Of the remaining 427, 395 or 92·5 per cent. were at the first visit found to be breast-fed, while other 8 had breast-feeding supplemented by either bottle-feeding or patent food. 16 were fed with cow's milk alone, and 8 with patent foods alone.

Some of the old abuses in infant rearing linger in spite of all that has been done to educate the mothers. Tube bottles are still in evidence, but particularly so in the newly opened districts, and will probably remain so long as they are on sale at the medical halls of the practitioners. Dummy teats, too, are still in widespread use, and the still more pernicious habits of giving stimulants or soothing powders to keep the children quiet during the mother's busy hours persist in many places. Cochineal three to six times weekly in teaspoonful doses for "hives" is still the never-failing prescription of the vast majority of the midwives and handy-women practising in the area. A special difficulty during the summer and autumn months, particularly in the rural parts, arises where the mothers go out to farm work. Of necessity the children are thus deprived of their natural food, and usually are entrusted to the care of a neighbour, so that even the artificial food they get is haphazard. Often, too, the mothers refuse to tell where the children are at such times, so that they are deprived at this critical time of the assistance of the Health



Visitor, who, however, realising the importance of keeping in touch with the cases at such a time, is most assiduous in her endeavours to locate the children, and in many cases is successful.

In connection with the work of the Health Visitor, the tables relating to Infant Deaths in Part I. of this report, at pages 342 and 347, and the report on Diarrhœal Diseases in Part II., at page 366, should be consulted.

6 cases of ophthalmia neonatorum were treated during the year. 5 of these were early cases, and readily responded to efficient treatment, the average number of visits required for these 5 cases being 8. All these made complete recoveries. Several other cases of discharge from the eyes were discovered by nurse in her routine duties, and these would doubtless have become serious but for prompt treatment. The other case of ophthalmia neonatorum was very severe. Though ophthalmia neonatorum is compulsorily notifiable, it was disappointing to find that no notification of this case was received from the doctor in attendance. It was notified from Glasgow Eye Infirmary on 27th October, where the child had been sent after the disease had been running on for 21 days, and by this time both corneæ were ulcerated, and there was very profuse discharge and œdema of the eyelids. Smears from the pus showed the presence of many gonococci. This case required and received very prolonged treatment; for the first 14 days it was visited twice daily, and then daily for other 27 days, and thereafter every second or third day. In all 59 visits were paid to this child, and as each visit entailed a walk of  $2\frac{1}{2}$  miles over a rough path, the amount of time spent was even more than the number of visits would indicate. In spite of the fact that an absolutely hopeless prognosis was given at hospital with regard to this case, nurse has the satisfaction of knowing that her treatment has been the means of preserving a fair degree of sight in one eye.

The following table shows the number of visits paid in connection with infectious or contagious diseases:—

Pulmonary Tuberculosis, - - - - -	82
Ophthalmia Neonatorum, - - - - -	99
Ringworm, - - - - -	30
Scabies, - - - - -	15
Meningitis, - - - - -	14
	<hr/>
Total, - - - - -	240
	<hr/>

The actual number of visits paid in these cases are somewhat misleading, as the time spent at any one visit varies so considerably. Many of the visits to cases of pulmonary tuberculosis were made in connection with patients in the very advanced stages of the disease.



These were for the most part quite helpless, and entailed much heavy nursing on the part of the Health Visitor, besides occupying much of her time.

TABLE G.—BIRTHS NOTIFIED DURING 1913, UNDER THE NOTIFICATION OF BIRTHS ACT, 1907.—VISITS MADE BY HEALTH VISITOR, &c.

MONTH.	BIRTHS.		First Visit.	REVISITS FOR		Stillborn.	METHOD OF FEEDING INFANTS.					IN ATTENDANCE.		
	Notified.	Registered.		Infant.	Mother.		Breast.			Cows' Milk.	Patent Food.	Doctor.	Midwife.	Handy-woman.
							Alone.	With Bottle.	With Food.					
1913.														
January, ...	46	64	36	109	...	3	29	...	...	3	1	15	15	6
February, ...	51	63	42	114	...	3	32	...	...	3	4	21	18	3
March, ...	55	54	29	128	...	...	29	...	...	...	...	13	11	5
April, ...	74	67	49	144	...	1	45	...	...	2	1	26	20	3
May, ...	69	70	46	129	...	1	44	...	...	1	...	21	19	6
June, ...	46	65	40	162	...	...	38	2	...	...	...	18	14	8
July, ...	63	58	14	9	...	...	13	...	1	...	...	1	12	1
August, ...	49	61	38	44	...	1	33	1	1	2	...	12	17	9
September, ...	52	49	35	64	...	1	31	1	...	2	...	10	20	5
October, ...	60	75	51	110	...	2	47	2	...	...	...	23	19	9
November, ...	48	46	31	108	...	2	25	...	...	3	1	12	15	4
December, ...	57	55	31	123	3	1	29	...	...	...	1	17	11	3
Total, ...	670	727	442	1,244	3	15	395	6	2	16	8	189	191	62

Infant Period.—The infant death-rate for each year since 1891 is given in Table A. The average annual rate for the last two decennial periods was 125·2 and 110·8. For the year 1913 the rate was 81·1, as compared with 103·49 for 1912. This 1913 figure is the lowest infantile death-rate on record, the previous lowest figure being 96·4 in 1906. The removal of Shettleston and Tollcross, which besides having the highest birth-rate in the area had also the highest infantile mortality, partly accounts for the large decrease in the death-rate. 59 deaths in all were recorded, and of these 14 occurred in the first week, 19 during the first month, and 30 during the first three months of life.

INFANT DEATHS CLASSIFIED IN GROUPS ACCORDING TO CAUSE.—NUMBER  
IN EACH GROUP COMPARED WITH THAT IN THE PRECEDING TWO YEARS.

	1913.		1912.
	No. of deaths.	Rate per 1000 births.	Rate per 1000 births
1. Premature Births, 11 ; Congenital Mal- formations, 3 ; Injury at Birth, 1 -	15	20·6	33·7
2. Diarrhœa, 6 ; Atrophy, Debility, and Marasmus, 7, ... ..	13	17·9	23·2
3. Pneumonia, 6 ; Bronchitis, 5, ...	11	15·1	20·8
4. Tuberculosis—Pulmonary, 1 ; Menin- geal, 3 ; Abdominal, 2, ... ..	6	8·2	3·0
5. Meningitis, 2, ... ..	2	2·7	2·4
6. Whooping Cough, 2 ; Diphtheria, 3 ; Cerebro-Spinal Fever, 2, ... ..	7	9·6	12·2
7. Violence, 1 ; overlying, 1, ... ..	2	2·7	0·6
8. Other Causes, 3, ... ..	3	4·1	8·0
Total, ... ..	59	81·1	103·4

### Hospitals and Sanatoria.

The number of cases removed to hospital during the year was 275. The following Table F, in which the cases are classified according to the disease from which the patient suffered, shows that 71 suffered from Diphtheria, 147 from scarlet fever, 4 from typhoid fever, 9 from erysipelas, 1 from puerperal fever, 34 from phthisis, 8 from measles, and 1 from cerebro-spinal fever.

The Lightburn Joint-Hospital expenditure for the year ending Whitsunday, 1913, was £4,606 0s. 5d. The cost rate of maintenance of each patient was £5 5s. 1d., as compared with £5 0s. 1d. in the preceding year.



TABLE F.—HOSPITAL AND SANATORIUM STATISTICS FOR THE YEAR 1913.

HOSPITAL.	Cases in Hospital at the beginning of year.	Admitted during year.	Dis-CHARGED.		Cases remaining in Hospital at the close of year.	NATURE OF CASES ADMITTED DURING YEAR.								
			Recovered.	Died.		Diphtheria.	Scarlet Fever.	Typhoid Fever.	Erysipelas.	Puerperal.	Tuberculosis.	Measles.	Whooping-cough.	Cerebro-spinal Fever.
Lightburn,	26	256	241	8	33	71	* 146	3†	9	1	17	8	...	1
Ruchill,	...	1	1	...	...	...	1	...	...	...	...	...	...	...
Belvidere,	...	1	1	...	...	...	...	1	...	...	...	...	...	...
Upperton,	...	8‡	2	1	5	...	...	...	...	...	8	...	...	...
Shotts,	...	3‡	2	...	1	...	...	...	...	...	3	...	...	...
Motherwell	...	2‡	2	...	...	...	...	...	...	...	2	...	...	...
Blantyre,	...	2‡	1	...	1	...	...	...	...	...	2	...	...	...
Stonehouse	...	1	...	...	1	...	...	...	...	...	1	...	...	...
Bellshill,	...	1	...	1	...	...	...	...	...	...	1	...	...	...
TOTAL,	26	275	250	10	41	71	147	4	9	1	34	8	...	1

\* Includes 3 Re-admissions.

† Includes 1 Contact Case.

‡ Lightburn Hospital was closed for Tuberculosis on September 9th, and 6 cases were transferred; 2 to Shotts, 1 to Motherwell and then to Blantyre, 1 to Motherwell, 1 to Blantyre, and 1 to Upperton. These cases are included in each institution.

**Institutional Accommodation for Tuberculosis.**—A scheme for the prevention, detection, and treatment of tuberculosis was prepared in accordance with the instructions contained in circular No. III., 1912, of the Local Government Board, and was approved by the Local Authority. Negotiations with the other County Sanitary Authorities and with the Local Government Board were entered into and continued during the greater part of 1913. The Local Government Board's decision was only received on April 29th, 1914, and was in the following terms:—

“ With reference to previous correspondence regarding the tuberculosis scheme for the Lower Ward District of the County of Lanark, I am now directed to express the Board's provisional approval thereof.



The scheme as so far submitted contains the following provisions, and the Board defer giving final approval to the scheme until such of the undermentioned matters as are still under consideration are settled :—

“ *Sanatorium and Work Colony.*—This institution will be provided at Hairmyres by the Middle Ward District Committee, and the Lower Ward District Committee will make arrangements to send suitable cases there.

“ *Hospital.*—A hospital of 28 beds will be provided. Particulars of the site and plans should be forwarded in terms of the Board's Hospital Memorandum, together with a statement showing the medical and nursing staff to be provided.

“ Arrangements will be made with the Middle Ward District Committee for the treatment of cases of non-pulmonary tuberculosis in the County Hospital, Motherwell.

“ As regards the hospital beds provided by the Lower Ward District, they will be available for the Middle and Upper Wards, but the Lower Ward shall have first claim on them.

“ *Dispensary.*—I am to enquire if any dispensary is to be provided; if so, particulars of site, plans, medical and nursing staff should be furnished.

“ *Tuberculosis Officers.*—Dr. Wilson is the Chief Administrative Tuberculosis Officer, and Dr. Scroggie is the Senior Tuberculosis Officer, while other five Tuberculosis Officers will be appointed under arrangement with the other two districts. These five Tuberculosis Officers will be available for work in all three districts as may be directed from time to time by Dr. Wilson.

“ *Tuberculosis Nurse.*—One Nurse Health Visitor will be available.

“ *Treatment of Cases at Home.*—The Tuberculosis Nurse will be available for treatment and supervision of cases at home, but I am to enquire what arrangements are proposed for supplying attendance and medicine to such cases as are not provided for by the Insurance Committee. In this connection reference is made to the Local Authority's powers under Section 66 (1) (d) of the Public Health Act, 1897.

“ *Shelters.*—These will be provided in suitable cases.

“ *Poor Law Cases.*—Treatment of cases hitherto dealt with by the Parish Councils will be undertaken by the Local Authority. If any



such cases are to be treated in the poorhouses under arrangement with the Parish Council owning same, the approval of the Board should be obtained to the poorhouses selected for this purpose.

“ In this connection I am to point out that insured persons or their dependants recommended by the Insurance Committee for sanatorium benefit, and not in receipt of Poor Law relief, cannot be treated in any poorhouse belonging to or managed by a Parish Council, even although the arrangements for treatment are made by the Local Authority.

“ *General Measures.*—Bacteriological work will be done in the County Bacteriological Laboratory at Hamilton, while general preventive measures, such as disinfection, distribution of disinfectants, spit cups, &c., will be carried out as occasion requires.

“ I shall be glad to learn in due course when further progress towards the completion of the scheme has been made.

“ This letter is written with the concurrence of the Scottish Insurance Commissioners.”

The work done throughout the County during the year is fully detailed in a special report by the Tuberculosis Officers, and need not be further referred to here. As regards the institutional accommodation to be provided in the Lower Ward area, negotiations are still proceeding.

### III.—GENERAL SANITATION.

#### Housing.

**Public Health Act and Building Bye-laws.**—In terms of the Public Health (Scotland) Act, 1897, the word “ house ” means a dwelling-house, and includes schools, also factories and other buildings in which persons are employed.

The plans lodged under the Building Bye-laws numbered 24. The usual statistical Tables I., II., and III. are given in the Annual Report of the District Sanitary Inspector. Table I. shows the number of plans lodged month by month, classified according to the parish in which they were to be erected. Table II. shows the nature of the buildings to be erected, and may be summarised thus:—The erection of new buildings—houses and shops, 8; workshops, 5; alterations in the mode of occupancy of existing buildings—houses and shops, 5; total plans, 5. Table III. shows the number of houses classified according to size, and the parish in which they were to be erected.

The number of houses to be erected as shown on the plans lodged during 1913 numbered 28. The figure for 1912 was 90, the large decrease being principally due to the annexation by Glasgow of Shettleston and Tollcross.

**One-Apartment Dwellings.**—The following Table J shows the houses erected each year classified according to size, and in the last column the percentage proportion of one-apartment houses is given.

TABLE J.—SHOWING NUMBER AND SIZE OF HOUSES SET FORTH IN PLANS SUBMITTED UNDER BUILDING BYE-LAWS DURING EACH OF THE FIFTEEN YEARS, 1898-1913.

YEAR.	One Apartment.	Two Apartments.	Three Apartments.	Four Apartments.	Five Apartments and upwards.	Total Houses.	Percentage Proportion of One-Apartment Houses.
1898, -	95	511	140	26	33	805	11·8
1899, -	93	294	127	35	85	634	14·6
1900, -	7	288	82	21	41	439	1·5
1901, -	99	620	255	2	26	1,002	9·8
1902, -	105	428	170	36	91	830	12·6
1903, -	218	599	135	35	117	1,104	19·7
1904, -	29	98	204	115	130	576	5·0
1905, -	66	202	180	34	180	662	9·9
1906, -	85	278	62	22	218	665	12·7
1907, -	38	154	72	35	83	382	9·9
1908, -	45	188	34	21	78	366	12·2
1909, -	1	110	8	19	44	182	0·5
1910, -	2	98	33	23	17	173	1·1
1911, -	4	54	56	2	22	138	2·9
1912, -	15	41	16	9	9	90	16·6
1913, -	1	12	3	9	3	28	3·6



The following table, extracted from Vol. I., Part 24, page 1539, of the Census Report, 1911, shows the number of occupied houses, with the number of windowed rooms, classified according to parish:—

Parish.	NUMBER OF WINDOWED ROOMS							Total.
	One.	Two.	Three.	Four.	Five.	Six.	Seven and up.	
Glasgow,* -	1,305	3,401	1,015	362	307	138	269	6,797
Cadder, -	345	1,074	369	229	318	106	260	2,701
Carmunnock, -	10	59	36	16	11	8	27	167
Govan,* -	5	16	15	...	2	...	17	55
Rutherglen, -	194	385	54	13	19	60	93	818
Total, -	1,859	4,935	1,489	620	657	312	666	10,538
Percentage, -	17·65	46·88	14·14	5·889	6·24	2·96	6·23	...

\* Figures for the Area previous to annexation.

**School Buildings.**—In 1912 plans were approved by the District Committee for a new school at Gartcosh under the Cadder Parish School Board, and this has now been completed and opened. Meantime the previously existing buildings are being entirely reconstructed.

At Lochfaulds School, under the same Board, the sanitary accommodation has been greatly improved by the introduction of water-closets to replace the pail privies formerly in use.

The design of school buildings, with regard specially to cross ventilation in large schools with central halls, is specially referred to in the Upper Ward portion of this report.

**Housing Acts.**—A circular was issued by the Local Government Board, dated 21st November, 1911, referring to Article V. of the Housing (Inspection of District) Regulations, which requires the Medical Officer of Health, or other officer designated by the Local Authority to act under these Regulations, to report annually to the Board with regard to the matters prescribed therein. Many inspections were made and improvements carried out in dwellings, especially with regard to the provision of domestic and sanitary conveniences, but most of the work was carried through under the Public Health Act.

The following tabular statement, prepared by the District Sanitary Inspector, summarises the inspections made, and action taken:—

HOUSES DEALT WITH FROM 15TH MAY, 1911, TO 15TH MAY, 1912,  
AND FROM 15TH MAY, 1912, TO 15TH MAY, 1913.

	1911-12.	1912-13.	1913-14.
Number of dwelling-houses inspected, -	30	92	84
Houses found unfit for habitation, -	28	29	83
Representations made to Local Authority, -	—	—	—
Closing Orders made, -	—	—	—
Defects remedied after making Closing Orders, —	—	—	—
„ without „ „	10	4	76
Houses closed voluntarily, -	13	3	11
Remedies in progress or arranged for, -	68	85	36
Demolished, -	7	—	—

During the year negotiations were in progress between the Lower Ward District Committee, the Middle Ward District Committee, and the Town Council of Rutherglen for the promotion of a town planning scheme, to include an extensive area comprising the whole of the landward portion of Rutherglen Parish and a large portion of Cambuslang Parish. The scheme has been finally adjusted, and negotiations are proceeding during the current year.

**Tents, Vans, and Sheds.**—In the course of the year 14 inspections were made by the Sanitary Inspector.

**Workshops.**—The number of workshops on the register at the close of the year was 94; this includes 3 retail bakehouses.

**Outworkers.**—Under Section 107 there were received from the Sanitary Authorities of Glasgow and others 7 addresses of outworkers engaged within the Lower Ward in making wearing apparel. 2 of these were located in Shettleston, 1 in Chryston, 2 in Bishopbriggs, and 2 in Cambuslang.

Two inspections of outworkers' premises were made, and these found in order.



## 1.—INSPECTIONS MADE BY THE SANITARY INSPECTORS.

PREMISES.	NUMBER OF—		
	Inspections.	Written Notices.	Prosecutions.
Factories, - - - - - (Including factory laundries.)	38	...	...
Workshops, - - - - - (Including workshop laundries.)	52	...	...
Workplaces, - - - - - (Other than outworkers' premises included in Part 3 of this report.)	13	...	...
Total, - - - - -	103	...	...

## 2.—DEFECTS FOUND.

PARTICULARS.	NUMBER OF DEFECTS.			Number of Prosecutions.
	Found.	Remedied.	Referred to H. M. Inspector.	
Nuisances under the Public Health Acts :—				
Want of cleanliness, - - -	...	...	...	...
Want of ventilation, - - -	...	...	...	...
Want of drainage of floors, - -	...	...	...	...
Other nuisances, - - -	...	...	...	...
Sanitary Accommodation, { Insufficient, - { Unsuitable or { defective, - { Not separate for { sexes, - - -	...	...	...	...
Total, - - - - -	...	...	...	...

## 3.—HOME WORK.

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Addresses of outworkers forwarded to other Councils, ...	...	...	...	—
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Inspections of outworkers' premises, ...	...	...	...	2
Outwork in unwholesome premises, ...	...	...	...	—
Outwork in infected premises, ...	...	...	...	—

## 4.—REGISTERED WORKSHOPS.

Total number of workshops on register at end of 1913 was 94. For detailed list see Table H.

## 5.—OTHER MATTERS.

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

Failure to affix Abstract of the Factory and Workshop Act (S. 133).

A detailed tabular statement, prepared from the register of workshops, classified according to the trade or industry, is here given, along with a note of the number of employees :—

TABLE H.—LIST OF WORKSHOPS, INCLUDING RETAIL BAKEHOUSES AND LAUNDRIES, CLASSIFIED ACCORDING TO THE NATURE OF THE INDUSTRY.

PARISH AND LOCALITY.	Dressmakers and Milliners.	Tailors.	Bakers.	Shoemakers.	Blacksmiths.	Joiners.	Plumbers.	Laundries.	Painters.	Cartwrights.	Other Manufacturers.	Total.	
<i>Barony—</i>													
Shettleston, - - -	...	...	...	1	...	...	...	1	...	...	...	2	
Lambhill, - - -	2	...	...	1	1	...	...	...	...	...	...	4	
<i>Cadder—</i>													
Muirhead and Chryston,	5	3	1	4	1	3	2	...	2	...	10	31	
Bishopbriggs, - - -	4	...	...	1	2	2	2	...	...	1	7	19	
Mollinsburn, - - -	...	1	...	...	1	1	...	...	...	...	1	4	
Auchinloch, - - -	...	...	...	...	...	1	...	...	...	...	...	1	
Lenzie, - - -	2	...	1	2	1	2	1	...	1	...	4	14	
Stepps, - - -	...	...	...	2	...	1	2	1	1	...	...	7	
Garnqueen, - - -	...	...	1	1	...	...	...	...	...	...	...	2	
<i>Carmunnock, - - -</i>	...	1	...	...	1	2	...	...	...	1	...	5	
<i>Govan, - - -</i>	...	...	...	...	...	...	...	...	...	...	...	...	
<i>Rutherglen, - - -</i>	...	...	...	2	...	...	...	...	...	...	3	5	
Total Workshops, -	13	5	3	14	7	12	7	2	4	2	25	94	
EMPLOYEES.	Females.	19	3	..	1	...	...	...	1	...	115	153	
	Males.	...	5	12	10	12	50	19	3	9	1	80	201
	Total.	19	8	12	11	12	50	19	17	10	1	195	354



### Special Districts.

The extent to which local administration contributes to the advancement of general sanitation may be realised from the number of districts formed for special purposes—water supply, drainage and sewage disposal, scavenging, and lighting. The number of districts so formed is shown in the following tabular statement, where a blank space in the assessment column will be understood to indicate that no district has been formed for the special purpose indicated.

TABLE I.—LIST OF **Special Districts** IN THE **Lower Ward**, AND THE RATES LEVIED FOR THE YEAR 1913-1914 (AS ASCERTAINED FROM THE COUNTY CLERK).

District.	Parish.	RATE OF ASSESSMENT PER £.				
		Water.	Drainage.	Sewage Purification.	Lighting.	Scavenging.
†Shettleston and Tollicross,	Glasgow,	{ Levied by } { Glasgow, }	† 1 $\frac{6}{12}$ d.	5 $\frac{8}{12}$ d.	‡ 3 $\frac{9}{12}$ d.	5 $\frac{6}{12}$ d.
Bishopbriggs, -	{ Glasgow & Cadder, }	1s. 0 $\frac{1}{2}$ d.	1s. 0 $\frac{6}{12}$ d.	—	3 $\frac{5}{12}$ d.	4d.
South Lenzie, -	Cadder,	1s.	5d.	—	5 $\frac{5}{12}$ d.	3 $\frac{1}{2}$ d.
Stepps, -	do.,	10d.	8 $\frac{6}{12}$ d.	—	4 $\frac{6}{12}$ d.	2 $\frac{1}{2}$ d.
†Millerston, -	Glasgow,	{ Levied by } { Glasgow, }	† 1 $\frac{6}{12}$ d.	5 $\frac{8}{12}$ d.	4 $\frac{6}{12}$ d.	—
Carmunnock, -	Carmunnock,	1s. 3d.	1s. 2d.	—	—	—
*Chryston and Muirhead,	Cadder,	10d.	1s. 2d.	—	4 $\frac{6}{12}$ d.	3 $\frac{1}{2}$ d.
Lambhill, -	Glasgow,	{ Levied by } { Glasgow, }	—	—	4 $\frac{6}{12}$ d.	—
Rutherglen, -	Rutherglen,	do.,	2 $\frac{6}{12}$ d.	4d.	4d.	2 $\frac{5}{12}$ d.

\* These two villages are within the South Cadder Special Water Supply District, which, with the North Cadder Special Water Supply District, embraces almost the whole parish of Cadder. The rates levied in these districts are—in North Cadder District, 1s. 0 $\frac{1}{2}$ d.; and in South Cadder District, 10d.

† In addition to the Drainage Rate of 1 $\frac{6}{12}$ d. there is also a rate of 2 $\frac{1}{12}$ d. for Purification Purposes in the Southern portion of the Barony Drainage District.

‡ Lighting, - - - 3d.  
Electric Lighting, - -  $\frac{6}{12}$ d.  
3 $\frac{9}{12}$ d.



If the districts be classified according to the number of purposes for which local administration and taxation are applied, we obtain the following results :—

W., D., S., L.,	-	Bishopbriggs, Chryston and Muirhead, South Lenzie, Stepps.
*D., S., L.,	-	Shettleston and Tollcross, Rutherglen.
W., D.,	-	Carmunnock.
*L.,	-	Linthouse, Lambhill.

\* These districts are within the area supplied with water by the City of Glasgow.

### Water Supplies.

*North Cadder.*—Further complaints were received during the year of the insufficiency of the supply to St. Mary's Industrial School at Kenmure. A suggestion has been made by the Engineers to increase the pressure by connecting the supply to the high-pressure mains at Colston. This would involve the laying of a considerable length of piping, which the directors of the Industrial School are considering.

*South Cadder.*—Complaint was received regarding the supply to Frankfield House, situated in an isolated locality within this special district. The water supply is presently obtained from a deep well in the garden, and a sample was taken for analysis. The chemical results, stated as parts per 100,000, were as follows :—Chlorides as Cl., 6.0; nitrate as nitrogen, .476; nitrites, present; free ammonia as nitrogen, .040; albuminoid ammonia as nitrogen, .032; oxygen absorbed, .98; colour after filtration, 3.8; and alkalinity, 4.7. The water was reported as unfit for domestic use. On the owners being communicated with on the subject, a letter was sent to the District Committee enquiring if the Committee would lay, or contribute to the laying of, a connecting pipe between the nearest main and the house, and grant a supply of water. The Committee, after considering a report by the Water Superintendent, to the effect that Frankfield House was 605 yards distant from the main, declined to lay or contribute to the expense of laying a connecting pipe. The well complained of has since been cleaned out by the owner, and extensive repairs will be carried out on the house during the current year, which may include the provision of a wholesome water supply.

### Drainage and Sewage Disposal.

*Chryston and Muirhead.*—In order to provide for the drainage of the north-west end of the village of Chryston, regarding which complaint was made as to nuisance caused by the bursting of field drains, through which the sewage passed on to the lands of Lanrigg,



the construction of a branch sewer has been arranged so that this drainage will be diverted into the main sewer in the Chryston Road and conveyed to the sewage purification works. In connection with complaint of pollution of the Drumgavil ditch by discharges from the septic tank receiving the sewage of a portion of the district which was not possible to lead to the main drainage system, the piping of the ditch was carried out during the spring, thus removing cause for complaint.

*Glenboig.*—The question of forming a special drainage district to include the whole of the village, which is within the Lower and Middle Wards, is still under the consideration of a Joint-Committee of both wards. Pending the carrying out of a scheme, a watering-trough has, at the expense of the Joint-Committee, been provided for watering cattle on Garnqueen Farm, the occupier having again complained of being deprived of the use of the stream owing to the serious pollution by the village sewage.

*Stepps.*—With the view to improve the distribution of the sewage at the purification works an alteration was made on the distribution trays of the filters, so as to prevent ponding up of the liquid, which gave rise to a deposit of polluting matter. Similar alterations were effected at the works at Bishopbriggs and Chryston. The question of better distribution of the sewage at all three works is one which should be dealt with by the Committees in charge of the works.

*Over Possil.*—In connection with the disposal of sewage from dwelling-houses on Over Possil Estate, Lambhill, the question of the pollution of the ditch receiving the sewage was the subject of special inspection and report. An endeavour is being made to induce the owner of the properties to arrange for the connection of the sewage outfall with the private sewers of the adjoining estate. It is understood that the matter is receiving the serious consideration of the proprietor responsible for the condition of the ditch.

*Old Auchinairn.*—The drainage from the properties of this village (22 in all) and that of a large piggery situated immediately to the west of the dwelling-houses was the subject of report, on account of serious pollution of the Bishopbriggs and Caley Burn, due mainly to the drainage from the piggery. In order to minimise pollution, the owners of the piggery had a large tank provided, which is cleaned out regularly every week. The results of subsequent inspection show that while an improvement has been effected there is still serious pollution.

*St. Mary's School, Kenmure.*—The disposal of the sewage of this school was found to be affecting the Bishopbriggs Burn, and was reported on by the Sanitary Inspector with a view to effect a connection with the Bishopbriggs Special Drainage District main outfall sewer.



### Scavenging.

There are six special scavenging districts within the Lower Ward area. What remains of the district previously known as Shettleston and Tollcross Special Scavenging District is now called North Shettleston Special Scavenging District, and includes Budhill, Springboig, and part of Sandyhills.

With regard to the districts of Rutherglen (landward), Bishopbriggs and Auchinairn, South Lenzie, Stepps, and Chryston and Muirhead, the removal of household refuse has been regularly and satisfactorily carried out. The substitution of portable ashbins for ashpits has been steadily increasing in all the districts.

Inspection was made by the County Medical Officer in the month of June of the Glasgow Corporation refuse disposal operations in the Robroyston area, and the following notes were made:—

Just beyond Robroyston Station on the Caledonian Railway there is a disused mineral railway branch which passes towards a disused coal pit. This railway is about one mile long, and is utilised for tipping operations more or less throughout its whole course. On the date of inspection a considerable amount of tipping was going on. On the moss lands near Bogside Farm steadying a matter of twenty or more railway trucks were standing, and there is a tipping face on the north side of the railway for at least a quarter of a mile, showing a considerable variety of refuse, from disused metal ware to highly combustible organic material. On the south side of the railway there was a considerable deposit of what seemed to be sludge refuse from Corporation Sewage Works. A distinctly offensive odour was smelt all along this tipping surface, and a considerable flock of crows were busy picking at one part of the heap.

Towards the end of the mineral railway, near Robroyston coal pit (disused), there is a considerable extent of quarry hole that is being filled up. This quarry hole is within 150 yards of Hillhead Cottages and the public highway leading from Old Auchinairn to Robroyston. Offensive odours have frequently been complained of here during summer weather. At the time of inspection eleven trucks of City refuse were being unloaded by ten men. The refuse contained a considerable quantity of objectionable material liable to decompose. It was tipped direct into the quarry hole, which contained a considerable amount of dark liquid. The surface of the water was for a considerable area covered with floating material, such as corks. Going along the refuse face one saw straw, paper, ashes, and disused household articles. There was also a distinct odour felt.

The attention of the City Sanitary Authorities was called to the matter.



**Nuisances.**

In North Mount Vernon certain sewer manholes were complained of as giving off offensive odours. Enquiries were made by the Sanitary Inspector, and a report was submitted to the Committee recommending that three manholes in Mansion House Road should be closed and a ventilating shaft erected.

In Lenzie district similar complaints were received, and it was agreed to close up the openings in the covers of two manholes. A ventilating shaft was previously erected at the head of this section of the sewer.

Complaints were received from the occupiers of two villa residences, one in Springboig, Shettleston, and one in Cardowan Drive, Stepps, as to dampness and dry rot in the structures, and offensive odours caused thereby. Special inspections and enquiries were made by the Sanitary Inspector and remedial measures carried out.

**Dairies.**

**Veterinary Inspection of Dairy Herds.**—By arrangement with the County Executive Committee, who have appointed a veterinary surgeon devoting his whole time to the work, the inspection of dairy herds was carried out as formerly. The results of these inspections during the season ending March, 1914, are given in the following table:—

**TABULAR STATEMENT, SHOWING RESULTS OF THE VETERINARY INSPECTION OF DAIRY HERDS IN THE LOWER WARD DISTRICT, CLASSIFIED ACCORDING TO PARISH.**

PARISH.	Herds.	Cows.	Suspected Tubercle.						Cows with Abnormal Conditions of Udders.						
			Samples of Milk.	Result.				Tubercle.	Mammitis.	Eruption on Teats.	Induration N.T.	Indurated Teats.	Atrophy.	TOTAL.	
				Smear.		Biological.									
				+	-	+	-								
Barony, -	23	485	1	...	1	...	1	...	5	2	14	11	22	43	
Cadder, -	79	1,430	8	1	7	1	6	2	13	6	36	34	59	116	
Carmunnock, -	22	618	2	1	1	...	...	1	6	7	15	8	30	59	
Rutherglen, -	8	114	1	...	1	...	1	...	...	1	4	...	10	15	
Total, -	132	2,647	12	2	10	1	8	3	24	16	69	53	121	233	

When the smear proved positive no biological examination was done.

The total figures for abnormal conditions of udders include 9 cases of suspected tubercle which gave negative results. In one of these no biological test was done.



This shows that 12 samples of milk were taken from suspected udders, and that 3 of these gave positive results. So soon as these results were obtained the owners were communicated with.

#### DISEASES OF ANIMALS ACTS.—TUBERCULOSIS ORDER, 1913.

Article III. (1) of the Tuberculosis Order runs:—"A veterinary surgeon or veterinary practitioner who in his private practice is employed to examine any animal, and is of opinion that the animal, if a cow, is suffering from tuberculosis of the udder, indurated udder, or other chronic disease of the udder, or, if a bovine animal, is suffering from tuberculosis with emaciation, shall with all practicable speed give notice of the existence or suspected existence of such disease to an Inspector to the Local Authority, who shall transmit the information to the Local Authority, who, if not themselves the Sanitary Authority, shall inform that Authority."

Article IV. (1) of the Tuberculosis Order runs:—"Where a Local Authority, by reason of information received under the preceding Articles or otherwise, have reasonable ground for supposing that on any premises in their district there is a cow which is suffering from chronic disease of the udder or giving tuberculosis milk, or a bovine animal which is suffering from tuberculosis with emaciation, the Local Authority shall with all practicable speed cause such veterinary examination of the bovine animals on such premises to be made by a Veterinary Inspector as in the opinion of the Local Authority is necessary to ascertain whether any cow thereon is suffering from tuberculosis of the udder or giving tuberculosis milk, or whether any bovine animal thereon is suffering from tuberculosis with emaciation, and for that purpose the Inspector may, with the previous consent in writing of the owner of the animal or of his agent, but not otherwise, apply the tuberculin test to any cow which the inspector suspects of suffering from tuberculosis of the udder, or of giving tuberculosis milk, or to any bovine animal which he suspects of suffering from tuberculosis with emaciation."

The following table classifies the notices and reports received under the above Articles from the Local Authority for the County of Lanark and from the Veterinary Inspector to the Local Authority:—

	Barony.	Cadder.	Rutherglen.	Car-munnoch.	Total.
Notices and Copy Reports,	4	11	8	3	26
Number of Cows,	4	13	8	3	28
Reported by Owners,	1	3	...	2	6
Reported by Veterinary Surgeons,	3	2	6	1	12
Reported by County Veterinary Inspector, - - - -	...	6	2	...	8



**Offensive Businesses.**

**Knackeries.**—The business at Dryfield has been carried on without any cause for complaint.

**Blood-drying Works at Carntyne.**—There has been no cause for complaint in connection with these works during the year.

**Fish Meal and Guano Works.**—Several minor complaints were received during the year regarding offensive odours from these works at Rutherglen, due to the escape of uncondensed vapours during temporary stoppage or breakdown at the works.

Considerable alterations were sanctioned by the Local Authority, and are at present being carried out. These include the removal of the concentrators as far from the public road as possible, and the provision of a special unloading bank whereby the offal is not subjected to any heating until deposited in the concentrators. These alterations should tend to minimise the risk of offensive odours emanating from the works.

**Pig-styes.**—The extension of the piggery at old Auchinairn was the subject of serious consideration, especially in regard to the means of sewage disposal. The liquid manure from piggeries is well known to be very offensive. It was, therefore, suggested that the liquid should be disposed off on farm lands for manurial purposes. This could not be arranged, so it was agreed to construct a large tank to intercept the solids and allow the effluent to flow into the drain (see notes under the heading "Drainage").

The Old Mansion House at Lambhill, which has for many years been occupied by a number of working-class tenants, has outbuildings, some of which have been used for keeping pigs. As the construction and arrangements were not satisfactory and improvements could not be made, the Sanitary Inspector called upon the owners to dispose of the pigs.

THE HISTORY OF THE

REIGN OF THE EMPEROR

OF THE GREAT MONGOLS

BY

JOHN H. M. J. VAN DER

WATERHOOF

OF THE

UNIVERSITY OF

AMSTERDAM

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COUNTY OF LANARK.

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# TUBERCULOSIS:

Prevention, Detection, and Treatment.

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## ANNUAL REPORT

BY THE

MEDICAL STAFF.

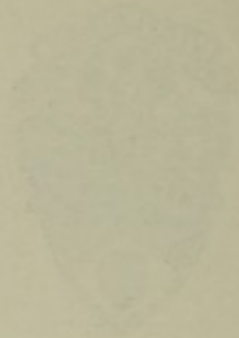
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**1913.**

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GLASGOW :

PRINTED BY ROBERT ANDERSON, 142 WEST NILE STREET.



COUNTY OF TAVAK

# TUBERCULOSIS

Prevention, Detection, and Treatment

## ANNUAL REPORT

MEDICAL DEPARTMENT

1912

PRINTED BY THE TAVAK COUNTY MEDICAL DEPARTMENT



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TO THE LOCAL GOVERNMENT BOARD FOR SCOTLAND,  
TO THE COUNTY COUNCIL OF LANARK, AND  
DISTRICT COMMITTEES THEREOF.

---

MY LORDS AND GENTLEMEN,

In preparing my Annual Report for the year 1913, a year in which important developments took place in the campaign against tuberculosis, I thought it desirable to prepare and issue separately a report detailing the work done and schemes formulated for the administrative control of tuberculosis. Each member of the staff has contributed to the preparation of this report, and each contribution is in some measure indicated by the names appearing in the different sections of the report, which has been somewhat hurriedly put together.

I am,

MY LORDS AND GENTLEMEN,

Your obedient Servant,

JOHN T. WILSON.

COUNTY OFFICES,  
HAMILTON, 29th August, 1914.

## COUNTY SANITARY DISTRICTS.

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### TUBERCULOSIS STAFF.

---

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#### **Consulting Surgeon.**

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#### **Consulting Physician.**

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## COUNTY OF LANARK.

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# TUBERCULOSIS:

### PREVENTION, DETECTION, AND TREATMENT.

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#### **Introductory.**

*Historical.*—One of the most pleasing features of modern civilisation is the great interest taken by the general community in the care of the sick and injured, as well as in the prevention of disease. Yet only a few years ago pulmonary forms of tuberculosis, a disease commonly known as consumption, a disease attended by symptoms and sufferings which appeal to human sympathy for help, was ignored by philanthropic and charitable organisations, such as general hospitals or infirmaries. Thus, in the City of Glasgow, the Western Infirmity and the Royal Infirmity did not admit patients suffering from pulmonary tuberculosis, and it was left to Poor Law Authorities to provide the necessary relief and institutional accommodation. For example, one Poor Law hospital and a poorhouse in the City of Glasgow (Stobhill and Barnhill), during the six years, May, 1904, to May, 1910, admitted on an average over 1,000 patients annually suffering from pulmonary tuberculosis. Poor Law institutions in County areas also had a number of beds specially set aside for the treatment of this disease. Such was the position of things in the year 1905 when the provision of institutional treatment for tuberculosis was commenced by the three County Sanitary Authorities of Lanarkshire.

The events which preceded 1905 have already been recorded in a special report, issued by the County Medical Officer in July, 1906, from which a short quotation is given:—

In December, 1900, the late Sir David Carrick Buchanan suggested to the County Council that a hospital for the treatment of consumptives should be erected to meet the wants of the whole County. The matter was brought before the Public Health Committee on 9th January 1901, who instructed the County Clerk to consider and report as to the powers of the County Council in the matter.

On 20th March, 1901, the County Clerk reported to a meeting of the Public Health Committee in the following terms:—"It would appear that, under the Public Health (Scotland) Act, 1897, the power to Local Authorities to provide hospitals was restricted to those required for the use of the inhabitants of their district suffering from infectious diseases, and that the question of the right of the Local Authority to apply the Public Health rate for the erection of hospitals for such patients would depend upon whether phthisis was an 'infectious disease.' I believe there is a growing opinion that it is so, but I am not aware of any case in which that view has been so far affirmed or



reduced to practice as to lead to the erection by Local Authorities of hospitals for the treatment of such cases, and the question of how far hospital treatment could benefit persons suffering from phthisis is one for medical experts."

In May 1903, a Lower Ward member of the County Council (Mr. Martin), after discussing the subject in the Lower Ward Committee, brought the matter before the County Council, along with the subject of notification, when the following motion was moved:—"That it be remitted to the Public Health Committee of the County to consider, and, if deemed advisable, to confer with the other Local Authorities within its area as to—

- (a) The desirability of the notification of phthisis as an infectious disease, and whether such notification should be voluntary or compulsory;
- (b) The provision of an isolation hospital for such cases of phthisis as may be certified dangerous to public health and may be willing to enter the same;

and thereafter to report to a future meeting of the County Council."

On 29th July, 1903, a sub-committee was appointed with a view to obtaining such information as would assist the committee in carrying out the remit.

On 12th April, 1905, there was laid before the meeting a special report by the County Medical Officer submitting information on the subject, and making the following observations and suggestions:—

"Voluntary notification and voluntary isolation of persons suffering from phthisis should, if judiciously carried out, prove acceptable and beneficial to the community.

"Should the committee recommend the adoption of these measures, they might be introduced, without incurring capital expenditure, by utilising the spare accommodation in the hospitals of the respective districts.

"Owing to the limited prevalence of ordinary infectious disease, there are several ward pavilions standing empty in the Lower and Middle Ward Districts. With a few wooden shelters for out-door treatment, all the advantages of a local sanatorium could be provided for consumptive patients. If cases in the early stages of the disease were to be admitted, one of the small hospitals in the Middle Ward could perhaps be given up wholly to this work.

"Experience elsewhere has shown that notification and isolation of phthisis involved much additional medical inspection and inquiry. To cope with this, an additional assistant would probably be required, although a commencement might be made with the present staff."

In June, 1905, this was communicated to the three District Committees, who resolved to admit to their hospitals persons suffering from pulmonary phthisis when there was suitable accommodation available, and that the Medical Officer of Health be instructed to carry out the necessary arrangements, subject to the approval of the Sub-Committee of Management for the respective hospitals.

Notification by medical practitioners was at first arranged for on a voluntary basis, and in the latter part of the year 1907 pulmonary



tuberculosis was made compulsory notifiable under the Notification Act. On 1st August, 1912, the disease was made compulsorily notifiable throughout Scotland by an Order of the Local Government Board.

The cases brought under notice distinguishing between those treated at home and those treated in hospital are given in the following table :—

TABLE I.

*Pulmonary Tuberculosis.*—Cases notified in the three County Sanitary Districts, 1906-1911 :—

*Cases Treated in Hospital.*

Year.	Cases.	Died.	Left District.	Surviving.	
				Total.	Percentage.
1906	208	130	57	21	10
1907	177	109	43	25	14
1908	158	72	49	37	23
1909	186	87	36	63	34
1910	275	103	68	104	38
1911	229	74	24	131	57
Totals,	1233	575	277	381	30

*Cases Treated at Home.*

Year.	Cases.	Died.	Left District.	Surviving.	
				Total.	Percentage.
1906	143	79	52	12	8
1907	101	70	20	11	11
1908	232	159	44	29	12·5
1909	242	154	66	22	9
1910	188	118	34	36	19
1911	211	115	33	63	30
Totals,	1,117*	695	249	173	15

\* This figure does not include 57 cases in Poor Law Institutions.

The above tabular statement shows that during the six years 1906-1911 no fewer than 2,350 patients had been brought under notice. 1,233 accepted hospital treatment, and 1,117 did not. An effort was made to keep in touch with all patients through the Sanitary Staff or otherwise, and the result is here shown as ascertained at the close of the year 1911. Thus, in the year 1906, when 143 cases were notified and treated at home 79 are known to have died within the County, 52 have left the district or cannot be traced, while 12 only are known to be surviving. Similarly, in that year 208 cases were notified, and received treatment in hospital. Of these, 130 are known to have died within the County, 57 have left the district or



cannot be traced, and only 21 are known to be surviving at the close of the year 1911. Summarising the statistics for the whole period, we find among those treated at home 695 are known to have died within the County, 249 have left the district or cannot be traced, while only 173 are known to be surviving. Among those treated in hospital, 575 are known to have died within the County, 277 have left the district, and 381 were surviving at the end of 1911.

The experience gained during those years in the active measures taken for the prevention, detection, and treatment of pulmonary tuberculosis gave one some idea of the vast and complex problem that lay before Public Health Authorities in trying to combat such a disease as consumption. During 1912 the Government introduced the National Insurance Act, which provided Sanatorium Benefit for all forms of tuberculosis among insured persons from July of that year. Subsequent events led to the Government making further provision for assisting Local Authorities financially in dealing with all cases of tuberculosis.

*Tuberculosis Schemes.*—On 29th May, 1912, the Local Government Board, in a circular letter addressed to Local Authorities, suggested that each Medical Officer of Health should be instructed to prepare a report on the requirements of their respective areas, with a view to the early preparation of adequate schemes for the “prevention, detection, and treatment of tuberculosis.” The terms here quoted are worthy of serious consideration. Prevention, detection, and treatment seem to sum up all aspects of administrative procedure that may be used for the control of tuberculosis. For example, the most important factor in prevention is admittedly good housing and all that it implies. A wholesome dwelling is not only of the utmost importance in preventing the development and spread of tuberculosis, but also in the treatment of the disease. Treatment again is dependant on the detection of the disease. All measures which aid in the early detection of tuberculosis are necessary for prevention and treatment. The earlier the disease can be detected the greater is the hope of recovery. Thus what might be called the administrative treatment of tuberculosis includes prevention and detection.

Each of the three County Local Authorities submitted to the Local Government Board a Tuberculosis Scheme, prepared by the Medical Officer of Health, which made provision for all forms of treatment, institutional and domiciliary, for all forms and stages of the disease, for insured persons, dependants, and non-insured, and even for paupers. All the work to be done as formerly under the Public Health Acts, and without the intervention of the County Council as provided for under the Insurance Act. These schemes have been



provisionally approved by the Local Government Board during the current year, and the Board's letters of approval will be found in each of the district minutes. The arrangements are briefly as follows:—

The Middle Ward District Committee have three fifty-bed sanatoria situated at Stonehouse, Shotts, and Upperton Longriggend, although the latter institution has at present only 30 beds. A large sanatorium and work colony is to be developed at Hairmyres, and progress has been made with preliminary arrangements. This institution will also make special provision for children. For surgical cases a large ward pavilion is provided at the Middle Ward County Hospital, Motherwell, where there is also an X-ray apparatus and all appliances for special forms of treatment. Dispensaries will be opened where necessary, and at present exist in two populous areas, viz., Blantyre and Cambuslang.

The Upper Ward District and the Lower Ward District will each have a tuberculosis institution in their own area for the admission of all cases, and from which cases requiring special treatment will be drafted to Middle Ward institutions, either at Motherwell or Hairmyres as the case may require.

#### Administration.

*Area and Population.*—The County of Lanark is for Public Health administration divided into three districts, known as the Upper, Middle, and Lower Wards. Each of the wards is administered by a District Committee, constituted the Local Authority under the Public Health (Scotland) Act. The area, population, and valuation of each ward was, at the middle of the year 1913, as follows:—

		Square Miles.	Population.	Valuation.
Upper Ward,	...	511	43,400	£374,935
Middle Ward,	...	291½	207,080	1,352,787
Lower Ward,	...	39	29,500	228,118
		<hr/>	<hr/>	<hr/>
County,	...	841½	279,980	£1,955,840

*Industries.*—Each ward or sanitary district differs greatly in this respect. In the Upper Ward agriculture is the prevailing industry, but mining is carried on at different places scattered throughout the whole length of the district. In the Middle Ward mining and manufacturing may be said to be the prevailing industries; yet agriculture is of great importance. There are also a number of residential areas near the City of Glasgow. In the Lower Ward all these interests are fairly well represented, there being mining, manufacturing, agricultural, and residential communities.



*Towns and Villages.*—A tabular statement will be found at the end of this portion of the report, which gives the names of the more important towns and villages, with the number of houses in each of the areas. From this it may be ascertained that in the Middle Ward there are 24 towns with over 2,000 of a population; in the Upper Ward there are 3; and in the Lower Ward there are 2.

*Staff.*—Throughout the greater part of the year three Assistant Medical Officers undertook all duties connected with tuberculosis, including institutional treatment at the smaller hospitals and sanatoria, but owing to changes in the staff through two of the Assistants receiving appointments in England, only two Assistants were on duty, and the work was with difficulty overtaken. After much negotiation between County Council and District Committee representatives four additional Medical Assistants were appointed, making six in all. This staff was considered necessary to meet the enormously increased responsibilities thrown upon the Local Authorities in carrying out adequate tuberculosis schemes, and this report now deals with the work accomplished. The arrangements as they at present stand are here briefly described.

The County Medical Officer, being also Medical Officer of Health for each of the three County Sanitary Districts, became administrative officer under the tuberculosis schemes; the Senior Assistant Medical Officer of Health became Senior Tuberculosis Officer; and the Second Assistant and four newly appointed members completed the outdoor staff. The Bacteriologist is also an Asst. Medical Officer of Health, although his duties are mainly confined to laboratory work.

All these officers are appointed by each of the District Committees as a Medical Officer of Health under the Public Health Act. They are entitled to act as such in any or all of the three County Sanitary Districts. For administrative purposes, however, each officer was allocated a definite area, four being allocated to the Middle Ward, one to the Upper Ward, and one to the Lower Ward, viz. :—

Dr. Frank H. Scroggie, who joined the staff in December, 1911, has Cambuslang and Blantyre Parishes, which have an area of 9,102 acres, and a population of 41,840.

Dr. John W. Miller, who joined the staff in January, 1913, has Bothwell and Cambusnethan Parishes, with an area of 29,285 acres, and a population of 69,069.

Dr. J. Thomson Dick, who joined the staff in October, 1913, has the Third Division of the Middle Ward District, with an area of 52,770 acres, and a population of 50,002.



Dr. Christina Barrowman, who joined the staff in October, 1913, has the First Division and Hamilton, Dalserf, and Dalzell Parishes, an area of 95,466 acres, with a population of 42,368.

Dr. James R. Adam, who joined the staff in September, 1913, has the whole of the Upper Ward, an area of 327,013 acres, with a population of 43,400.

Dr. Robt. Richards, who joined the staff in September, 1913, has the Lower Ward, with an area of 24,885 acres, and a population of 29,500.

### **Treatment and Control.**

The treatment of tuberculosis has, from an administrative point of view, acquired an importance little dreamt of two years ago. Up till then charity and the Poor Law were the agencies which the working classes had to rely upon when overtaken with consumption or any other disabling form of tuberculosis. The change and the rapidity with which that change has been brought about are no doubt in large measure due to the National Health Insurance Act, but there have been indications in past years of administrative opinion being formed, to which reference might be briefly made. In the year 1898 Sir Richard Thorne Thorne,\* Medical Officer of the Local Government Board for England, recommended the provision of hospitals for the isolation and treatment of consumptive patients, but no action was taken by the Board at that time. In the year 1906 the Local Government Board for Scotland, in a circular letter, dated 10th March, urged upon Local Authorities the adoption of administrative measures, including institutional treatment, but little progress was made in the provision of treatment by Local Authorities until the National Health Insurance Act came into operation, providing sanatorium benefit as from July, 1912. It is significant that this Act should have singled out this one group of diseases from all others, and should have made definite provision for the treatment of all forms of tuberculosis occurring in insured persons, and also an adoptive provision for dependants. In view of the financial aid thus obtained, the Local

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\* Harben Lectures, 1898. "I can also see great advantage in the construction, for public health purposes, of isolation hospitals for phthisical patients. The educational effect of even a temporary residence in such an institution, where the adoption of precautions against the diffusion of the tubercular infection would form a rule of life, would in my opinion be very great. Such institutions would also have other advantages. They would provide the conditions favourable to the complete cure of persons suffering from incipient phthisis, and who, if left to themselves, would ultimately succumb, leaving those dependent on them to be a burden on the public rates; and they would further serve to provide, in separate buildings, for those who, while suffering from the more advanced forms of the disease, could not fail to act as diffusers on the infection around them and to add to the misery of their own homes."



Government Board have urged Public Health Authorities to make provision for the treatment of all persons, on the understanding that one-half of the total cost not met under the Insurance Act will be met by Treasury grants. The Board have also advised that the term "infectious disease" includes all forms of tuberculosis, and all stages of the disease, in respect that if there were no infection the disease would cease to exist. It is no longer a question whether any particular case is at the moment infective to others, but is the illness due to infection? Such a definition of "infectious disease" has materially widened the scope of Public Health administration, and can only be made practicable by grants in aid from Imperial sources. The administrative treatment of tuberculosis is now a matter of the utmost concern to Public Health Authorities, and it is most desirable that the subject should be carefully considered and discussed with the medical profession, who are also greatly concerned with this and all other aspects of preventive medicine. Two questions arise for discussion, and might be briefly stated thus:—*Who are to receive treatment, and how is treatment to be carried out?*

As the observations and suggestions now made are based largely upon the experience gained since 1905, in providing institutional treatment for tuberculosis in the three County Sanitary Districts of Lanark, I might be allowed to refer to the administrative arrangements in that County. First, I would mention that all the work has been carried out under the Public Health Act. County Sanitary Districts in Scotland being differently constituted from those in England, it has not been necessary to call in the aid of the County Council. The tuberculosis schemes, when complete, will provide treatment for all forms and stages of the disease, and all classes of the community—insured, dependant, non-insured, and even persons in receipt of parochial relief. The institutions will comprise (1) sanatorium and work colony; special accommodation will be provided for children, and include an open-air school. (2) Several hospitals are in use, and one of these has special accommodation for surgical cases. This particular hospital has also an X-ray apparatus. (3) One or two dispensaries in populous places are being tried, but in County districts reliance is mainly placed upon visits to the home by the staff of Tuberculosis Officers. The institutional staff at present includes three resident medical officers and a consulting surgeon. The outdoor staff consists of six Tuberculosis Officers. The number of beds presently in use in County institutions is about 170, and when the scheme is complete there will be over 300 beds. As the population is under 300,000, there will thus be over one bed per 1,000, entirely devoted to the treatment of tuberculosis. The number of cases on record is about 800, of which over 90 per cent. are pulmonary forms of the



disease. Now that non-pulmonary forms are compulsorily notifiable, there will probably be another 800 added to our lists. The treatment has been carried out so far on popular lines, and no compulsion has as yet been exercised, although consideration has been given to the question of compulsory isolation in certain cases. Isolation in certain cases will be carried out under Sections 54 and 55 of the Public Health Act. The former section provides for the compulsory removal of persons to hospital, and the latter for the compulsory detention of such persons in hospital.

*The Patients who are to receive Treatment.*—Every person who is known to be suffering from any form of tuberculosis is entitled to receive appropriate treatment, the form of such treatment varying with the nature of the case. The Public Health Authority becomes aware of the existence of the disease through medical practitioners. Much has been said in urban communities about the value of dispensaries, but I am sure that in County districts reliance must be placed upon the medical attendant. Compulsory notification is now in Scotland as in England, made under an Order of the Local Government Board, and some consideration might be given to the form of notification. It has been suggested by the British Medical Association that "any person applying to a Tuberculosis Authority for benefit under the scheme should present a statement of his case signed by a medical practitioner." This is obtained in the City of Aberdeen with the notification, for which, I understand, a fee of 5s. is paid. As the medical attendant must be in possession of certain clinical data before notification is made, this seems to be the best mode of carrying out the suggestion. In dealing with pulmonary forms of the disease such clinical data is of great importance.

Great difficulty is experienced in having cases notified in the early stages of the disease. So insidious, secretive, and treacherous is it that few patients among the working classes seek medical advice until the disease is far advanced. The experience in Lanarkshire during the past six years shows that, in about 80 per cent. of the cases, the disease was too far advanced when notified to hold out any hope of permanent improvement. Taking the cases notified in any particular year, we find that on an average the percentage surviving at the end of each year is something like 70, 40, 25, 20, 15, and 10, so that at the end of five years there is only the small remnant of 10 per cent. left. The disappearances from the records takes place largely through death, but also through change of residence. In the diagnosis of pulmonary tuberculosis medical practitioners still attach considerable importance to the presence or absence of tubercle bacilli in the spit. The Bacteriological Laboratory records show that about 70 per cent. of the specimens received for examination gave negative results. If



all these specimens, or many of them, be from patients with symptoms suggestive of tubercle, it seems desirable that the medical practitioner should seek such further aid as laboratory methods afford. Thus, in obtaining further specimens from the patient, greater care should be exercised as to the time and method of collection, and, if thought necessary, an animal inoculation could be carried out. It has been suggested by the Astor Committee that the cases to receive institutional treatment should include those in which the disease is *strongly suspected*, but in which there is no evident impairment of the working capacity. Medical practitioners will, I fear, hesitate to notify such cases. There is, no doubt, real difficulty in suggesting to such patient that his case should be notified, with a view to receiving treatment in a sanatorium. If such persons could receive treatment in institutions that are neither called hospitals nor sanatoria, probably notification would be more easily obtained. In the case of patients who do not require any aid from a Public Health Authority, and where the medical attendant has a difficulty in notifying the case, it is customary to mark upon the notification "Do not visit." In this respect reference should be made to the *Interim Report of the Departmental Committee on Tuberculosis*:—

#### CLASSIFICATION OF PATIENTS.

- (1) Cases in which the disease can be diagnosed or is strongly suspected, but in which there is no evident impairment of the working capacity.
- (2) Cases of recent onset, with some impairment of the working capacity without marked evidence of ill-health.
- (3) Cases of recent onset, with evidence of acute illness.
- (4) Cases of a longer history of illness. In some of these cases permanent arrest of the disease may be hoped for, but in the majority restoration to full working capacity for more than a comparatively short period is not to be looked for.
- (5) Cases in which there is permanent loss of working capacity. Many of these patients live for a considerable period in a condition of chronic ill-health.
- (6) Cases in which a fatal termination within six months is probable.

Difficulty in notification is also experienced in another group of cases, in which the only symptoms are those of pleurisy. Clinical records show that, in many instances, pulmonary tuberculosis began with pleurisy, yet cases are never notified at this stage. Institutional treatment for such cases would probably be beneficial, and prevent the development of deeper lesions. Again, the differential diagnosis of



chronic bronchitis presents difficulty in the notification of the disease. In many cases signs and symptoms so much resemble pulmonary tuberculosis that it takes months to make a differential diagnosis, and this can best be done by residence in an institution. Many other difficulties connected with the notification of pulmonary tuberculosis might be mentioned, but we might consider next some of the difficulties connected with the provision of institutional treatment.

Working men, who have a wife and family, and are earning good wages, are often very reluctant to accept institutional treatment so long as their general health is not seriously impaired, on the ground that their dependants will not be properly provided for. Medical benefit is no doubt an aid, but it is often quite inadequate to the necessities of a wife and large family. Again, mothers who have a large family, and no near relative or friend to look after them, may accept institutional treatment for a time, but soon difficulties arise. Her thoughts are naturally upon those she has left at home, and if her general health improves she is anxious to return home as early as possible. In some cases this difficulty has been provided for by taking the children into a home specially set aside for the purpose.

Patients who have never been in an institution, and especially working men who are accustomed to liquor, resent the discipline of a sanatorium, and leave of their own accord. It has been well said in such cases that you can only help a consumptive patient in so far as he is willing to help himself. A work colony is being established, but a miner, earning 7s. a shift, cannot understand why he should be asked to work in a tuberculosis work colony for a small wage, or nothing at all, merely on the ground of health, when he himself considers he might as well be working at his own occupation.

Lastly, there is a group who are mentally deficient, for whom some special accommodation, with male attendants, seems necessary. For example, a patient, resident in a common lodging-house, was admitted to a County sanatorium, and found to be suffering from a well-marked lesion in both lungs, with spit containing T.B. His mental condition was such that he could not be allowed to associate with other patients, and as he was able to move about he wandered from place to place, no doubt distributing infection as he went.

Of all classes of the community, children seem to present the best field for institutional treatment from an administrative point of view. Free from worldly cares and anxieties, they can be kept under control for an indefinite length of time, and special accommodation should be provided for them.



*Non-Pulmonary Tuberculosis.*—Patients with these forms of the disease are as numerous, if not more so, than pulmonary cases, and although only recently made compulsorily notifiable in Scotland, a number of patients have been treated in past years, suffering from almost every variety of lesion—bones, joints, glands, skin, special organs, &c. In County districts many of these can be treated in the ordinary hospitals and sanatoria, but where surgical treatment is necessary they will be dealt with in a special ward of the largest hospital, to which a consulting surgeon has recently been appointed. In large towns, with their well-equipped general hospitals and philanthropic institutions, arrangements can no doubt be made, but in respect that such treatment is subject to a Treasury grant, some financial adjustments would require to be made.

*Domiciliary Treatment and After Care* have, in some parts of County districts, been developed on satisfactory lines. Thus, where garden ground is available open shelters can be provided, as in Aberdeen County, and the medical attendant can have every facility for carrying out the open-air treatment, provided the family funds can afford the necessary comforts and nourishment. But neither under the Insurance Act nor under the Public Health Act can sustenance be afforded. Where the patient is willing to apply for poor relief, sustenance can be given by the Poor Law Authority, while special diet, necessary for treatment, can be provided by the Public Health Authority, as shown in the following letter from the Local Government Board:—

“ Local Government Board,  
“ Edinburgh, 6th April, 1914.

“ SIR,

“ TUBERCULOSIS.

“ The Board have had under consideration a memorandum by their Medical Inspector, Dr. Watt, regarding a meeting on 26th February, 1914, between you and Inspectors of Poor in the Middle Ward District, at which certain difficulties were discussed in connection with the treatment of Poor Law cases of pulmonary tuberculosis. The Board understand that you desire their advice on these matters, and I am now directed to express the Board's opinions as follows:—

“ 1. If a phthisis patient is a pauper, the Local Authority is to be responsible only for treatment. If the treatment is in a sanatorium, it necessarily includes entire maintenance; but if treatment is in the pauper's own home, it covers only medical and nursing attendance and



such medicines and special foods as are exclusively necessary for the treatment of phthisis. Clothing, lodging, and ordinary sustentation fall to be provided by the Poor Law Authority.

" 2. The Tuberculosis Maintenance Grant is payable only in respect of treatment for tuberculosis (*i.e.*, residence in a sanatorium, and medical or nursing attendance, medicine, and special food supplied at home on order of the Tuberculosis Officer).

" 3. Pauper phthisis patients receiving treatment at home should be medically supervised, and have their treatment prescribed by the Tuberculosis Officer or other medical practitioner by arrangement with the Local Authority. The Board will be prepared to assent to the Tuberculosis Officer sending, under arrangement, slips to the Inspector of Poor, authorising him to supply patients with special food or medicines; accounts for the same may be paid by the Inspector of Poor, and charged against the Local Authority, the slips being sent with accounts as vouchers. The idea of this arrangement is to utilise existing local machinery and lessen the personal work of the Tuberculosis Officer where he has to administer a large district.

" 4. Poor Law observation wards are not suitable for phthisis cases. But the Local Authority might own a small sanatorium, accommodating, say, a half-dozen patients unsuitable for an ordinary sanatorium. Such rough or "test" sanatorium should be under control of the Tuberculosis Officer, but might be managed by a male nurse. Cases of insanity could readily be detected in an institution of this kind.

" I am, SIR,

" Your obedient Servant,

" JOHN T. MAXWELL,  
*Secretary.*

" Dr. WILSON,  
" County Medical Officer,  
" Hamilton."

In mining and manufacturing communities, however, where the house at best consists of a room and kitchen, often in direct communication, and where there is no garden ground, it is exceedingly difficult to carry out treatment satisfactorily. No matter how willing the patient may be to have windows open, other members of the household are sure to object. There is also great difficulty in securing proper dieting and hygienic treatment. For such cases continued institutional treatment seems desirable. With regard to insured persons receiving domiciliary treatment, it has been suggested that



quarterly reports by the medical attendant should be sent to the Tuberculosis Officer. This suggestion has not been acted upon, and is worthy of discussion.

Better housing is no doubt one of the most important factors in the *domiciliary treatment* of tuberculosis, as well as in its prevention. There is also great need for steps being taken to educate the public in Public Health questions.

The Government has done a great deal for the campaign against tuberculosis in supplying munitions of war, and it is our duty to see that full and proper use is made of the means put at our disposal. Some persons may question the value of certain aspects of administrative treatment, from both a curative and a preventive standpoint, but no one will, I think, deny that all the work is of a beneficent nature.

These administrative aspects of treatment form a very important part of the scheme of administrative control, but, as will be shown in the reports of the Tuberculosis Officers, Bacteriologist, and Veterinary Surgeon, other aspects of the work have not been neglected.

The clinical aspects of the work will be found in the reports of the various institutions.

**NATIONAL HEALTH INSURANCE ACTS.**—The National Health Insurance Authorities in providing sanatorium benefit have had no difficulty in obtaining institutional treatment for all their cases. The County Medical Officer was appointed Medical Adviser to the County Insurance Committee, and at first attended the monthly meetings of the Sanatorium Benefit Committee. Since the work was inaugurated, Dr. Frank H. Scroggie, Senior Tuberculosis Officer, has attended and advised. The procedure followed and the forms used in dealing with insured persons are briefly indicated in the following notes extracted from a letter to the County Insurance Clerk:—

1. *Record Card*.—This is transmitted to the Insurance Clerk whenever a case is brought under the notice of the Medical Officer of Health, and contains a great deal of information as to the domestic and social conditions of the patient.

2. *Application Form*.—When a patient desires sanatorium benefit this form, with the *Membership Book* and the *Contribution Card*, the officer of the Health Authority endeavours to get filled up and duly signed by the patient. If these three documents can be obtained at the same time as the Record Card is filled up, then the whole is sent together, but the procedure is designed to inform the Insurance Authorities of every case as early as possible.



THE END OF THE WORLD



HAIRMYRES HOME, EAST KILBRIDE.





4. *Forms Med. 2 and 4* are only filled up after a case has been admitted to an institution, as the clinical information otherwise obtained was not considered satisfactory. Instructions have been issued to the officers of the various institutions to send in these clinical reports as early as possible, so that we are able to send the information to the Insurance Clerk, say, within a week of the admission of the case.

5. *Weekly List of Admissions and Discharges*.—This is prepared in the office from the weekly returns obtained from each institution.

6. *Monthly List of Domiciliary Visits*.—Each Tuberculosis Officer is responsible in his own area for the preparation of this information, but difficulty has been experienced by the Middle Ward Staff in getting this kept up to date owing to the heavy nature of the work involved.

*Dispensary Records* will also be available, but this branch of the work is not yet sufficiently developed in our County Sanitary Districts.

The information given on the Record Card is greatly in excess of that given by any other health authority to an Insurance Committee, but it is in the meantime being continued. Form Med. 2 might be discontinued, as it contains clinical data that cannot be of much interest to the Insurance Committee. Form Med. 4 might be continued, and should any of the information on Form Med. 2 be desired it may be added.

With regard to cases that are being treated at home, it has been suggested that clinical reports might be obtained from the medical attendant, but no definite arrangement has been made.

The work of the Sanatorium Benefit Committee during the year 1913 is admirably reported upon by the County Insurance Clerk (Mr. W. M. Marshall), and as copies of this report will be available to members of the District Committee it will not be necessary to deal with the subject here. It may be mentioned, however, that 148 applications for sanatorium benefit were received by the committee, and the cases were nearly all granted institutional treatment in County hospitals and sanatoria.

**HAIRMYRES HOME.**—During the current year great developments have taken place in connection with this institution and grounds. As this is fully described in a report issued by the Middle Ward District Clerk (Mr. W. E. Whyte) in August last, and as the report is still available, the scheme need not be referred to here. The use made of the existing home during the current year in the treatment of children is indicated in two photographic illustrations here reproduced.



## COUNTY OF LANARK.

## TOWNS, VILLAGES, AND RURAL GROUPS, WITH NUMBER OF OCCUPIED HOUSES.

PARISH.	TOWNS, &c.	Occupied Houses.	PARISH.	TOWNS, &c.	Occupied Houses.
BIGGAR, -	Biggar Town, Part of, -	33	LESMAHAGOW, -	Lesmahagow, -	-
	Rural, -	133		Coalburn, -	-
CARLUKE, -	Carlisle, -	1,180		Kirkfieldbank, -	-
	Law, -	421		Crossford, -	-
	Braidwood, -	166		Kirkmuirhill, -	-
	Castlehill, -	79		Auchenbeath & Burnfoot, -	-
	Kilncadzow, -	39		Blackwood, -	-
	Roadmeetings, -	30		Boghead, -	-
	Hallcraig and Scoularhall, -	24		Hazelbank, -	-
	Yeildshields, -	11		Brocketsbrae, -	-
	Rural, -	204		Fence, -	-
CARMICHAEL, -	Douglas Water, -	171		New Trows, -	-
	Rural, -	106		Southfield, -	-
CARNWATH, -	Tarbrax, -	247		Draffan, -	-
	Carnwath, -	202		Devonburn, -	-
	Forth, -	173		Dillarburn, -	-
	Wilsontown, -	145		Lintfieldbank, -	-
	Haywood, -	85		Lairsbridgend, -	-
	Braehead, -	81		Tillietudlem, -	-
	Woolfords, -	46		Rural, -	-
	Newbigging, -	28	LIBBERTON, -	Libberton and Quothquan, -	-
	Climpy, -	21		Rural, -	-
	Rural, -	278	PETTINAIN, -	Pettinain, -	-
CARSTAIRS, -	Carstairs Junction, -	183		Rural, -	-
	Carstairs Village, -	123	SYMINGTON, -	Symington, -	-
	Rural, -	98		Rural, -	-
COVINGTON AND THANKERTON, -	Thankerton, -	64	WALSTON, -	Elsrickle, -	-
	Rural, -	55		Rural, -	-
CRAWFORD, -	Leadhills, -	250	WISTON AND ROBERTON, -	Roberton, -	-
	Crawford, -	85		Wiston, -	-
	Elvanfoot, -	25		Rural, -	-
	Rural, -	102	AVONDALE, -	Strathaven, -	1,
CRAWFORDJOHN, -	Abington, -	47		Rural, -	-
	Crawfordjohn, -	41	EAST KILBRIDE, -	East Kilbride and Maxwellton, -	-
	Rural, -	77		Busby, -	-
CULTER, -	Culter, -	50		Auldhouse, -	-
	Rural, -	50		Jackton, -	-
DOLPHINTON, -	Dolphinton, -	23		Rural, -	-
	Rural, -	30	GLASFORD, -	Glasford, -	-
DOUGLAS, -	Douglas, -	321		Chapelton, -	-
	Glespin, -	43		Rural, -	-
	Rigside, -	40	STONEHOUSE, -	Stonehouse, -	-
	Rural, -	156		Sandford, -	-
DUNSYRE, -	Dunsyre, -	10		Rural, -	-
	Rural, -	26	BLANTYRE, -	Blantyre, -	2,
LAMINGTON, -	Lamington, -	34		Caldervale Terrace, -	-
	Rural, -	37		Auchentibber, -	-
LANARK, -	New Lanark, -	188		Rural, -	-
	Crosslaw District, -	84	BOTHWELL, -	Bothwell, -	-
	Nemphlar District, -	20		Bothwell Haugh, -	-
	Rural, -	195		Uddingston, -	1,



TOWNS, VILLAGES, AND RURAL GROUPS—*Continued.*

PARISH.	TOWNS, &C.	Occupied Houses.	PARISH.	TOWNS, &C.	Occupied Houses.
BOTHWELL— <i>continued.</i>	Aitkenhead and Tannochside, - - - - -	544	HAMILTON, -	Eddlewood Village and Colliery, - - - - -	255
	Bellshill and Mossend, - - - - -	2,900		Ferniegair, - - - - -	257
	Holytown, Clydesdale, and Fullwood, - - - - -	888		Quarter, - - - - -	235
	New Stevenston, - - - - -	711		Cadzow Rows, - - - - -	195
	Carfin, - - - - -	376		Udston and Dykehead, - - - - -	78
	Newarthill, - - - - -	510		Limekilnburn, - - - - -	40
	Chapelhall, - - - - -	385		Meikle Earnock, - - - - -	38
	Newlands Row, - - - - -	55		Hollandbush, - - - - -	11
	West Bellshill and Muirpark Rows, - - - - -	142		Rural, - - - - -	250
	Bothwell Park Row, - - - - -	163	NEW MONKLAND	Caldercruix & Glengowan, - - - - -	303
	Orbiston Row, - - - - -	32		Longriggend, - - - - -	203
	Carnbroe, Wellpark, and Brewsterford, - - - - -	159		Glenboig, - - - - -	221
	Legbrannock, - - - - -	40		Plains, - - - - -	157
	Newhouse, - - - - -	19		Greengairs, - - - - -	152
	Polloxhill, - - - - -	15		Annatnill, - - - - -	147
	Bailside, - - - - -	29		Airdrie, Whiterigg, and Stanriggs, - - - - -	123
	Cleland Townhead, - - - - -	35		Glenmavis, - - - - -	121
	Rural, - - - - -	368		South Biggar and Carlisle Roads, - - - - -	67
CAMBUSLANG, -	Cambuslang, - - - - -	3,213		Cairnhill Road, - - - - -	37
	Halfway, Gateside, and Gilbertfield, - - - - -	479		Caldervale and Easter Craigneuk, - - - - -	44
	Hallside, Newton, and Westburn, - - - - -	606		Moffat Mills and Moffat Grove, - - - - -	61
	Flemington and Lightburn, - - - - -	331		Colliertree, - - - - -	19
	Rural, - - - - -	154		Arden and Arden Rows, - - - - -	35
CAMBUSNETHAN, -	Stane, - - - - -	501		Eastfield and Eastfield Rows, - - - - -	37
	Newmains and Bonkle, - - - - -	789		Longrigg and East and West Longrigg, - - - - -	92
	Netherton, - - - - -	302		Roughrigg, - - - - -	70
	Overtown, - - - - -	291		East Glentore, - - - - -	25
	Waterloo, - - - - -	221		Avonhead and Shell Row, - - - - -	24
	Morningside, - - - - -	205		Wattstoun, - - - - -	46
	Chapel, - - - - -	129		Darngavil, - - - - -	63
	Castlehill and Pather, - - - - -	70		Meikle Drumgray, - - - - -	20
	Gowkthrapple and Overtown Road, - - - - -	33		Riggend & High Riggend, - - - - -	59
	Allanbank, Springhead, &c., - - - - -	28	OLD MONKLAND	Luggiebank, - - - - -	26
DALSERF, -	Rural, - - - - -	286		Stand, - - - - -	26
	Larkhall, - - - - -	2,710		Kipps, - - - - -	17
	Netherburn, - - - - -	260		Rural, - - - - -	458
	Swinhill, - - - - -	111		Fullarton and Clyde Iron Work, - - - - -	332
	Birkenshaw, - - - - -	105		Carmyle and Kenmuir, - - - - -	338
	Shawsburn and Ayr Road, - - - - -	89		Foxley, - - - - -	44
	Rosebank, - - - - -	39		North and South Mount Vernon, - - - - -	137
	Cornclilloch, - - - - -	44		Broomhouse and Boghall, - - - - -	141
	Dalserf, - - - - -	25		Baillieston, - - - - -	823
	Ashgill Row, - - - - -	27		Bargeddie, - - - - -	429
DALZIEL, -	Rural, - - - - -	174		Barrachnie, - - - - -	66
	Craigneuk, - - - - -	31		Swinton, - - - - -	96
	Hamilton Road, - - - - -	90		Easterhouse, - - - - -	50
	North Motherwell Rows, - - - - -	106		West Maryston, - - - - -	90
	Ravenscraig, - - - - -	34		Rosehall, - - - - -	24
	Rural, - - - - -	86		Gartgill, - - - - -	91



TOWNS, VILLAGES, AND RURAL GROUPS—*Continued.*

PARISH.	TOWNS, &C.	Occupied Houses.	PARISH.	TOWNS, &C.	Occupied Houses.
OLD MONKLAND — <i>continued.</i>	Hollandhurst, - - -	18	GLASGOW— <i>continued.</i>	Millerston and Hoggan- field, - - -	161
	Calderbank and Woodhall,	409		Coltpark, - - -	148
	Faskine and Palacecraig,	81		Rural, - - -	287
	Gartliston, - - -	57	CADDER, -	Chryston and Muirhead, -	450
	Rural, - - -	324		Stepps, - - -	356
SHOTTS, -	Shotts and Dykehead, -	889		Bishopbriggs, - - -	368
	Cleland, - - -	781		Mavis Valley and Jellyhill,	222
	Harthill, - - -	359		Auchenairn and Old Auch- enairn, - - -	220
	West Benhar, - - -	202		South Lenzie, - - -	210
	Salsburgh and Springfield,	159		Auchenloch, - - -	45
	Ladylands, - - -	11		Gartcosh, - - -	201
	Springbank Row, - - -	23		Garnkirk, - - -	171
	Shotts Burn and Shotts Kirk, - - -	21		Garnqueen, - - -	127
	Barbleus, - - -	22		Auchengeich Row, - - -	100
	Hillend, - - -	46		Gartloch, - - -	73
	Gartness, - - -	50		Mollinsburn, - - -	63
	Hassockrig, - - -	11		Moodiesburn, - - -	22
	Linrigg Row, - - -	21		Rural, - - -	280
	Northrigg, - - -	44	CARMUNNOCK,	Carmunnock, - - -	106
	Forrestfield, - - -	11		Rural, - - -	91
	Dunsyston, - - -	12	RUTHERGLEN,	Farne District, - - -	310
	Rural, - - -	427		Eastfield and Rosebank, -	366
GLASGOW, -	North Shettleston,			Burnside, - - -	172
	Budhill and Springboig, -	561		Rural, - - -	34
	Lambhill, - - -	236			
	Riddrie, - - -	195			

97 of Caldercruix houses are in Shotts Parish.  
30 of Gartloch houses are in Glasgow Parish.

27 of North Mount Vernon houses are in Glasgow Parish.  
11 of Stepps houses are in Glasgow Parish.

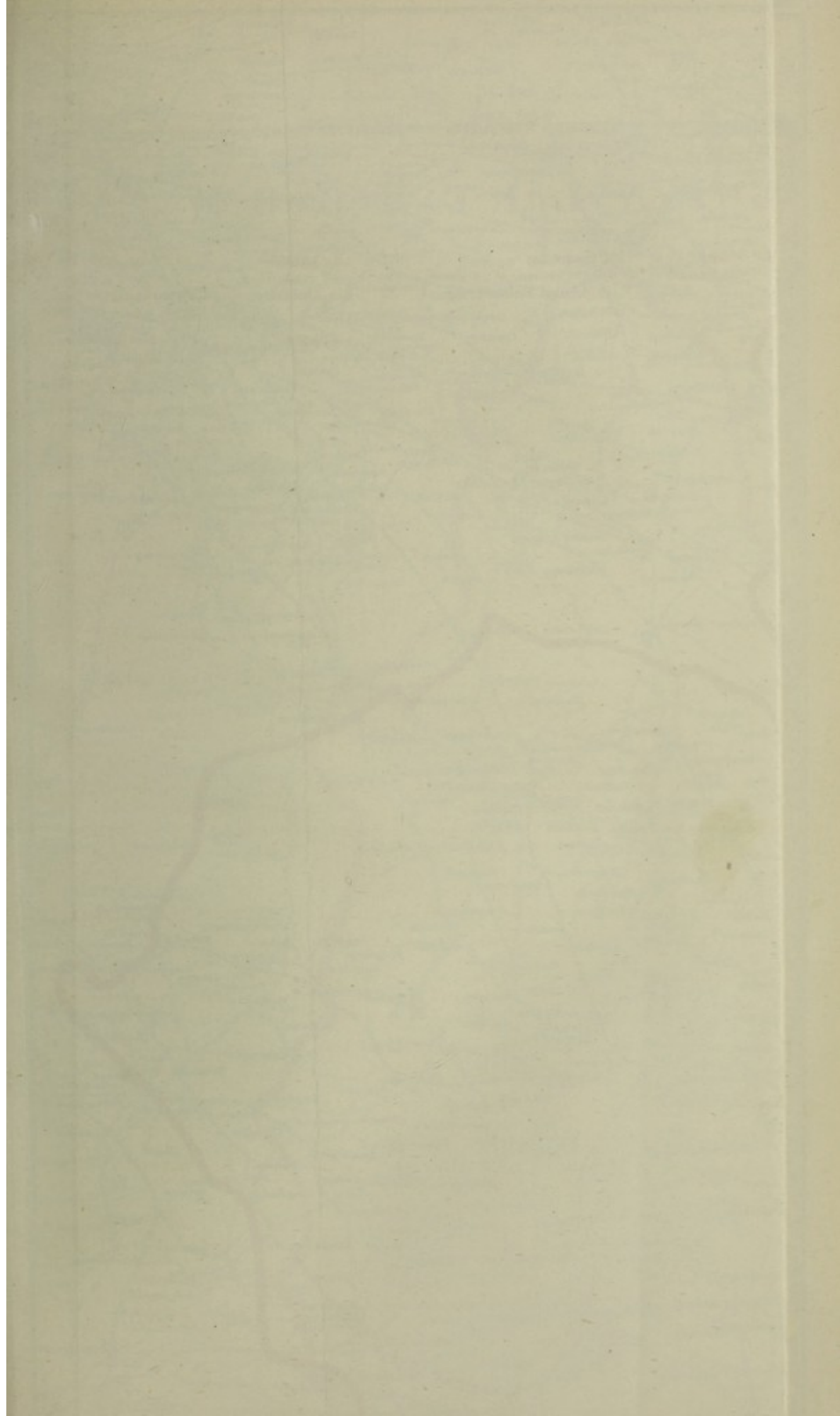
The information regarding the Upper and Middle Wards was taken from the Valuation Roll 1911-12, and for the Lower Ward from the Valuation Roll 1913-14.

## SUMMARY TABULAR STATEMENT.—HOUSES CLASSIFIED IN EACH SANITARY DISTRICT INTO TOWNS, VILLAGES, AND RURAL GROUPS.

*Explanatory Note.*—Where there are less than 25 houses in a group they are classified as rural areas; where the number of houses range from 25 to 400 they are classified as villages; and where the number of houses is above 400 they are classified as towns. The population averages about 5 persons per house.

Houses Classified.	MIDDLE WARD.		UPPER WARD.		LOWER WARD.		COUNTY.	
	Towns and Villages.	Houses.	Towns and Villages.	Houses.	Towns and Villages.	Houses.	Towns and Villages.	Houses.
<i>Rural.</i> - 25	—	3,867	—	2,627	—	714	—	7,208
<i>Villages.</i> - 50	47	954	16	577	1	45	44	1,576
- 100	20	1,471	8	581	2	136	30	2,188
- 200	19	2,596	12	1,810	8	1,180	39	5,586
- 400	18	5,076	6	1,563	9	2,489	33	9,128
<i>Towns.</i> - 500	5	2,231	2	918	1	450	8	3,599
- 1000	12	8,453	—	—	1	561	13	9,014
- 2000	2	2,840	1	1,180	—	—	3	4,020
- 4000	5	11,800	—	—	—	—	5	11,800
		<u>39,288</u>		<u>9,256</u>		<u>5,575</u>		<u>54,119</u>







# LANARKSHIRE INSTITUTIONS.





## LANARKSHIRE INSTITUTIONS.

### EXPLANATORY NOTES RELATIVE TO MAP.

Institutions provided by **County Public Health Authorities** are shown in **Red**; Isolation Hospitals being indicated by a square  $\square$ ; and Sanatoria by a circle  $\bigcirc$ . A number is also given for reference.

#### *Hospitals.*

1. County Hospital, Motherwell.
2. Lightburn Joint Hospital, Shettleston.
3. Bellshill Hospital.
4. Upper Ward District Hospital, Road-meetings, Carluke.

#### *Sanatoria.*

1. Stonehouse Sanatorium.
2. Shotts Sanatorium.
3. Uppertown Sanatorium, Longriggend.
4. Hairmyres.
5. Blantyre.
6. Dalserf.

Institutions provided by **Burgh Public Health Authorities** are shown in **Blue**; Isolation Hospitals being indicated by a square  $\square$ ; and Sanatoria by a circle  $\bigcirc$ . A number is also given for reference.

#### *Hospitals.*

1. Hamilton Burgh Hospital.
2. Coatbridge „ „
3. Airdrie „ „
4. Wishaw „ „
5. Lanark „ „
6. Motherwell „ „
7. Robroyston Hospital.
8. Shieldhall „
9. Ruchill „
10. Knightswood „

#### *Sanatoria.*

1. Bellefield Sanatorium, Lanark.
2. Country Home for Tuberculous Children.
3. Lanarkshire Burghs Sanatorium, Muirburn.

**Poor Law Hospitals and Asylums** are indicated by **Green squares**  $\square$ .

1. Hamilton Combination Poorhouse.
2. Dalzell Poorhouse, Motherwell.
3. Omoa Combination Poorhouse.
4. New Monkland Poorhouse, Airdrie.
5. Old „ „ Coatbridge.
6. Lanark District Asylum, Hartwood.
7. Kirklands Asylums, Bothwell.
8. Gartloch Asylum, Gartcosh.
9. Glasgow Epileptic Colony, Chryston.

**Philanthropic or Voluntary Supported Hospitals, &c.,** are indicated by **Green circles**  $\bigcirc$ .

1. Douglas Cottage Hospital, Douglas.
2. Blantyre „ „ Blantyre.
3. Alexander Hospital, Coatbridge.
4. St. Mary's Hospital, Lanark.
5. Lockhart Hospital, Lanark.
6. Lady Hozier Convalescent Home, Lanark.
7. Lenzie Convalescent Home, Lenzie.



### COUNTY ISOLATION HOSPITALS.

1.—The County Hospital, Motherwell, is provided for the treatment of all acute infectious diseases occurring throughout the Middle Ward District. Also has accommodation for the treatment of surgical cases of tuberculosis.

2.—Lightburn Joint-Hospital provides for the treatment of all acute infectious diseases occurring in the Lower Ward area. Is also used partly by the Middle Ward area, and to a small extent by the City of Glasgow. Has also accommodation for the treatment of tuberculosis.

3.—Bellshill Hospital, provided by the Middle Ward District Committee for the treatment of smallpox. Was in use for the treatment of tuberculosis, but is now used for the treatment of acute infectious diseases.

4.—Upper Ward District Hospital provides for the treatment of all acute infectious diseases occurring in the Upper Ward area. Has also accommodation for the treatment of tuberculosis.

### COUNTY SANATORIA.

1, 2, and 3.—Stonehouse, Shotts, and Uppertown Sanatoria are three 50-bed sanatoria, provided by the Middle Ward District Committee for the treatment of tuberculosis. Uppertown has only 30 beds at present.

4.—Hairmyres. This institution is being developed as a sanatorium and work colony, also as a children's home.

5 and 6.—Blantyre and Dalserf are small institutions in the Middle Ward area, presently used in connection with tuberculosis work.

### BURGH ISOLATION HOSPITALS.

1-6.—Are Burgh Hospitals, situated throughout the County, the name indicating the Burgh to which they belong.

7.—Robroyston Hospital is being erected by the City of Glasgow for the treatment of smallpox, and will be used when not so required for the treatment of tuberculosis.

8, 9, and 10.—Shieldhall, Ruchill, and Knightswood are large institutions belonging to the City of Glasgow, and are for the treatment of acute infectious diseases.

### BURGH SANATORIA.

1.—Bellefield Sanatorium, owned by the City of Glasgow, for the treatment of male patients suffering from tuberculosis.



2.—Country Home for Tuberculosis Children, being provided by the City of Glasgow in the County of Renfrew.

3.—Lanarkshire Burghs Sanatorium, Muirburn, is being provided jointly by the large Burghs for the treatment of tuberculosis.

#### POOR LAW HOSPITALS AND ASYLUMS.

1-5.—The five poorhouses—Hamilton, Dalzell, Omoa, New Monkland, and Old Monkland—have in past years had wards for the treatment of tuberculosis.

6-8.—The three asylums—Lanark District, Kirklands, and Gartloch—have a considerable amount of accommodation for the treatment of tuberculosis.

9.—Glasgow Epileptic Colony is a new institution erected for the treatment of epileptics.

#### PHILANTHROPIC OR VOLUNTARY SUPPORTED HOSPITALS, &c.

1.—Douglas Cottage Hospital has accommodation for the treatment of tuberculosis.

2.—Blantyre Cottage Hospital has treated surgical cases of tuberculosis.

## MIDDLE WARD DISTRICT.

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### STAFF.

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#### County and District Medical Officer.

JOHN T. WILSON, M.D., D.P.H.

#### Tuberculosis Officers and Assistant Medical Officers of Health.

FRANK H. SCROGGIE, M.B., Ch.B., D.P.H.

JOHN W. MILLER, M.B., Ch.B., D.P.H.

J. THOMSON DICK, M.B., Ch.B., D.P.H.

CHRISTINA BARROWMAN, M.B. Ch.B., B.Sc. (P.H.).

#### Health Visitors.

Nurse M'NEILL.

„ STRATH.

„ ROSS.

Nurse STEWART.

„ ARNOT.



## MIDDLE WARD DISTRICT.

### Tuberculosis.

**Mortality.**—The deaths from the various forms of tuberculosis registered during the year 1913 have been arranged in age groups in the following table, which shows that the total deaths from all forms of tuberculosis amounted to 327—pulmonary, 176; meningeal, 67; abdominal, 63; and other forms, 21:—

TABLE I.—DEATHS FROM TUBERCULOSIS CLASSIFIED ACCORDING TO AGE PERIODS IN YEARS.

	-5	5-15	15-25	25-45	45-65	65+	TOTAL.	Death-rates per 1,000 Population.
Pulmonary, -	6	21	41	72	35	1	176	0.85
Meningeal, -	45	19	—	3	—	—	67	0.32
Abdominal, -	47	10	—	5	1	—	63	0.30
Others, -	6	2	8	2	3	—	21	0.10
	104	52	49	82	39	1	327	1.57

These figures do not differ materially from those of the preceding year, the total for 1912 being 309—pulmonary, 177; meningeal, 54; abdominal, 66; and other forms, 12.

### Pulmonary.

The mortality from pulmonary tuberculosis since 1891 is given in a table at page 40, and shows that the average annual death-rate has declined from 13.5 to 8.5 per 10,000 of the population, the latter being the rate for the year 1913.

### Notification Cases, 1913.—

New cases notified,	-	-	-	-	-	-	313
New cases not notified,	-	-	-	-	-	-	56
Old cases renotified by the same practitioner,	-	-	-	-	-	-	103
Old cases renotified by a different practitioner,	-	-	-	-	-	-	25
Total,							497

These cases were dealt with as follows:—

Admitted to hospital, - - - - -	347
Refused treatment, - - - - -	69
Died before or soon after notification, - - - - -	54
Inmates of poorhouses, - - - - -	4
Visitors, or had left the district, - - - - -	21
Unsuitable for treatment, - - - - -	2
Total,	<u>497</u>

The number of deaths during the year was 176.

**Age and Occupation.**—The cases brought to our notice for the first time during 1913 are classified in the following tables according to age and occupation:—

Ages,	-1	1-5	5-15	15-25	25-45	45-65	65+	Total.
Cases,	—	7	82	92	144	43	1	369
								Total.
<i>Domestic Work.</i> —Housewives, 88; Domestic, 11; Servants, 8;								
Children, 9, ...	...	...	...	...	...	...	...	116
<i>Scholars</i> , 72, ...	...	...	...	...	...	...	...	72
<i>Miners, &amp;c.</i> —Miners, 57; Pitheadworkers, 11; Firemen, 4;								
Engineman, 1, ...	...	...	...	...	...	...	...	73
<i>Metalworkers.</i> —Steelworkers, 12; Ironworkers, 5; Labourers, 5;								
Stocktakers, 2; Engineer, 1, ...	...	...	...	...	...	...	...	25
<i>Factory and Workshop Employees.</i> —Millworkers, 7; Dress-								
maker, 1; Printer, 1; Tailoress, 1; Coachpainter, 1; Laundry-	...	...	...	...	...	...	...	12
worker, 1, ...	...	...	...	...	...	...	...	...
<i>Stoneworkers or Brickworkers.</i> —Brickworker, 2; Mason, 1, ...								
...	...	...	...	...	...	...	...	3
<i>Shopkeepers.</i> —Barmen, 4; Grocer, 1; Watchmaker, 1, ...								
...	...	...	...	...	...	...	...	6
<i>Miscellaneous.</i> —Clerks, 13; Farm servants, 6; Labourers, 4;								
Farmers, 3; Teachers, 2; Policemen, 2; Carters, 2; Signal-	...	...	...	...	...	...	...	...
men, 2; Painter, 1; Traveller, 1; Platelayer, 1; Postman,	...	...	...	...	...	...	...	...
1; Hawker, 1; Joiner, 1; Gardener, 1; None, 5; Un-	...	...	...	...	...	...	...	...
known, 16, ...	...	...	...	...	...	...	...	62
								<u>369</u>

**Deaths in Relation to Notification.**—In the following table the deaths registered from pulmonary tuberculosis are considered in relation to the date of notification. As a rule the disease is of a somewhat chronic nature, and the duration of illness lasts for several years. In the classification of cases suggested by the Departmental Committee on Tuberculosis, which was appointed to advise the Government, the cases were divided into six groups. The last, or sixth group,



relates to cases in the most advanced stages of the disease—"cases in which a fatal termination within six months is probable." We may assume, therefore, that, as a rule, when a patient dies within six months of notification there was no prospect of recovery. The following table shows the cases classified according to the period that elapsed between the receipt of the notification and the registration of death. If we include among those so classified the deaths of persons that were never notified by the medical practitioner, we find that over 60 per cent. of the patients died within six months of being notified. This seems to suggest that legislation and administration are somewhat in advance of public opinion, and there is little evidence of improvement since the work was begun in the year 1905. Thus, during the year 1913, in 26 fatal cases (Col. 3) death took place without the patient ever having been notified by a medical practitioner; 35 died within one month of notification (Col. 5); 27 between one and three months (Col. 6); and 30 between three and six months (Col. 7). Thus out of a total of 176 deaths (Cols. 3 and 4) registered during 1913, no fewer than 118—equal to 67 per cent. of the total deaths—took place within six months of notification.

TABLE 2.—DEATHS IN RELATION TO NOTIFICATION, 1906-13.

Year.	Cases Notified.	Fatal Cases.		Fatal Cases Notified.—Period between Notification and Death.				
		Un-notified.	Notified.	1 Month.	1-3 Month.	3-6 Month.	6-12 Month.	Over 1 Year.
1906	252	101	54	15	18	6	13	2
1907	189	92	77	16	17	13	16	15
1908	301	43	141	40	36	21	18	26
1909	338	52	155	36	33	27	25	34
1910	370	30	131	34	30	16	22	29
1911	336	24	161	31	30	20	29	51
1912	365	22	138	30	20	26	19	43
1913	369	26	150	35	27	30	31	27
	2,520	390	1,007	237	211	159	173	227
1	2	3	4	5	6	7	8	9

**Domiciliary Supervision.**—When a case has been notified, and no indication given by the medical practitioner that the case has not to be visited, supervision is carried on by the Tuberculosis Officers, both through the sanitary and nursing staffs and by personal visits and correspondence. In this way an effort is made to trace all cases until they disappear from the records in one way or another. The result is shown in the following table. It will be remembered that notification commenced about the middle of the year 1905.

CASES UNDER SUPERVISION DURING 1913.

Year.	Cases Notified.	Cases in District Surviving 1st January, 1913.	Changes during 1913.		Cases in District Surviving 31st December, 1913.	Cases taken off List. Disease Arrested or Diagnosis Revised.
			Died.	Left District.		
1905	92	6	1	1	4	—
1906	252	11	1	1	9	1
1907	189	14	1	2	11	3
1908	301	18	2	2	14	5
1909	338	45	5	2	38	10
1910	360	79	12	3	64	13
1911	336	93	6	9	78	14
1912	365	223	48	25	150	24
Total,	2,233	489	76	45	368	70
1913	369		123	27	219	15
Totals,	2,602		199	72	587	85
1	2	3	4	5	6	7

The cases under supervision during the year 1913 amounted to 858. Of these, 369 were notified during the currency of the year. Of those notified in previous years, the cases known to be surviving in the district at 1st January numbered 489.



The changes recorded during 1913 in each of these groups are shown in columns 4 and 5 of the table. Of those notified in 1913, no less than 123 died, and 27 had left the district or could not be traced, leaving 219 surviving in the district. Of those notified in former years, 76 died, and 45 had left the district or were not traced, leaving 368 surviving in the district. The number of cases on record at the close of the year was thus 587 (Col. 6, last line).

The Tuberculosis Officers in the course of their enquiries and visits obtained information that enabled them to revise this list, and in this way 85 names have been removed. 70 of these had been notified in previous years, while 15 had been notified during 1913 (see Col 7). Most of these cases were patients in good health, in whom the disease seemed to have been arrested, but in a few the diagnosis was revised, some of the patients being found to suffer from chronic bronchitis. The number of cases on record at 1st January, 1914, was therefore 502.

A series of tables (A, B, C, D, E) has also been prepared showing the progress of events in each complete year since the administrative control of tuberculosis was commenced. Table A distinguishes between cases which received institutional treatment and cases which did not receive such treatment, and it shows the position of matters at the close of the year 1911. Thus of 91 cases treated at home, notified during the year 1906, 49 were known to be dead, 35 had left the district or could not be traced, and thus only 7 were known to be surviving in the district, which gives the percentage of survivors as 7. Taking the statistics for the whole six years, 1906-1911, out of 728 cases notified, 458 were known to have died by the end of 1911, 157 had left the district, thus leaving only 113 survivors. With regard to the cases treated in hospital during the year 1906, out of a total of 161 cases, 105 were known to have died by the end of 1911, 39 had left the district or could not be traced, thus leaving only 17 survivors, or 10 per cent. of the total cases.

Taking now the cases which received institutional treatment, of which more complete records are available, the following Tables B, C, D, and E show the changes that took place year by year. Thus the tables contain, for the year 1905, when treatment was begun, a record of nearly nine years, for the cases notified in 1906 a record of eight years, for the cases notified during 1907 a record of seven years, and so on down to the year 1910. Table B shows the actual numbers surviving at the end of each year. Table C shows the cases that have died before the end of each year; Table D the cases which have left the district, or who could not be traced during each year; and Table E the percentage proportion of cases remaining in the district at the end of each year.



The total number of patients dealt with in these records amounts to 892; and if we look at Table E, which gives the percentage proportion of cases remaining in the district at the end of each year after notification, we find that more than one-half of the cases have disappeared by the end of the second year. This loss is largely made up of cases who are known to have died in the district. Take, for example, the patients treated during 1910, who numbered 232. At the end of the second year 84 had died, while 57 had left the district or could not be traced, and 64 of these deaths took place during the first year. This shows the large number of fatal cases that are never notified until the fatal issue seems imminent.

TABLE A.—CASES NOTIFIED IN THE MIDDLE WARD SUFFERING FROM PULMONARY TUBERCULOSIS, DISTINGUISHING BETWEEN THOSE TREATED AT HOME AND THOSE TREATED IN HOSPITAL, 1906-1911.

TREATED AT HOME.					
Year.	Cases.	Died.	Left District.	Surviving.	
				Number.	Percentage.
1906	91	49	35	7	7
1907	56	35	12	9	16
1908	155	107	28	20	12
1909	171	108	48	15	8
1910	119	75	19	25	21
1911	136	84	15	37	27
Total,	728*	458	157	113	
TREATED IN HOSPITAL.					
1906	161	106	37	18	11
1907	130	77	30	23	17
1908	131	64	39	28	21
1909	158	75	46	37	23
1910	232	84	57	91	39
1911	189	61	16	112	59
Total,	1,001	467	225	309	
Grand Total,	1,729	925	382	422	

\* These figures do not include 57 cases in Poor Law Institutions notified each year as follows :—1907, 3 ; 1908, 15 ; 1909, 9 ; 1910, 19 ; and 1911, 11.



TABLE B.—DOMICILIARY RECORDS 1905-13.

Year.	Cases treated in Hospital.	Cases surviving at the end of each year after notification.								
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th
1905	80	62	40	27	15	12	8	7	5	4
1906	161	119	73	43	32	22	18	15	15	...
1907	130	91	54	37	27	23	16	13	...	...
1908	131	93	52	36	28	19	17	...	...	...
1909	158	123	57	37	32	28	...	...	..	...
1910	232	139	91	76	68	...	...	...	...	...
Total cases surviving at end of each year, -		627	367	256	202	104	59	35	20	4
Total cases treated to end of each year, -		892	892	892	892	660	502	371	241	80

TABLE C.

Year.	Cases treated in Hospital.	Cases dying before the end of each year after notification.								
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th
1905	80	17	37	47	51	52	55	55	55	56
1906	161	40	78	94	100*	106	106	107	107	...
1907	130	34	62	72	76	77	79	81	...	...
1908	131	25	53	63	64	66	68	...	...	...
1909	158	31	71	75	78	79	...	...	...	...
1910	232	64	84	88	94	...	...	...	...	...

TABLE D.

Year.	Cases treated in Hospital.	Cases leaving the district or not being traced before the end of each year after notification.								
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th
1905	80	1	3	6	14	16	17	18	20	20
1906	161	2	10	24	29	33	37	39	39	...
1907	130	5	14	21	27	30	35	36	...	...
1908	131	13	26	32	39	46	46	...	...	...
1909	158	4	30	46	48	51	...	...	...	...
1910	232	29	57	68	70	...	...	...	...	...

TABLE E.

Year.	Cases treated in Hospital.	Percentage of cases remaining in the district at end of each year after notification.								
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th
1905	80	77.5	50.0	33.7	18.7	15.0	10.0	8.7	6.2	5.0
1906	161	73.9	45.3	26.8	19.8	13.6	11.1	9.3	9.3	..
1907	130	70.0	41.5	28.4	20.7	17.6	12.3	10.0	...	...
1908	131	70.9	39.6	27.4	21.3	14.5	12.9	...	...	...
1909	158	77.8	36.0	23.4	20.2	17.7	...	...	...	...
1910	232	59.9	39.2	32.7	29.3	..	...	...	...	...
Percentage of total cases surviving at end of each year.		70.2	41.1	28.7	22.6	15.7	11.7	9.4	8.2	5.0



*Age and Sex—Insurance.*—The following table shows all the cases (858) under supervision during 1913 classified in age and sex groups and their relation to the National Insurance Act:—

Age Periods.	Male.	Female.	Total.	Insured.	Dependent.	Non-Insured.
— 5	8	9	17	...	17	...
— 10	47	62	109	...	106	3
— 15	45	68	113	...	111	2
— 20	55	47	102	84	15	3
— 25	56	38	94	70	17	7
— 30	44	48	92	45	40	7
— 35	33	52	85	32	43	10
— 40	43	41	84	30	38	16
— 45	39	29	68	35	26	7
— 50	27	19	46	27	15	4
— 55	17	7	24	8	7	9
— 60	12	...	12	9	...	3
— 65	4	4	8	...	4	4
65 +	3	1	4	1	...	3
	433	425	858	341	439	78

#### PARISH OF RESIDENCE.

Parish.	No. of Cases.	Parish.	No. of Cases.	Parish.	No. of Cases.
Avondale,	16	Blantyre,	106	New Monkland,	40
East Kilbride,	18	Bothwell,	278	Old Monkland,	90
Glasford,	...	Cambuslang,	112	Shotts,	72
Stonehouse,	10	Cambusnethan,	54		
		Dalserf,	32		
		Dalziel,	5		
		Hamilton,	25		
1st Division,	44	2nd Division,	612	3rd Division,	202

Total Middle Ward—858.

#### HOME CONDITIONS.

The following table shows the number of apartments and type of house occupied by the patients and their families:—

Apartments.	Tenement.	Cottage.	Row.	Institution.	Total.
1	83	3	111	...	197
2	262	33	189	...	484
3	55	31	13	...	99
4 +	11	49	3	...	63
				15	15
	411	116	316	15	858

The number of inmates in these houses is shown below :—

Apartments.	Total Inmates.	Inmates per House.	Inmates per Room.	Cases.	Percentage of cases to inmates.
1	891	4.5	4.5	197	22
2	2,910	6	3	484	16
3	529	5.3	1.7	99	18
4 +	317	4	...	63	19

*Sleeping Accommodation.*—In the 825 cases in which the particulars are known, 136 of the cases had a room to themselves, 118 shared the room with 1 other person, 124 with 2 others, 143 with 3 others, and 304 with 4 or more persons.

In the 813 cases in which the details are known, 300 of the cases had a bed to themselves, 283 shared the bed with 1 other person, 177 with 2 others, 40 with 3 others, and 13 with 4 or more other persons.

PATIENTS CLASSIFIED ACCORDING TO WEEKLY INCOME, STATED IN  
SHILLINGS PER WEEK.

No. of Persons.	- 20s.	- 25s.	- 30s.	- 35s.	- 40s.	- 50s.	50s. +
1	2	1	2	1	..	1	...
2	4	2	3	4	5	2	1
3	5	9	14	12	14	2	6
4	7	6	15	14	14	16	17
5	13	7	23	25	14	17	17
6	6	8	14	18	14	22	29
7	11	9	20	17	13	25	32
8	2	3	8	10	7	15	28
9	1	2	5	11	6	13	14
10	1	2	1	4	5	5	11
11	...	...	...	1	...	2	2
12	...	...	1	...	...	4	1
	52	49	106	117	92	124	158

*Bacteriological Laboratory.*—During the year 563 specimens of sputum were received from medical practitioners for examination. Of these, 121 were found to contain tubercle bacilli, and 442 were negative. The results are reported daily by the Bacteriologist to the Public Health Department, and all specimens found positive are carefully noted. Should a positive specimen be from a patient not notified, the medical practitioner sending the specimen is communicated with. In 63 instances the positive sputum was the first information the Department had of the case. The specimens reported negative are also considered in relation to the notifications received, but only one or two of these were notified.

Nine specimens from non-pulmonary cases were reported negative.



*National Insurance Act.*—The applications of insured persons applying for sanatorium benefit are considered by the Sanatorium Benefit Committee of the Insurance Committee monthly, but in order to obviate delay in the treatment of the case, it has been arranged that the recommendations of the Tuberculosis Officer are carried out at once, and if the Insurance Committee cannot grant the application, the District Committee assume liability. In order to ensure close co-operation between the District Committee, who are responsible for treatment, and the Insurance Committee, an Advisory Committee, consisting of members of both bodies, has been constituted, and will discuss the problems arising in the working of the scheme and its development. The suggestions of this committee will be submitted to the District Committee for its consideration, and will, no doubt, be found of considerable value.

PULMONARY TUBERCULOSIS IN EACH REGISTRATION DISTRICT OF THE  
MIDDLE WARD—AVERAGE ANNUAL NUMBER OF DEATHS FOR  
QUINQUENNIAL PERIODS 1891-1910 AND FOR THE YEARS 1910,  
1911, 1912, AND 1913.

Registration District.	Population, Census 1901.	1891-1895.	1896-1900.	1901-1905.	1906-1910.	1910.	1911.	1912.	1913.
Avondale, - -	5,773	10·2	7·4	5·0	7	4	1	2	4
East Kilbride, - -	3,948	4·6	6·2	5·8	5·8	4	3	3	8
Glasford, - - -	1,321	1·4	0·8	1·2	1·2	1	1	...	...
Stonehouse, - -	3,665	4·8	6·8	4·2	2	3	5	3	3
Blantyre, - - -	14,145	18·2	17·6	22·2	15·6	23	24	20	17
Bothwell, - - -	16,260	18 0	14·6	17·8	14	8	12	23	17
Bellshill, - - -	14,135	10·6	18·0	13·6	15·4	23	17	22	19
Holytown, - - -	15,510	13·4	11·4	13·4	16·8	16	16	15	14
Cambuslang, - -	20,211	28·4	25·4	27·0	19·4	19	30	18	27
Cambusnethan, - -	9,814	13·8	7·4	9·2	9·4	9	12	9	7
Calderhead, - -	2,515	2·2	2·8	2·8	2·6	1	1	...	4
Dalserf, - - -	4,088	3·8	1·8	4·2	2·6	1	1	5	1
Larkhall, - - -	12,034	12 0	14·2	12·6	7·4	6	8	9	9
Dalziel, - - -	2,030	1·8	1·2	2·4	2·4	1	2	3	2
Hamilton, - - -	7,597	11·0	6·8	6·0	6·8	8	10	3	7
New Monkland, -	14,498	14·6	18 2	11·6	14·2	8	5	12	11
Old Monkland— Eastern, - - } Coatbridge, - -	2,665	2 2	1·2	1·8	2	...	3	2	3
Western, - - -	2,939	2·8	2·6	1·8	2·6	2	3	4	...
Shotts—East, - -	10,653	15·6	12 0	9·8	11·2	10	15	12	8
Middle, - - -	3,593	2·8	2 8	1·8	3	3	3	2	4
Calderhead, - -	2,823	1·2	1·6	1·6	2·2	3	2	1	1
Western, - - -	4,126	3·0	4·2	5·2	5·4	4	3	1	8
Northern, - - -	3,757	4·6	5·8	4·8	4·6	3	6	7	2
Middle Ward District,	1,263	2·2	2·2	1·8	1·6	1	2	1	...
Average Quinquennial Death- rate per 10,000 of Population, }	179,363	203·2	193·0	187·6	175	161	185	177	176
		13·57	11·44	10·00	8·83	7·97	9·10	8·71	8·50



## DOMICILIARY RECORDS.

## BLANTYRE AND CAMBUSLANG PARISHES.

FRANK H. SCROGGIE, M.B., Ch.B., D.P.H.

*Senior Tuberculosis Officer and Assistant Medical Officer of Health.*

*Number of Cases.*—The total number of cases on record throughout the year was 246. Of these, 218 were pulmonary cases and 28 were non-pulmonary cases.

**Pulmonary Tuberculosis.**

The following table dealing with the 218 pulmonary cases alive at some period during 1913 shows the year of notification and the changes during the year :—

		1907	1908	1909	1910	1911	1912	1913	Total.	
Cases on record 1913,	-	-	5	4	13	17	26	68	85	218
Died,	-	-	1	1	3	3	1	10	25	44
Left district,	-	-	0	0	0	0	1	8	3	12
Removed from list,	-	-	0	0	1	0	0	11	1	13
On record 31st December, 1913,		4	3	9	14	24	39	56	149	

*Age and Sex—Insurance—Conjugal State.*—The following table shows Age (in quinquennial groups), Sex, Conjugal State, and relation to National Insurance Act :—

Years.	No. of cases.			Insured. Dependent.				Not Ins.		Married.		Single.	
	M.	F.	T.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1—5	4	2	6	...	...	4	2	...	...	...	...	4	2
5—10	11	13	24	...	...	11	13	...	...	...	...	11	13
10—15	11	14	25	1	...	9	14	1	...	...	...	11	14
15—20	16	8	24	14	5	2	3	...	...	1	...	15	8
20—25	10	10	20	9	4	...	4	1	2	...	3	10	7
25—30	19	13	32	15	3	...	10	4	...	7	8	12	5
30—35	4	14	18	3	...	...	12	1	2	3	13	1	1
35—40	15	12	27	9	...	...	9	6	3	11	11	4	1
40—45	4	7	11	3	...	...	7	1	...	3	7	1	...
45—50	9	8	17	9	1	...	6	...	1	8	7	1	1
50—55	7	1	8	4	...	...	1	3	...	5	1	2	...
55—60	2	...	2	1	...	...	...	...	1	2	...	...	...
60—65	2	2	4	...	...	...	2	2	...	2	2	...	...
65 & over	...	...	...	...	...	...	...	...	...	...	...	...	...
	114	104	218	68	13	26	83	19	9	42	52	72	52



## OCCUPATION.

*Domestic Work.*—Housewives, 54; domestics, 13; servants, 2; scholars, 34; children, 6.

*Miners, &c.*—Miners, 36; pithead-workers, 9; engineman, 1.

*Metalworkers.*—Steelworkers, 13; labourers, 7; furnacemen, 2; mechanic, 1.

*Factory and Workshop Employees.*—Millworkers, 8; dressmakers, 2; printer, 1.

*Shopkeepers.*—Watchmaker, 1; barman, 1; grocer, 1.

*Miscellaneous.*—Farm servants, 2; clerks, 2; hotel-keeper, 1; typists, 2; railway guard, 1; teacher, 1; gardener, 1; insurance agent, 1; commercial traveller, 1; musician, 1; draughtsman, 1; none, 1; unknown, 11.

*Parish of Residence.*—Blantyre, 106; Cambuslang, 112.

*Duration of Illness.*—The duration of illness in months at date of notification is given in the following table:—

Months,	0-1	1-2	2-3	3-6	6-9	9-12	12-18	18-24	Over 24
Cases, -	5	17	23	29	29	16	27	15	41

*Earliest Symptoms.*—Cough or spit, 142; pain or pleurisy, 22; pneumonia, 14; influenza, 10; hæmoptysis, 4; wasting, 3; measles, 3; whooping-cough, 1; indigestion, 1; bronchitis, 1; weakness, 1; unknown, 16.

*Home Conditions.*—The following table shows number of apartments and type of house used by the patients and their families:—

Apartments.	Tenement.	Cottage.	Row.	Institution.	Total.
1	28	—	12	—	40
2	89	13	27	—	129
3	19	4	1	—	24
4	1	1	1	—	3
over 4	—	20	—	2	22
	137	38	41	2	218

It will be noted that 169 or 78 per cent. of the cases occurred in one-apartment and two-apartment houses. In at least 90 per cent. of these dwellings there is no garden or private ground attached to the house, which makes it useless through lack of privacy to provide sleeping accommodation in shelters or chalets outside the house. This lack of privacy also frequently causes difficulty in persuading the inmates of houses situated in miners' rows and on the ground floor of tenements to keep their windows open. They object to the interior of the house being exposed so openly to the gaze of passers-by. The result usually is that the patient spends all his time out of doors on his feet, and when he wants to rest he is compelled to retire to an imperfectly ventilated dwelling.



*Inmates—*

Apartments.	1	2	3	4 and over.
Total Inmates, - - -	198	822	145	53
Average number per house,	5.07	6.46	5.58	5.28
Average number per room,	5.07	3.23	1.86	1.32

*Sleeping Accommodation.*—23 of the cases had a room to themselves, 41 shared the room with 1 other person, 38 with 2 others, 35 with 3 others, 20 with 4 others, 18 with 5 others, 18 with 6 others, and 9 with more than 6 other persons.

59 of the cases had a bed to themselves, 72 shared the bed with 1 other person, 50 with 2 others, and 21 with 3 others.

16 cases, not included in above, where a visit was not desired, probably had a room to themselves, as the great majority of such cases belong to the well-to-do class.

The sleeping accommodation in the one-apartment houses usually consists of two recess beds, while the two-apartment houses have in addition a recess bed in the room. These recess beds are the most objectionable feature of the interior of the houses. The enclosed space is dark, and consequently usually dirty, while in many cases the space under the bed is used for storing all kinds of rubbish, and in a few cases it is used as a coal cellar. When in use recess beds form a more or less stagnant pool of impure air about the patient, who thus loses the tonic effect produced by sleeping in circulating fresh air, while the danger of infection to any person who sleeps in the same bed is undoubtedly increased.

*Income.*—The following table shows the income in shillings per week of the household in relation to the number of inmates:—

No. of Persons.	0-20s.	20-25s.	25-30s.	30-35s.	35-40s.	40-50s.	Over 50s.
1	...	...	...	1	...	...	...
2	1	...	...	...	3	1	1
3	3	3	2	2	3	...	2
4	2	2	2	4	6	5	7
5	4	2	4	5	5	6	10
6	...	1	2	7	5	7	11
7	1	1	7	8	3	5	12
8	1	1	1	2	1	4	12
9	...	1	...	6	2	2	5
10	..	1	...	2	1	2	1
11	...	...	...	...	...	...	1
Totals,	12	12	18	37	29	32	62

The average income of the households was 47/- per week.

“ “ “ per person “ 6/11 “

“ “ “ “ “ {Children under 12 counted as half} 8/4 “

16 cases not visited are not included.



The weekly income of households occupying one, two, and three apartment houses is as follows:—

	1 ap.	2 ap.	3 ap.
Average income of household,	30/9	43/10	50/1
„ „ per person,	6/4	6/8	9/3
„ „ „	7/8	8/2	10/8

Two children under 12 counted one person.

In the table on inmates it is shown that the one-apartment houses are crowded to a greater extent than the others, the average per room being 5·07 against the next highest average, viz., 3·23 in the two-apartment houses. A one-apartment house is quite suitable for newly married couples or old people whose family have scattered, but it is evident that the one-apartment houses in the district are not so used. The reason for this is not altogether financial, the average income per person in one-apartment houses being 6s. 4d. against 6s. 8d. in two-apartment houses. No doubt many respectable people, who through illness, &c., are compelled to economise on the rent of their house, give up a larger house for a single apartment, but in many cases the drain on the finances is caused by drink, gambling, and wasteful habits. So long as one-apartment houses exist it is unlikely that this thriftless class will cease to occupy them. It should, however, be remembered that the majority of the inmates of room-and-kitchen houses seldom use the room during the day, and at night the majority of them sleep in the kitchen.

*Domiciliary Visits.*—During the year 59 visits to the houses were made by the Tuberculosis Officer, 356 by the Sanitary Inspector, and 189 by the Health Visitor.

*Institutional Treatment (at any time).*—154 of the 218 cases, or 70 per cent., have received institutional treatment in the County institutions at some time during their illness.

Many of the cases have had institutional treatment more than once. The figures are as follows:—Once, 109; twice, 28; 3 times, 8; 4 times, 5; 5 times, 3; 6 times, 1—total, 154.

#### CONDITION AT END OF THE YEAR.

Year of notification.	Number of cases.	Arrested.	Improved.	Stationary.	Worse.	Died.	Off list.	Not to be visited.
1907	5	—	—	3	1	1	—	—
1908	4	—	—	1	1	1	—	1
1909	13	—	3	2	1	3	1	3
1910	17	—	5	4	1	4	1	2
1911	26	—	8	9	3	1	2	3
1912	68	—	15	18	5	10	17	3
1913	85	—	15	37	3	26	4	0
	218	—	46	74	15	46	25	12



*Sputum Examination.*—Of the 218 cases, in 73 the sputum contained tubercle bacilli at some time, 37 of them being positive during 1913. Of the 37, 22 of the specimens were sent by medical practitioners, 8 from notified and 14 from unnotified cases, which latter were notified as a result of the positive finding.

### **Non-Pulmonary Tuberculosis.**

*Number.*—There were on record during 1913, 28 cases. Of these, 4 died and 1 left the district, leaving 23 on record at 31st December, 1913.

*Site of Lesion.*—Bones and joints, 11; glands, 7; abdomen, 5; meninges, 2; epididymis, 1; subcutaneous tissues, 2.

*Domiciliary Visits.*—During the year 6 visits to the homes were made by the Tuberculosis Officer, 40 by the Sanitary Inspector, and 7 by the Health Visitor.

*Institutional Treatment.*—16 of the cases had institutional treatment once, and 3 had institutional treatment on two occasions.

## Domiciliary Records.

### EXPLANATORY NOTE.

The more important data in these Records have been extracted and tabulated in such a way as to give the greatest amount of information in the smallest possible space, and the consequent use of abbreviations and signs necessitates explanatory notes:—

*Insurance.* Column 7 indicates by letters whether the case was an Insured (I.), Dependant (D.), or Non-Insured (N.I.) person.

*Institutional Treatment.* Column 12. Hospitals and Sanatoria belonging to the County are denoted by the first letters of the name, indicating the place where the institution is situated, thus:—

- |                       |                   |
|-----------------------|-------------------|
| (1) St.—Stonehouse.   | (5) L.—Lightburn. |
| (2) Sh.—Shotts.       | (6) B.—Bellshill. |
| (3) U.—Uppertown.     | (7) Bl.—Blantyre. |
| (4) M.—Motherwell.    | (8) D.—Dalserf.   |
| (9) Rm.—Roadmeetings. |                   |

Names of institutions belonging to other authorities are printed in full. In cases which received institutional treatment in 1913 the dates of admission and discharges are given in full, while in cases which received institutional treatment in previous years the year is indicated; thus L./06 means that the patient received treatment in Lightburn Hospital in 1906.

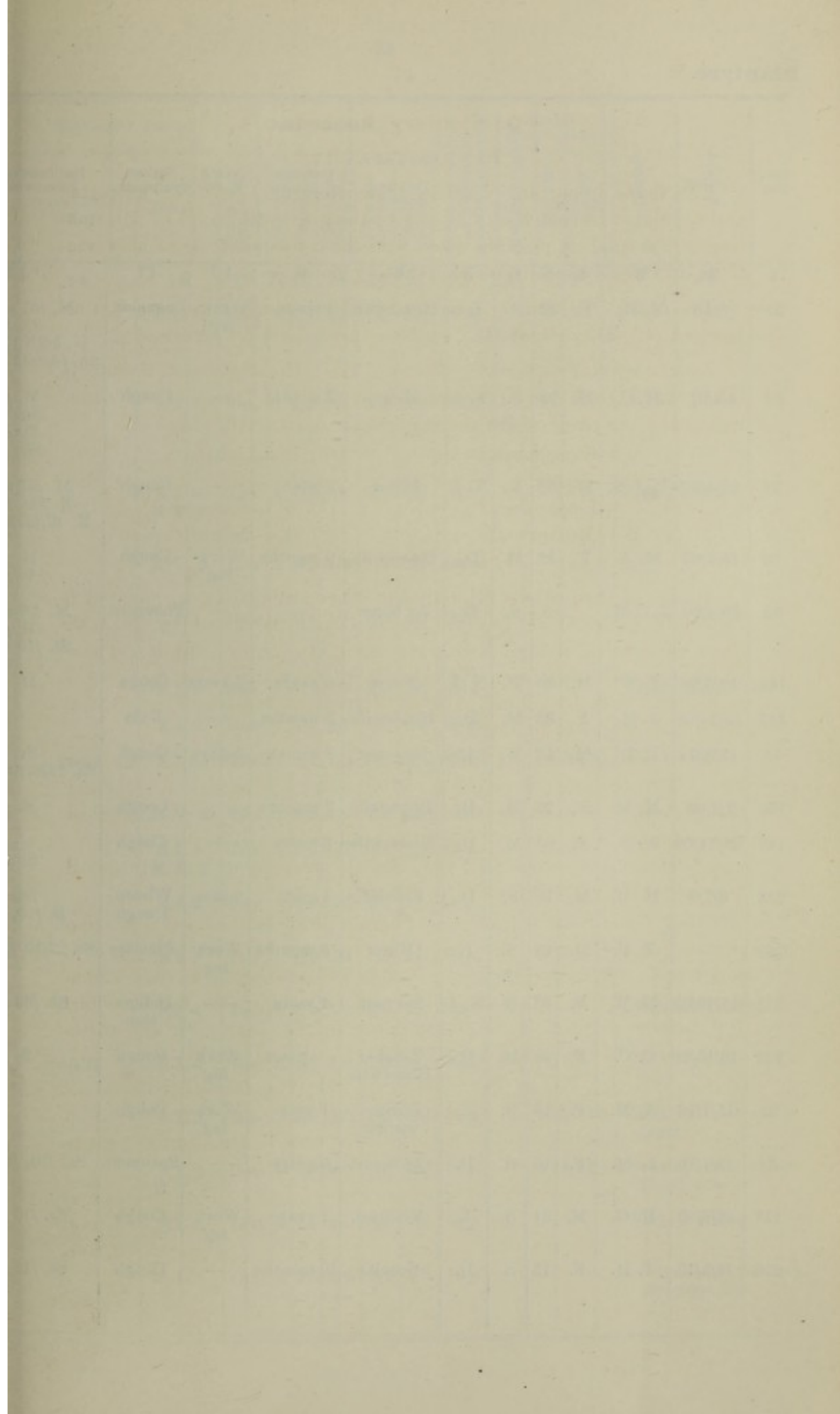
*Domiciliary Visits.* Columns 14 and 15. In column 14 the visits by the Tuberculosis Officer are given—the day and month of each visit being given; for example, 6/9 means a visit paid by the Tuberculosis Officer on 6th September. The visits paid by the Health Visitor (H.V.) and Sanitary Inspector (S.I.) are in most instances not given in detail, but the total number of visits is given.

*Home Conditions.* Inmates. Column 18 gives the total number of inmates in the house. A distinction is drawn between those over 12 years and those under 12 years; thus 7/3 means 7 persons over 12 and 3 under 12 years. The same holds good for columns 19 and 20, which indicate the number of inmates sleeping in the same room and in the same bed as the patient.

*Condition at End of Year.* Column 22. The same terms are used to describe the condition of the patient at the end of the year as to describe the general result of hospital treatment in the clinical records, viz., Arrested, Improved, Stationary, Worse, Died.

*Sputum Examination.* The information under this heading is very incomplete. In extracting the information from the record cards note was made of all positive results, but many of the negatives were ignored; this will be obviated in the future.





## Blantyre.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
34	7/2/07	S. M.	F.	42	M.	D.	Housewife	5 years	Working	Pneumon.	M. /07 and / St. /11 U. 3/2/13—26/3 Sh. 19/8/13—15/1
62	1/4/07	H. C.	M.	25	S.	N. I.	Miner	3 months	—	Cough	M. /07 Sh. /08 B. /09 Sh. /12
73	12/4/07	T. J. S.	M.	52	M.	N. I.	Miner	1 year	—	Cough	M. /07 and / B. /09, /09, / M. 17/6/13—27/
78	15/4/07	M. A.	F.	33	M.	D.	Housewife	9 months	Working	Cough	M. /07 B. /12
95	30/4/07	J. C. M.	.	6	S.	D.	At home	—	—	Pneumon.	M. /07 and / B. /10 St. /10 and /
189	10/6/08	J. W.	M.	39	M.	N. I.	Nurse	6 years	3 years	Cough	M. /08
347	18/11/08	J. M.	F.	30	M.	D.	Housewife	3 months	—	Pain	
75	15/3/09	P. D.	M.	48	M.	I.	Labourer	3 months	3 days	Cough	St. /09 St. 25/8/13—11/
106	2/4/09	M. M.	F.	25	M.	D.	Housewife	2 months	—	Cough	B. /09
140	28/11/09	A. R.	F.	30	M.	D.	Housewife	2 years	—	Cough	U. /09 St. /12
233	6/7/9	H. M.	M.	10	S.	D.	Scholar	1 year	9 mos.	Whoop. Cough	St. /09 B. /10, /11,
269	—	P. F.	M.	18	S.	I.	Miner	6 months	Working	Pleurisy	St. 23/10/13. S
313	15/10/09	M. R.	F.	30	S.	N. I.	Servant	4 years	—	Indiges- tion	St. /09 and /
332	16/10/09	C. C.	F.	44	M.	D.	Teacher Housewife	years	Working	Cough	B. /09
21	15/1/10	A. M.	F.	18	S.	I.	Pithead worker	1 year	Working	Cough	
22	15/1/10	L. M.	F.	16	S.	D.	At home	5 years	—	Pneumon.	St. /10, /11 an
118	12/3/10	H. G.	M.	21	S.	I.	Violinist	1 year	Working	Cough	St. /10 and
216	10/5/10	T. H.	F.	13	S.	D.	Scholar	10 months	—	Cough	St. /10 and



ec. no.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
34		S.I. 1	Row	2	4/4	1/3	1/0	44/	W'se	+ 16/1	+		
32		S.I. 3	Ten.	2	7/0	1/0	0/0	40/	Stat.	- 18/11	-		
73		S.I. 6 H.V. 2	Ten.	2	3/0	0/0	0/0	10/			+	Died 13/9/13	
78		H.V. 9	Row	2	3/5	1/3	1/1	30/	Stat		-		
95		S.I. 1	Row	2	4/4	1/1	0/1	44/	Stat.		-		
89		S.I. 2	Ten.	1	3/2	2/2	1/0	12/	Stat.		-	Laudanum drinker	
147		S.I. 2	Row	1	4/2	3/2	1/0	33/	W'se		-		
75	24/11	S.I. 1	Ten.	2	2/1	1/0	0/0	24/6	W'se		+ 1909		
106		H.V. 4	Ten.	2	3/2	1/2	1/2	35/	Stat.		-		
140		S.I. 4 H.V. 2	Ten.	1	4/2	3/2	0/2	30/	Imp.		-		
233		S.I. 4	Row	1	3/5	3/4	0/0	18/11	Imp.		-		
269		S.I. 5	Ten.	1	3/0	2/0	1/0	12/	Imp.	- 20/10	-		
313		S.I. 4	Ten.	2	5/0	1/0	0/0	50/	Stat.		-	Off list, Dec., 1913	
332	10/12	S.I. 5	Ten.	2	4/3	3/0	1/0	31/	Stat.		-		
21		S.I. 3	Ten.	2	7/0	3/0	1/0	32/	Imp.		+ 12/1/10	Working. No symp- toms	
22		S.I. 1 H.V. 1	Cot.	3	7/3	0/0	0/0	40/	Imp.		+ 16/4/11	No symptoms; domes- tic service.	
118		S.I. 2	Cot.	3	4/0	0/0	0/0	42/	Imp.		-	Well ; working.	
216		S.I. 5	Ten.	2	5/5	2/4	0/2	30/	Imp.		-	In domestic service ; no symptoms.	

## Blantyre—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
237	2/6/10	P. R.	M.	46	M.	I.	Miner	2 years	—	Cough	B. /10 St. 10/6/13—16/3 Sh. 22/7/13—11/13
263	16/10/10	N. M.	F.	36	M.	D.	Housewife	9 months	Work- ing	Cough	B. /10, M. /1 B. /10, B. /1
381	24/8/10	M. L.	F.	11	S.	D.	Scholar	6 months	Work- ing	Cough	B. /10
407	14/9/10	M. M.	M.	23	S.	I.	Miner	2 years	Work- ing	Cough	St. /10 Sh. 30/7/13—2/13
68	5/3/11	C. C.	F.	14	S.	—	Scholar	3 months	—	Cough	St. /11 and /1
98	8/3/11	F. G.	M.	55	M.	N.I.	Miner	2 years	Work- ing	Pleurisy	B. /11 and /1
103	15/3/11	A. C.	M.	16	S.	I.	Pithead worker	1 year	—	Pneumon.	Sh. /11
123	22/3/11	T. C.	M.	29	M.	I.	Miner	21 months	Work- ing	Cough	St. /11, U. /1 St. 13/6/13—2/13 Sh. 14/8/13—14/13
151	7/4/11	J. K.	M.	27	M.	N.I.	Ironmonger	2 years	Work- ing	Pleurisy	St. /11 and /1
153	7/4/11	A. M.	F.	50	M.	D.	Housewife	2 years	Work- ing	Pleurisy	
237	23/5/11	J. D.	F.	42	M.	D.	Housewife	15 months	Work- ing	Cough	B. /11 and /1
347	2/9/11	J. H.	F.	39	M.	D.	Weaver, Housewife	2½ years	Work- ing	Pleurisy	St. /11 St. 25/8/13—27/13
404	2/11/11	A. L.	M.	34	M.	I.	Hammers- man	3 weeks	3 wks.	Cough	
29	1/2/12	J. M.	M.	3	S.	D.	At home	2 years	—	Pneumon.	St. /12
34	6/2/12	M. P.	F.	5	S.	D.	Scholar	3 weeks	—	Measles	
40	15/2/12	M. L.	F.	25	M.	D.	Dom. servt., Housewife	18 months	Work- ing	Cough	B. /12
52	20/2/12	M. B.	F.	5	S.	D.	Scholar	8 weeks	—	Measles	B. /12 B. 8/9/13—21/13 D. 21/10/13—29/13
60	26/2/12	A. C.	F.	9	S.	D.	Scholar	7 months	2 mos.	Wasting	St. /12 B. 8/1/13—26/13 D. 26/3/13—31/13
79	8/3/12	H. S.	F.	9	S.	D.	Scholar	6 months	6 mos.	Cough	St. /12



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
37	12/12	S.I. 8	Ten.	2	4/2	1/0	1/0	50/	Stat.		+ 21/5/10		
63		S.I. 6 H.V. 8	Row	2	3/0	1/0	1/0	50/	W'se		+ 14/6/10		
81		S.I. 2	Row	1	2/3	2/2	0/1	26/	Stat.		-		
107		S.I. 5	Cot.	2	4/5	1/1	1/0	22/			+ 28/9/10	Died 2/12/13.	
68	11/11	H.V. 11	Row	2	7/2	4/2	0/1	30/	W'se		+ 7/4/13		
98	11/12		Ten.	1	4/1	3/1	1/1	18/6	Stat.		+ 6/3/11		
103		S.I. 3	Ten.	1	3/2	2/2	1/0	30/	Stat.		-		
123	10/12		Row	1	2/3	1/3	1/1	22/	Wse.		+ 22/5/13		
151		S.I. 2	Ten.	1	3/1	2/1	0/0	35/	Wse.		+ 14/8/11		
153		S.I. 2	Ten.	2	3/1	1/0	1/0	27/			-	Died 6/13.	
237		S.I. 5	Row	2	4/0	3/0	1/0	25/	Stat.		-		
347		S.I. 1	Ten.	2	5/3	2/2	1/0	86/	Stat.		+ 31/8/11		
404		S.I. 3	Ten.	1	2/0	1/0	1/0	20/	Imp.	+ 29/7		Working.	
29		S.I. 4	Row	2	4/6	2/3	0/0	35/	Imp.		-		
34		S.I. 2	Ten.	1	2/1	2/0	2/0	25/	Imp.		-		
40		S.I. 5 H.V. 9	Ten.	1	2/2	1/2	1/1	30/	Imp.		-		
52	3/1	H.V. 9	Row	2	2/3	2/2	0/1	26/	Stat.		-		
60			Row	2	2/5	2/4	0/3	25/	Stat.		-		
79		H.V. 3	Row	2	3/3	0/1	0/1	2/8	Imp.		-		

## Blantyre—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
81	9/3/12	J. F.	M.	37	S.	I.	Miner	2 months	2 mos.	Influenza	St. /12 St. 2/6/13—17/13 Sh. 17/10/13—22/13
92	8/3/12	C. S.	F.	40	M.	D.	Housewife	12 months	4 mos.	Cough	B. /12
135	16/4/12	T. H.	M.	14	S.	D.	Scholar	6 weeks	5 wks.	Pleurisy	B. /12
190	14/5/12	M. M.	F.	64	M.	D.	Housewife	1 month	3 wks	Cough	B. /12
221	4/6/12	J. T.	F.	5	S.	D.	Scholar	2 weeks	2 wks.	Pneumon.	
223	5/6/12	J. S.	F.	28	M.	D.	Housewife	4 months	1 wk.	Cough	U. /12 & /13
229	31/5/12	A. C.	F.	6	S.	D.	Scholar	7 months	—	Weakness	St. /12, B. /13
252	19/6/12	J. T.	M.	25	S.	I.	Draughtsman, Farm lab.	10 weeks	—	Cough	
270	29/6/12	M. S. P.	F.	15	S.	D.	At home	5 months	—	Influenza	U. /12 M. 24/5/13—21/13 D. 21/10/13—23/13 Bl. 23/10/13—S in
274	6/7/12	M. M.	F.	18	S.	D.	Dressmaker At home	1 month	1 wk.	Cough	St. 24/7/12—12/13
286	22/6/12	S. A. C.	F.	23	M.	D.	Housewife	18 months	Work- ing	Cough	U. /12
307	9/8/12	W. N.	M.	36	M.	I.	Miner	12 months	Work- ing	Haem.	St. /12
324	15/8/12	A. H.	F.	3	S.	D.	At home	5 weeks	—	Pneumon.	
332	22/8/12	A. M.	F.	10	S.	D.	Scholar	5 weeks	4 wks.	Bron.	
345	3/9/12	W. K.	M.	22	S.	I.	Engineman, Farm servt.	9 months	3 wks.	Cough	St. /12
349	9/9/12	A. C.	M.	14	S.	D.	Scholar	years	3 yrs.	Pleurisy	
357	11/9/12	H. Y.	M.	39	M.	I.	Miner	12 months	12 mos.	Pain	
358	11/9/12	T. B.	M.	24	S.	I.	Miner	3 years	2 yrs.	Cough	St. 15/11/12—25/13 M. 25/9/13—4/13 D. 4/10/13—St in
369	18/9/12	A. C.	M.	16	S.	I.	Miner	2 weeks	5 days	Cough	
372	19/9/12	C. S.	M.	26	M.	I.	Miner	1 year	3 mos	Cough	
381	25/9/12	J. P.	M.	26	S.	I.	Barman	2 months	Work- ing	Cough	St. 4/11/12—12/13



ec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.						Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.		1913.	Previous Results.	
3	14	15	16	17	18	19	20	21	22	23	24	25
1		S.I. 6	Ten.	3	4/0	0/0	0/0	60/	Wse.		-	
2	25/3	S.I. 1 H.V. 4	Row	2	3/3	2/1	0/1	28/	Stat.		+ 12/3/12	
35	23/3	S.I. 3	Ten.	1	4/3	3/3	2/0	25/	Imp.		-	Working
90		S.I. 3	Row	2	4/1	1/0	1/0	25/	Imp.		+ 20/5/12	No symptoms
21		S.I. 3	Ten.	2	3/5	1/1	0/0	24/	Imp.		-	At school
23		S.I. 5	Ten.	1	2/3	1/3	1/1	35/			+ 3/6/12	Died 24/12/13
29		S.I. 2	Row	2	2/5	2/4	0/3	26/	Stat.		-	
52			Cot.	6	4/0	0/0	0/0	Am- ple	Stat.		+ 17/6/12	Working in farm at Sanquhar
70	30/11	H.V. 4	Ten.	3	6/3	3/3	0/2	63/	Stat.		+ 26/6/12	
74		S.I. 1	Cot.	4	3/1	0/0	0/0	40/	Wse.		+ 4/7/12	
86		H.V. 14	Ten.	1	2/1	1/1	1/1	24/	Stat.		-	
97	3/4 24/11	H.V. 13	Ten.	2	3/4	2/3	1/1	30/	Imp.		+ 2/2/12	Off list 31/12/13
24		S.I. 4	Ten.	2	4/5	2/4	0/2	42/	Imp.		-	Working No symptoms
32		S.I. 4	Ten.	3	4/3	0/1	0/1	40/	Imp.		-	
45	4/4 24/11	H.V. 11	Cot.	2	6/2	1/0	1/0	45/	—		+ 29/8/12	Off list 31/12/13
49			Cot.	2	5/0	2/0	0/0	70/	—		-	Died 23/11/13
57		S.I. 2	Row	4	4/3	1/0	1/0	30/	Stat.	- 3/3		Off list 8/13
58		S.I. 2	Row	2	4/2	1/0	1/0	33/	Stat.		+ 29/8/12	
59			Cot.	2	5/0	1/0	1/0	70/	Stat.		-	Off list 8/13
72		S.I. 1	Ten.	2	6/0	1/0	1/0	60/	Wse.		+ 17/9/12	
81		S.I. 1	Row	3	2/0	1/0	0/0	35/	Imp.		+ 17/9/12	Working

## Blantyre—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
404	14/10/12	R. D.	F.	13	S.	D.	Scholar	8 months	5 mos.	Wasting	Sh. 20/10/12—1/9/13 20/11/13—Still
431	7/6/12	J. B.	M.	22	S.	I.	Tram car conductor	18 months	Work- ing	Pleurisy	St. 31/10/12—2/6/13
434	19/10/12	C. B.	M.	10	S.	D.	Scholar	4 weeks	4 wks.	Cough	B. 2/11/12—28/6/13
456	18/11/12	J. L.	M.	39	S.	N. I.	—	4 years	—	Cough	
—	1/11/12	F. B.	M.	4	S.	D.	Scholar	1 month	—	Cough	D. 2/11/12
—	1/11/12	J. B.	M.	8	S.	D.	Scholar	1 month	3 days	Cough	B. 2/11/12—8/3/13
469	3/12/12	H. M.	M.	6	S.	D.	Scholar	8 months	Work- ing	Wasting	B. 8/1/13—5/5/13
472	6/12/12	R. J.	M.	18	S.	I.	Miner	2½ years	Work- ing	Influenza	St. 18/12/12—12/3/13
486	18/12/12	G. B.	M.	33	M.	I.	Miner	10 weeks	6 wks.	Influenza	St. 4/1/13—26/3/13
1	1/1/13	J. M.	F.	29	M.	D.	Housewife	4 months	3 mos.	Influenza	St. 13/1/13—22/3/13
2	2/1/13	P. M.	M.	9	S.	D.	Scholar	6 months	3 wks.	Pleurisy	Bl. 25/1/13—26/9/13
47	28/1/13	J. M.	F.	25	S.	I.	Typist	7 weeks	7 wks.	Pneumon.	St. 4/2/13—4/8/13
64	6/2/13	T. P.	M.	50	M.	I.	Miner	8 months	6 mos.	Cough	B. 3/3/13—26/5/13
71	20/1/13	P. C.	M.	1½	S.	D.	At home	5 weeks	—	Pneumon.	
72	8/2/13	J. M.	M.	52	S.	N. I.	Engineman	4 years	4 years	Cough	
77	14/2/13	M. M.	F.	22	S.	I.	Pithead- worker	8 weeks	8 wks.	Cough	St. 25/2/13—17/5/13
79	15/2/13	M. L.	F.	26	S.	I.	Pithead- worker	6 months	2 wks.	Cough	St. 25/2/13—18/7/13
127	12/3/13	J. C.	F.	39	M.	D.	Housewife	3 months	Work- ing	Pneumon.	Sh. 25/3/13—28/5/13
128	12/3/13	S. M.	F.	15	S.	I.	Pithead- worker	4 weeks	4 wks.	Cough	Bl. 25/3/13—16/9/13
150	24/3/13	A. M.	F.	12	S.	D.	Scholar	6 weeks	6 wks.	Influenza	Bl. 1/5/13—31/7/13
160	28/3/13	T. Y.	M.	39	M.	I.	Miner	4 months	3 days	Cough	U. 24/4/13—16/7/13



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
404	24/11	S.I. 1	Row	1	7/3	2/0	0/0	46/	W'se		+ 9/10/12		
431	11/11	S.I. 1	Cot.	2	5/1	1/0	0/0	60/	—		+ 8/11/12	Died 21/7/13	
434			Row	2	5/2	1/2	1/2	28/	—		—	Off list 31/12/13	
456			Cot.	7	4/0	0/0	0/0	Am-ple	—		—	Not to be visited Died 2/12/13	
—			Row	2	5/2	1/2	1/2	28/	—		—	Off list 31/12/13	
—			Row	2	5/2	1/2	1/2	28/	—		—	Off list 31/12/13	
469			Ten.	1	2/2	2/1	1/0	40/			—	Left district 31/12/13	
472		S.I. 2	Ten.	2	7/2	3/2	1/0	76/	Imp.		+ 3/12/12	Working	
486		S.I. 1 H.V. 5	Row	2	2/4	1/4	0/2	30/	Imp.		—	—	
1		S.I. 1	Ten.	2	2/1	1/1	0/1	35/	Imp.		—		
2		S.I. 2	Row	1	5/2	5/1	2/1	32/	Stat.		—	Also abdominal	
47	24/11	S.I. 1 H.V. 4	Ten.	3	4/0	0/0	0/0	Am-ple		+ 21/1	+	Died 29/11/13	
64		S.I. 2	Row	2	2/5	1/5	1/2	32/2	Stat.		+ 26/2/13		
71		S.I. 1	Row	1	2/1	2/0	2/0	32/			—	Died 20/1/13. Not notified	
72		S.I. 1	Cot.	3	2/0	0/0	0/0	35/			—	Died 29/1/13, before notification	
77		S.I. 5	Ten.	2	7/0	2/0	1/0	88/			+ 20/3/13	Left district 31/12/13	
79	19/11	S.I. 2	Ten.	2	6/0	1/0	1/0	43/6	Imp.		—		
27	24/11	S.I. 2	Ten.	2	2/5	0/5	0/2	35/	Imp.		—		
28		S.I. 2	Row	1	4/3	3/3	1/0	17/	Imp.		—		
50		S.I. 1	Cot.	3	6/2	1/1	1/1	51/		+ 18/3		Died 6/9/13	
160		S.I. 3	Row	2	3/4	2/4	1/0	25/	Stat.	+ 2/3			

## Blantyre—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
182	9/4/13	M. F.	F.	32	M.	D.	Servant, housewife	2 years	5 wks.	Pleurisy	Bl. 17/4/13—29/6/13
180	9/4/13	F. D.	F.	30	M.	D.	Housewife	2 years	4 mos.	Cough	
143	25/3/13	J. C.	M.	63	—	—	—	—	—	—	
181	5/4/13	M. H.	F.	23	W.	N.I.	Housewife	1 year	Work- ing	Pleurisy	St. 10/4/13—24/5/13
185	10/4/13	J. F.	M.	15	S.	I.	Pithead- worker	9 months	9 mos.	Haem.	St. 24/4/13—3/5/13
191	14/4/13	J. F.	F.	35	M.	D.	Housewife	3 months	Work- ing	Cough	Sh. 26/4/13—6/6/13
212	2/5/13	A. M.	F.	39	M.	D.	Housewife	4 months	—	Cough	
249	2/6/13	C. M.	M.	18	S.	I.	Miner	3 years	4 mos.	Cough	St. 23/6/13—25/9/13
289	30/6/13	P. K.	M.	28	S.	I.	Miner	3 months	5 wks.	Cough	
317	22/7/13	E. M.	F.	12	S.	D.	Scholar	5 years	—	Cough	
325	29/7/13	H. H.	F.	46	M.	D.	Housewife	6 months	2 wks.	Cough	B. 12/8/13—6/9/13
327	30/7/13	J. W.	M.	18	S.	I.	Labourer	8 months	2 wks.	Cough	St. 1/8/13—Still i
328	30/7/13	J. L.	M.	28	S.	N.I.	Hotel keeper	9 months	2 mos.	Cough	
350	26/8/13	A. M.	F.	38	M.	D.	Housewife	years	—	Cough	
361	5/9/13	M. R.	F.	7	S.	D.	Scholar	1½ years	—	Pneumon.	
366	13/9/13	E. G.	F.	24	M.	D.	Servant, Housewife	1 year	3 wks.	Cough	Sh. 7/10/13. Still
376	16/9/16	A. A.	F.	22	S.	I.	Typist	2 months	2 mos.	Cough	St. 7/10/13. Still
388	26/9/13	T. S.	M.	22	S.	I.	Miner	7 weeks	10 days	Influen.	Sh. 4/10/13. Still
390	29/9/13	Mrs. Y.	F.	62	M.	D.	Housewife	1 year	—	Cough	
405	9/10/13	W. S.	M.	18	M.	I.	Miner	6 months	2 mos.	Influen.	U. 14/10/13—16/12/13



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.						Condition at end of Year.	SPTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartment.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.		1913.	Previous Results.	
13	14	15	16	17	18	19	20	21	22	23	24	25
182		S.I. 3 H.V. 4	Ten.	1	3/2	2/2	1/0	32/	Stat.	+	4/4	
180		S.I. 1	Cot.	2	4/2	2/0	2/0	37/			—	Died 18/4/13
143			—	—	—	—	—	—			—	Died 2/2/13, Kirklands Asylum
181	5/4	S.I. 1 H.V. 5	Ten.	2	2/3	1/3	0/2	10/			—	Left district 18/10/13
85		S.I. 2	Ten.	3	3/0	0/0	0/0	27/	Stat.		—	
91		S.I. 2	Ten.	1	3/4	2/4	0/2	35/	Imp.		—	No symptoms
212		S.I. 1	Row	2	7/1	1/1	1/1	?		+	11/4	Died 18/4/13
249		S.I. 1	Ten.	1	4/2	3/2	1/1	51/	Stat.		—	
289		S.I. 1	Row	2	3/2	0/0	0/0	32/			—	Died 1/7/13
317		S.I. 2	Row	2	5/1	2/1	0/0	56/	Imp.		—	At school. No symptoms
325		S.I. 1	Row	1	2/1	1/1	1/0	36/			—	Off list 31/12/13
327		S.I. 1	Cot.	2	4/1	0/0	0/0	37/	Stat.		+1/8/13	
328		S.I. 1	H'tel	8	4/0	0/0	0/0	Ample			—	Died 17/12/12
350		S.I. 1 H.V. 5	Ten.	3	5/3	1/1	1/1	49/	Stat.		—	
361		S.I. 2	Row	2	3/4	0/2	0/0	48/	Stat.		—	
366		S.I. 1	Row	2	5/3	3/2	1/1	72/	Wse.	+	1/9	
376		S.I. 1	Ten.	3	3/0	0/0	0/0	Ample	Stat.	+	20/8	
388		S.I. 1	Row	3	5/1	2/0	0/0	76/	Stat.	+	22/9	
390		S.I. 1	Farm	—	—	—	—	Ample			—	Not to be visited Died 23/10/13
405		S.I. 1	Ten.	3	4/4	1/0	1/0	77/	Stat.		—	

## Blantyre—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
406	9/10/13	J. H.	F.	37	M.	D.	Servant, Housewife	7 months	3 mos.	Pneumon.	St. 14/10/13—26/11/12
425	24/10/13	M. M.	F.	14	S.	D.	At home	7 weeks	—	Pleurisy	St. 17/11/13—31/11/13
426	24/10/13	M. M.	F.	45	M.	D.	Farm serv. Housewife	3 months	3 mos.	Cough	Sh. 6/11/13. Still
437	29/10/13	J. H.	M.	14	S.	I.	Miner	3 months	3 mos.	Pleurisy	
448	8/11/13	J. G.	F.	40	M.	D.	Weaver, Housewife	2 weeks	Working	Cough	U. 2/12/13. Still
488	18/12/13	A. A.	F.	45	S.	I.	Machinist	1 year	10 mos.	Cough	
498	26/12/13	M. C.	F.	34	M.	D.	Housewife	1 year	2 wks.	Cough	
											NON-PULMONARY
	26/2/12	Mrs. C.	F.	35	M.	D.	Housewife	6 months	Working	Abscess on arm	M. 25/2, B. 27/3
	9/4/12	M.A.C.	F.	7	S.	D.	Scholar	3 weeks	—	Wasting	B. /12
	31/7/12	J. G.	M.	3	S.	D.	At home	2 years	—	Wasting	B. /12
	22/11/12	F. C.	M.	35	M.	N.I.	Miner	16 months	16 mos.	Swelling of leg	M. 4/12/12—25/2/13 M. 21/7/13—4/10/13
	26/11/12	A. B.	M.	4	S.	D.	At home	1 year	—	Swelling	M. 22/11/12—29/6/13
	30/12/12	O. B.	M.	19	S.	I.	Miner	4 weeks	3 wks.	Swelling	M. 16/12/12—22/2/13
	1/3/13	M. G.	F.	18	S.	D.	At home	11 years	—	Swelling jaw	M. 4/3/13—26/5/13
	6/2/13	D. C.	M.	7	S.	D.	Scholar	5 months	3 mos.	Pain	M. 10/2/13—21/6/13 26/9/13—22/10/13 Bl. 22/10/13. Still
	3/3/13	J. M.	F.	13	S.	D.	Scholar	1 year	1 year	Swelling fingers	M. 6/3/13—11/6/13
	10/3/13	W. P.	M.	11	S.	D.	Scholar	5 years	1 mo.	Swelling elbow	M. 20/3/13—14/5/13
	11/4/13	M. M.	F.	10	S.	D.	Scholar	2½ years	1 mo.	Swelling glands	



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
106		S.I. 1	Cot.	2	5/2	1/0	1/0	64/	Stat.		-		
125		S.I. 1	Row	2	5/2	2/2	1/1	60/	Stat.		-		
126		S.I. 1	Row	2	6/2	3/0	1/0	62/	Wse.		+ 10/11/13		
137		S.I. I	Ten.	1	2/1	1/1	0/0	8/				Died 4/10/13	
148		S.I. 1	Ten.	2	2/3	1/3	1/0	40/	Stat.				
188		S.I. 1	Cot.	2	4/3	0/0	0/0	Am-ple	Stat.	+ 1/11	-		
198		S.I. 1	Ten.	3	3/1	1/0	0/0	42/	Stat		-		
TUBERCULOSIS.													
		S.I. 3	Row	2	2/3	1/5	1/1	25/				Multiple abscesses	
	10/12	S.I. 4	Ten.	2	5/4	3/2	1/1	45/				Wrist joint	
		H.V. 6	Row	2	6/4	4/1	0/0	30/				Died 10/11/13 Abdomen	
		S.I. 5	Ten.	2	2/2	1/2	1/0	23/	Stat.			Spine	
		S.I. 1	Row	1	4/2	4/1	0/0	28/				Fever	
		S.I. 1	Ten.	2	4/3	1/0	1/0	42/				Epididymis	
		S.I. 1	Ten.	2	7/0	1/0	0/0	82/				Jaw and skin	
		S.I. 1	Ten.	2	2/5	2/1	2/1	18/				Hip joint	
		S.I. I	Ten.	2	8/1	2/1	0/0	129/				Fingers	
		S.I. 1	Ten.	3	4/6	2/3	1/0	44/				Groin glands	
		S.I. 1	Ten.	3	2/4	0/1	0/1	35/				Neck glands	

## Blantyre—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
	10/4/13	L. M.	F.	18	S.	I.	Domestic servant	4 months	4 mos.	Pain in abdomen	U. 37/4/13—2/8/13 M. 1/10/13—21/10/13 Bl. 21/10/13. Still i
	24/4/13	M. R.	F.	2	S.	D.	At home	1 year	—	Wasting	Bl. 26/4/13—22/5/13 M. 22/5/13—27/6/13
	27/10/13	S. K.	F.	3	S.	D.	At home	—	—	—	
	16/12/13	R. A.	M.	3	S.	D.	At home	1 year	—	Pain	M. 27/12/13. Still i
<b>Cambuslang.</b>											
43	13/2/08	Mrs. R.	F.	45	M.	N.I.	—	—	—	—	
58	22/2/08	G. F.	M.	53	M.	I.	Steel smelter	3 months	Work- ing	Cough	St. /08
36	2/2/09	Mrs. L.	F.	—	—	—	—	—	—	—	—
129	21/4/09	A. S.	M.	53	M.	I.	Labourer	Years	—	Cough	
120	19/4/09	W. D.	M.	—	—	—	—	—	—	—	
154	8/5/09	J. M.	M.	44	S.	I.	Miner	1 year	6 mos.	Cough	U. /09 and /12 B. /10 and /10 M. /10
155	8/5/09	Mrs. H.	F.	—	—	—	—	—	—	—	—
225	28/6/09	J. D. B.	M.	—	—	—	—	—	—	—	—
101	5/3/10	J. P.	M.	19	S.	I.	Pithead worker	9 months	6 mos.	Cough	L. /10
139	7/4/10	K. O.	F.	8	S.	D.	Scholar	4 years	—	Cough	B. /10 Bl. 8/7/13—18/10/3
165	11/4/10	R. D.	M.	38	M.	I.	Insurance agent	2 years	5 wks.	Cough	
209	6/5/10	G. S.	M.	48	M.	I.	—	—	Work- ing	Cough	St. /10
280	23/6/10	J. C. M.	M.	53	—	—	—	—	—	—	
281	23/6/10	Mrs. S.	F.	36	M.	—	—	—	—	—	



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
		S.I. 1	Ten.	3	6/2	1/1	1/0	70/				Abdomen	
		S.I. 1	Cot.	3	4/4	3/2	1/1	25/				Died 27/6/13 Abdomen	
		S.I. 1	Ten.	2	2/4	—	—	—				Died 28/10/13 Meningitis	
		S.I. 1	Ten.	1	2/2	2/1	2/1	28/				Hip joint	
43			—	—	—	—	—	—			—	Not to be visited	
58		S.I. 1	Ten.	3	4/1	1/1	0	100/			+2/8/10	Died 24/4/13	
36			—	—	—	—	—	—			—	Not to be visited	
129		S.I. 1	Row	1	3/0	2/0	0	20/			—	Died 2/1/13	
120			—	—	—	—	—	—			—	Not to be visited	
154		S.I. 1	Ten.	2	5/0	3/0	1/0	65/			+10/7/12	Died 13/3/13	
155			—	—	—	—	—	—			—	Not to be visited	
225			—	—	—	—	—	—		+ 20/1	—	Not to be visited Died 13/2/13	
101			Ten.	2	5/0	1/0	0/0	40/			—	Not traced	
139		S.I. 1	Ten.	1	2/2	2/1	0/1	36/	Imp.		—		
165		S.I. 1	Ten.	2	2/4	0	0	33/			—	Not to be visited Died 16/4/13	
209		S.I. 2	Ten.	2	4/1	0	0	49/			+3/5/10	Died 11/4/13	
280			—	—	—	—	—	Am- ple			—	Not to be visited	
281			—	—	—	—	—	—			—	Not to be visited	

## Cambuslang—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
347	1/8/10	J. L.	M.	56	M.	I.	Miner	Years	Work- ing	Cough	M. /10 St. /10 B. /12 and /1
489	3/11/10	J. K.	M.	22	S.	—	—	—	—	—	
500	30/11/10	P. B.	M.	26	S.	I.	Postman Miner	7 months	—	Cough	St. 11
47	6/2/11	S. M.	F.	31	M.	D.	Housewife	2 months	Work- ing	Cough	St. /11 and /1
69	17/12/11	T. D.	M.	38	—	—	—	—	—	—	
88	28/2/11	M. B.	F.	2	S.	D.	At home	2 months	—	Pneumon.	
91	2/3/11	H. Y.	F.	26	M.	D.	Millworker Housewife	2 months	Work- ing	Cough	St. /11
92	2/3/11	M. B.	F.	22	S.	I.	Dyeworker	1 month	3 wks.	Cough	St. /11
94	7/3/11	M. M.	F.	43	M.	D.	Housewife	12 months	Work- ing	Cough	B. /11
106	16/3/11	K. D.	F.	11	S.	D.	Scholar	6 months	—	Cough	St. /11 B. 21/12/12—8/3
119	3/3/11	G. C.	M.	9	S.	D.	Scholar	2 months	—	Cough	U. /11 St. /12
200	3/5/11	A. M.	F.	40	M.	D.	Dyeworker Housewife	1 year	Work- ing	Cough	L. /11
244	17/5/11	W. J.	M.	51	M.	I.	Steelworker	3 years	1 week	Cough	L. 6/3/13—31/5/
255	2/6/11	M. D.	F.	26	M.	D.	Outworker, Housewife	6 months	Work- ing	Cough	B. /12 Sh. 7/6/13—16/63
334	14/8/11	S. T.	M.	5	S.	D.	Scholar	3 months	—	Cough	B. /11 B. 11/11/12—7/33
341	21/8/11	J. R.	M.	46	M.	I.	Nailworker	9 months	Work- ing	Pleurisy	B. 11/ and /11
389	16/10/11	G. P. J.	M.	40	M.	N.I.	—	—	—	—	
415	3/11/11	M. H.	F.	14	S.	D.	Scholar	6 months	—	Cough	St. /11
437	13/12/11	F. C.	M.	19	S.	I.	Labourer	3 weeks	2 wks.	Cough	St. /11



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
347		S.I. 1	Ten.	2	3/1	0	0	25/	Stat.		-		
489			—	—	—	—	—	—			-	Died 8/5/13 Not to be visited.	
500	24/10	S.I. 5	Ten.	2	6/0	3/0	1/0	60/	Stat.		-	Working	
47	19/11	S.I. 2	Ten.	2	2/4	1/4	1/1	30/	Stat.		-		
69			—	—	—	—	—	—			-	Not to be visited	
88	19/11	H.V. 2 S.I. 1	Ten.	2	7/2	5/1	2/1	30/	Stat.		-		
91	19/11	S.I. 6	Ten.	2	2/3	0/1	0/1	30/	Imp.		—		
92	24/10 9/12	S.I. 6	Ten.	2	6/0	3/0	1/0	84/	Imp.		-	Working	
94		S.I. 5	Ten.	3	3/2	0	0	35/	Stat.		+ 14/3/11		
106	21/10	S.I. 3	Ten.	1	3/2	3/1	2/1	25/	Imp.		-		
119		S.I. 2	Ten.	2	6/2	3/2	2/1	51/	Stat.		-		
200		S.I. 2	Ten.	2	3/6	1/1	1/1	33/	Imp.		-		
244		S.I. 2	Ten.	2	5/1	2/0	2/0	50/			-	Left district 16/9/13	
255		S.I. 3	Ten.	2	2/3	1/3	1/1	35/	Wse.		+ 30/5/11		
334		S.I. 3	Ten.	1	5/4	5/3	2/1	35/	Stat.		-		
341		S.I. 4	Ten.	2	4/2	3/0	1/0	46/	Imp.		-	Working.	
389			—	—	—	—	—	Am- ple			-	Not to be visited.	
415		S.I. 3	Ten.	2	5/2	0	0	45/	Imp.		-	Working.	
437	23/6—19/11	S.I. 4	Ten.	2	4/2	1/0	0/0	42/6	Imp.		-	Working.	

## Cambuslang—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
456	28/12/11	J. A.	F.	22	S.	N.I.	—	—	—	—	
25	23/1/12	A. C.	F.	45	M.	D.	Housewife	6 months	Working	Cough	St. /12
63	22/2/12	N. D.	F.	10	S.	D.	Scholar	12 months	—	Cough	St. /12
67	26/2/12	T. M.	M.	16	S.	I.	Steelworker	9 months	2 wks.	Pleurisy	B. /12
74	2/3/12	N. J. R.	M.	37	M.	N.I.	Printer	2 years	4 wks.	Pleurisy	
77	7/3/12	P. K.	M.	21	S.	I.	Steelworker	3 weeks	Working	Cough	
126	11/4/12	P. M.	M.	47	S.	I.	Steelworker	2 months	6 wks.	Cough	B. /12
158	30/4/12	R. W. P.	M.	60	M.	N.I.	Printer	3 years	—	Cough	
213	29/5/12	M. C.	F.	32	M.	D.	Dom. servt., Housewife	1 year	—	Cough	St. /12
225	6/6/12	A. M.	F.	12	S.	D.	Scholar	years	—	Cough	
243	15/6/12	E. E.	F.	46	M.	D.	Housewife	2 months	—	Cough	
281	16/7/12	J. M.	M.	39	M.	I.	Miner	3 months	2 wks.	Cough	U. /12
290	24/7/12	S. F.	M.	43	M.	I.	Furnace- man	6 months	9 wks.	Cough	St. 24/9/13—13/14
304	26/7/12	J. R.	M.	8	S.	D.	Scholar	months	—	Cough	B. /11 and /12
310	12/8/12	G. A.	M.	14	S.	D.	At home	years	—	Cough	St. /12
328	20/8/12	M. L.	F.	18	S.	I.	Outworker	12 months	—	Cough	B. /12
329	20/8/12	O. L.	M.	8	S.	D.	Scholar	8 months	—	Cough	B. /12
330	20/8/12	J. H.	M.	17	S.	I.	Engineer	3 months	—	Cough	St. /12
367	17/9/12	W. B.	M.	18	S.	I.	Miner	3 weeks	3 wks.	Haem.	



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
456		—	—	—	—	—	—	—				Not to be visited.	
25		S.I. 2	Ten.	2	6/2	1/1	1/1	71/	Stat.		—		
63	25/11	S.I. 1	Ten.	2	4/3	2/1	0/1	60/	Imp.		—	At school.	
67	17/10	S.I. 2	Ten.	2	6/0	1/0	1/0	25/	Stat.		—	Off list 17/10/13 ; working	
74			Cot.	7	2/2	0	0	Ample	Stat.		—	Not to be visited.	
77			Ten.	2	6/4	0/1	0/1	30/			—	Off list 17/1/13.	
126		S.I. 3	Ten.	3	1	0	0	30/			+8/4/12	Died 10/9/13.	
158			Cot.	8	6/0	0	0	Ample			+28/3/12	Not to be visited died 17/12/13.	
213		S.I. 1 H.V. 9	Ten.	3	2/5	1/1	1/1	23/	Stat.		—		
225		S.I. 1 H.V. 2	Cot.	2	6/1	4/0	2/0	91/	Stat.		—		
243			Row	1	5/4	4/4	1/2	59/			+12/6/12	Left district March, 1913.	
281		S.I. 5	Ten.	2	6/5	2/4	1/2	60/	Wse.		+15/7/12		
290		S.I. 5	Ten.	2	5/3	1/0	1/0	82/	Stat.		+10/7/12		
304	19/11	H.V. 11	Ten.	2	5/2	2/1	2/1	70/	Stat.		—		
310	25/11	S.I. 3	Ten.	2	4/0	1/0	0/0	30/	Imp.		—	Working.	
328	17/10—24/10 9/12	S.I. 1 H.V. 7	Ten.	2	6/3	5/3	0/1	30/	Stat.		+28/10/12		
329	17/10—24/10 9/12	S.I. 1 H.V. 13	Ten.	2	6/3	6/2	2/1	30/	Stat.		—		
330		S.I. 4	Ten.	3	4/0	1/0	0/0	67/			—	To Canada 23/6/13.	
367		S.I. 4	Ten.	2	6/0	1/0	1/0	92/	Imp.		—		

## Cambuslang—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
385	30/9/12	M. W.	F.	30	M.	D.	Housewife	3 months	—	Cough	B. /12
393	27/9/12	M. P.	F.	8	S.	D.	Scholar	1 year	—	Cough	B. 5/10/12—3/1/13
415	16/10/12	M. W.	F.	26	S.	I.	Mantle-maker	2 years	Work-ing	Cough	
416	16/10/12	J. W.	F.	30	M.	D.	Housewife	6 weeks	Work-ing	Cough	
426	29/10/12	J. B.	M.	14	S.	D.	Scholar	1 year	—	Cough	U. 2/11/12—24/2/13
427	30/10/12	J. C.	M.	37	M.	N.I.	—	—	—	—	
439	4/11/12	M. W.	F.	29	M.	D.	Weaver, Housewife	3 months	Work-ing	Cough	B. /12 B. 2/4/13—25/6/13
443	12/11/12	H. K.	M.	30	M.	I.	Steelworker	6 months	4 wks.	Cough	St. 13/11/12—1/3/13
449	15/11/12	L. B.	F.	37	S.	—	—	—	—	—	
450	16/11/12	J. H.	F.	7	S.	D.	Scholar	Years	—	Cough	B. 23/11/12—1/2/13
461	25/11/12	M. M.	F.	21	M.	D.	Housewife	3 months	3 wks.	Cough	B. 26/11/12—18/1/13
491	23/12/12	J. D.	M.	29	S.	I.	Book-keeper	2 years	Work-ing	Cough	
494	24/12/12	B. P.	M.	8	S.	D.	Scholar	6 years	2 mos.	Cough	
495	24/12/12	J. M.	F.	14	S.	D.	At home	2 years	—	Cough	B. 4/1/13—29/3/13
8	6/1/13	J. H.	F.	12	S.	D.	Scholar	6 months	6 wks.	Cough	B. 7/1/13—2/5/13
13	9/1/13	M. K.	F.	9	S.	D.	Scholar	1 year	4 wks.	Cough	
25	16/1/13	L. H.	F.	36	M.	D.	Weaver, Housewife	18 months	Work-ing	Cough	
40	21/1/13	J. J.	M.	49	M.	I.	Miner	1 year	1 wk.	Cough	U. 25/1/13—3/5/13
42	25/1/13	A. T.	F.	8	S.	D.	Scholar	1 year	1 year	Cough	B. 7/3/13—29/3/13



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
385			Ten.	3	2/2	1/2	1/0	32/			+ 9/10/12	Died 28/1/13	
393			Ten.	2	3/4	2/2	0/2	30/			-	Died 24/1/13	
415		S.I. 2	Ten.	2	3/0	0	0	38/	Stat.		-	Working	
416		S.I. 3	Ten.	2	3/5	1/5	1/1	36/	Imp.		-	Off list 17/4/13	
426		S.I. 1	Ten.	3	7/4	4/2	1/0	68/			-	Off list 17/4/13	
—			—	—	—	—	—	Ample			-	Not to be visited	
439			Ten.	2	2/5	1/1	1/1	29/			+ 4/4/13	Died 30/8/13	
443	11/10	S.I. 1	Ten.	2	3/4	1/0	1/0	33/			+ 5/11/12	Left district 17/10/13	
449			—	—	—	—	—	—			-	Not to visited	
450		S.I. 1	Ten.	2	4/4	2/3	2/0	31/			-	Left district 3/13	
461			Ten.	1	2/2	1/2	1/2	33/			+ 24/12/12	Died 5/2/13	
491			Cot.	7	8/0	0	0	Ample		+ 9/12		Not to be visited	
494	11/10	S.I. 1	Ten.	2	3/2	1/0	1/0	22/			-	Left district 8/13	
495		S.I. 2	Ten.	2	4/5	2/3	0/2	37/			-	Gone to Canada 6/13	
8	25/11	S.I. 2	Ten.	2	4/1	1/1	1/1	15/	Imp.		-		
13		S.I. 1	Ten.	1	2/3	2/2	0/0	35/			-	Died 12/1/13	
25		S.I. 3	Ten.	2	3/1	1/1	1/1	13/			-	Died 14/9/13	
40	17/10 9/12	S.I. 3	Ten.	2	5/4	1/2	1/2	33/	Stat.		-		
42		S.I. 1 H.V. 2	Ten.	1	2/2	2/1	2/0	20/			-	Died 29/3/13	

## Cambuslang—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
43	25/1/13	A. B.	F.	8	S.	D.	Scholar	4 months	3 mos.	Influenza	Bl. 1/2/13—19/3/13
65	6/2/13	A. M.	M.	14	S.	I.	Miner	2 months	3 wks.	Cough	B. 12/2/13—18/2/13
67	6/2/13	J. T.	M.	12	S.	D.	Scholar	Years	6 mos.	Cough	B. 12/2/13—9/5/13
86	20/2/13	J. C.	M.	28	S.	I.	Clerk	4 months	Work- ing	Cough	U. 3/3/13—17/5/13
93	25/2/13	J. M.	M.	29	S.	I.	Steel dresser	5 months	2 mos.	Cough	U. 3/3/13—11/4/13
108	4/3/13	A. K.	F.	46	F.	D.	Weaver, Housewife	2 months	Work- ing	Cough	
121	11/3/13	W. M.	M.	46	M.	I.	Furnaceman	1 year	1 wk.	Cough	Sh. 12/3/13—12/7/13 U. 6/12/13. Still i
122	11/3/13	J. C.	F.	15	S.	D.	At home	2 months	Work- ing.	Cough	St. 15/3/13—4/4/13 M. 4/4/13—19/7/13 St. 19/7/13—27/9/13 Sh. 22/11/13. Still i
137	18/3/13	W. S.	M.	17	S.	I.	Miner	18 months	4 wks.	Cough	St. 22/3/13—11/7/13
140	10/3/13	D. M.	M.	9	S.	D.	Scholar	6 months	—	Cough	B. 31/3/13—18/6/13
161	28/3/13	M. S.	F.	24	S.	I.	Dyeworker	6 months	2 wks.	Cough	Bl. 1/4/13—28/4/13 U. 28/4/13—24/7/13
162	28/3/13	A. F.	F.	27	S.	D.	Teacher	6 months	1 wk.	Cough	
163	28/3/13	T. R.	M.	29	S.	I.	Labourer	1 year	1 wk.	Cough	
164	28/3/13	W. T.	M.	8	S.	D.	Scholar	3 months	9 wks.	Cough	
168	1/4/13	J. M.	M.	8	S.	D.	Scholar	2 months	3 wks.	Influenza	Sh. 5/4/13—5/7/13
171	2/4/13	A. M.	F.	11	S.	D.	Scholar	12 months	1 year	Cough	B. 5/4/13—23/8/13
214	3/5/13	A. B.	F.	28	M.	D.	Housewife	3 months	Work- ing	Cough	St. 12/5/13—1/8/13
217	5/5/13	J. G.	M.	27	M.	I.	Miner	3 months	8 wks.	Cough	B. 16/5/13—30/8/13
232	20/5/13	A. R.	M.	35	S.	I.	Steeldresser	2 years	5 wks.	Cough	M. 22/5/13—18/6/13



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.						Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.		1913.	Previous Results.	
13	14	15	16	17	18	19	20	21	22	23	24	25
43		S.I. 1	Ten.	2	6/2	2/0	2/0	55/			+ 3/2/13	Died 21/4/13
65		S.I. 1	Ten.	3	6/2	3/0	1/0	47/			-	Died 18/2/13
67	19/11	S.I. 3	Ten.	2	5/1	1/0	1/0	43/	Imp.		-	At school
86	21/10	S.I. 3	Cot.	3	5/0	2/0	0/0	114/	Imp.	+ 11/2		Working
93		S.I. 1	Ten.	2	5/0	1/0	0/0	52/			+ 10/3/13	Died 6/5/13
108		S.I. 3 H.V. 8	Ten.	2	3/3	1/1	1/1	30/	Stat.		-	
121		S.I. 2	Ten.	2	6/2	2/1	1/0	64/	Stat.		+	
122	19/11	S.I. 1	Ten.	2	3/2	1/1	1/1	40/	Stat.		-	
137	16/10, 9/12	S.I. 1	Ten.	2	5/4	2/0	2/0	60/	Imp.		-	Working.
140		S.I. 1	Ten.	2	2/5	2/4	1/0	37/			-	Died 18/6/13; Tub. Meningitis.
161	16/10, 25/11	S.I. 2	Ten.	3	3/1	2/1	0/0	19/		+ 25/3		Died 27/11/13.
162		S.I. 1 H.T. 6	Cot.	5	5/0	2/0	0/0	90/				Died 11/12/13.
163		S.I. 1	Ten.	2	6/4	2/0	0/0	23/6		+ 26/3		Left district 28/3/13.
164		S.I. 2	Row	2	2/4	2/3	0/2	40/	Imp.		-	
168		S.I. 2	Row	2	2/4	2/3	0/2	35/	Imp.		-	
171	25/11	S.I. 2	Ten.	2	2/2	0/1	0/1	35/	Stat.		-	
214		S.I. 1	Ten.	2	2/0	1/0	1/0	42/	Imp.	+ 1/5		Working.
217	4/10	S.I. 3	Row	2	2/2	1/2	1/2	35/		+ 2/5		Died 5/10/13.
232		S.I. 1	Ten.	2	4/2	0/0	0/0	35/			+ 25/5/13	Died 18/6/13.

## Cambuslang—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
235	22/5/13	E. P.	F.	33	M.	D.	Housewife	8 months	Working	Cough	B. 24/5/13—25/6/13
237	21/5/13	D. M.	M.	46	M.	I.	Ropeworker Gardener	6 months	2 wks.	Cough	M. 22/5/13—31/5/13
251	2/6/13	W. S.	M.	38	M.	I.	Butcher, Grinder	3 years	Working	Cough	Sh. 5/6/13—18/8/13
256	9/6/13	M. C.	F.	32	M.	D.	Dom. servt., Housewife	9 months	Working	Cough	Sh. 14/6/13—12/9/13
311	12/7/13	F. C.	M.	43	M.	I.	Dyeworker	2 years	Working	Cough	St. 14/7/13—13/10/13
312	15/7/13	T. F. S.	M.	45	M.	I.	Watch- maker	9 years	1 wk.	Cough	B. 18/7/13—29/8/13
352	28/8/13	J. H. D.	M.	21	S.	I.	Clerk	6 months	10 days	Cough	St. 30/8/13—Still
—	4/9/13	A. T.	M.	37	M.	I.	Miner	9 weeks	9 wks.	Pleurisy	B. 5/9/13—9/9/13 Up. 9/9/13—27/11/13
365	11/9/13	G. A. G.	M.	16	S.	I.	Nailworker	1 year	6 mos.	Haem.	Bl. 11/9/13—Still
386	27/9/13	P. C.	M.	21	S.	I.	Miner	3 months	2 mos.	Cough	Sh. 29/9/13—21/11/13
389	29/9/13	B. K.	M.	2	S.	D.	At home	2 months	—	Cough	
407	—	J. K.	M.	36	—	—	—	—	—	—	
412	10/10/13	J. D.	F.	22	S.	I.	Weaver	6 months	1 wk.	Pleurisy	St. 15/10/13—Still
416	17/10/13	W. C.	M.	49	M.	I.	Commercial traveller	2½ years	2 days	Pleurisy	Sh. 22/10/13—Still
419	18/10/13	J. B.	F.	39	M.	D.	Weaver, Housewife	9 months	Working	Cough	St. 1/11/13—Still
440	3/11/13	C. M.	M.	25	S.	I.	Miner	1 year	2 wks.	Pleurisy	Sh. 5/11/13—Still
443	5/11/13	J. L.	F.	25	M.	D.	Laun. maid, Housewife	2 months	Working	Pneumon.	—
446	7/11/13	J. G.	F.	15	S.	I.	Pithead worker	3 months	3 mos.	Cough	U. 10/11/13—Still



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartment.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
235		S.I. 1	Ten.	1	2/4	1/4	0/3	40/	0		+ 27/5/13	Died 25/6/13.	
237		S.I. 1	Ten.	2	5/0	3/0	1/0	67/	0		—	Died 31/5/13.	
251		S.I. 2	Ten.	2	3/3	0/1	0/1	36/6	Stat.		—	Working.	
256		S.I. 1 H.V. 3	Ten.	2	3/4	1/4	0/1	42/	Imp.	+ 4/6			
311	19/11	S.I. 1	Ten.	3	7/2	1/1	1/1	83/	Wse.		+ 16/7/13		
312	16/10, 9/12	S.I. 1	Ten.	2	6/1	1/0	1/0	53/	Stat.		+ 22/7/13		
352		S.I. 1	Ten.	2	4/1	1/1	0/0	55/	Imp.	+ 23/8			
—		S.I. 1	Ten.	2	4/5	3/2	1/1	43/	Stat.		+ 27/11/13		
365			Ten.	2	3/3	1/1	0/0	43/6	Stat.		+ 16/9/13		
386		S.I. 1	Ten.	2	6/0	3/0	1/0	66/	Stat.		—		
389		S.I. 1	Ten.	1	2/2	2/1	0/0	38/			—	Died 20/10/13.	
407		—	—	—	—	—	—	—			—	Died Hartwood Asylum 6/9/13; not notified.	
412		S.I. 1	Ten.	2	6/0	3/0	1/0	92/	Stat.	+ 7/10			
416		S.I. 1	Ten.	4	6/1	1/0	1/0	75/6	Stat.	+ 13/10			
419		S.I. 1	Ten.	2	2/3	1/1	1/1	40/	Stat.	+ 16/10			
440		S.I. 1	Ten.	2	4/0	2/0	1/0	115/	Stat.		—		
443	19/11	S.I. 1	Ten.	2	3/1	2/1	1/1	40/	Stat.		—		
446			Ten.	1	5/3	4/3	2/1	50/	Stat.		+ 19/11/13		

## Cambuslang—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
459	17/11/13	F. O.	M.	28	S.	I.	Miner	6 months	6 wks.	Cough	U. 24/11/13—17/12/13 M. 17/12/13—Still
474	2/12/13	M. S.	F.	46	M.	D.	Dyeworker Housewife	6 months	Work- ing	Cough	Sh. 6/12/13. Still
475	2/12/13	C. O.	M.	18	S.	I.	Labourer	2 months	6 wks.	Cough	St. 5/12/13. Still
484	11/12/13	R. R.	M.	26	M.	I.	Engine- driver	12 weeks	12 wks.	Cough	Sh. 13/12/13 Still
NON-PULMONARY											
114 1911	28/6/10	R. B.	M.	8	S.	D.	Scholar	years	—	Swelling	
457	29/12/11	J. F.	M.	6	S.	D.	Scholar	2 months	2 mos	Swelling	
	9/5/12	M. M.	F.	12	S.	D.	Scholar	1 year	1 mo.	Swelling neck	
	21/6/12	J. M.	F.	13	S.	D.	Scholar	6 months	—	Swelling neck	
	21/6/12	B. M.	F.	11	S.	D.	Scholar	6 months	—	Swelling neck	
	29/10/12	M. F.	M.	21	S.	N. I.	Miner	14 months	—	Pain in back	M. /12
	12/11/12	J. C.	M.	15	S.	I.	Miner	years	—	Swelling back	
166	1/4/13	J. M.	F.	9	S.	D.	Scholar	4 months	2 mos.	Swelling neck	Bl. 5/4/13—19/7/13
	6/2/13	T. R.	M.	2	S.	D.	At home	3 months	—	Swelling neck	
	14/2/13	S. M.	F.	3	S.	D.	At home	2 years	—	Swelling fingers	M. 15/2/13—30/8/13
	3/3/13	A. B.	M.	5	S.	D.	At home	4 years	—	Diarrhoea	M. 8/3/13—2/4/13
	28/5/13	M. D.	F.	20	S.	I.	Dyeworker	2 years	—	Swelling buttock	M. 30/5/13—8/9/13
	29/11/13	E. M.	M.	8	S.	D.	Scholar	years	—	Diarrhoea	Bl. 29/11/13. Still



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.						Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.		1913.	Previous Results.	
13	14	15	16	17	18	19	20	21	22	23	24	25
459		S. I. 1	Ten.	1	2/2	1/2	0/0	38/	Stat.		-	
474		S. I. 1	Ten.	2	5/2	2/2	1/0	51/	Stat.		-	
475	28/11	S. I. 1	Ten.	2	5/2	4/2	0/0	137/6	Stat.		+ 16/12/13	
484	9/12	S. I. 1	Ten.	1	2/0	1/0	1/0	36/	Stat.		-	
TUBERCULOSIS.												
114	19/11	S. I. 1	Ten.	2	5/1	1/0	0/0	38/				Elbow. Left district
—			Ten.	2	2/4	1/2	0/1	40/	Stat.			Elbow
	19/11	S. I. 1	Ten.	2	3/5	0/4	0/2	35/				Cervical glands
		S. I. 1	Ten.	2	2/6	2/5	0/3	26/				Cervical glands healed
		S. I. 1	Ten.	2	2/6	2/5	0/3	26/				Cervical glands
	20/11		Ten.	2	5/0	2/0	2/0	17/6				Spine
			Ten.	3	4/3	1/1	0/0	55/				Died 3/5/13. Spine Meningitis
		S. I. 2	Ten.	2	3/5	2/4	0/2	42/				Cervical glands
		S. I. 1	Ten.	1	2/1	2/0	2/0	32/				Cervical glands
		H. V. 1 S. I. 1	Ten.	2	2/6	2/3	0/2	35/				Fingers. Left district 3/12/13
	19/11	S. I. 1	Ten.	2	6/2	1/1	1/1	57/				Abdomen
		S. I. 1	Ten.	1	3/0	2/0	0/0	22/				Buttock
	19/11	S. I. 1	Ten.	2	2/3	-	-	-				Abdomen

## DOMICILIARY SUPERVISION.

Parishes of AVONDALE, EAST KILBRIDE, GLASFORD, STONEHOUSE, DALSERF, DALZIEL, and HAMILTON.

CHRISTINA BARROWMAN, M.B., Ch.B., B.Sc. (P.H.).

*Number of Cases.*—The total number of cases on record throughout the year was 118, and of these 106 were pulmonary and 12 non-pulmonary. Of the total number, 28 cases proved fatal before the end of 1913, 20 cases left the district, 2 cases were put off the list, leaving 68 cases to be dealt with at 1st January, 1914.

DISTRIBUTION OF CASES.—PULMONARY AND NON-PULMONARY.—  
CONJUGAL STATE.

Parish.	No. of cases.	Pulmonary.	Non-Pulmonary.	Married.		Single.	
				M.	F.	M.	F.
Avondale,	16	16	—	4	3	5	4
E. Kilbride,	20	18	2	3	3	6	8
Glasford,	—	—	—	—	—	—	—
Stonehouse,	10	10	—	4	1	1	4
Dalsersf,	39	32	7	5	10	11	13
Dalziel,	5	5	—	—	1	2	2
Hamilton,	28	25	3	9	6	9	4
Total,	118	106	12	25	24	34	35

*Insurance—Age—Sex.*—In the following table the cases are classified according to age (in quinquennial groups), sex, and according to whether they were insured, not insured, or dependents:—

INSURANCE.—AGE AND SEX.

Years.	Insured.		Dependant.		Non-insured.		Total.
	M.	F.	M.	F.	M.	F.	
5	—	—	1	—	—	—	1
5-10	—	—	4	8	—	—	12
10-15	—	—	4	5	—	—	9
15-20	2	7	—	2	—	—	11
20-25	10	8	2	3	1	1	25
25-30	3	—	1	6	1	2	13
30-35	4	—	—	8	2	3	17
35-40	7	—	—	2	3	—	12
40-45	5	—	—	2	1	—	8
45-50	2	—	—	2	—	1	5
50-55	1	—	—	—	1	—	2
55-60	1	—	—	—	—	—	1
60-65	—	—	—	—	1	—	1
over 65	—	—	—	—	1	—	1
Total,	35	15	12	38	11	7	118



## OCCUPATION.

*Domestic Workers.*—Housewives, 13; domestics, 5; at home, 5.

*Scholars*, 23.

*Miners*, 21.

*Factory and Workshop Employees.*—Millworkers, 3; dressmaker, 1; coach painters, 2; silk weavers, 2.

*Stoneworkers and Brickworkers.*—Mason, 1; brickworker, 1.

*Shopkeeper*, 1.

*Miscellaneous.*—Clerks, 10; farm labourers, 6; farmer, 1; polisher, 1; carter, 1; contractor, 1; policemen, 2; painter, 1; postman, 1; hawker, 1; engineman, 1; weaver, 1; gardener, 1; typist, 1; coachmen, 3; engineers, 3; gold miner, 1; midwife, 1; firemen, 2; nurse, 1.

*Duration of Illness.*—The duration of illness before notification in given periods for pulmonary and non-pulmonary cases in the combined parishes was as follows:—

*Pulmonary—*

Months—	1	1-2	2-3	3-6	6-12	12-18	18-24	24 & over	Indef.
Cases, ...	3	4	10	26	21	7	3	25	7 = 106

*Non-Pulmonary—*

Cases, ...	—	1	—	1	2	2	—	4	2 = 12
------------	---	---	---	---	---	---	---	---	--------

*Earliest Symptoms recognised.*—In 59·4 per cent. of the 106 pulmonary cases occurring in the combined parishes illness commenced with cough and cold. Pleurisy was the earliest symptom in 16·04 per cent., hæmorrhage 2·8 per cent., debility 5·6 per cent., influenza (so called) 3·7 per cent., pneumonia 1·88 per cent., hoarseness ·9 per cent., indigestion ·9 per cent., and in 8·5 per cent. earliest symptoms were indefinite.

Pleurisy, it will be noted, was the earliest symptom in 16·04 per cent. of the cases, and the average duration of illness before notification was in such cases 8·36 months.

The time elapsing between ceasing work and date of notification is shown in the following table:—

	Pulmonary.		Non-Pulmonary.
Months— - 1	21	...	—
1-2	8	...	1
2-3	2	...	—
3-6	8	...	1
6-12	6	...	1
12-18	4	...	3
18-24	3	...	—
24 & over	3	...	3
No record	25	...	2
Working	26	...	1
	106 patients ...		12 patients

Only 27 patients were able for work at date of notification.

*Home Conditions.*—The number of cases occurring in tenements, cottages, and rows, and the number of apartments in the various dwellings, is given in the following table:—

No. of Apartments.	Tenement.	Cottage.	Row.
1	8	1	13
2	33	3	17
3	8	19	3
4 or more	5	1	—
Total,	54	24	33

Hotel, 1 case; poorhouse, 2 cases; hospital, 1 case; no record, 3 cases. Thus, 22 cases lived in a single apartment, 53 in houses of 2 rooms, 30 in houses of 3 rooms, and 6 in houses with more accommodation.

*Inmates.*—The average number of inmates per apartment in different sizes of houses was:—

#### HOUSING ACCOMMODATION.

Apartments,	-	-	1	2	3	4 and over.
Total number of persons,	-	103	327	104	91	
Average number of persons per household,	-	-	4.7	6.3	6.5	5.6
Average number of persons per apartment,	-	-	4.7	3.15	2.16	1.4

*Sleeping Accommodation.*—In 40 cases patient slept alone in bedroom, in 19 with one person, in 16 with two, in 22 with three, in 14 with four, in 5 with five, and in 2 cases with six in same room.

In 58 cases patient was alone in bed, 35 slept with one person, 16 with two persons, 4 with four, and in 5 there is no record.

*Weekly Income.*—In some cases it was difficult to obtain the exact income of a household, and where this happened, if the family appeared to live in comfortable circumstances, the income was recorded as ample. The incomes known were then averaged in relation to the number of inmates per household, and for all parishes combined it was found that in the homes of notified tuberculous patients the average weekly income per inmate was 6.3 shillings.



WEEKLY INCOME CLASSIFIED IN GROUPS AND NUMBER OF PERSONS PER  
HOUSEHOLD DEPENDENT ON THE INCOME.

No. of Persons.	20/.	25/.	30/.	35/.	40/.	50/.	50/ and up.
1	—	—	—	—	—	—	—
2	—	1	—	1	1	—	—
3	1	1	2	2	1	1	2
4	—	—	1	4	3	4	5
5	3	1	4	4	2	—	1
6	2	—	1	2	2	1	5
7	2	2	4	2	1	4	1
8	—	1	2	3	—	1	2
9	1	1	—	1	1	3	2
10	—	—	—	—	1	—	—
11	—	—	—	1	—	—	1
12	—	—	—	—	—	2	—

*Domiciliary Visits.*—A total of 19 visits was paid by the Tuberculosis Officer to the homes of the patients, while 274 visits were paid by Sanitary Inspectors and Health Visitors. In 12 cases no visits were made, by request. There was thus an average of 2·6 visits per patient.

*Institutional Treatment* (at any time, and for pulmonary and non-pulmonary cases) :—

Received institutional treatment once,	...	...	45
„ „ „ twice,	...	...	12
„ „ „ thrice,	...	...	2
„ „ „ six times,	...	...	1
<hr/>			
Total who received treatment,	...	...	60
„ „ refused „	...	...	51
„ „ received treatment outwith the			
county,...	...	...	2
No record,	...	...	5

Condition at end of year 1913 of all cases notified before that date:—

Year of Notifi.	Cases.	Arr.	Imp.	Stat.	Worse.	Died.	Off List.	Not to be Visited.	In San.	Left D.
1906	2	—	1	—	—	—	—	—	1	—
1907	1	—	1	—	—	—	—	—	—	—
1908	9	2	2	2	—	—	—	2	—	1
1909	6	2	—	3	—	—	—	—	—	1
1910	5	1	1	—	—	2	—	1	—	—
1911	9	1	2	3	—	1	1	—	1	—
1912	24	—	4	7	2	8	—	—	1	2
1913	62	—	4	15	3	25	1	—	6	8
Total, 118		6	15	30	5	36	2	3	9	12

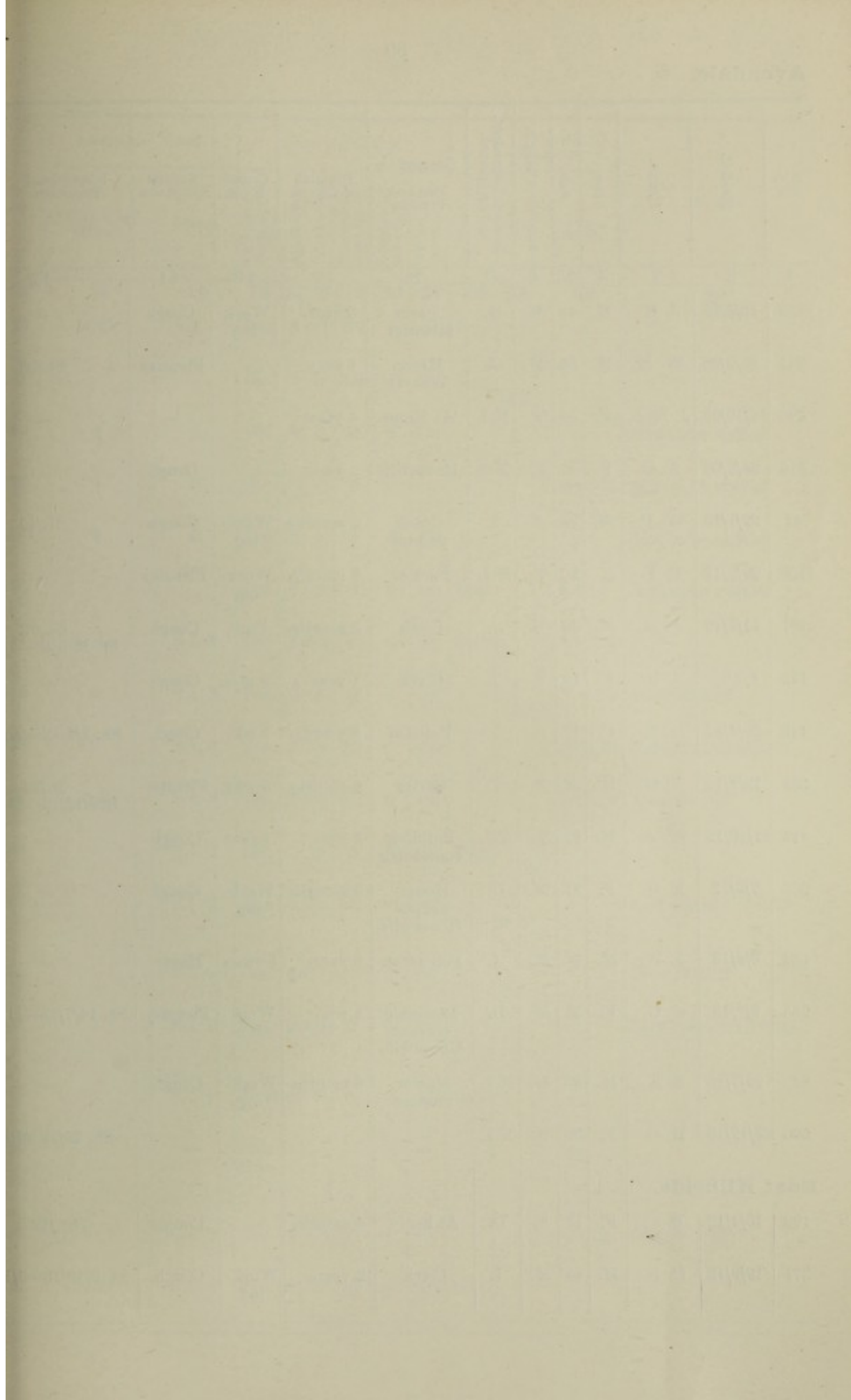
Condition at end of year of the 51 cases who refused institutional treatment:—

Arr.	Improvement.	Stationary.	Worse.	Fatal.	No Record.	No. of patients.
6	6	9	1	24	5	51

*Sputum Examination.*—

	T B Found.	No T B.	Total.
Examined, 1913, ...	27	4	31
Examined previous to 1913,	37	—	37
No record of examination, ...	—	—	57
Total,	64	4	125





## Avondale.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
158	16/5/08	J. K.	M.	44	M.	I.	Farm labourer	6 years	Work-ing	Cough	—
241	28/3/08	W. M.	M.	36	M.	I.	Mason Weaver	1 year	—	Pleurisy	St./08
326	16/10/08	J. M. S.	F.	30	S.	N.I.	At Home	4 years	—	—	—
316	26/6/08	A. C.	F.	46	M.	N.I.	Housewife	years	—	Cough	—
41	22/1/10	W. F.	M.	23	S.	I.	Coach painter	2 months	Work-ing	Cough	St./10
156	29/2/12	R. F.	M.	30	S.	N.I.	Farmer	6 months	Work-ing	Pleurisy	—
181	11/5/12	A. M.	M.	20	S.	I.	Clerk	5 months	1 mo.	Cough	St./12 St. 18/3/13—5/73
115	8/3/13	J. B.	F.	18	S.	I.	Clerk	1 year	3 mos.	Cough	—
149	29/4/12	G. R.	F.	17	S.	I.	Polisher	3 years	1 wk.	Cough	Sh. 7/5/12—26/73
359	12/9/12	T. M.	M.	24	S.	I.	Carter	6 months	5 wks.	Pleurisy	B./12 B28/12/12—25/23
419	21/10/12	W. A.	M.	67	S.	N.I.	Building contractor	1 year	1 year	Cough	—
253	7/6/13	E. G.	F.	31	M.	D.	House-keeper Housewife	3 months	Work-ing	Cough	—
254	6/6/13	J. W.	M.	36	M.	I.	Policeman	5 years	5 years	Haem.	—
255	9/6/13	J. G.	F.	34	M.	D.	Domestic servant Housewife	1 year	Work-ing	Pleurisy	St. 14/7/13—11/13
323	29/7/13	S. K.	M.	35	M.	N.I.	Master Painter	6 months	Work-ing	Cough	—
500	25/12/13	H. G.	F.	30	S.	N.I.	—	—	—	—	Sh. 25/12 still in

## East Kilbride.

122	10/4/12	B. C.	F.	15	S.	D.	At home	4 months	—	Cough	St./12
371	19/9/12	C. B.	M.	45	M.	I.	Clerk	2 years	Work-ing	Cough	St. 2/12/13—3/12/



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.						Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.		1913.	Previous Results.	
13	14	15	16	17	18	19	20	21	22	23	24	25
158	19/11	S.I. 1	Ten.	3	5/1	3/1	1	40/	Imp.		—	
241			Cot.	5	5/	3/0	1/0	30/	Stat.	+ 19/3		
326	0	0	Cot.	6	3	0	0	Am-ple			—	Not to be visited
316	0	0	Cot.	8	—	0	0	Am-ple			+ 23/12/12	Not to be visited
41	0	0	Ten.	3	4	0	0	33/			—	Not to be visited
156			Cot.	6	4	0	0	Am-ple	Imp.		+ 8/4/12	Not to be visited
181	21/11	S.I. 1	Cot.	3	5/2	0	0	45/	Stat.		+ 9/11/12	
115	0	S.I. 2	Ten.	2	3	0	0	30/		+ 4/3		Died 18/6/13
149	0	S.I. 1	Ten.	4	5/4	2/1	0	24/			+ 23/12/12	Left district 11/8/13
359	13/2	S.I. 2	Ten.	1	3/2	2/2	0	12/			+ 6/12/12	Died 23/4/13
419	—	S.I. 1	Cot.	7	2	0	0	Am-ple	Stat.		—	
253		S.I. 1	Cot.	6	7/2	3/1	0/1	60/		+ 20/5		Left district 17/6/13
254		S.I. 1	Cot.	4	2/1	0	0	26/		+ 7/6		Died 18/8/13
255	0	S.I. 2	Ten.	2	3/2	0	0	28/		+ 7/6		Left district 11/10/13
323	0	S.I. 1	Hotel	10	4	0	0	80/	Imp.		—	
500	—	—	Poor-house	—	—	—	—	—			—	
122	—	S.I. 8	Ten.	4	9/3	0/1	0/1	40/			+ 6/4/12	Died 28/6/13
371	17/11	S.I. 5	Ten.	2	2	0/0	0/0	24/6	Stat.		—	

## East Kilbride—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
26	17/1/13	M. P.	F.	30	S.	—	—	—	—	—	—
70	—	M. D.	F.	26	S.	D.	At home	2 years	—	Cough	—
87	21/2/13	M. B.	F.	29	M.	D.	Domestic servant, Housewife	7 months	Working	Cough	Bl. 4/3/13—14/13
117	10/3/13	P. W.	F.	21	S.	N.I.	At home	3 months	—	Cough	—
130	13/3/13	J. M.	M.	21	S.	N.I.	Postman	4 months	4 wks.	Cough	St. 25/3/13—29/13
136	18/3/13	J. L.	F.	26	S.	N.I.	Farm servant	6 years	6 yrs.	Whoop. Cough	—
188	—	J. B.	M.	32	M.	I.	Warehouseman	3 years	10 mos.	Cough	—
187	7/4/13	M. K.	F.	31	M.	N.I.	Housewife	8 months	—	Cough	—
199	17/4/13	J. W.	M.	11	S.	D.	Scholar	6 years	—	Cough	—
205	26/4/13	J. W.	F.	22	S.	I.	Farm servant	6 months	4 mos.	Pneumon.	—
236	22/5/13	D. M'L.	M.	26	S.	I.	Clerk	6 years	6 wks.	Cough	St. 3/6/13—27/83
337	5/8/13	D. W.	M.	36	S.	N.I.	Clerk	3 years	18 mos.	Cough	—
248	2/6/13	J. M.	M.	39	S.	N. I.	Railway Clerk	3 months	1 wk.	Cough	—
299	4/7/13	C. D.	F.	22	S.	I.	Domestic servant	2 weeks	2 wks.	Haem	—
308	9/7/13	W. G.	M.	40	M.	N. I.	Policeman	10 months	9 mos.	Cough	—
418	18/10/13	Mrs. M.	F.	30	M.	D.	Housewife	—	—	—	—
NON-PULMONARY											
—	2/12/13	R. Q.	M.	14	S.	D.	Scholar At home	Years	13 mos.	Swelling	St. 2/12/13. Still
—	18/12/13	M. H.	F.	30	S.	D.	Domestic At home	3 years	3 yrs.	—	—

Glasford—No Cases.



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
26		S.I. 1	—	—	—	—	—	—	—		—	Left district on notification	
70		S.I. 1	Ten.	2	3	0	0	25/	—		—	Died 13/1/13 Not notified	
87	26/2	S.I. 2	Row	1	2/1	1/1	0/1	20/	—	+	14/3	Died 14/3/13	
117		S.I. 1	Cot.	7	3	0	0	Ample	—	+	3/3	Left district 31/5/13	
130		S.I. 1	Ten.	3	5/3	2/0	0	23/	—	8/3		Died 29/6/13	
136		S.I. 1	Ten.	3	5/1	1/0	1/0	50/	—		—	Died 18/3/13	
188		S.I. 1	Ten.	2	2/2	0	0	Unk'n.	—		—	Died 27/3/13 Not notified	
187		S.I. 1	Cot.	7	3	0	0	140/	—		—	In Kingussie Sanatorium	
199		S.I. 1	Ten.	2	1/4	1/2	0	34/	—		—	Left district 31/12/13	
205	19/11	S.I. 2	Cot.	4	5/1	2/1	0	30/	Imp.		—		
236		S.I. 1	Ten.	2	2	0	0	30/	—	+	17/5	Died 5/10/13	
237		S.I. 1	Cot.	4	3	0	0	40/	—		—	Died 26/7/13	
248		S.I. 1	Cot.	5	4/0	0	0	50/	Stat.		—		
299		S.I. 1	Cot.	7	—	0	0	—	—		—	Left District.	
308		S.I. 2	Ten.	2	4/3	0/0	0/0	30/	—		—	Died 10/13	
418		S.I. 1	Ten.	—	—	—	—	—	Hamilton		—	Died 17/10/13	
CASES.													
—		S.I. 1	Ten.	2	4/3	1/1	1/1	25/	—			Cervical Glands.	
—		S.I. 1	Row.	2	4/3	1/1	0/0	20/	—			Kidney.	

## Stonehouse.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
87	25/4/07	C. H.	M.	31	M.	N. I.	Hawker	2 month	—	Influenza	M. /07
133	28/3/11	N. B.	F.	6	S.	D.	Scholar	3 months	—	Cough	St. /11 & /12
216	4/5/11	J. B.	F.	9	S.	D.	Scholar	4 years	—	Cough	Sh. /11 & /12
370	18/9/12	J. F.	M.	40	M.	I.	Engineman	9 months	8 mos.	Pleurisy	B. 27/9/12—25/4/
375	23/9/12	J. H.	M.	36	M.	N. I.	Railway clerk	6 months	11 days	Cough	Sh. 19/3/13—16/6/
383	27/9/12	J. S.	F.	21	S.	I.	Domestic servant	3 months	3 wks.	Cough	Sh. 2/10/12—1/2/
266	10/6/13	M. L.	F.	28	M.	D.	Weaver Housewife	5 months	Work- ing	Cough	0
294	30/6/13	A. B.	F.	7	S.	D.	Scholar	2 months	—	—	0
391	30/9/13	R. B.	M.	23	S.	I.	Clerk	2 months	1 mth.	Cough	St. 26/11/13. Still
488	19/12/13	B. P.	M.	39	M.	I.	Miner	3 years	14 wks.	Cough	0

## Dalserf.

29	25/1/09	G. R.	M.	10	S.	D.	Scholar	years	5 years	Cough	B. /10 St. /12 Bl. 4/8/13—4/10/1
166	12/5/09	H. W.	F.	16	S.	D.	At home	3 years	—	Pleurisy	B. /09
289	26/9/09	J. A.	M.	16	S.	I.	Miner	2 months	1 wk.	Cough	St. /09, /10, and /1
171	13/4/10	A. R.	M.	22	S.	I.	Miner	1 year	Work- ing	Cough	St. 10 and 12
259	14/6/10	A. S.	F.	40	M.	D.	Housewife	2 months	Work- ing	Pleurisy	None
457	19/10/10	J. M.	F.	21	S.	I.	Silk weaver	6 months	1 wk.	Cough	None
67	17/2/11	M. M.	F.	36	M.	D.	Dom. servt., Housewife	2 years	Work- ing	Rundown	St. /11



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
87	17/11	S.I. 4	Ten.	1	2/2	1/2	1/0	25/	Imp.	18/6	+ 1907		
133	12/11 11/12	S.I. 2 H.V. 2	Cot.	3	3/4	1/2	0/2	18/6	Imp.	2/12	-		
216	12/11 11/12	S.I. 2 H.V. 2	Cot.	3	3/4	1/2	0/2	18/6	Imp.		-		
370		0	Ten.	3	2/4	0	0	12/	-		-	Died 2/5/13	
375	17/11	S.I. 4	Ten.	3	6/0	2/0	0	35/	W'se		+		
383	12/11	S.I. 5	Cot.	1	3/0	2/0	0	Am- ple	Stat.		+		
266		S.I. 2	Ten.	2	4/0	0	0	40/	-		-	Died 3/7/13	
294	12/11 11/12	S.I. 1	Ten.	1	1/4	1/3	0/2	25/	Stat.		-		
391		S.I. 2	Cot.	4	6/0	2/0	0/0	Am- ple	-	+ 25/9	+		
488		S.I. 1	Row.	1	2/3	1/3	1/1	30/	Stat.	+ 12/12	+		
29		S.I. 8	Ten.	2	4/1	3	1	54/	Stat.		-		
166			Ten.	1	3/0	2	0	30/			-	Left district—Dec. 1913	
289		S.I. 4	Row	3	5/2	1	1	40/	Stat.		+ 13/5/12	Working	
171		S.I. 6	Ten.	1	3/1	2/1	0	30/			+ 18/4/10	Died 29/7/13	
259		S.I. 2	Row	2	3/4	1/3	1/0	35/	Imp.		-		
457		S.I. 4	Row	2	4/0	1/0	1/0	38/			+ 1910	Died 2/7/13	
67		S.I. 10	Ten.	2	3/4	1/3	0	30/	Stat.		-		

## Dalsert—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
238	22/5/11	P. S.	M.	27	S.	D.	Miner	2 years	1 year	Pain	St. /11 St. /12 M. /12 S. 12/11/12—19/13 M. 19/6/13—4/14/3 D. 24/1/13—still a
311	14/11/11	S. M.	M.	40	M.	I.	Gardener, miner	months	4 mos.	Cough	St. /11 and /1
1	1/1/12	S. H.	F.	19	S.	I.	Silk weaver	6 months	2 days	Cough	St. /12 U. /12
95	20/8/12	A. M.	F.	33	M.	D.	Dressmaker housewife	3 months	—	Run down	None
191	15/5/12	W. M.	M.	23	M.	I.	Miner	7 months	3 wks.	Cough	B. /12
269	28/6/12	M. A. M.	F.	34	M.	D.	Farm servant, housewife	4 months	—	Pain	St. /12
292	27/7/12	B. M.	F.	49	M.	D.	Housewife	6 months	Work- ing	Pain	Sh. /12 and /1
337	30/8/12	E. E.	F.	24	S.	I.	Typist	3 months	10 days	Cough	St. 2/9/12—21/6/3
360	19/9/12	R. C.	F.	26	M.	D.	Factory worker, Housewife	18 months	Work- ing	Weak- ness	St. 21/10/13. Still a
402	11/10/12	W. H.	M.	41	M.	I.	Coachman, Labourer	4 years	3 wks.	Cough	Sh. 16/10/12—28/3
447	14/11/12	A. F.	M.	20	S.	I.	Engineer	10 months	10 mos.	Indiges- tion	Sh. 13/12/12—3/23
37	21/1/13	J. D.	M.	36	M.	I.	Coach painter	5 months	3 mos.	Influenza	0
138	18/3/13	W. F.	M.	37	S.	I.	Coachman, Miner	2 years	7 wks.	Pleurisy	St. 21/3/13—23/73
145	13/3/13	M. L.	F.	13	S.	D.	Scholar	11 months	—	Weak- ness	0
177	8/4/13	J. D.	F.	21	M.	D.	Millworker, Housewife	11 months	Work- ing	Cough	0
279	19/6/13	M. M.	F.	24	M.	D.	Dom. servt., Housewife	12 months	Work- ing	Weak- ness	St. 28/6/13—13/91
298	1/7/13	R. S.	M.	53	S.	N.I.	Gold Miner	4 months	11 wks.	Cough	St. 30/7/13—13/91



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
238			Row	1	3/2	2/2	0	13/			+		
311		S.I. 1	Row	1	3/6	2/6	1/2	13/	Stat.		—		
1		S.I. 2	Row	1	5/0	4/0	0	34/			+ 20/12/11	Died 7/2/13	
95		S.I. 2	Ten.	3	3/3	1/3	1/0	32/	Stat.		—		
191		S.I. 1	Ten.	1	2/1	1/1	1/0	35/	Imp.		+ 20/5/12	Working	
269		S.I. 7	Ten.	2	3/6	2/1	1/0	30/	Stat.		—		
292		S.I. 6	Ten.	3	3/5	1/0	1/0	30/	Imp.		—		
337		S.I. 2	Cot.	3	6/0	2/0	1/0	68/	Imp.		+ 19/8/12	Left district, 5/1/14. Working	
360		S.I. 9	Ten.	2	2/2	1/2	0/1	30/		+ 17/5	+		
402			Row	2	3/4	1/2	0/0	25/			+ 15/10/12	Not traced	
447			Ten.	4	4/0	0/0	0/0				+ 21/2/12	Died 28/3/13	
37		S.I. 1	Ten.	2	3/5	1/2	1/2	30/			—	Died 21/1/13	
138		S.I. 4	Row	3	8/3	0	0	30/	Imp.	+ 1/3	+		
145		S.I. 1	Row	1	3/3	2/3	1/1	26/			—	Died 2/12/13	
177		S.I. 2 H.V. 18	Row	1	3/1	2/1	1/1	40/		+ 13/3 + 27/5	+	Died 12/9/13	
279	20/9	S.I. 2 H.V. 4	Row	1	3/1	2/1	1/0	40/	Wse.	+ 17/6	+		
298		S.I. 1	Ten.	1	3/0	2/0	0/0	—		+ 1/8		Died 14/10/13	

## Dalserf.—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
301	5/7/13	M. K.	F.	33	M.	D.	Housewife	8 months	—	Pleurisy	0
320	28/7/13	D. M.	M.	21	S.	N.I.	Railway Clerk	2 years	Work- ing	Cough	St. 1/8/13—Still
329	2/8/13	A. H.	F.	21	S.	I.	Domestic servant	9 months	10 days	Cough	St. 5/8/13—5/9/13
342	30/5/13	A. A.	F.	11	S.	D.	Scholar Tailoress	2 years	14 days	Cough	M. 12/5/13—11/8/13; St. 11/8/13—1/11/13
354	29/8/13	M. P.	F.	33	M.	D.	Housewife	15 months	—	Cough	St. 20/9/13—10/11/13
369	—	J. J.	M.	21	—	—	—	—	—	—	0
457	11/11/13	J. D.	M.	30	S.	I.	Miner, Signalman	12 years	12 mos.	Haem.	0
471	18/12/13	A. W.	F.	9	S.	D.	Scholar	21 months	2 mos.	Weari- ness	D. 24/11/13 Still hospital
NON-PULMONARY											
1909	1909	M. M.	F.	6	S.	D.	Scholar	?	—	—	0
1912	12/11/12	W. M.	M.	33	M.	I.	Coachman	21 years	6 wks.	Accident	M. /12 & /13 D. 18/10/13—22/12/13
	6/3/13	D. B.	M.	4	S.	D.	At home	5 months	—	Diarrhoea	M. 12/3/13—22/3/13
	4/11/13	L. B.	F.	6	S.	D.	Scholar	3 months		Loss of flesh	0
	5/7/13	J. S.	F.	14	S.	D.	At home	1 year	—	Swelling	Bl. 15/7/13—25/7/13; M. 25/7/13—10/9/13
	24/10/13	A. H.	F.	7	S.	D.	Scholar	7 months	5 wks.	Swelling	M. 13/1/13—22/10/13
	4/9/13	J. M.	F.	6	S.	D.	Scholar	3 years	Work- ing	Swelling	0
Dalziel.											
259	22/6/12	Mrs. D.	F.	23	M.	—	Housewife	4 months	1 wk.	Cough, Spit	None
20	10/1/13	N. M.	F.	23	S.	I.	Nurse	1 month	2 wks.	Cough, Spit	Sh. 1/1/13 to 20/1/13 St. 20/1/13 to 6/3/13
184	10/4/13	M. H.	F.	22	S.	I.	Brick- worker Domestic	4 weeks	4 wks.	Influenza	Sh. 21/4/13 to 14/7/13
194	15/4/13	G. H.	M.	7	S.	—	Scholar	3 months	5 days	Cough, Spit	St. 21/4/13 to 14/7/13
229	14/5/13	J. M'G.	M.	11	S.	—		—	—	Cough, Spit	—



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartment.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
301		S.I. 1	Cot.	2	3/1	0/0	0/0	30/			-	Died 16/7/13	
320		S.I. 1	Cot.	2	3/0	1/0	0	27/	Stat.		+3/9/13		
329		S.I. 1	Row	2	4/3	2/1	0/0	40/			+15/8/13	Died 3/9/13	
342		S.I. 1	Row	3	4/2	3/1	1/1	52/	Stat.		+15/8/13		
354		S.I. 2	Ten.	6	7/2	0/0	0/0	Am- ple	Stat.	+ 23/9	+		
369			—	—	—	—	—	—			-	Died in Hartwood Asylum before noti- fication	
457		S.I. 1	Ten.	2	5/0	0/0	0/0	25/	Stat.		-		
471		H.V. 2	Row	2	3/4	1/2	0/1	40/			-		
TUBERCULOSIS.													
		S. I. 1 H. V. 7	Ten.	2	-	-	-					Osseous	
		S. I. 3 H. V. 3	Row	1	3/2	2/2	1/0	8/				Hip joint disease	
		S. I. 1 H. V. 6	Ten.	2	2/5	2/4	2/1	28/				Abdomen	
		H. V. 3	Ten.	2	2/5	2/4	0/0	28/				Abdomen	
		S. I. 1	Row	1	3/0	2/0	1/0	7/				Cervical glands	
		S. I. 1	Row	2	2/4	0/2	0/2	60/				Cervical glands	
		H. V. 1 S. I. 1	Ten.	1	3/6	3/5	2/2	35/				Glands	
259		S.I. 1	Cot.	6	3	0	0	Am- ple				Sanatorium treatment not desired. Died 20/1/13	
20			Hos- pital	—	—	—	—	—				Left district	
184		S.I. 2	Row	2	5/3	3/2	1/1	28/		3/4 +		Died 14/8/13	
194	12/4	S.I. 2	Row	2	5/3	1	1	28/				Off list 14/7/13	
229			Poor- house	—	—	—	—	—				Burgh of Wishaw case	

## Hamilton.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
64	6/3/06	S. M'L.	F.	39	M.	D.	Spinner Housewife	5 years	Work- ing	Cough	B.19/2/13—22/5/1 St.16/12—still in
113	10/5/06	M.M.	F.	41	M.	D.	Housewife	3 months	Work- ing	Cough, Spit	—
31	3/2/08	D. B.	M.	58	M.	I.	Miner	3 „	18 months	Breath- lessness	—
91	24/3/08	J. B.	F.	17	S.	I.	Domestic Servant	3 „	Work- ing	Cough	—
314	5/10/08	J. W.	M.	40	M.	I.	Miner Roadman	2 „	Work- ing	Pleurisy	—
226	15/7/08	J. M.	M.	21	S.	I.	Miner Platelayer	6 weeks	Work- ing	„	—
349	21/11/08	T. G.	M.	7	S.	D.	Scholar	1 month	—	Pneumon.	—
76	13/3/09	J. M.	M.	17	S.	I.	Miner	4 „	Work- ing	Pleurisy	—
335	18/10/09	G. N.	M.	16	S.	I.	„	4 „	1 week	Cough	—
294	20/6/10	B. S.	F.	10	S.	D.	Scholar	—	—	—	—
111	17/3/11	T. B.	M.	8	S.	D.	„	2 months	—	Cough	—
193	1/5/11	W. L.	M.	34	M.	I.	Miner	2 years	18 months	„	U.15/9/12—15/1/1
380	6/10/11	P. B.	M.	23	S.	I.	„	2 „	Work- ing	„	—
392	23/10/11	S. W.	F.	27	M.	D.	Farm Servt. Housewife	18 months	Work- ing	„	St.16/4/13—14/6/1



## RECORDS.

Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartment.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
64	—	4	Ten.	2	2	1	1	36/	Stat.	—	+	In Hospital at end of year.	
64	6/9	5	„	2	6/3	3/1	1	42/	Imp.	No spit	—	—	
31	—	1	Row	2	5	2	1	36/	—	—	—	Died 2/7/13.	
91	—	1	Ten.	2	5/7	—	—	40/	Arr.	No spit	—	No symptoms.	
314	—	6	„	2	4/5	1/4	1	43/	Stat.	—	—	Working.	
226	—	1	„	2	4	1	1	47/	Imp.	—	+	Working since 1910.	
349	—	1	Row	2	3/4	2/2	1	60/	Arr.	No spit	—	At School.	
76	—	2	Ten.	2	4	1	0	37/	„	„	—	Working.	
335	—	1	„	2	4	0	0	60/	„	„	+	Working since 1910.	
244	—	1	„	2	4/6	2/2	1/1	—	„	„	—	At School.	
111	—	2	„	2	7/4	3/2	0	50/	„	„	—	At School.	
193	—	3	Row	1	2/4	1/4	1/1	10/	Stat.	—	—	Left district 9/9/13.	
380	—	1	„	2	6/2	2/1	0	59/	„	—	—	Off list 9/12/13.	
392	—	14	„	2	2/3	1/3	1/1	35/	—	—	+	Died 26/12/13.	

## Hamilton—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
361	13/9/12	A. A.	M.	39	M.	I.	Miner	2 months	3 wks.	Cough	—
463	26/11/12	J. B.	M.	21	S.	I.	Miner	3 months	4 wks.	Cough	St. 30/11/12—25/1/13
46	27/1/13	P. A.	M.	28	M.	I.	Miner	2 weeks	2 wks.	Pain	St. 4/2/13—5/6/13; Sh. 5/6/13—4/12/13
146	—	M. M.	F.	65	M.	D.	Midwife	5 months	6 wks.	Cough	—
207	26/4/13	M. L.	F.	47	M.	D.	Dom. servt., Housewife	6 months	Work- ing	Cough	St. 19/6/13—19/7/13
238	24/5/13	J. H.	M.	19	S.	I.	Engineer	14 weeks	14 wks.	Cough	—
275	17/6/13	M. S.	F.	16	S.	I.	Farm servant	9 months	1 week	Anaemia	St. 20/6/13—30/7/13
296	2/7/13	T. F.	M.	50	M.	I.	Fireman	1 month	3 wks.	Pain in Chest	—
363	10/9/13	J. G.	M.	48	M.	I.	Miner	5 months	11 mos. (injury)	Hoarse- ness	Sh. 18/9/13—11/12/13
377	18/9/13	M. B.	F.	29	M.	D.	Dom. servt., Housewife	6 months	Work- ing	Influenza	—
404	8/10/13	A. S.	M.	37	M.	I.	Clerk	3 years	8 mos.	Cough	Sh. 26/12/13
NON-PULMONAR											
—	7/8/13	W. R.	M.	27	M.	I.	Miner	7 months	4 mos.	Pain in Chest	St. 16/8/13—13/9/13
—	4/12/13	J. N.	M.	9	S.	D.	Scholar	4 years	1 year	Swelling	—
—	—	M. M.	F.	11	S.	D.	Scholar	1 year	Work- ing	Pain in Chest	—



## RECORDS.

Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
361	18/2	S.I. 4	Row	1	3/4	2/4	1/1	22/6			+	Died 6/4/13	
463		S.I. 2	Ten.	2	5/5	2	2	35/			+	Died 5/2/13	
46			Row	1	3/1	2/1	1/1	35/	Stat.		+		
146	—	—	Ten.	2	3/5	0	0	30/		— 30/1 — 8/2	—	Died 22/2/13; from Registrar's return	
207	—	S.I. 12	Cot.	3	5/1	1/0	1	38/	Wse.	+ 14/4	+		
238		S.I. 1	Ten.	2	8/1	2/1	0	45/		+ 16/5	+	Died 26/6/13	
275		S.I. 1	Ten.	2	5/3	1/1	0	90/			+	Died 6/9/13	
296		S.I. 2	Cot.	2	4/0	3/0	1	64/		+ 30/6	+	Died 28/9/13	
363		S.I. 1	Row	2	4/4	1/3	1	48/	Imp.	+ 8/9	+		
377		S.I. 5	Row	2	4/5	2/2	1/1	140/		+ 15/9	+	Died 4/10/13	
404	28/10, 30/10	S.I. 1	Ten.	4	4/2	0	0	50/	Wse.		+	Still in Sanatorium	
TUBERCULOSIS.													
		S.I. 1	Row	2	5/1	3/1	1/1	60/	Wse.		—		
		H.V. 1	Row	2	4/1	2/0	1/0	20/					
		S.I. 2	Ten.	2	3/1	2/0	0	50/					

## DOMICILIARY SUPERVISION.

## BOTHWELL AND CAMBUSNETHAN PARISHES.

TUBERCULOSIS OFFICER—J. W. MILLER, M.B., Ch.B., D.P.H.

**Bothwell Parish.**

*Number of Cases.*—The total number of cases on record throughout the year was 316. Of these, 278 were pulmonary cases, while 38 suffered from non-pulmonary forms of the disease, and are dealt with by themselves. Of the 278 pulmonary cases, 111 were notified during the year, while 167, notified in previous years, were known to be surviving at 1st January, 1913. The changes during the year were as follows:—Deaths, 48, including 31 of those notified in 1913; 15 left the district, including 6 notified in 1913; 43 were removed from the list for various reasons; and 2 were not traced. The total number of cases on record on the 31st December, 1913, was thus 170.

## INSURANCE.

*Age and Sex—Insurance—Conjugal State.*—In the following table the cases are classified according to Age (in quinquennial groups), Sex, and according to whether they were Insured, Non-insured, or Dependents, and whether married or single:—

Age Periods.	Sex.		Tot.	Ins.	Dep.	Non- Ins.	Tot.	Married.	Single.	Total.		
	M.	F.										
— 5	3	4	7	...	7	...	7	...	7	7		
—10	18	24	42	...	42	...	42	...	42	42		
—15	23	39	62	...	62	...	62	...	62	62		
—20	17	15	32	27	5	...	32	2	30	32		
—25	19	10	29	24	5	...	29	7	22	29		
—30	13	13	26	14	12	...	26	15	11	26		
—35	12	8	20	13	7	...	20	14	6	20		
—40	9	10	19	8	10	1	19	15	4	19		
—45	12	13	25	14	11	...	25	20	5	25		
—50	5	3	8	5	3	...	8	7	1	8		
—55	1	1	2	1	1	...	2	2	...	2		
—60	3	...	3	3	...	...	3	3	...	3		
—65	...	2	2	...	2	...	2	2	...	2		
over 65	1	...	1	1	...	...	1	1	...	1		
			136	142	278	110	167	1	278	88	190	278



## OCCUPATION.

<i>Domestic Work.</i> —Housewives, 51; domestics, 24; servant, 1; children, 9, ... ..	85
<i>Scholars, 87. Teachers, 2, ... ..</i>	89
<i>Miners, &amp;c.</i> —Miners, 46; pithead-workers, 5; enginemen, 2; checkweigher, 1; screener, 1, ...	55
<i>Metalworkers.</i> —Steelworkers, 7; ironworker, 1; plumber, 1; platelayer, 1; engineers, 2, ...	12
<i>Factory and Workshop Employees.</i> —Dressmakers, 2; bookbinder, 1; chemical worker, 1; compositor, 1; boot merchant, 1; waggon maker, 1, ... ..	7
<i>Stoneworker or Brickworker.</i> —Quarrymen, 2; bricklayer, 1, ... ..	3
<i>Shopkeeper.</i> —Shoemakers, 2; shop girls, 3; bar- man, 1; grocer, 1, ... ..	7
<i>Miscellaneous.</i> —Carter, 1; clerks, 3; insurance agent, 1; greenkeeper, 1; labourers, 7; stock- broker, 1; lampman, 1; soldier, 1; outworker, 1; boxmaker, 1; typist, 1; coal salesman, 1, ...	20
	<hr/> 278 <hr/>

*Duration of Illness.*—The duration of illness in monthly periods was as follows:—

Months—1	1-2	2-3	3-6	6-12	12-18	18-24	Over 24	Not stated.	Total.
Cases.—8	33	14	35	59	11	30	59	29	= 278

*Earliest Symptoms recognised.*—The earliest symptoms recognised were:—in 162 cases, cough; in 44, pleurisy; in 13, “cold”; in 12, pneumonia; in 8, hæmoptysis; in 7, influenza; in 5, wasting; in 5, bronchitis; in 1, anæmia; in 1, asthma; in 1, debility; in 1, dyspepsia; in 4, peritonitis; in 3, cervical adenitis; in 1, spinal caries; and in 10 the earliest symptoms are not recorded.

In nearly 60 per cent. cough was the initial symptom; in 16 per cent. the onset was with pleurisy; in 3 per cent. with hæmoptysis; while “cold” and bronchitis were first complained of in 6 per cent. of the cases.

*Home Conditions.*—The number of cases occurring in tenements, cottages, and rows, and the number of apartments in the various dwellings, are given in the following table:—

No. of Apartments.	Tenement.	Cottage.	Row.	Institution.	Total Houses.
1	32	...	32	...	64
2	100	3	59	...	162
3	21	5	7	...	33
4 and upwards.	4	12	...	3	19
	157	20	98	3	278



It is evident that 81 per cent. of the cases occurred in one and two apartment houses, 23 per cent. in the houses of one apartment, and 58 per cent. in those of two apartments. At the last Census the percentage of one-apartment and two-apartment houses in the parish was 23 and 53 respectively—a total of 76 per cent.

*Inmates.*—Of the 278 houses, there were thus 64 of one apartment, 162 of two apartments, 33 of three apartments, and 19 of four or more apartments. The total number of inmates in each size of house, with the average number of persons per house, was as follows:—

Apartments,	...	1	2	3	4 and over
Total inmates,	...	234	820	206	78
Average number per house,		3.6	5.0	6.2	4.1

*Sleeping Accommodation.*—Of the 278 cases, 47 had a room to themselves, 25 shared a room with 1 other person, 32 with 2 other persons, 46 with 3 others, while the remainder shared a room with more than 3 persons. In 2 cases there was no record. Including the 47 who had a room to themselves, 118 occupied a bed alone, 90 had 1 other, 59 had 2 others, 9 had 3 others, and 2 had 4 others, sharing a bed with them.

*Weekly Income.*—This was returned as ample in 66 cases. 1 case was destitute, while in 12 cases there was no record. In 199 of the 278 cases the weekly income was recorded, and among these the average weekly income per household amounted to 40s. 1d. The total number of persons in the families in which these 199 cases occurred, and who were dependent on this weekly income, was 1,184, making the average weekly income available per head 6s. 9d.

The following table shows in detail the cases in relation to weekly income, with the number of persons depending on the income:—

WEEKLY INCOME CLASSIFIED IN GROUPS—AND NUMBER OF PERSONS  
DEPENDENT ON THE INCOME.

No. of Persons.	-20s.	20-25s.	25-30s.	30-35s.	35-40s.	40-50s.	Over 50s.
1	1	1	2	...	...	...	...
2	1	1	1	1	1	...	...
3	...	3	5	4	6	1	1
4	...	1	7	2	5	4	2
5	4	2	8	6	5	5	3
6	1	3	6	5	4	6	8
7	2	5	8	5	8	6	8
8	1	1	3	1	4	4	4
9	...	...	1	1	1	4	3
10	...	...	1	2	3	...	4
11	...	...	...	...	...	1	...
12	...	...	...	...	...	1	1
	10	17	42	27	37	32	34



*Domiciliary Visits.*—The Tuberculosis Officer paid 85 visits to the homes of the patients, while 952 visits were paid by the Sanitary Inspector and Health Visitor.

*Institutional Treatment (at any time).*—Of the 278 cases, 213 received treatment in County institutions, 1 in an institution outwith the County, and 64 refused such treatment.

Received institutional treatment once, ...	147
"                    "          twice, ...	40
"                    "          thrice, ...	18
"                    "          four times, ...	7
"                    "          five times, ...	2
Total who have received institutional treatment,	214

#### CONDITION AT END OF YEAR.

Year of Notification.	Cases.	Arrested.	Improved.	Stationary.	Worse.	Died.	In Sana- torium.	Off list, left district, lost trace of.	Not to be visited.
1905	2	1	1	...	...	...	...	...	...
1906	4	...	1	1	...	...	1	1	...
1907	3	1	...	2	...	...	...	...	...
1908	6	3	3	...	...	...	...	...	...
1909	18	6	7	1	3	...	...	1	...
1910	33	8	15	3	1	3	1	2	...
1911	36	9	17	3	2	2	...	3	...
1912	65	7	23	2	3	13	5	10	2
1913	111	6	43	7	7	31	6	8	3
Totals,	278	41	110	19	16	49	13	25	5

#### SPUTUM.

	T.B. found.	T.B. not found.	Total.
Examined in 1913, ...	9	4	13
Not examined in 1913 (but examined previously), ...	31	25	56
No record of any examination, ...	...	...	209
	40	29	278

#### Non-Pulmonary Tuberculosis.

*Number of Cases.*—The total number of cases on record throughout the year was 38. Of these, 29 were notified during the year, and 9 in previous years. During the year 12 were removed from the list as well, and 6 left the district, so that the total number on record on 31st December, 1913, was 20.

*Site of Lesion.*—In 17 of the cases the cervical glands were affected; in 9, bones and joints; in 7, the skin; in 4, the abdomen; and in 1, the kidney.

*Institutional Treatment.*—23 of the cases received institutional treatment in County institutions, while 1 received treatment outwith the County.

## Bothwell.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
15	30/6/05	B. G.	F.	41	M.	D.	Housewife	13 years	6 mos.	Pleurisy	M./05, M./06, U./1
47	7/8/12	W. N.	M.	33	M.	I.	Miner	5 years	—	Pleurisy	St./05
111	7/4/06	W. B.	M.	30	S.	N.I.	School teacher	6 years	—	Pleurisy	St./06
135	31/5/06	A. H.	F.	45	W.	D.	Housewife	11 years	—	Cough	St./06, St./11, St./1 U./11/6/13—9/8/13
192	3/3/06	A. S.	M.	24	S.	I.	Miner	6 years	2 years	Cough & Spit	U./11, B./1/6/13—9/9/13, St./9/9/13. Still in
223	10/9/06	R. T.	M.	48	M.	I.	Miner	6 years	5 years	Cough	St./06, St./07, B./0
86	25/4/07	J. E.	M.	37	M.	I.	Steel worker	6 years	5 years	Pleurisy	M./07, M./07, M./07 U./6/5/11—29/7/11
128	17/6/07	S. P.	F.	48	M.	D.	Housewife	10 years	—	Cough & Spit	M./07, St./10, St./1
203	9/11/07	J. K.	F.	22	S.	I.	Chemical worker	4 years	—	Cough	M./07
5	6/1/08	F. C.	M.	60	M.	I.	Miner	4 years	5 wks.	Cough	St./08, B./12, U./1
57	21/7/08	M. H.	M.	44	M.	I.	Check weightman	5 years	—	Pleurisy	M./08
161	18/5/08	M. S.	F.	14	S.	D.	At home	2 years	—	Cough	St./08, St./11
261	12/8/08	W. M.	M.	37	M.	I.	Miner	1 year	—	Dyspepsia	St./08
313	2/10/08	M. O'N.	F.	33	S.	D.	Housewife	—	—	Cough	None
19	18/1/09	J. J.	F.	33	M.	D.	Housewife	1 year	—	Cold	None
85	24/3/09	H. C.	M.	25	M.	I.	Screener	3 years	—	Cough	B. /09
103	31/3/09	M. M.	F.	8	S.	D.	Scholar	2 years	Work- ing	Pneu- monia	U./09, U./12
109	20/3/09	S. M'C.	F.	24	S.	N.I.	Sch. teacher. Housewife	1 year	—	Cough	St. /09
115	16/4/09	J. K.	M.	33	M.	I.	Miner	—	7/5/11	Cough, Influenza	St. /09—B. /11 St. 5/5/13—24/7/13



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
15	—	H.V. 14	Ten.	2	3/3	3/3	/1	Am- ple	Imp.			Left district, Jan., 1914	
47	—	S.I. 1	Ten.	2	3/4	3/4	1/1	Am- ple	Arr.			Working regularly	
111	—	S.I. 3	Ten.	2	2	1	0	Am- ple	Imp.			Working regularly	
135	—	S.I. 2	Ten.	4	3	1	0	Pri- vate	Stat.				
192	27/1—11/4	S.I. 2	Row	2	5/1	1	0	45/					
223	—	S.I. 2	Ten.	2	4/2	3/1	2	35/	Imp.			Probably Chronic Bronchitis	
86	—	S.I. 2	Ten.	2	4/2	3/1	0	17/	Stat.		+		
128	7/11	S.I. 4	Ten.	3	5/2	2/2	2	60/	Stat.		+		
203	7/11	S.I. 2	Ten.	2	8/2	5/1	2/1	54/	Arr.			Taken off list	
5		H.V. 13	Row	2	7	2	1	55/	Imp.	20/1			
57		S.I. 2	Ten.	3	5/1	2	1	60/	Arr.			Off list	
161		S.I. 1	Ten.	1	3	3	0	Am- ple	Imp.			Working	
261		S.I. 1	Ten.	2	4/3	2/1	1/1	40/	Arr.			Working; off list	
313		H.V. 1	Ten.	1	1/2	2/2	1	32/	Arr.			Offlist; refused Sana- torium treatment	
19		S.I. 4	Ten.	2	2/1	2/1	1	Am- ple	Arr.			Keeping well. Offlist; refused Sanatorium treatment	
85	11/11	S.I. 1	Row	1	2/1	2/1	1	27/	Imp.			—	
103	19/11	H.V. 7 S.I. 1	Ten.	1	4/2	4/1	2/0	30/	Imp.			Keeping well	
109		S.I. 2	Ten.	2	4	0	0	Am- ple	Arr.			Working; taken off list	
115	11/12	H.V. 4	Ten.	1	3/2	3/2	0	—	Stat.		+ 1911	—	

## Bothwell—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
139	13/4/09	J. M'C.	M.	11	S.	D.	Scholar	—	—	Cough & wasting	St./09, B./10
172	17/5/09	J. L.	M.	39	M.	I.	Miner	—	25/5/11	Bronch.	St. /09
203	7/6/09	Mrs. K.	F.	34	M.	D.	Housewife	—	—	—	Sh. /09
230	5/7/09	M. M'P.	F.	45	M.	D.	Housewife	1 year	—	Cough & wasting	B./09, U./10
268	6/8/09	S. G.	M.	25	S.	I.	Pithead worker	—	—	Cough	St. /09
288	24/8/09	T. K.	M.	18	S.	I.	Labourer	5 months	/9/09	Cough	St. /09, St. /10 St. 4/3/12—24/1/13
325	11/10/09	H. M.	F.	34	M.	D.	Housewife	6 months	—	Pain in side	St./09
336	19/10/09	M. V.	F.	42	M.	N.I.	Housewife	—	—	Cold	B. /10—M. /10 B. /10
357	5/11/09	M. G.	M.	16	S.	I.	Miner	2 years	—	Cough, spit, Haem.	U. /09, B. 10/2/13 —16/5/13
370	20/11/09	H. S.	M.	13	S.	D.	Scholar	—	—	Wasting	U. /10—Sh. /12
371	20/11/09	A. L.	M.	48	M.	I.	Miner	1 year	1 year	Cough	None
376	30/5/11	A. B.	M.	31	S.	I.	Miner	6 years	—	Asthma	U./10, St./10, St./11
387	11/2/09	Mrs. B.	F.	23	S.	I.	Bookbinder	—	—	Cold	St. /10
2	4/1/10	M. B.	F.	10	S.	D.	Scholar	4 years	—	Cough	U. /10, B. /10 U. 9/2/13—11/3/13
3	4/1/10	N. B.	F.	12	S.	D.	Scholar	4 years	—	Cough	U. /10, B. /11 U. 19/2/13—11/3/13
16	11/1/10	J. M.	F.	33	S.	I.	Dressmaker	1 year	—	Cold	St./10
75	17/2/10	J. D.	M.	32	S.	I.	Lampman	1 year	—	Cough	St. /10
80	21/2/10	T. L.	M.	11	S.	D.	Scholar	—	—	Cough	U. /10, St. /12



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
139		H.V. 1	Ten.	2	3/4	0	0	38/	Arr.			Attending school. Off list	
172	11/11	S.I. 1	Ten.	2	3/2	3/2	1	19/				Off list 11/11/13.	
203	7/11	H.V. 2	Row	2	4/4	4	1	41/6	Imp.			—	
230		S.I. 4	Ten.	2	5/2	2	2	32/	Arr.			Off list	
268	11/12	H.V. 10	Row	1	2	2	0	22/	Imp.			Patient married, and (along with wife) resides with mother- in-law, who is a notified case.	
288	11/12	S.I. 1	Ten.	1	5/2	5/2	1	38/	Imp.		+ 1912	—	
325		S.I. 1 H.V. 3	Ten.	2	3/2	2	0	Am- ple	Arr.			Off list	
336	11/12	H.V. 5	Row	1	3	3	1	25/	W'se		+ 1910	—	
357		S.I. 1	Ten.	2	4/2	0	0	60/	Arr.			Off list	
370	11/11	S.I. 1	Row	2	4	4	1	42/	Imp.			Working.	
371		S.I. 4	Row	2	4/5	2/3	0/1	Des- ti- tute	W'se			Refused Sanatorium treatment	
376		S.I. 3	Ten.	1	2	2	0	12/	W'se		- 1910	Died 28/1/14	
387		S.I. 1	Ten.	2	4/1	3/1	1	Am- ple	Imp.		+ 1909	—	
2	19/11	H.V. 4	Row	2	6/3	3/2	2	Am- ple	Arr.			Taken off list.	
3	19/11	H.V. 4	Row	2	6/3	3/2	2	Am- ple	Arr.			Taken off list.	
16		S.I. 4	Ten.	3	4	0	0	Am- ple	Arr.		- 1910	Off list	
75		S.I. 1	Row	2	1	1	0	22/6				Lost trace of.	
80	7/11	S.I. 2	Row	2	5/6	3/2	1	50/	Imp.			At school.	

## Bothwell.—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
97	29/11/11	H. C.	M.	7	S.	D.	Scholar	1 year	—	Cough	B. /10, B. /11, S. /11 D. 21/10/13—30/12/13
114	9/3/10	W. W.	M.	12	S.	D.	Scholar	—	2½ yrs.	Pleurisy	B. /10, U. /12
115	10/3/10	M. R.	F.	14	S.	D.	At home			Cough	B./10
120	11/3/10	A. L.	M.	16	S.	I.	Miner			Cough	St./10
130	18/3/10	S. R.	F.	27	M.	D.	Housewife				None
136	22/3/10	S. M.	F.	18	S.	I.	Shop girl	2 years	—	Cough	U./10
142	26/3/10	J. D.	M.	10	S.	D.	Scholar	—	6 months	Cold	B./10, /11, & /12 M. 20/8/12—4/10/13 Bl. 4/10/13 Still in
168	13/4/10	M. J.	F.	16	S.	I.	Domestic	1 year	6/11	Cold	St./10, St./11
195	2/5/10	H. O'R.	M.	41	M.	I.	Wagon Maker	5 years	—	Pleurisy	B./10
196	2/3/10	M. G.	F.	12	S.	D.	Scholar	2 years	3 months	Cold	B./10 & /12, St. /30/6/13 —28/9/13
217	12/5/10	M. C.	F.	36	M.	D.	Housewife	2 years		Cough	B./10
224	20/5/12	E. D.	F.	18	S.	I.	Domestic	1 year	—	Cold	St./10, B./11, St. 14/4 —17/5 M. 28/9—4/10
227	24/5/10	M. J.	M.	22	S.	I.	Miner				B./10, M./10, Bell./10 St./12
231	30/5/10	B. M'F.	F.	29	S.	I.	Domestic, At home	4 years	4 yrs.	Anæmia, Cough	St./10, U./11 and 11, B./12, U./12, St./5/6/13—26/7/13
236	2/6/10	B. J.	F.	44	M.	D.	Housewife	6 months	—	Cough	St./10, B./11
261	16/6/10	J. C.	M.	25	M.	I.	Shoemaker			Cold	B./10
270	21/6/10	R. M.	F.	13	S.	D.	Scholar	2 years	3 wks.	Anæmia	None
279	23/6/10	S. G.	F.	26	S.	D.	At home			Pott's disease	None



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
97		S.I. 1	Ten.	2	2/4	2/4	2	27/	Imp.			—	
114	7/11	H.V. 2	Ten.	2	4/2	4/2	1/1	32/	Imp.		- 1912	—	
115		H.V. 6	Row	2	3/4	3/2	/1	30/	Imp.			Working	
120		S.I. 2	Ten.	1	4/1	4/1	1	42/6	Imp.			Working	
130		S.I. 1	Row	2	2/5	2/5	1	21/	Imp.			Refused Sanatorium treatment	
136		H.V. 1	Ten.	2	3/1	3	0	Am- ple	Arr.			Off list	
142		H.V. 3	Row	1	3/2	3/2	1	20/			+ 1912		
168		S.I. 2	Ten.	2	4/2	3/1	1	35/	Imp.		+ 1911		
195		S.I. 1	Row	2	3/4	0	0	18/			- 1910	Died 4/3/12	
196	5/12	S.I. 1	Row	1	3/1	3/1	0	—	Arr.			Off list	
217	11/11	S.I. 4	Row	1	2/4	2/4	1	30/	Arr.			Off list	
224	16/9	S.I. 1 H.V. 4	Ten.	1	3	3	0	—				Diagnosis not estab- lished	
227	19/11	S.I. 2	Ten.	2	4/2	4/2	1/1	70/	Imp.		- 1912	Working	
231	19/11	H.V. 6	Ten.	2	5	2	0	57/6	Imp.		- 1910		
256	19/11	S.I. 2	Ten.	2	5/2	3/2	1	45/	Imp.				
261		H.V. 4	Ten.	2	5	3	2	Am- ple	Stat.		+ 1910		
270			Ten.	2	2/3	0	0	38/	Arr.			Off list	
279	14/11	S.I. 2	Ten.	3	3	0	0	39/	W'se			Parents would not allow patient to go to sanatorium	

## Bothwell—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
287	28/6/10	W. C.	M.	37	M.	I.	Miner			Cold	U./10
465	1/11/10	T. B.	M.	26	M.	I.	Boot Merchant	1 year		Cough, wasting	St./10
330	19/7/10	A. S.	F.	7	S.	D.	Scholar	1 year	—	Cough	B./12
421	28/9/10	P. B.	M.	50	W.	I.	Engineman	1 year	8/11		U./10
298	19/7/08	Mrs. K.	F.	38	M.	D.	Housewife	7 years	Work- ing	Pleurisy	M./10, B./12
467	1/11/10	M. M.	F.	13	S.	D.	Scholar	1 year	1 yr.	Tub. Periton.	B./11, M./11
468	14/11/10	G. M'G.	M.	13	S.	D.	Scholar	7 years	7 yrs.	Pleurisy	B./10, St./11, St./11
469	1/11/10	T. M'Q.	M.	12	S.	D.	Scholar	7 years	4 mos.	Bronchit.	None
473	3/11/10	T. L.	M.	42	M.	I.	Miner	3 years	—	Pneumon.	U./10
513	21/12/10	W. K.	M.	11	S.	D.	Scholar	7½ years	/11/10	Pleurisy	None
525	30/12/10	B. H.	F.	12	S.	D.	Scholar	2 years	2 yrs.	Cough	None
13	14/1/11	M. M'C.	M.	15	S.	I.	Miner	13 months		Influenza	U./11
37	30/1/11	D. L.	M.	8	S.	D.	Scholar	6 years	3 mos.	Pneumon.	B./11
38	31/1/11	J. K.	F.	13	S.	D.	Scholar	4 months	14/1/11	Cough	U./11, St./11
59	—	F. M.	F.	14	S.	D.	Scholar	1 year	1 year	Bronch.	B./11—B./12
60	2/2/11	J. S.	M.	12	S.	D.	Scholar	1 year	—	Cough, Swelling in legs	B./11 Bl.21/7/13—18/10/13
76	20/2/11	L. M.	F.	19	S.	D.	Domestic	8 months	—	Cold	B./11
84	25/2/11	A. M.	F.	11	S.	D.	Scholar	—	23/4/12	Cough	B. /11, Sh. /12
89	2/3/11	J. B.	F.	14	S.	D.	At home	1 year	—	Cough	None



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
287		S.I. 2	Ten.	2	3/4	1	1	30/	Imp.			Working	
465		S.I. 1	Ten.	2	2/1	2/1	1	Am- ple			+ 1910	Died 19/1/13	
330		S.I. 2	Ten.	2	3/3	2/3	/1	35/	Imp.			At school	
421	11/12	H.V. 6	Row	2	4/2	0	0	23/	Imp.			Working	
298	21/11	H.V. 9	Row	2	3/4	2/4	1/1	30/	Imp.		—	Keeping well	
467		H.V. 4	Ten.	2	5/5	3/4	0	30/	Stat.			Tuberculous abscess in back	
468		S.I. 1	Ten.	2	5/6	1	1	Am- ple	Imp.		- 1911		
469		S.I. 1	Ten.	2	4/3	4/1	1	Am- ple	Arr.			Off list. Sanatorium treatment refused.	
473		H.V. 4	Ten.	2	5/4	3/2	1/1	45/	Stat.				
513		H.V. 1 S.I. 1	Row	3	8/1	2	0	Am- ple				Died 17/3/13.	
525		S.I. 2	Ten.	3	7/1	3	0	55/	Imp.	<sup>+</sup> 5/3 15/5			
13		S.I. 1	Ten.	2	6/5	2/1	/1	Am- ple	Arr.			Off list.	
37		S.I. 1	Ten.	2	5/5	2/2	0	Am- ple	Imp.		- 15/6/12	At school.	
38	7/11	H.V. 3	Row	2	5/5		2	—	Imp.			Working.	
59		S.I. 1	Ten.	3	7/6		0	50/	Imp.			Working.	
60	14/4	S.I. 3	Ten.	1	2/1	2/1	1	30/	Imp.			Chronic Osteomyelitis both legs, in addi- tion to chest lesion.	
76		H.V. 2	Ten.	2	4/1	1/1	1/1	30/				Left district.	
84		S.I. 1	Ten.	2	4/1	2/1	1/1	30/	Stat.		- 1911		
89	7/11	S.I. 2	Ten.	3	3/2	0	0	50/	Imp.			Parents would not let patient go to Sana- torium.	

## Bothwell—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
90	2/3/11	M. D.	F.	12	S.	D.	Scholar	—	24/2/11	Pleurisy	None
96		L. M'G.	F.	13	S.	D.	Scholar	16 months	—	Cough, Wasting	B. /11, St. /12
97		W. M'G.	M.	4	S.	D.	—	16 months	—	Wasting	B. /11
99	10/3/11	R. D.	M.	10	S.	D.	Scholar	—	—	Cough	B. /11, B. /12 B. 26/2/13—20/6/13
100		Wm. M.	M.	23	S.	I.	Miner	2 years	—	—	B. /11
182	25/4/11	A. H.	M.	10	S.	D.	Scholar	1 year	2 yrs.	Cough	U. /11, St. /12, B. /12 U. 2/6/13—23/8/13
183	25/4/11	R. A.	M.	19	S.	I.	Pithead worker	18 months	—	Cough	B. /11
190	26/4/11	E. T.	F.	40	M.	D.	Housewife	3 years	4 mos.	Haemop.	B. /11
192	28/4/11	W. T.	M.	23	S.	I.	Clerk	1 year	—	Pleurisy	None.
201	3/5/11	S. W.	F.	30	M.	D.	Housewife	—	—	Haemop.	U. /11
229	17/5/11	M. M.	F.	35	M.	D.	Domestic, Housewife	1 year	/5/11	Cough	None
234	20/5/11	P. C.	M.	27	S.	I.	Miner	6 months	—	Cough	St. /11
263	15/6/11	M. B.	F.	41	M.	D.	Servant, Housewife	13 years	—	—	None
265	15/6/11	M. M'G.	F.	43	M.	D.	Housewife	3 years	—	Cough	B. 16/1/13—14/2/13
280	24/6/11	W. H.	M.	11	S.	D.	Scholar	14 months	—	Influenza	St. /11 B. 7/3/13—30/8/13
290	7/7/11	S. M'C.	M.	47	M.	I.	Steelworker	8 years	8 yrs.	Bronch.	B. /11
293	13/7/11	E. S.	F.	14	S.	D.	Scholar	5 years	2 mos.	Swelling in neck	B. /11
270	16/6/11	M. C.	F.	10	S.	D.	Scholar	3 years	3 years	Weakness	B. /11 St. /12
318	5/8/11	J. C.	F.	9	S.	D.	Scholar	13 months	13 mos.	Cough	St. /11



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
90		S.I. 3	Row	3	4/5	3	0	36/	Arr.			Keeping well ; off list 21/12/10. Sanator. treatment refused	
96		S.I. 2 H.V. 6	Ten.	1	4/6	4/6	/1	35/	Arr.		- 1911	Off list.	
97		S.I. 2	Ten.	1	4/6	4/6	/2	35/	Arr.			Off list.	
99	7/11	H.V. 2	Row	2	5/3	2/4	1/2	40/	Imp.				
100		H.V. 1	Ten.	2	4/1	1	1/1	30/	Arr.		- 1911	Off list.	
182		H.V. 5	Row	2	2/5	2/5	2	22/	Arr.		- 1912	Off list.	
183	11/11	H.V. 2	Row	2	3/4	0	0	30/	W'se				
190		S.I. 4	Row	1	3/2	3/2	0	14/	W'se		+ 1911		
192		S.I. 2	Cot.	4	6	0	0	Am- ple	Imp.			Working.	
201		S.I. 1	Ten.	1	3	3	2	—				Left district.	
229		S.I. 2	Ten.	2	2/2	2/2	1	28/			+ 1911	Left dist'ct. Sanator. treatment refused	
234		H.V. 5	Ten.	2	4/2	0	0	46/	Imp.			Working.	
263		S.I. 3	Ten.	2	5/2	2/2	1/1	30/	Arr.			Off list. Sanatorium treatment refused	
265		S.I. 1 H.V. 3	Row	1	4/3	4/3	1/1	30/				Left district.	
280		H.V. 4	Ten.	2	2/3	2	0	Am- ple	Imp.				
290	14/11	S.I. 2	Ten.	1	3/2	3/2	1	10/	Stat.		- 1911	Chronic Bronchitis ; off list.	
293	14/11	S.I. 1	Ten.	2	4/1	0	0	32/	Imp.	- 4/4			
270	—	S.I. 2	Ten.	1	2/1	2/1	1	28/	Arr.			Off list.	
318	—	S.I. 2 H.V. 4	Ten.	1	2/3	2/3	0	26/	Arr.		+ 1911	Off list 12/12/13.	

## Bothwell.—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
340	30/8/11	J. M.	M.	16	S.	I.	Grocer's assistant	2 months	—	Pneumon.	None
373	2/10/11	M. M'I.	F.	11	S.	D.	Scholar	9 months	9 mos.	Cold	None
388	10/10/11	J. E.	M.	23	S.	I.	Steel worker	4 months	—	Bronch.	St./11
405	2/11/11	R. W.	M.	23	S.	I.	Pithead labourer	4 months	—	Cough, Wasting	St./11
409	6/11/11	J. O.	M.	25	S.	I.	Carter	3 years	2½ yrs.	Abd. Tub.	St./12
427	25/11/11	F. M'A.	M.	20	S.	I.	Miner	12 months	8/11	Pneumon.	St./12
430	28/11/11	W. C.	M.	27	S.	I.	Miner	6 months	14 dys.	Cough, Spit	St./11 U./12
451	10/1/12	J. M.	M.	12	S.	D.	Scholar	2½ years	2 yrs.	Cough, Spit	St./12 Bl. 27/6/13—13/9/13
452	20/12/11	A. M'F.	F.	9	S.	D.	Scholar	2 months	14 dys.	Wasting	B./11
4	5/1/12	A. L.	M.	30	S.	I.	Miner	7 weeks	6 wks.	Cough	B./11
41	14/2/12	W. D.	M.	9	S.	D.	Scholar	3 months	—	Pleurisy	St./12, St. 9/9/12—4/1/13, St. 8/12/13—11/5/14,
42	16/2/12	J. W.	M.	12	S.	D.	Scholar	6 months	5 wks.	Cough	B./12
53	21/2/12	W. W.	M.	41	S.	I.	Miner	10 months	/6/11	Influenza	St./12, U./12
55	18/2/12	C. K.	F.	6	S.	D.	—	2 months	—	Cough	St./12
64	28/2/12	J. T.	F.	13	S.	D.	Scholar	2 months	—	Pleurisy	St./12
84	11/3/12	S. K.	F.	9	S.	D.	Scholar	3 months	6 wks.	Cough & Wasting	St./12, B. 25/9/12—7/2/13
105	30/3/12	W. G.	M.	41	S.	N.I.	Stock-broker	7 years	1905	Cough & Spit	None
116	3/4/12	M. M'G.	M.	30	M.	I.	Miner	4 months	12 wks.	Cough & Spit	St. 19/4/12—20/7/12
117	4/4/12	J. C.	M.	20	S.	I.	Quarry worker	6 months	5 wks.	Influenza	St./12, U. 26/5/13—3/6/13



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartment.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
340	11/11	H.V. 2	Row	3	6/3	1	1	Am- ple	Imp.			Working; Sanatorium treatment refused	
373	—	S.I. 2	Ten.	2	2/3	2/3	1	30/	Imp.			Gone to Ireland for Holiday; Sanat. treatment refused	
388	—	S.I. 3	Ten.	2	5/1	2	0	42/	—		+ 1911	Died 27/11/13.	
405	—	S.I. 1 H.V. 4	Ten.	2	9/1	3	0	Am- ple	—			Died 25/5/13.	
409	19/11	H.V. 8	Ten.	2	7	3	0	Am- ple	Imp.		- 1911	—	
427	—	S.I. 2	Ten.	3	6/3	1	1	45/	Imp.			Working.	
430	—	S.I. 1	Ten.	2	6/1	2	0	66/	Stat.		- 1911	—	
451	—	S.I. 2	Ten.	2	3/2	3/2	1	55/	Imp.		- 1912	—	
452	—	S.I. 2	Ten.	2	5/2	2	2	32/	Imp.			At School.	
4		S.I. 1	Ten.	1	5/2	5/2	2	30/			- 1912	Patient is a Pole; left district	
41		S.I. 1 H.V. 7	Ten.	2	4/2	4/2	0	28/	Imp.				
42		S.I. 1	Ten.	1	3	3	3	31/6				Left district /3/1913	
53	11/12	S.I. 2	Ten.	2	4	1	0	Am- ple	Imp.		+ 1912		
55	7/11	S.I. 1 H.V. 1	Ten.	1	2/4	2/4	0	36/	Imp.				
64	5/12	S.I. 4 H.V. 11	Row	2	5/2	5/2	0	Am- ple	Imp.		+ 1912		
84		S.I. 1 H.V. 9	Ten.	3	6/2	2/1	2/1	45/	Imp.			Attending school	
105		S.I. 2	Cot.	11	4	0	0	Am- ple			+ 1905	Not to be visited died 13/9/13	
116	5/12	S.I. 1 H.V. 7	Row	2	3/3	3/3	1/1	—	Stat.		+ 1912	Working	
117		S.I. 2 H.V. 8	Ten.	2	4	2	1	80/			+ 1912	Died 3/6/13	

## Bothwell—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
125	11/4/12	A. R.	F.	13	S.	D.	Scholar	4 months	/3/12	Cough, Spit, & Haem.	B./12, B. 1/11/12—7/23, St. 20/10/13. Still
144	26/4/12	J. M'P.	M.	8	S.	D.	Scholar	15 months	5 wks.	Pleurisy	Sh./12
145	26/4/12	W. M'P.	M.	31	M.	I.	Miner	years	—	Cough & Spit	None
146	26/4/12	M. M'G.	F.	4	S.	D.	—	1 year	—	Diarrhoea & Wasting	St./12
175	7/5/11	J. S.	M.	18	S.	I.	Clerk	4 months	/1/12	Pleurisy	None
176	9/5/12	A. W.	F.	7	S.	D.	Scholar	7 weeks	7 wks.	Cough, Spit	U./12
194	20/5/12	J. S.	M.	13	S.	D.	Scholar	8 months	2 mos.	Pleurisy	U./12
210	30/5/12	H. B.	M.	20	S.	I.	Miner	5 months	5 mos.	Pleurisy	U./12
218	1/6/12	A. G.	M.	5	S.	D.	Scholar	3 weeks	/5/12	Pneumon.	B. 9/12/12—22/3, D. 28/11/13. Still
237	12/6/12	A. H.	F.	12	S.	D.	Scholar	4 months	/3/12	Cough, Spit	S. 17/6/12—7/9/
241	15/6/12	M. M.	F.	11	S.	D.	Scholar	1 year	/5/12	Pleurisy	B./12 B. 12/5/13—8/8/
253	18/6/12	M. A.	F.	29	M.	D.	Housewife	2 months	—	Pain in side	U./12
268	27/6/12	J. W.	M.	9	S.	D.	Scholar	4 years	6 wks.	Pneumon.	St./12 B. 3/10/12—7/2/
272	5/7/12	A. W.	F.	12	S.	D.	Scholar	—	14 days	Cough	St./12
287	26/7/12	W. M'C.	M.	30	M.	I.	Miner	2 years	—	Cough, Spit	St./12 St./12
288	22/7/12	A. H.	M.	12	S.	D.	Scholar	7 months	/6/12	Cough, Pain in side	B. 13/1/13—7/4/1
306	9/8/12	M. D.	F.	12	S.	D.	Scholar	4 months	—	Cough, Spit	B./12
309	8/8/12	E. K.	F.	10	S.	D.	Scholar	—	—	—	B./12



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartment.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
125		S.I. 1 H.V. 7	Row	1	4/1	4/1	1/1	50/	Imp.		+ 1912		
144		S.I. 2 H.V. 2	Row	2	3/5	2/2	/2	30/	Imp.				
145		S.I. 2 H.V. 1	Row	2	3/5	1/3	1	30/	Arr.			Refused Sanatorium treatment; off list 30/12/13	
146		S.I. 2	Ten.	1	2/3	2/3	2/1	30/				Left district	
175		S.I. 2	Ten.	3	4	0	0	30/	Imp.			Refused Sanatorium treatment	
176		S.I. 1 H.V. 3	Ten.	2	2/5	2/2	0	35/	W'se			Died 3/2/14	
194		S.I. 2	Ten.	2	3	3	0	Am- ple	Arr.			Working. Off list.	
210	7/11	S.I. 1 H.V. 1	Ten.	3	8/2	2	0	Am- ple	Arr.			Working. Off list. Case of Pleurisy with effusion.	
218	7/11	S.I. 1	Ten.	2	5/3	4/3	2	90/				Off list 1914.	
237		S.I. 1 H.V. 4	Ten.	2	4/1	0	0	40/				Died 18/3/13.	
241	7/11	H.V. 3	Row	2	5/4	2/4	/2	55/	Imp.				
253		S.I. 1	Cot.	5	2/2	0	0	100/	Arr.			Off list 22/1/13.	
268	5/12	S.I. 1 H.V. 6	Ten.	2	3/3	2/3	2	50/	Imp.				
272	7/11	S.I. 1 H.V. 9	Ten.	2	2/3	2/2	1	Am- ple	Arr.			Off list.	
287	11/11	S.I. 4	Row	2	2/3	2/3	1/1	30/	Imp.			Working.	
288	11/11	S.I. 2 H.V. 2	Row	1	4/4	4/4	/3	14/				Left district.	
306	7/11	S.I. 2	Row	2	3/3	3/2	/1	40/	Imp.		—1912		
309	7/11	S.I. 4	Row	1	2/4	2/4	/2	22/	imp.			At school.	

## Bothwell.—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
312	12/8/12	M. K.	F.	10	S.	D.	Scholar	3 months	3/12	Pneumon.	B./12
315	14/8/12	A. D.	M.	54	M.	I.	Soldier Miner	12 months	—	Pleurisy	B. 18/11/12—7/2/13
316	14/8/12	A. P.	F.	14	S.	D.	At home	5 months	—	Cough & spit	None
317	14/8/12	Mrs. D.	F.	39	M.	D.	Housewife	6 years	/8/12	Cough & spit	B./12
321	15/8/12	A. R.	M.	21	S.	I.	Clerk	6 months	/7/12	Influenza	St./12
333	22/8/12	A. H.	F.	10	S.	D.	Scholar	18 months	/6/12	Cough	B./12, Sh. 9/12/13— Still in
338	29/8/12	H. R.	M.	30	M.	I.	Miner	1 year	6 mos.	Cough	St./12
340	29/8/12	T. M'D.	M.	34	M.	I.	Ins. Agent	3 years	—	Pleurisy	Douglas 1/3/13— 15/8/13
348	5/9/12	S. C.	M.	44	M.	I.	Steelworker	15 months	9/12	Cough	None
350	7/9/12	H. O'N.	M.	18	S.	I.	Miner	6 months	3 wks.	Pleurisy	St./12
362	14/9/12	Mrs. H.	F.	65	M.	D.	Housewife	Years	—	Cough & spit	None
363	14/9/12	D. M.	M.	8	S.	D.	Scholar	?	3 wks.	Cough & spit	B./12
376	23/9/12	E. V.	F.	22	S.	I.	Domestic	1 month	—	Cough	Sh. 3/10/12—1/2/13
377	23/9/12	H. K.	M.	18	S.	I.	Labourer	3 weeks	3 wks.	Cough & spit	St./12, B. 4/1/13— 7/1/13
400	28/9/12	G. S.	M.	26	S.	I.	Labourer	9 months	/9/12	Cough & spit	Sh. 18/10/12— 19/4/13 St. 30/6/13 Still in
405	14/10/12	Mrs. E.	F.	36	M.	D.	Housewife	Years	—	Cough & spit	U. 20/11/12—12/2/13
412	11/10/12	J. L.	M.	30	M.	I.	Plumber	2 months	1 mos.	Cough	M./12, Sh. 23/10/12— 16/6/13, St. 16/6/13 Still in
420	24/10/12	J. W.	M.	40	S.	I.	Miner	1 month	5 wks.	Hæmop- tysis	B. 31/10/12—7/2/13
423	24/10/12	P. Q.	M.	47	S.	I.	Miner, Labourer	1 year	1 wk.	Cough, Spit	B. 1/11/12—10/1/13



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
312	21/11	S.I. 4	Row	2	3/4	1/2	/1	34/	Imp.				
315		S.I. 2 H.V. 40	Row	3	4/6	2/3	1/1	36/	Stat.		—1912	Chronic Bronchitis.	
316	7/11	S.I. 4	Ten.	3	5/2	3/1	1	60/	Imp.				
316		S.I. 3 H.V. 40	Row	3	4/6	2/3	1/1	36/	Arr.			Off list 21/12/13	
321		S.I. 3	Ten.	4	5/1	0	0	Am- ple				Left district	
333		S.I. 2	Row	1	2/1	2/1	0	34/			— 1912		
338		S.I. 2	Row	2	2/2	2/2	0	Am- ple				Left district	
340		S.I. 2	Cot.	3	2/1	0	0	Am- ple	W'se		+ 1912	Died /4/14	
348		S.I. 1	Ten.	3	4	1	1	30/			+ 1912	Died 3/2/13 ; Sanat. treatment refused	
350		H.V. 1	Ten.	3	7/3	4	1	Am- ple	Arr.			Off list 14/2/14	
362		S.I. 1	Cot.	10	3	0	0	Am- ple				Not to be visited	
363		S.I. 2	Ten.	2	2/3	2/3	1	35/	Imp.				
376	11/12	S.I. 2 H.V. 8	Row	1	2	2	1	—	Imp.		— 1912		
377		H.V. 1 S.I. 1	Ten.	1	3/2	3/2	0	18/			+ 1912	Died 7/1/13	
400		H.V. 1	Row	2	3/1	0	0	50/					
405		H.V. 1 S.I. 1	Row	1	2/1	2/1	1/1	Am- ple			— 1912	Left district	
412		S.I. 2	Ten.	1	1/2	1/2	2	33/6			+ 1912		
420		S.I. 1 H.V. 7	Row	2	3/2	0	0	36/	Imp.		— 1912		
423		S.I. 1	Mod.	—	—	—	0	18/			— 1912	Left district.	

## Bothwell—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
440	7/11/12	M. J.	M.	30	M.	I.	Miner	5 months	5 mos.	Pneumon.	None
441	8/11/12	J. M.	M.	58	Wr.	I.	Clerk, Green-keeper	2 months	1 mon.	Cough, Spit	S.13/11/12—22/13
445	12/11/12	M. R.	F.	19	S.	I.	Domestic	12 months	2½ mos.	Cough	B.26/11/12—21/13
448	14/11/12	S. S.	F.	34	M.	D.	Weaver, Housewife	4 months	—	Cough	B.25/11/12—12/13
451	16/11/12	M. S.	.	13	S.	D.	Scholar	3 years	1 year	Cough, Spit	B.16/4/12—7/2/13
453	18/11/12	B. W.	F.	11	S.	D.	Scholar	—	4 days	Cough, Spit	B.8/1/13—4/4/13
458	16/11/12	H. M'E.	M.	18	S.	I.	Shoemaker	8 weeks	7 wks.	Cough, Spit	St.25/11/12—still a
459	21/11/12	F. R.	M.	9	S.	D.	Scholar	3 months	4 mos.	Cough	B.30/11/12—21/23
460	22/11/12	Mrs. H.	F.	38	M.	D.	Maid, Housewife	1 year	—	Cough, Spit	St.26/11/12—22/13
465	29/11/12	J. M'T.	F.	18	S.	I.	Domestic	5 months	5 days	Cough, Spit	St.6/12/12—1/3/13
473	7/12/12	A. M.	M.	12	S.	D.	Scholar	3 years	3 days	Cough, Spit	B.16/4/13—12/7/13 B.15/8/13—9/9/13 St.9/9/13—28/11/13
474	7/12/12	H. C.	F.	1½	S.	D.	—	2 months	—	Cough	None
482	17/12/12	M. M'F.	F.	19	S.	I.	Typist	years	5 mos.	Cough	None
483	18/12/12	E. B.	F.	14	S.	D.	Message girl	6 weeks	3 wks.	Cough, Wasting	B. 16/12/12—13/33
497	21/12/12	A. Q.	F.	7	S.	D.	Scholar	2 years	3 mos.	Cough, Wasting	B. 20/12/12—6/1/13
498	26/12/12	B. R.	F.	20	M.	D.	Millworker, Housewife	2 years	—	Cough, Spit	U. 7/1/13—29/3/13
499	27/12/12	J. M.	M.	25	S.	I.	Coal salesman	10 weeks	6 wks.	Pleurisy	Sh. 8/1/13—8/5/13
504	31/12/12	J. L.	M.	39	M.	I.	Bricklayer	4 weeks	4 wks.	Cough, Spit	B. 7/1/13—1/3/14
3	2/1/13	C. R.	F.	13½	S.	D.	Scholar	4 weeks	4 wks.	Cold	None



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
440		H.V. 4	Row	1	2/5	2/5	2	10/	Imp.			Sanatorium was not recommended.	
441		S.I. 2. H.V. 2	Ten.	2	3	3	0	60/			+ 1912	Died 18/4/13.	
445		S.I. 1 H.V. 24	„	2	3	3	0	36/			+ 1912	Died 21/12/13.	
448		S.I. 1	Row	2	2/2	0	0	36/			+ 1912	Died 19/1/13.	
451		S.I. 2 H.V. 6	„	2	5/2	5/2	1/1	87/	Imp.				
453		H.V. 1	Ten.	2	4/3	2	0	50/	Imp.				
458		S.I. 2	„	2	4/6	2	1	63/6			+ 1912		
459		H.V. 1	Row	2	2/2	2/2	1/1	35/	Imp.			Attending School.	
460	25-9	H.V. 1	Cot.	2	2	1	1	31/	Wse.		+ 1912	Not to be visited.	
465		H.V.I.	„	3	5	1	1	Am- ple			+ 1912	Lost trace of.	
473		S.I. 1 H.V. 3	Row	2	6/1	5	1	60/	Imp.				
474		S.I. 2	„	1	2/4	2/4	0	30/				Died 16/12/13; refused Sanator. treatment	
482		S.I. 1	Cot.	6	6	0	0	Am- ple				Not to be visited.	
483		S.I. 2	Ten.	2	4/4	1/3	3	40/6				Died 13/3/13 in Sana- torium.	
497		S.I. 2	Row	2	3/4	1/2	0	40/6				Died 6/1/13 in Sana- torium.	
498		H.V. 1	Ten.	2	2/1	2/1	2	22/				Left district.	
499	15/7	S.I. 2	Ten.	2	3	0	0	28/				Died 21/7/13.	
504		S.I. 2	Ten.	2	4/3	1	1 1/2	40/				Died 1/3/13 in Sana- torium.	
3		S.I. 1	Cot.	5	5/1	0	0	Am- ple	Imp.			Sanatorium treatment not recommended	

## Bothwell—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
4	3/1/13	A. R.	M.	37	—	N.I.	Soldier	—	—	—	None
10	6/1/13	C. D.	M.	18	S.	I.	Miner	2 months	4 wks.	Pleurisy	B. 8/1/13—23/2/13
11	8/1/13	W. B.	M.	12	S.	D.	Scholar	5 years	1 mo.	Cough, Spit	U. 14/1/13—1/5/14
12	9/1/13	J. A.	M.	8	S.	D.	Scholar	2 months	2 mos.	Pleurisy	U. 14/1/13—19/4/13
14	9/1/13	E. B.	F.	13	S.	D.	Scholar	2 years	—	Cough	None
27	17/1/13	J. G.	M.	7	S.	D.	Scholar	6 years	6 mos.	Cough	U. 30/1/13—17/5/13
18	17/1/13	C. K.	M.	6	S.	D.	Scholar	14 months	1 mo.	Pleurisy	U. 30/1/13—19/5/13
19	17/1/13	W. M.	F.	19	M.	D.	Farm servant, Housewife	1 year	—	Cough, Spit	U. 30/1/13—19/4/13
22	15/1/13	M. K.	F.	18	S.	I.	Pithead worker	7 weeks	—	Cough	B. 16/1/13—12/4/13
23	15/1/13	M. M'G.	F.	52	M.	D.	Housewife	6 months	—	Cough, Spit	None
30	18/1/13	R. B.	M.	10	S.	D.	Scholar	2 months	2 mos.	Cough, Spit	U. 30/1/13—26/4/13
33	20/1/13	E. W.	F.	37	M.	D.	Housewife	5 years	3 wks.	Cough	St. 22/1/13—11/4/13 M. 28/8/13—16/9/13
35	21/1/13	J. A.	F.	20	S.	I.	Maid	9 weeks	9 wks.	Cough, Spit	None
38	17/1/13	G. M.	M.	38	M.	I.	Steel-worker	2 years	2 wks.	Cough, Spit	St. 22/1/13—12/2/13
39	23/1/13	A. S.	F.	13	S.	D.	At home	3 years	2 mos.	Pain in side	U. 30/1/13—16/7/13
44	29/1/13	M. B.	F.	28	M.	D.	Housewife	9 months	3 wks.	Cough	B. 24/1/13—18/4/13 St. 19/12/13. Still ill
45	27/1/13	J. S.	M.	13	S.	D.	At home	years	—	—	B. 31/1/13—17/2/13 M. 17/2/13—21/4/13
50	30/1/13	A. S.	M.	38	S.	D.	Miner	5 months	3 wks.	Cough	U. 3/2/13—14/5/13



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
4		—	Cot.	7	4	0	0	—			+ 1912	Not to be visited ; off list	
10		H.V. 1 S.I. 2	Row	1	3/2	3/2	0	50/	Imp.			Working	
11		H.V. I	Ten.	2	4/4	1	1	27/	Arr.			Off list	
12	19/11	H.V. 2	Ten.	3	4/3	2/3	/1	Am- ple	Arr.			Off list, 31/12/13	
14	21/10, 26/11	S.I. 1 H.V. 8	Row	1	3/3	3/3	0	27/	Imp.			Sanatorium treatment not recommended	
27		S.I. 1	Row	2	6/2	4	2	80/	Imp.				
18		S.I. 1	Row	2	4/4	4/4	2	36/	Imp.				
19	11/12	S.I. 3 H.V. 13	Row	1	2	2	1	36/	Wse.				
22		S.I. 1 H.V. 6	Row	1	2	2	0	14/				Died 20/7/13	
23		S.I. 2 H.V. 7	Row	2	3/1	3/1	1	39/				Died, 8/6/13 ; refused Sanatorium	
30		S.I. 2	Ten.	2	5/4	2/3	/1	85/	Imp.				
33		S.I. 1	Row	2	4/1	2	2	Am- ple				Multiple tuberculous glands in addition to pulmonary lesion ; died 21/1/13	
35		S.I. 2	Ten.	2	7/2	2	0	Am- ple		18/1 + few		Died 1/3/13 ; Sanat. treatment refused	
38		S.I. 2	Ten.	2	5/3	2/2	1	Am- ple				Died 19/2/13	
39		S.I. 1	Row	1	3	3	0	39/	Imp.				
44	14/11	S.I. 2 H.V. 14	Ten.	2	4/4	1/1	1/1	40/6	Imp.				
45	10/12	H.V. 1 S.I. 1	Row	1	4/1	4/1	0	23/9	Imp.				
50		S.I. 2	Row	2	4/3	1	0	36/				Left district.	

## Bothwell.—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
51	30/1/13	M. P.	F.	18	S.	D.	At home	2 weeks	—	Cough, Spit	B. 5/2/13—1/5/14
52	30/1/13	S. G.	F.	1 $\frac{3}{4}$	S.	D.	—	3 months	—	Cough, Wasting	None.
54	30/1/13	A. C.	F.	14	S.	D.	Scholar	6 years	3 mos.	Haem.	B. 31/1/13—25/4/14
56	1/2/13	G. B.	M.	23	S.	I.	Steelwork foreman	2 months	1 mo.	Pneum.	St. 1/2/13—15/3/14
59	4/2/13	J. M'G.	M.	42	M.	I.	Miner	5 months	5 wks.	Pleurisy	St. 7/2/13—21/2/14
69	11/2/13	J. S.	M.	31	M.	I.	Engine-keeper	2 months	—	Cough, Wasting	Sh. 19/2/13—19/6/14
73	17/2/13	W. M'F.	M.	74	M.	I.	Packing-box maker	2 years	—	Haem.	None.
78	13/2/13	M. M'L.	F.	15	S.	D.	At home	2 $\frac{1}{2}$ months	—	Pleurisy	B. 18/2/13—18/4/14
80	15/2/13	M. M.	F.	6	S.	D.	Scholar	2 years	1 mo.	Pleurisy	B. 25/2/13—20/5/14
81	17/2/13	P. B.	M.	23	S.	I.	Miner	1 year	2 wks.	Cough, Wasting	B. 19/2/13—11/8/14
83	18/2/13	M. G.	F.	23	S.	I.	Domestic	4 months	2 wks.	Cough, Spit	U. 26/5/13—6/4/14
84	19/2/13	W. M.	M.	12	S.	D.	Scholar	1 month	3 weeks	Cough, wasting	B. 24/2/13—20/5/14
88	21/2/13	L. L.	M.	5	S.	D.	—	2 months	—	Pain in and Swelling of Abdomen	None
94	25/2/13	J. B.	F.	36	M.	D.	Domestic, Housewife	3 months	—	Cough, Spit	S. 4/3/13—10/5/13
95	26/2/13	I. C.	F.	12	S.	D.	Scholar	3 $\frac{1}{2}$ years	1 week	Cough, Spit	B. 15/3/13—14/7/13
98	28/2/13	P. G.	M.	3	S.	D.	—	1 year	—	Pleurisy	M. 6/3/13—17/5/13 D. 17/10/13—6/12/13
99	26/2/13	R. M'N	F.	11	S.	D.	Scholar	4 weeks	2 weeks	Swelling in neck	B. 28/2/13—25/6/13
109	5/3/13	J. D.	F.	11	S.	D.	Scholar	3 months	3 mos.	Cough, Spit	None



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
51		S.I. 1 H.V. 8	Ten.	2	6/2	4/2	1/1	—				Died 10/6/13.	
52		H.V. 3	Row	2	/4	3/4	2	Am- ple				Sanatorium treat- ment refused. Died 21/6/13.	
54	7/11	S.I. 2 H.V. 6	Ten.	2	6/2	3/2	/1	Am- ple	Imp.				
56			Cot.	11	7/9	0	0	Am- ple	Imp.			Not to be visited.	
59		S.I. 1 H.V. 1	Ten.	2	4/4	3/3	1	Am- ple				Died 11/4/13.	
69	11/12	S.I. 2	Cot.	2	2/3	1	1	31/	Imp.			Working.	
73			Cot.	9	4	0	0	Am- ple				Not to be visited. Died 8/1/13.	
78		S.I. 2	Ten.	2	3/1	3/1	0	40/				Died in Sanatorium.	
80		S.I. 2	Ten.	3	8/4	2/3	1	90/	Imp.				
81		S.I. 1	Row	1	3/2	3/2	0	35/				Died in Sanatorium.	
83		S.I. 2 H.V. 5	Row	2	6/1	6/1	1	30/				Died in Sanatorium.	
84	7/11	S.I. 1	Ten.	2	8/1	2/1	1	Am- ple	Imp.				
88		S.I. 2	Row	2	5/2	2	1	50/				Died 29/3/13 of Abdom- inal Tuberculosis. Sanator. treatment refused	
94		S.I. 2	Row	2	2/3	0	0	30/	Stat.				
95		S.I. 2	Cot.	4	4/4	1/1	0	50/	Wse				
98		S.I. 2	Ten.	2	2/5	2/5	3	39/	Imp.			Old empyema case.	
99		S.I. 2 H.V. 1	Ten.	1	2/5	2/5	2	25/	Imp.			Tuberculous cervical adenitis, in addition to pulmonary lesion	
109		S.I. 1 H.V. 1	Row	1	3/1	3/1	1	Am- ple				Died 7/3/13; Sanat. treatment refused.	

## Bothwell—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
113	7/3/13	J. M'C.	F.	23	S.	D.	W'ls spinner at home	2 years	15 mos.	Cough, Spit	None
118	10/3/13	E. C.	F.	30	M.	D.	Farmservt., Housewife	6 months	3 mos.	Cough, Spit	St. 3/4/13—28/6/1
119	10/3/13	M. W.	F.	29	M.	D.	Farmservt., Housewife	6 months	—	Cough, Spit	B. 19/3/13—7/6/1
135	15/3/13	M. C.	F.	5	S.	D.	Scholar	5 months	2 mos.	Cough, Spit	B. 28/3/13—7/4/1
139	19/3/13	C. L.	F.	24	M.	D.	Pithead, Housewife	21 months	2 mos.	Cough, Spit	St. 31/3/13—2/5/1
144	—	M. J.	F.	43	S.	D.	H'sekeeper at home	4 years	4 years	Pleurisy	None
147	21/3/13	S. C.	F.	15	S.	D.	Shop girl	2 years	6 days	Cough, Spit	B. 25/3/13—17/6/1
148	21/3/13	A. H.	M.	6½	S.	D.	Scholar	1 year	—	Cough, Spit	None
158	25/3/13	M. C.	F.	7	S.	D.	Scholar	2 weeks	2 wks.	Cough, Spit	B. 25/3/13—20/5/1
159	27/3/13	M. R.	F.	7½	S.	D.	Scholar	4 years	4 wks.	Cough, Spit	St. 31/3/13—28/6/1
172	4/4/13	J. Y.	M.	35	S.	I.	Stoneminer	3 days	2 mos.	Influenza	B. 8/4/13—19/4/13
179	9/4/13	W. C.	M.	28	S.	I.	Miner	1 year	2 wks.	Haem.	U. 17/4/13—8/7/13
193	16/4/13	J. H.	F.	36	S.	I.	House-keeper	1 week	—	Cough, Spit	None
202	23/4/13	M. M'B.	F.	14	S.	D.	At home	2 years	—	Cough, Spit	B. 16/4/13—6/8/13
203	21/4/13	A. P.	F.	11	S.	D.	Scholar	8 months	9 mos.	Pain in Side, Cough, Spit	B. 24/4/13—9/8/13 Bl. 9/9/13—Still in
208	28/4/13	J. A.	M.	4	S.	D.	—	3 years	—	Pleurisy	B. 6/5/13—1/8/13
211	2/5/13	J. T.	M.	15	S.	D.	Miner	9 months	10 days	Cough, Spit	B. 16/5/13—6/7/13
216	5/5/13	J. M.	M.	21	S.	I.	Miner	1 year	2 wks.	Cough, Spit	U. 14/5/13—15/11/13



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.						Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.		1913.	Previous Results.	
13	14	15	16	17	18	19	20	21	22	23	24	25
113		S.I. 2	Ten.	2	7/1	4/1	0	60/				Died 26/3/13; Sanator. treatment refused.
118		S.I. 2	Ten.	2	3/3	3/3	1/1	35/	Stat.			
119		S.I. 2	Row	2	4/2	2/2	1	40/				Died 18/6/13.
135		S.I. 2	Row	1	3/4	3/4	2/2	20/				Died in Sanatorium, 7/4/13.
139		S.I. 2 H.V. 8	Row	1	2	2	1	30/				Died 5/1/13.
144		S.I. 1	Ten.	2	2	2	0	Am- ple				Died /2/13. Case discovered in Registrar's returns.
147		S.I. 2	Ten.	3	7/2	3	1	30/	Imp.			Working.
148		S.I. 2	Ten.	1	3/3	3/3	1/1	42/	Stat.			Sanatorium treatment refused.
158		S.I. 2	Row	1	2/3	2/3	1	35/				No definite evidence of Pulmonary Tub.
159		S.I. 2	Ten.	1	2/3	2/3	2	43/6	Arr.			Off list.
172		S.I. 2	Row	2	3	0	0	35/				Died 19/4/13 in Sanat.
179		S.I. 2	Ten.	3	4/5	0	0	35/	Imp.			
193		S.I. 1	Cot.	6	2	0	0	Am- ple	Imp.			Sanat. treatment not recommended; not to be visited.
202	25/11	S.I. 2	Ten.	2	4/3	2/2	0	35/	Imp.			
203		S.I. 3	Row	1	3/3	3/3	1/1	20/	W'se			Died 27/2/14.
208		S.I. 2	Ten.	2	3/5	3/5	2	36/	Arr.			Off list.
211		S.I. 3	Ten.	2	6/4	2	0	80/				Died 6/7/13 in Sanat.
216	11/12	S.I. 2	Row	2	3/1	0	0	36/	Stat.			

## Bothwell—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
222	8/5/13	M. R.	F.	16	S.	D.	At home	6 months	—	Wasting	None
223	8/5/13	H. B.	F.	43	S.	D.	At home	3 years	7 mos.	Cough, Spit	None
225	9/5/13	J. H.	M.	33	M.	I.	Miner	3 years	3 wks.	Cough, Spit	Sh. 22/5/13—24/7/13
241	28/5/13	W. R.	M.	13	S.	D.	Scholar	—	5 wks.	Cough, Spit	B. 12/5/13—14/5/13
243	30/5/13	M. H.	F.	20	S.	I.	Domestic	1 year	33 wks.	Cough, Spit	B. 30/5/13—8/9/13 M. 8/8/13—21/10/13 Bl. 21/10/13—24/12/13
250	2/6/13	M. S.	F.	48	M.	D.	Housewife	16 years	—	Cough, Spit	B. 6/6/13—7/9/13
262	10/6/13	W. M.	M.	7	S.	D.	Scholar	6 years	4 days	Pneumo.	B. 12/6/13—6/9/13
263	9/6/13	C. E.	F.	64	M.	D.	Housewife	3 months	—	Cough, Spit	B. 11/6/13—30/8/13
264	10/6/13	M. M'C.	F.	28	M.	D.	Housewife	10 months	2 mos.	Cough, Spit	None
276	18/6/13	J. K.	F.	44	M.	D.	Maid, Housewife	6 weeks	—	Cough, Spit	None
277	17/6/13	J. W.	F.	15	S.	D.	At home	3½ months	—	Cough, Spit	None
281	23/6/13	D. M'N.	M.	58	M.	I.	Miner	9 months	6 mos.	Cough, Spit	None
285	24/6/13	E. D.	M.	1	S.	I.	Miner	3 months	4 wks.	Pleurisy	Sh. 14/7/13—19/8/13
295	2/7/13	J. H.	M.	41	M.	I.	Steelworker	4 months	2 wks.	Cough, Spit	St. 7/7/13—1/10/13
303	7/7/13	F. B.	F.	43	S.	N.I.	Governess	1 year	15 mos.	—	None
309	10/7/13	R. F.	F.	7	S.	D.	Scholar	6 years	—	Cough, Spit	B. 18/7/13—9/8/13 Bl. 9/9/13—4/10/13
314	17/7/13	J. S.	M.	19	S.	I.	Labourer	25 weeks	10 wks.	Cough, Spit	B. 22/7/13—9/9/13 Sh. 9/9/13—still in
322	28/7/13	K. S.	F.	12	S.	D.	Scholar	2 years	2 yrs.	Pleurisy	St. 5/8/13—24/10/13
330	8/8/13	J. D.	M.	24	S.	I.	Miner	2 months	—	Pleurisy	U. 15/8/13—7/11/13



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
222		S.I. 3 H.V. 28	Row	2	6	3	1	120/	Imp.			Sanat. treatment not recommended.	
223		S.I. 2	Cot.	8	6	0	0	Am- ple				Died 16/5/13; Sanat treatment not re- commended.	
225		S.I. 2	Row	2	2/2	2/2	1	43/6				Died 12/8/13.	
241		S.I. 2	Ten.	1	3	3	3	30/	Imp.				
243		S.I. 3	Ten.	2	3/1	0	0	Am- ple				Died in Sanatorium, 24/12/13.	
250		S.I. 2	Ten.	4	5	0	0	Am- ple	Imp.				
262		S.I. 2	Ten.	2	4/3	1	1	40/	Imp.				
263		S.I. 3	Row	1	3	3	0	25/				Died 30/8/13 in Sana- torium.	
264		S.I. 2	Row	2	3/4	0	0	40/				Left District. Sanat. treatment refused.	
276	7/11	S.I. 2	Cot.	3	5/1	1/1	1	100/				Died 8/11/13. Sanat. treatment refused.	
277		S.I. 1	Cot.	3	3	0	0	Am- ple	Arr.			Off list; Sanatorium treatment refused.	
281		S.I. 2	Ten.	2	3/2	3/2	0	36/		19/6 +		Died 19/6/13; Sanat. treatment refused.	
285		S.I. 2	Row	1	4	4	1	30/				Died 19/8/13 in Sana- torium.	
295	25/11	S.I. 3	Cot.	2	4/1	1	0	70/	Imp.				
303		S.I. 2	Ten.	3	2	2	0	Am- ple				Died 12/7/13; Sanat. treatment refused	
309		S.I. 2	Ten.	2	3/4	1	1	25/	Arr.			Off list.	
314		S.I. 2	Row	2	3/1	3/1	0	22/				Still in Sanatorium.	
322		S.I. 2	Ten.	2	6/3	3/1	1	45/	Stat.				
330		S.I. 2	Ten.	2	3/1	0	0	40/	Imp.			Working.	

## Bothwell.—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
331	11/8/13	M. S.	F.	41	M.	D.	Domestic, Housewife	3 weeks	—	Cough, Spit	Sh. 15/8/13—7/11/13
336	15/8/13	P. S.	M.	44	M.	I.	Fireman	6 weeks	3 wks.	Cough, Spit	U. 18/8/13—8/11/13
344	19/8/13	M. R.	F.	26	M.	D.	Housewife	3 years	—	Cough, Spit	None
348	22/8/13	A. H.	F.	20	S.	I.	Dressmaker	6 months	—	Cough, Spit	None
351	26/8/13	J. C.	F.	5½	S.	D.	—	2 years	—	Wasting	None
353	29/8/13	B. C.	M.	23	S.	I.	Ironworker	7 months	1 mo.	Cough, Spit	St. 3/9/13—13/12/13
358	3/9/13	M. L.	F.	28	M.	D.	Housewife	2 years	8 wks.	Cough, Spit	U. 10/9/13—15/11/13
359	4/9/13	M. C.	F.	14	S.	D.	Outworker	7 weeks	7 wks.	Cough, Spit	None
367	13/9/13	W. M.	M.	34	M.	I.	Miner, labourer	2 years	3 wks.	Cough, Spit	None
382	19/9/13	J. G.	M.	19	S.	I.	Miner	2 years	—	Cough, Spit	St. 2/10/13—27/12/13
383	24/9/13	M. S.	F.	32	M.	D.	Waitress, Housewife	3 years	—	Cough, Spit, Hoarse	None
385	26/9/13	E. M.C.	F.	25	M.	D.	Outdoor worker, Housewife	9 months	—	Pain in side, Cough, Spit	U. 3/10/13—15/11/13
387	27/9/13	E. G.	F.	8	S.	D.	Scholar	9 months	1½ mos.	Cough, Spit	U. 29/9/13. Still in
392	30/9/13	W. C.	M.	20	S.	I.	Miner	3 months	1 wk.	Cough, Spit	U. 3/10/13—24/12/13
395	3/10/13	I. M.	M.	22	S.	I.	Barman	5 weeks	—	Cough, Spit	U. 7/10/13—15/12/13
409	10/10/13	J. A.	F.	49	M.	D.	Brick-worker, Housewife	1 year	10 wks.	Cough, Spit	None
410	10/10/13	M. B.	F.	9	S.	D.	Scholar	3 weeks	2 wks.	Cough, Spit	Bl. 17/10/13—22/11/13
414	14/10/13	L. C.	M.	31	M.	I.	Miner, Labourer	18 months	—	Cough, Spit	Sh. 20/10/13—24/12/13 U. 24/12/13. Still in
415	17/10/13	P. D.	M.	41	M.	I.	Miner	6 months	3 wks.	Influenza	U. 24/10/13—15/12/13



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
331		S.I. 2	Ten.	1	2/2	2/2	1	26/	Imp.			Working	
336		S.I. 2	Ten.	1	3/2	3/2	1	35/	Imp.				
344		S.I. 2	Ten.	2	3/1	1/1	1	45/				Left district 1/12/13 ; Sanatorium treatment refused	
348		S.I. 2	Ten.	2	3	3	0	Ample				Left district ; Sanat. treatment refused	
351		S.I. 2	Ten.	2	3/5	2/3	1	35/	Imp.			Sanatorium treatment refused	
353		S.I. 2	Ten.	2	4	1	1	30/	Imp.			Working	
358		S.I. 2	Row	2	2/3	2/3	1/3	40	Imp.				
359		S.I. 2	Row	1	2/1	2/1	0	—				Sanat. treatment refused ; died 29/9/13	
367		S.I. 2	Ten.	2	2/6	0	0	24/				Left district ; Sanat. treatment refused	
382		S.I. 2	Row	2	6/3	2	2	96/	W'se				
383		S.I. 2	Ten.	2	4/1	1	1	Ample				Refused Sanatorium treatment	
385	20/11	S.I. 3 H.V. 3	Row	2	2/2	2/2	1/1	30/	W'se			Absconded from Sanatorium	
387		S.I. 2	Ten.	1	2/4	2/4	0	45/					
392		S.I. 2	Ten.	3	6/1	4	0	Ample	Imp.			Working	
395	24/12	S.I. 3	Row	2	5/2	1	0	Ample	Stat.				
409		S.I. 2	Ten.	2	5/4	2/2	1	50/				Died 26/11/13. Sanatorium treatment refused	
410		S.I. 2	Ten.	2	5/1	3	0	90/	Imp.	7/10			
414		S.I. 2	Mod.	—	—	—	0	30/					
415	24/12	S.I. 2	Row	3	4/3	2/1	0	60/	Imp.				

## Bothwell—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
423	22/10/13	Mrs. G.	F.	45	M.	D.	Housewife	1 year	14 wks.	Cough, Spit	None
424	22/10/13	C. M.	F.	23	M.	D.	Domestic, Housewife	3 months	—	Pleurisy	None
427	24/10/13	M. D.	F.	29	M.	D.	Domestic, Housewife	2 months	4 wks.	Cough, Spit	Sh. 27/10/13—7/11/13
441	4/11/13	L. S.	F.	11	S.	D.	Scholar	9 months	6 wks.	Cough, Spit	Sh. 17/11/13. Still
442	4/11/13	C. S.	F.	23	M.	D.	Farm worker, Housewife	9 months	—	Cough, Spit	None
444	5/11/13	P. S.	M.	31	S.	I.	Pit head worker	1 year	2 wks.	Cough, Spit	Sh. 10/11/13. Still
452	26/11/13	A. K.	M.	11	S.	D.	Scholar	1 year	2 wks.	Cough, Spit	D. 14/11/13. Still
453	10/11/13	M. C.	M.	12	S.	D.	Scholar	2 years	—	Cough, Spit	None
460	19/11/13	P. B.	M.	31	M.	I.	Miner	2 years	—	Pain in side, Cough, Spit	None
461	18/11/13	A. D.	F.	18	S.	D.	At home	1 month	—	Pain in side, Cough, Spit	Sh. 1/12/13—4/12/13
465	22/11/13	A. C.	M.	23	S.	I.	Compositor	2 months	1 day	Cough, Spit	None
477	4/12/13	W. C.	M.	44	M.	I.	Platelayer	8 months	10 days	Cough, Spit	None
485	15/12/13	J. S.	M.	25	M.	I.	Miner	2 years	1 year	Cough, Spit	U. 7/12/13—29/12/13
490	18/12/13	J. G.	F.	10	S.	D.	Scholar	3 years	18 mos.	Cough, Spit	None
491	18/12/13	E. L.	F.	24	M.	D.	Domestic, Housewife	2 years	—	Cough	St. 19/12/13—30/12/13
492	15/12/13	T. L.	M.	15	S.	D.	Stocktaker	6 months	5 mos.	Pain in side and Cough	None
493	15/12/13	G. B.	M.	44	M.	I.	Fireman	7 months	3 weeks	Tub. abs. in neck, Cough, Spit	None
506	31/12/13	E. D.	F.	6	S.	D.	Scholar	5 years	14 days	Pneumon.	None



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
423	7/11	S.I. 3	Ten.	2	4/3	1/1	1/1	100/	Wse.			Sanatorium treatment refused	
424	5/12	S.I. 2 H.V. 3	Ten.	1	2/1	2/1	2/1	40/	mp.	15/10 + Mny.		Sanatorium treatment refused	
427		S.I. 2	Ten.	1	2/4	2/4	1/1	39/6	Imp.			Abandoned from Sana- torium	
441		S.I. 2 H.V. 1	Row	2	2/6	2/1	0	40/		7/11 + Few			
442	14/12	S.I. 3	Ten.	1	2/1	2/1	1	45/	Imp.			Sanatorium treatment refused	
444		S.I. 2	Mod.	—	—	—	0	29/					
452	7/11	S.I. 2	Row	2	5/5	2/3	1	40/					
453	7/11	S.I. 2	Ten.	3	6/1	3	2	Am- ple	Imp.			Sanatorium treatment refused	
460	13/12	S.I. 2 H.V. 1	Row	2	4/2	1/2	1/1	60/	Imp.			Working	
461	11/12	S.I. 2	Cot.	3	7/3	1	1	60/	Imp.	7/11 + Mny.		Abandoned from Sana- torium	
465		S.I. 1	Ten.	7	4	0	0	Am- ple	mp.	17/11 +		Sanat. treatment not desired.	
477		S.I. 2	Row	2	2	1	1	Am- ple		29/11 +		Left district 17/12/13. Sanatorium treat- ment refused	
485		S.I. 2	Row	2	/3	1/3	0	—	W'se	8/12 +			
490	25/11	S.I. 2	Row	3	8/1	0	0	Am- ple	Stat.			Sanat. treatment not desired.	
491	17/12	S.I. 3	Ten.	1	2/1	2/1	1	39/	Imp.				
492		S.I. 2	Ten.	2	5/1	3	1	58/	Imp.			Sanatorium treatment refused	
493	17/12	S.I. 2	Row	1	3/2	3/2	1	—	Imp.			Working. Sanat. treatment refused.	
506	24/12	S.I. 2	Ten.	2	2/5	0	0	43/6	Imp.			Sanat. treatment not desired.	

## Bothwell.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
277	19/8/10	M. A.	F.	16	S.	D.	At home	1 month	Working	Swollen Glands	M./10
39	31/1/11	J. M'C.	M.	17	S.	I.	Pithead worker	7 years	—	Swelling in neck	B./11, M./11 B./11
58		H. M.	F.	10	S.	D.	Scholar	5 years	3 yrs.	Swelling of ankle	B./11
1911	20/4/11	M. B.	F.	13	S.	D.	Scholar	4 months	1 mo.	Swelling of Wrist	—
1911	—	L. B.	F.	10	S.	D.	Scholar	3 years	23/3/11	Swelling of Elbow	—
1911	—	R. M'C.	F.	<sup>a</sup> 12	S.	D.	—	2/1/11	—	Swelling of hand	Royal Infirmary Glasgow
1912	28/9/12	H. G.	M.	11	S.	D.	Scholar	3 years	4 days	Swelling in neck	Sh. 3/10/12—12/2/13
1912	27/11/12	J. C.	M.	7	S.	D.	Scholar	1 year	5 wks.	Swelling in neck	M. 9/12/12—12/3/13
1912	12/12/12	E. G.	M.	16	S.	I.	Pit pony driver	5 years	3 wks.	—	M. 23/11/12—8/2/13
1913	18/2/13	M. C.	F.	18	S.	I.	Factory girl	5 years	3 years	Swelling in neck	None
1913	26/2/13	H. F.	F.	14	S.	D.	At home	1 year	—	—	M./24/2/13—28/6/13
1913	26/2/13	S. G.	M.	2	S.	D.	—	18 months	—	Swelling in neck	M. 28/2/13—2/4/13
1913	6/3/13	J. C.	M.	18	S.	I.	Labourer	16 years	—	Swelling in neck	None
1913	10/3/13	K. M.	F.	5	S.	D.	—	3 months	—	Wasting, Diarrhoea	Bl. 21/3/13—29/3/13
1913	10/3/13	M. F.	F.	17	S.	I.	Farm servant	4 months	—	Swelling in neck	None
1913	20/3/13	M. M'L.	F.	8	S.	D.	Scholar	3 years	—	—	M. 15/4/13—17/5/13
1913	27/3/13	S. K.	F.	8	S.	D.	Scholar	6 weeks	3 weeks	Pain in and swelling of knee joint	M. 25/4/13—24/5/13



## TUBERCULOSIS.

Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
277		S.I. 2 H.V. 7	Row	3	9/1	2/0	0	—				Off list 31st Dec. 1913 Case of cervical adenitis.	
39		S.I. 1	Row	2	5/3	1	1	51/	Imp.			Working : Tub. Cer- vical Adenitis. Left district.	
58			Ten.	1	2/5	2/5	0	30/				Left district.	
911	—	—	Ten.	2	6/2	4/2	2	Am- ple	—			Osseous Tuberculosis ; Off List 31/12/13.	
911	—	—	Ten.	2	5/2	3/2	2	Am- ple	—			Osseous Tuberculosis ; Off List 31/12/13.	
911	—	—	Ten.	2	2/2	2/2	1/1	—	Imp.			Osseous Tuberculosis.	
912			Row	2	5/6	1/3	1	40/				Case of Tub. Glands in neck; offlist 31/12/13.	
912			Ten,	1	2/4	2/4	3	40/6				Case of Tub. Glands in neck; offlist 31/12/13.	
912			Row	2	5	3	1	53/6	Imp.			Case of Lupus Vul- garis.	
913		S.I. 3	Ten.	2	2/6	1/3	1	Am- ple				Tuberculous cervical adenitis.	
913		S.I. 2	Row	2	6/1	4	2	33/	Imp.			Lupus erythematosus	
913	26/2	S.I. 3	Row	2	2/4	2/3	0	37/6				Off list. Tuberculous cervical adenitis.	
913	14/11	S.I. 3	Ten.	2	5/2	5/2	2	15/	Imp.			Off list. Tuberculous cervical adenitis.	
913		S.I. 2 H.V. 3	Ten.	2	5/1	3	1	Am- ple	Imp.			Abdominal tuber- culosis. Left district 31/12/13.	
913		S.I. 2	Cot.	9	2/6	2	0	Am- ple				Tuberculous cervical adenitis. Left dist.	
913		S.I. 2	Row	2	2/5	2/5	1	35/	Imp.			Tuberculous ulcers of legs.	
913		S.I. 2	Row	2	6/2	4/2	2/1	Am- ple				Traumatic synovitis of knee joint.	

## Bothwell.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
1913	3/4/13	R. M.C.	F.	12	S.	D.	Scholar	1 year	—	Swelling in neck	None
1913	3/4/13	M. B.	F.	9	S.	D.	Scholar	2 years	—	Swelling in neck	M./21/5/13—7/6/
1913	5/4/13	P. H.	M.	3½	S.	D.	—	6 weeks	—	—	—
1913	7/4/13	J. S.	M.	9	S.	D.	—	2½ years	—	—	—
1913	9/4/13	H. M.D.	M.	8	S.	D.	Scholar	3 years	10 mos.	Sore on heel	M./5/4/13—2/5/1
1913	16/4/13	A. P.	M.	7	S.		Scholar	1 year	—	Swelling in neck	M. 17/5/13—17/5/
1913	28/4/13	J. M.I.	M.	10	S.		Scholar	4 months	3 wks.	Swelling in neck	M. 21/5/13—21/6/
1913	2/5/13	M. M.C.	F.	8	S.		Scholar	10 weeks	6 wks.	—	—
1913	5/5/13	M. S.	F.	3	S.		—	—	—	Swelling in neck	—
1913	8/5/13	P. B.	M.	3	S.		—	2 months	—	Swelling in neck	—
1913	13/6/13	R. M.R.	M.	7	S.		Scholar	1 year	3 mos.	—	B. 4/6/13—6/9/1
1913	7/6/13	I. C.	F.	29	M.		Laundry maid, Housewife	15 months	—	—	M. 30/6/13—24/9/1
1913	12/6/13	M. C.	F.	12	S.		Scholar	8 years	—	Sore on face	M. 14/6/13—6/9/1 M. 19/11/13—19/11/
1913	16/6/13	D. M.G.	M.	15	S.		Miner	2 years	—	Swelling in neck	—
1913	19/6/13	A. B.	F.	16	S.	I.	Farm servant	6 years	1 mo.	Swelling in neck	—
1913	19/6/13	D. T.	M.	9	S.		Scholar	3 weeks	1 wk.	Swelling in neck	—



## TUBERCULOSIS—Continued.

Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
1913		S.I. 1	Ten.	3	6	1	1	Am-ple	Imp.				
1913		S.I. 2	Ten.	4	7/3	1	1	Am-ple				Tuberculous Cervical Adenitis. Off list 7/6/13.	
1913		S.I. 1	Row	2	2/3	2	0	43/6				Abdom. tuberculosis. Off list 31/12/13	
1913		S.I. 1	Ten.	1	3/4	3/4	0	35/	Stat.			Caries of spine.	
1913		S.I. 2	Ten.	2	4/3	3/2	1	70/				Tuberculous ulcer on skin of heel. Off list 31/12/13.	
1913		S.I. 3	Ten.	2	2/5	2/2	/1	43/6				Off list. Tuberculous Cervical Adenitis.	
1913		S.I. 3	Ten.	2	5/3	3/1	1	95/				Off list. Tuberculous Cervical Adenitis.	
1913		S.I. 2	Ten.	2	4/4	1/2	/1	60/				Tuberculosis of face and hand. Off list 31/12/13	
1913		S.I. 2	Ten.	2	5/1	5/1	3	Am-ple				Tuberculous Cervical Adenitis. Off list. Left district.	
1913		S.I. 1	Ten.	2	3/4	1/2	/2	43/6				Tuberculous Cervical Adenitis. Off list 31/12/13.	
1913		S.I. 1	Ten.	2	5/2	3/2	2	Am-ple	Imp.			Tuberculosis of bone	
1913		S.I. 2	Ten.	1	2	1	1	35/	Stat.			Tuberculosis of kidney and cystitis.	
1913	14/11	S.I. 2	Ten.	2	6/1	3/2	1/1	Am-ple	Imp.			Lupus Vulgaris of face.	
1913	14/11	S.I. 2	Row	2	5/1	2/1	1	60/				Tuberculous Cervical Adenitis.	
1913		S.I. 1	Ten.	2	5/1	4	1	Am-ple				Tuberculous Cervical Adenitis. Off list. Left district.	
1913		S.I. 2	Ten.	2	2/4	2/4	/2	35/				Tuberculous Cervical Adenitis. Off list; well.	

## Bothwell.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
1913	10/7/13	W. B.	M.	12	S.		Scholar	6 weeks	6 wks.	Swelling of knee	U. 14/7/13. Still
1913	4/11/13	L. B.	F.	13	S.		At home	6 years	—	Sore on arm	M. 5/11/13—5/11/
1913	6/11/13	J. K.	M.	7	S.		Scholar	2 years	8 mos.	Diarrhoea, Wasting	D. 14/11/13. Still
1913	26/11/13	K. G.	F.	12	S.		Scholar	2 months	10 wks.	Sore on ankle	D. 28/11/13. Still
1913	3/12/13	N. P.	F.	1 $\frac{1}{2}$	S.		—	6 years	—	Wasting, Diarrhoea	M. 25/11/13—20/12/



## TUBERCULOSIS—Continued.

Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
1913	11/11	S.I. 2	Row	1	3	2	0	20/				Tuberculous disease of knee joint.	
1913		S.I. 2	Ten.	2	6/1	1	1	Am- ple				Lupus Vulgaris of right forearm.	
1913		S.I. 2	Row	1	2/5	2/5	2/1	45/				Abdominal Tuber- culosis.	
1913		S.I. 2	Ten.	2	4/3	2/1	/1	Am- ple				Osseous Tuberculosis.	
1913		S.I. 2	Ten.	1	2/3	2/3	0	22/				Gastro-enteritis.	

### Cambusnethan Parish.

*Number of Cases.*—The total number of cases on record throughout the year was 56. Of these, 54 were pulmonary cases, while 2 suffered from non-pulmonary forms of the disease, and are dealt with by themselves. Of the 54 pulmonary cases, 27 were notified during the year, while 27 notified in previous years were known to be surviving at 1st January, 1913. The changes during the year were as follows:—Deaths, 13, including 7 notified in 1913; 8 left the district, including 4 notified in 1913; and 4 were removed from the list for various reasons. The total number of cases on record on the 31st December, 1913, was thus 29.

*Age and Sex—Insurance—Conjugal State.*—In the following table the cases are classified according to Age (in quinquennial groups), Sex, and according to whether they were Insured, Non-insured, or Dependents, and whether married or single:—

Age Periods.	Sex.		Insured.		Depend.		Non-Insured.		Total.	Married.		Single.	
	M.	F.	M.	F.	M.	F.	M.	F.		M.	F.	M.	F.
— 5	...	...	...	...	...	...	...	...	...	...	...	...	...
—10	...	1	...	...	...	1	...	...	1	...	...	...	1
—15	2	2	...	...	2	2	...	...	4	...	...	2	2
—20	4	2	4	2	...	...	...	...	6	...	...	4	2
—25	4	...	4	...	...	...	...	...	4	...	...	4	...
—30	3	5	3	1	...	4	...	...	8	1	4	2	1
—35	...	8	...	1	...	7	...	...	8	...	7	...	1
—40	1	5	1	...	...	5	...	...	6	1	4	...	1
—45	6	...	5	...	...	...	1	...	6	5	...	1	...
—50	5	1	5	...	...	...	...	1	6	5	...	...	1
—55	1	2	1	...	...	2	...	...	3	...	2	1	...
—60	2	...	2	...	...	...	...	...	2	2	...	...	...
	28	26	25	4	2	21	1	1	54	14	17	14	9

### OCCUPATION.

	Total.
<i>Domestic Work.</i> —Housewives, 16; domestics, 3, ...	19
<i>Scholars</i> , 5, ...	5
<i>Miners</i> , 8, ...	8
<i>Metalworkers.</i> —Moulder, 1; steeldresser, 1; puddler, 1, ...	3
<i>Stone Workers.</i> —Mason, 1, ...	1
<i>Factory and Workshop Employees.</i> —Wagon painter, 1; dressmaker, 1, ...	2
<i>Shopkeepers.</i> —Grocer, 1; shoemaker, 1, ...	2
<i>Miscellaneous.</i> —Farmer, 1; farm servant, 1; dairy-maid, 1; clerk, 1; fireman, 1; labourers, 5; unknown, 4, ...	14
	54



*Duration of Illness.*—The duration of illness in monthly periods was as follows:—

Months	1	1-2	2-3	3-6	6-12	12-18	18-24	Over 24	Not stated.
Cases	2	6	5	8	6	2	7	13	5 = 54

*Earliest Symptoms recognised.*—The earliest symptoms recognised were:—in 40 cases, cough; in 4, pleurisy; in 2, hæmoptysis; in 2, influenza; in 1, pneumonia; in 1, wasting; in 1, dyspepsia; and in 3 the earliest symptoms were not recorded.

*Home Conditions.*—The number of cases occurring in tenements, cottages, and rows, and the number of apartments in the various dwellings, is given in the following table:—

No. of Apartments.	Tenement.	Cottage.	Row.	Institution.	Total Houses.
1	2	...	9	...	11
2	13	3	16	...	32
3	2	1	...	...	3
4 and upwards,	...	5	...	1	6
	17	9	25	1	52

In 2 of the cases there was no record of the description of the house.

*Inmates.*—Of the 52 houses, there were thus 11 of one apartment, 32 of two apartments, 3 of three apartments, and 6 of four or more apartments. Of these there is no available record of the number of inmates in one of the four or more apartment houses. The total number of inmates in the others, with the average number of persons per house, was as follows:—

Apartments,	...	...	1	2	3	4 and over
Total inmates,	...	...	55	191	14	20
Average number per house,			5	5.9	4.6	4

*Sleeping Accommodation.*—Of the 54 cases, 14 had a room to themselves; of the remainder, 9 shared a room with 1 other person, 2 with 2 others, 6 with 3 others, 7 with 4 others, 6 with 5 others, and 6 with over 5 others. In 4 there was no record. Including the 14 who had a room to themselves, 22 occupied a bed alone, 18 had 1 other, and 10 had 2 others sharing a bed with them. In 4 cases there was no record.

*Domiciliary Visits.*—A total of 4 visits were paid by the Tuberculosis Officer to the homes of the patients, while 190 visits were paid by the Sanitary Inspector and Health Visitor.

*Institutional Treatment (at any time).*—Of the 54 cases, 34 received treatment in County institutions, and 20 refused such treatment.

Received Institutional treatment once, ... ..	27
"                    "                    " twice, ... ..	5
"                    "                    " thrice, ... ..	2
	—
	34
	==

#### CONDITION AT END OF YEAR.

Year of Notification.	Cases.	Arrested.	Improved.	Stationary.	Worse.	Died.	In Sanatorium.	Off list.	Not to be visited.
1906	2	...	...	...	...	1	...	...	1
1907	2	...	1	...	...	...	...	1	...
1909	6	2	2	...	...	1	...	1	...
1910	3	2	...	...	...	...	...	1	...
1911	3	1	1	...	...	...	...	1	...
1912	11	4	2	1	...	3	...	...	1
1913	27	...	6	5	2	8	3	3	...
Totals,	54	9	12	6	2	13	3	7	2

*Weekly Income.*—This was returned as ample in 11 cases, while in 3 cases there was no record. In 40 of the 54 a record has been kept, and among these the average weekly wage works out, approximately, at 39s. 1d. If regard is had to the number of persons depending on the wage for livelihood, it is found that in the families of those 40 cases there was a total of 233 persons, making the average weekly income available per head 6s. 8d.

The following table shows in detail the cases in relation to weekly income, with the number of persons depending on the income:—

#### WEEKLY INCOME CLASSIFIED IN GROUPS—AND NUMBER OF PERSONS DEPENDENT ON THE INCOME.

No. of Persons.	•20s.	20-25s.	25-30s.	30-35s.	35-40s.	40-50s.	Over 50s.
1	...	...	...	...	...	...	...
2	1	...	...	...	...	...	...
3	1	1	...	...	1	...	...
4	...	...	2	2	...	1	2
5	1	1	...	3	1	1	1
6	...	...	...	...	2	2	2
7	1	1	1	...	...	2	2
8	...	...	...	1	...	1	2
9	...	...	...	1	1	1	...
10	...	...	...	...	...	...	1
	4	3	3	7	5	8	10



**SPUTUM.**

	T.B. found.	T.B. not found.	Total.
Examined in 1913, ...	6	...	6
Not examined in 1913 (but examined previously),	3	4	7
No record of any examination,	...	...	41
Totals, ...	9	4	54

**Non-Pulmonary Tuberculosis.**

There were 2 cases on the list at the beginning of the year, and during the year 1 was removed from the list as well. In both the cervical glands were affected, and both received institutional treatment.

## Cambusnethan.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
71	—	J. B.	M.	44	M.	I.	Miner	8 years	8 yrs.	Cough, Spit	Sh. /05, St. /11 Sh. /12
217	6/9/06	B. S.	F.	33	M.	D.	—	—	—	—	None
129	26/6/07	Mrs. J.B.	F.	35	M.	D.	Housewife	5 years	—	Cough, Spit	M. /07, St. /11
222	6/12/07	J. L.	M.	25	S.	I.	Moulder	5 years	—	Cough, Spit	None
16	15/1/09	J. C.	M.	47	M.	I.	Waggon painter	3 years	—	Cough, Spit	St. /11
177	25/4/09	A. I.	M.	27	S.	I.	Miner	4 years	—	Pleurisy	St. /09, St. /10
218	17/6/09	P. F.	M.	21	S.	I.	Grocer, Labourer	2 years	—	Influenza	St. /09, St. /10
290	28/8/09	A. B.	M.	21	S.	I.	Miner	2 years	—	Influenza	None
340	21/10/09	Mrs. H.	F.	30	M.	D.	Housewife	3 years	—	Cough, Spit	U. /09
342	21/10/09	A. M.	F.	26	S.	D.	At home	2½ years	—	Cough, Spit	None
249	6/6/10	M. L.	F.	13	S.	D.	Scholar	3 years	—	Cough	U. /10
409	15/9/10	M. R.	F.	31	M.	D.	Housewife	2½ years	—	Cough, Spit	St. /10
417	21/9/10	M. P.	F.	11	S.	D.	Scholar	5 years	—	Cough	None
109	17/3/11	Wm. M.	M.	20	S.	I.	Moulder, Farm servt.	2 years	—	Cough, Spit	Sh. /11
302	17/2/11	W. Q.	M.	17	S.	I.	—	3 months	—	Cough	None
348	4/9/11	T. L.	M.	37	M.	I.	Labourer	3 years	1 wk.	Cough	St./8/4/13—31/5/13, St./18/6/13—11/7/13
28	1/2/12	B. S.	F.	40	S.	D.	Housemaid	1 year	1 yr.	Cough, Spit	None
82	9/3/12	J. R.	F.	36	M.	D.	Housewife	2 years	—	Cough, Spit	B./12, Sh./12, Sh.18/10/13—12/11/13
94	19/3/12	A. G.	F.	29	M.	D.	Domestic, Housewife	3 months	—	Cough, Spit	None



Rec No.	DOMICILIARY VISITS		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
71		S.I. 4	Row	1	2	1	0	12/				Died 11/1/13	
217		—	—	—	—	—	—	Am-ple				Not to be visited	
129		S.I. 2 H.V. 2	Row	2	5/4	4/1	1/1	30/				Left district	
222		S.I. 4	Row	2	5	1	1	70/	Imp			Sanatorium treatment refused	
16		S.I. 7	Ten.	2	3/5	3/5	1	87/			- 10/4/11	Left district	
177		S.I. 5	Row	2	4	0	0	60/6				Died 5/8/13	
218		S.I. 9	Ten.	2	5/1	3	1	50/	Arr.				
290		S.I. 2	Ten.	2	4	3	1	40/	Imp.			Sanatorium treatment refused	
340	14/11/13	S.I. 3	Row	2	3/1	1/1	1/1	Am-ple	Arr.			Off list	
342		S.I. 2 H.V. 3	Row	2	5/1	4/1	1/1	36/	Imp.			Sanatorium treatment refused	
249		S.I. 3 H.V. 5	Ten.	2	4/5	4/5	1	36/	Arr.				
409		S.I. 4 H.V. 8	Row	2	2/5	2/5	0	60/	Arr.		- 28/9/10		
417		S.I. 6	Ten.	2	3/1	3/1	1	66/				Left district ; Sanat. treatment refused	
109		S.I. 2	Cot.	6	—	0	0	Am-ple	Arr.		+ 23/3/11		
302		S.I. 5 H.V. 3	Row	1	4/3	0	0	19/				Left district ; Sanat. treatment refused	
348		S.I. 3	Row	1	2/5	2/5	1/1	28/	Imp.				
28		S.I. 3	Cot.	6	5	0	0	Am-ple				Not to be visited	
82		S.I. 4 H.V. 8	Row	1	2/4	2/4	1/1	45/	Arr.		- 11/12/12	Off list	
94		S.I. 2	Ten.	3	2/2	2/2	1	25/	Arr.			Sanat. treatment not desired	

## Cambusnethan—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
171	6/5/12	V. A.	F.	8	S.	D.	Scholar	11 months	11 mos.	Cough, Weakness	Sh./7/5/12—4/13
294	31/7/12	M. R.	F.	20	S.	I.	Dressmaker	2 months	2 mos.	Loss of flesh	St./12
320	15/8/12	J. F.	F.	59	S.	N.I.	Grocer	3 months	—	Cough	None
323	15/8/12	H. D.	M.	58	M.	I.	Miner	5 weeks	5 wks.	Pleurisy	St./12
344	3/9/12	G. L.	M.	43	M.	I.	Shoemaker	5 weeks	—	Cough, Spit	St./12
386	30/9/12	M. M.	F.	52	M.	D.	Domestic, Housewife	3½ months	3½ mos.	Cough, Spit	None
421	24/10/12	E. M.	F.	32	M.	D.	Factory worker, Housewife	3 weeks	—	Cough, Spit	Sh./14/11/12—5/13
470	5/11/12	R. S.	M.	50	M.	I.	Mason	5 years	2 wks.	Cough, Spit	U./27/1/13—3/23, Sh./14/4/13—14/13
24	15/1/13	Mrs. H.	F.	35	M.	D.	Maid, Housewife	—	1 wk.	Cough, Spit	None
34	26/1/13	J. M.	F.	51	M.	D.	Domestic, Housewife	2 years	6 mos.	Cough, Spit	B.23/1/13—2/23
36	21/1/13	A. C.	M.	46	W.	I.	Fireman	10 weeks	10 wks.	Cough, Spit	U.5/5/13—still
61	4/2/13	D. O'N.	M.	13	S.	D.	Scholar	2 months	2 mos.	Cough, Spit	Sh.10/2/13—16/4/13
74	—	T. O.	M.	60	M.	I.	—	—	—	—	None
92	25/2/13	E. D.	M.	42	S.	I.	Miner	2 months	2 mos.	Cough, Spit	Sh.28/2/13—6/9/13
103	3/3/13	H. F.	M.	19	S.	I.	Steeldresser	18 months	1 wk.	Haemop.	St.7/3/13—16/7/13
106	3/3/13	M. S.	F.	16	S.	I.	Dairymaid	1 year	1 year	Dysp., Cough, Spit	Sh.7/3/13—10/3/13
131	13/3/13	A. B.	F.	26	M.	D.	Housewife	5 months	1 mon.	Cough, Spit	None
154	25/3/13	R. W.	M.	29	M.	I.	Miner,	6 months	3 mos.	Pneu.	Sh.28/3/13—2/6/14
173	4/4/13	J. S.	F.	40	M.	D.	Domestic, Housewife	5 months	4 wks.	Cough, Spit	Sh.5/4/13—8/4/14



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		Notes.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
171		S.I. 3	Ten.	1	6/4	6/4	0	50/				Died 13/9/13	
294		S.I. 4	Row	2	5/2	—	—	60/	Arr.			Off list	
320		S.I. 3	Cot.	4	5	1	1	Am-ple	Imp.			Sanatorium treatment refused	
323		S.I. 2	Ten.	1	2	1	0	—	Arr.		- 5/11/12	Off list	
344		S.I. 4	Ten.	2	3/4	3/4	1	40/			+ 27/8/12	Died 29/8/13	
386		S.I. 2	Row	2	3	1	0	Am-ple				Died 26/11/13 ; Sanat. treatment refused	
421		S.I. 2	Cot.	2	2/2	2/2	0	30/	Imp.				
470	12/2	S.I. 4 H.V. 1	Row	2	5	0	0	24/	Stat.		+ 2/12/12		
24		S.I. 2 H.V. 2	Ten.	2	2/3	0	0	Am-ple	Stat.				
34		S.I. 2	Ten.	2	4/1	0	0	30/	Imp.			Refused to stay in Sanatorium.	
36		S.I. 2 H.V. 1	Row	1	2/2	2/2	1	26/				Died in Sanatorium.	
61		S.I. 3 H.V. 4	Ten.	2	5/1	1	1	45/	Stat.				
74	—	—	Hart. Asy.	—	—	—	—	—				Died in Hartwood Asylum, 20/1/13. Case discovered in Registrar's returns.	
92		S.I. 2	Row	2	4/4	1	0	49/6				Left district.	
103		S.I. 2	Ten.	2	5/1	0	0	50/	Stat.			Working.	
106		S.I. 2	Ten.	2	3/5	2/1	1	60/				Died in Sanatorium.	
131		S.I. 2	Row	1	3	3	1	35/				Left district.	
154		S.I. 3	Cot.	2	2/3	2/3	1/1	30/				Died 6/8/13.	
173		S.I. 2	Row	2	3/1	3/1	1	30/				Died in Sanatorium.	

## Cambusnethan—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
190	12/4/13	Mrs. C.	F.	26	M.	I.	Brick-worker, Housewife	3 years	4 wks.	Haemop.	B.21/4/13—8/8/13
194	15/4/13	P. S.	M.	52	S.	I.	Clerk	4 months	1 wk.	Cough, Spit	Sh.25/4/13—15/8/13
206	26/4/13	J. K.	M.	50	M.	I.	Puddler	3 months	2 days	Cough, Spit	U.28/5/13—20/8/13
240	27/5/13	J. R.	M.	45	M.	N.I.	Farmer	6 months	—	Cough, Spit	None
265	10/6/13	J. R.	M.	46	M.	I.	Labourer	—	2 yrs.	Pain in side, Cough, Spit	None
279	19/6/13	J. G.	M.	43	M.	I.	Miner	4 months	4 mos.	Cough, Spit	None
306	8/7/13	R. H.	M.	21	S.	I.	Labourer	15 weeks	15 wks.	Cough, Spit	Sh. 21/7/13—23/8/13
318	24/7/13	J. L.	M.	20	S.	I.	—	—	—	—	None
319	24/7/13	M. O'R.	F.	38	M.	D.	Housewife	8 weeks	8 wks.	Pleurisy	None
338	18/8/13	Mrs. P.	F.	39	M.	D.	Housewife	16 months	—	Cough, Spit	Sh. 8/9/13—6/12/13
346	20/8/13	M. Y.	F.	32	M.	D.	Housewife	1 year	—	Cough, Spit	None
360	3/9/13	J. B.	M.	17	S.	I.	Labourer	2 years	—	Cough, Spit	Sh. 15/9/13—Still in
381	18/9/13	M. N.	F.	35	S.	I.	Housemaid	1 year	—	Cough, Spit	St. 29/9/13—20/12/13
428	25/10/13	T. B.	M.	11	S.	D.	Scholar	2 years	—	Cough, Spit	Bl. 17/11/13—Still in
454	12/11/13	S. L.	M.	41	M.	I.	Miner	3 weeks	2 wks.	Cough, Spit	U. 17/11/13—Still in
473	2/12/13	A. S.	F.	28	M.	D.	Dressmaker Housewife	10 months	—	Cough, Spit	None
NON-PULMONARY											
1912	24/5/12	S. R.	F.	5	S.	D.	—	4 years	—	Swelling in neck	Sh./12, M./7/12/12—22/3/13
1912	20/11/12	P. S.	M.	17	S.	I.	Miner	3 years	1 mo.	Swelling in neck	M./28/11/12—8/3/13



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
190		S.I. 4	Row	1	2/1	2/1	0	24/	Stat.	9/4 + few		Re-admission to Sana- torium not desired.	
194		S.I. 2	Ten.	3	4/1	0	0	39/	Imp.			Working.	
206		S.I. 2	Ten.	2	7	3	1	40/	Imp.			Working.	
240		S.I. 1	Cot.	4	2	0	0	Am- ple		20/3 +		Sanat. treatment not desired; died 6/8/13.	
265		S.I. 2	Row	2	2/3	0	0	14/	W'se.			Sanat. treatment re- fused.	
279		S.I. 2	Cot.	2	2/5	1/4	1/1	22/	Imp.	26/3 +		Sanat. treatment re- fused.	
306	25/9	S.I. 4	Row	1	5	5	2	32/	Imp.			Refused to stay in Sanatorium.	
318		S.I. 1								+ 16/7		Left district; not traced.	
319		S.I. 2	Row	2	3/3	3/1	1/1	35/		+ 22/7		Sanat. treatment re- fused. Died 16/11/13.	
338		S.I. 2	Row	1	3/3	3/3	1/1	Am- ple				Died December, 1913.	
346		S.I. 2	Row	2	4/3	0	0	Am- ple	W'se			Johnstone case.	
360	13/9	S.I. 3	Row	2	3	0	0	18/					
381		S.I. 2	Cot.	4	8	4	1	Am- ple	Imp.	+ 1/8		Working.	
428		S.I. 2	Row	2	2/6	2/3	1	33/				Attending school.	
454		S.I. 2	Ten.	2	4/5	1/3	1	43/6					
473		S.I. 2 H.V. 2	Cot.	3	2/3	1	0	40/	Stat.			Sanat. treatment not desired.	
TUBERCULOSIS.													
1912		S.I. 2	Row	1	2/4	2/4	1/1	45/				Off list; Tuberculous cervical adenitis	
1912		S.I. 2	Cot.	3	6/2	2	0	10/				Tuberculous cervical adenitis	

## DOMICILIARY SUPERVISION.

Parishes of NEW MONKLAND, OLD MONKLAND, and SHOTTS.

J. THOMSON DICK, M.B., Ch.B., D.P.H.

*Number of Cases.*—The total number of cases on record throughout the year was 206, of which 202 were of pulmonary type, while 4 were of non-pulmonary type, and will be considered separately. Of the 202 pulmonary cases, 83 were put on record during the year 1913, while 119 notified in previous years were known to be surviving on 1st January, 1913. The changes during the year were as follows:—44 died, including 30 of those notified during 1913; 22 left the district, including 8 of those notified during 1913; and 21 were removed from the list for various reasons. The total number on record at 31st December, 1913, was 115.

In the following table the cases are classified according to age and sex, and according to whether they were insured, dependent, or non-insured, and whether married or single:—

## INSURANCE, AGE, SEX, AND CONJUGAL STATE.

Quinquen. periods.	Males.	Females.	Insured.		Depend.		Non-Ins.		Total.	Married.		Single.	
			M.	F.	M.	F.	M.	F.		M.	F.	M.	F.
— 5	1	3	—	—	1	3	—	—	4	—	—	1	3
—10	16	19	—	—	15	17	1	2	35	—	—	16	19
—15	7	11	—	—	7	10	—	1	18	—	—	7	11
—20	17	13	14	9	—	4	3	—	30	—	—	17	13
—25	10	6	9	2	—	3	1	1	16	—	3	10	3
—30	4	9	4	2	—	7	—	—	13	1	7	3	2
—35	11	11	10	2	—	8	1	1	22	8	6	3	5
—40	8	12	5	—	—	11	3	1	20	4	11	4	1
—45	11	7	8	—	—	7	3	—	18	8	7	3	—
—50	6	4	5	—	—	4	1	—	10	6	4	—	—
—55	6	3	1	—	—	3	5	—	9	6	3	—	—
—60	4	—	2	—	—	—	2	—	4	4	—	—	—
—65	1	—	—	—	—	—	1	—	1	1	—	—	—
65andover	1	1	—	—	—	—	1	1	2	1	1	—	—
	103	99	58	15	23	77	22	7	202	39	42	64	57
			73		100		29			81		121	



## OCCUPATION.

In the following table the patients are classified according to the nature of their occupation :—

<i>Domestic Work.</i> —Housewives, 41; domestics, 3;	
servants, 7; children, 5, ... ..	56
<i>Scholars, 52. Teacher, 1, ... ..</i>	53
<i>Miners, &amp;c.</i> —Miners, 39; pithead-workers, 5; fire-	
man, 1, ... ..	45
<i>Metalworkers.</i> —Steelworkers, 2; ironworker, 1;	
blacksmith, 1; plumber, 1; furnaceman, 1, ...	6
<i>Factory and Workshop Employees.</i> —Millworkers, 5;	
dressmakers, 2; tailor, 1; bottleworker, 1, ...	9
<i>Stoneworkers, &amp;c.</i> —Masons, 2; brickworker, 1, ...	3
<i>Shopkeepers.</i> —Barmen, 3, ... ..	3
<i>Miscellaneous.</i> —Clerks, 3; farmers, 3; labourers,	
6; carters, 2; hawker, 1; signalman, 1; crane-	
man, 1; roadman, 1; insurance agent, 1; out-	
worker, 1; none, 3; unknown, 4, ... ..	27
	<hr/>
	202
	<hr/>

*Parish of Residence.*—The cases are tabulated below according to the parish of residence :—

Parish of New Monkland, ... ..	40
Old Monkland, ... ..	90
Shotts, ... ..	72
	<hr/>
Total, ... ..	202
	<hr/>

*Duration of Illness.*—The duration of illness in monthly periods was as follows :—

Months—1	1-2	2-3	3-6	6-12	12-18	18-24	Over 24	Not stated.
Cases, 4	23	16	28	23	19	7	70	12
		Total,	...	...	202.			

Of the 70 cases where illness extended over a period of two years or more the following facts may be noted :—6 proved not to be cases of pulmonary tuberculosis, and have been removed from the list. In 8 cases the beginning of illness is dated from an initial pleurisy, and in 6 from an attack of pneumonia, though in many instances symptoms sufficiently grave to attract the patient's attention did not develop for some considerable time after the original attack had apparently passed off. In 12 cases T.B. were found in the spit, 1 case being that of a male, J. M'M., aged 33, whose illness dated back ten years. Three of

the cases have had recurrent attacks of hæmoptysis, extending over several years, and out of the total 70 cases 10 died during 1913.

*Earliest Symptoms recognised.*—The earliest symptoms recognised were :—

Cough,	121;	pleurisy,	24;	influenza,	12;
pneumonia,	11;	hæmoptysis,	13;	debility and	
wasting,	8;	asthma,	2;	anæmia,	1;
accident to		chest,	1;	not recorded,	9.
Total,					202

In the majority of the cases in which the earliest symptom was cough the illness began with what was regarded by the patient as an ordinary cold or a chill, but in many instances, however, the onset of cough was slow and insidious, and could not be attributed to even such trivial causes as those mentioned above. In a number of cases the illness was believed to have originated with exposure to extremes of temperatures, to cold night air, or to a wetting. Pleurisy, influenza, and pneumonia formed fairly common modes of onset, while in 6·5 per cent. of the cases the first indication of danger was hæmoptysis. In the 8 cases in which weakness or wasting was given as the primary symptom the patients were either women or children.

*Home Conditions.*—In the following table are shown the types and sizes of houses occupied by the patients and their families :—

Number of Apartments.	Ten.	Cot.	Row.	Institution.	Total Houses.
1	13	2	45	—	60
2	29	11	70	—	110
3	5	2	2	—	9
4 and over	1	10	2	—	13
	—	—	—	9	9
	No record,	...	...	...	...
					1
					202

*Inmates.*—Of the 202 houses, excluding the 9 institutions and the 1 of which there is no record, there were thus 60 of one apartment, 110 of two apartments, 9 of three apartments, and 13 of four or more apartments. The total number of inmates, with the average number of persons per room, was as follows :—

	Apartments,	1,	2,	3,	4 and over.
Total Inmates,	-	301	750	60	75
Average number per room,		5·	3·4	2·2	1·5

*Sleeping Accommodation.*—Of the 202 cases, 19 had a room to themselves, 29 shared a room with one other person, 36 with two



others, and in the remaining 106 cases the room was shared with three or more. Including the 19 who had a room to themselves, there were only 57 who slept alone. In a large proportion of cases, therefore, the patients were for a considerable time in close contact with other and presumably healthy members of their families, giving rise to conditions which could scarcely be more favourable to direct personal infection.

In 12 cases there is no record available of the sleeping accommodation.

*Weekly Income.*—In several cases no record of the weekly wage is available, while in many instances the income is returned as “ample” or “satisfactory.” In 161 of the total cases, however, a record has been kept, and among those the average weekly income is found to be 31s. 6d. In the families of those 161 cases there was a total of 996 persons, making the average weekly income available per head, approximately, 5s. 11d. The following table shows the cases in relation to weekly income, with the number of persons depending on the income:—

WEEKLY INCOME CLASSIFIED IN GROUPS—AND NUMBER OF PERSONS  
DEPENDENT ON THE INCOME.

Number of Persons.	—20/	20-25/	25-30/	30-35/	35-40/	40-50/	50/ and upwards.
1	1	—	—	—	—	1	—
2	1	—	2	2	—	1	—
3	—	1	5	4	3	—	1
4	5	3	3	3	—	2	1
5	1	1	7	7	1	5	2
6	3	4	5	4	1	6	3
7	5	—	—	2	1	8	9
8	—	—	2	3	2	5	8
9	—	—	4	2	1	3	4
10	1	1	—	—	—	3	5
11	—	—	—	—	—	1	—
12	—	—	1	—	—	1	—

*Domiciliary Visits.*—A total of 121 visits were paid to the homes of the patients by the Tuberculosis Officer, and 511 by the Sanitary Inspector and Health Visitors.

INSTITUTIONAL TREATMENT (AT ANY TIME).

Treated in County Institution.	Treated in Institution outwith County.	Refused Treatment.	Left District or Non-Tuberculous.
134	2	3	43

Of the 134 patients treated in County institutions, a number returned for treatment after their first stay in sanatorium, so that

while 115 received treatment once, 11 received treatment twice, 2 three times, 3 four times, 1 five times, and 2 six times.

#### CONDITION AT END OF YEAR.

Year of Notification	Cases	Arr.	Imp.	Stat.	Worse	Died	Off List	Not to be Visited	In Sanatorium
1905 ...	2	—	1	—	—	—	—	—	1
1906 ...	6	—	3	—	—	1	2	—	—
1907 ...	3	1	1	—	—	—	1	—	—
1908 ...	4	1	1	—	—	—	1	—	1
1909 ...	5	2	—	—	—	—	2	1	—
1910 ...	17	2	7	3	1	2	1	1	—
1911 ...	21	1	7	—	—	2	6	—	5
1912 ...	61	1	24	2	3	9	17	1	4
1913 ...	83	2	15	7	6	30	13	1	9
	202	10	59	12	10	44	43	4	20

Of the 43 cases removed from the list, 22 left the district, and of the others 9 were adults and 12 were children.

Sputum examinations were as follows:—

	+	-	Total.
Examined in 1913, ... ..	22	8	30
Not examined in 1913, but examined previously,	14	16	30
No record of any examination, ... ..	—	—	142
			<hr/> 202 <hr/>

#### Non-Pulmonary Cases.

During the year 4 cases of non-pulmonary tuberculosis were on record. Two were cases of tuberculous cervical adenitis, one was a tuberculous peritonitis, and one a tuberculous arthritis. Short notes of the cases are as follows:—

C. R., male, aged 17, was notified as suffering from tuberculosis of the cervical glands in 1908. Though the condition was not severe at any time, he received non-operative treatment in Bellshill Sanatorium for fifteen weeks in 1912. During the whole of 1913 the glandular enlargement has been very slight; general health good; and he has been at work regularly as a miner.

A. M'G., female, aged 9—cervical adenitis—was notified in 1911. The condition has not been severe at any time, and she has not received institutional treatment. At the end of the year 1913 her general health was excellent, and the glandular enlargement had almost disappeared.



M. D., female, aged 10—tuberculous peritonitis—was notified 17/11/13. The illness began eighteen months previously. She made an apparently good recovery, and relapsed again six weeks before notification. She was admitted to Dalserf Sanatorium 29/11/13, and at the end of the year was still in. At the time of her original illness a sister died of the same disease.

I. S., female, aged 11—tuberculosis of the right hip joint—was notified 12/4/13. She turned ill a year before with stiffness of joint and slight pain. She was admitted to Motherwell Hospital 5/4/13, her general condition at this time being poor and local condition severe. She was discharged on 2/10/13 improved, with the leg put up in plaster. At the end of the year her general condition was fairly good, though she was still confined to bed.

## New Monkland.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
39	11/2/09	H. W.	F.	28	S.	N.I.	Teacher	—	—	—	—
158	7/4/10	L. B.	F.	12	S.	I.	Scholar, Mill girl, Dom. servt.,	5 months	At school	Cough	U./10
338	23/2/10	R. S.	M.	44	M.	I.	Labourer	3 years	Working	Pleurisy	St./10—30/4/13—27/5/13
408	14/9/10	A. T.	M.	46	M.	I.	Farmer, Fireman	3 years	2 mos.	Cough	U. 24/3/13—19/4
472	7/11/10	J. N.	M.	9	S.	D.	Scholar	4 years	At school	Pneumonia	U./11
42	1/2/11	S. D.	F.	9	S.	D.	Scholar	18 months	At school	Cough	U./11
43	1/2/11	A. M'D.	F.	41	M.	D.	Domestic, Housewife	18 months	Working	Cough	U./11
333	14/8/11	E. C.	F.	31	M.	D.	Servant, Housewife	6 years	Working	Cough, Spit	U./11
45	3/2/11	J. F.	F.	8	S.	D.	Scholar	2 months	—	Cough	U./11
236	10/6/12	J. Q.	F.	32	M.	D.	Servant, Housewife	9 months	Working	Cough, Spit	B./12
260	22/6/12	P. R.	F.	6	S.	D.	Scholar	4 months	4 mos.	Cough, Spit	U./12
279	9/7/12	A. L.	F.	15	S.	D.	Servant	—	—	Anæmia	St./12
302	7/8/12	J. S.	F.	28	M.	D.	Dom. servt., Housewife	8 months	8 mos.	Cough	—
304	3/8/12	G. C.	F.	26	M.	D.	Pithd wrker Housewife	2 months	2 mos.	Cough, Spit	U./12
430		H. M'G.	F.	67	M.	N.I.	—	—	—	—	—
468	3/12/12	K. W.	F.	7	S.	D.	Scholar	7 months	2 mos.	Cough	—
475	9/12/12	M. R.	F.	18	S.	I.	Cash girl, None	6 months	—	Cough, Spit	U. 17/1/13—12/7/13
49	28/1/13	S. M'G.	F.	30	S.	D.	None, Imbecile	—	—	Cough	—
53	31/1/13	M. W.	F.	44	M.	D.	Housewife	6 months	Working	Cough, Wasting	U. 18/6/13—24/9/13



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.						Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.		1913.	Previous Results.	
13	14	15	16	17	18	19	20	21	22	23	24	25
39			—	7	—	—	—	—				Requested not to visit
158	27/10/	S.I. 3	Row	2	5/5	3/2	1/1	48/	Imp.			
338		S.I. 1	Cot.	2	7/0	0	0	42/				Died 8/7/13.
408		S.I. 3	Cot.	3	2/6	0/3	0/1	26/		31/3 +		Died 2/7/13.
472	22/10/		Row	2	2/4	2/3	0/1	69/	Imp.			Residing temporarily outwith district.
42	22/10/	H.V. 4	Row	1	3/2	3/1	1/0	26/				Died from Diphtheria 26/9/13.
43	22/10/		Row	1	3/4	2/4	1/2	30/	Arr.			
333	16/10/	S.I. 2	Row	2	6/3	1/1	1/0	78/			- 14/8/11	Off list.
45			Row	2	7/3	3/2	1/2	55/				Off list.
236	17/10/	S.I. 10 H.V. 3	Ten	2	4/4	3/4	0/4	30/	Imp.			
260	16/10/	S.I. 8	Row	2	5/4	4/3	1/2	30/	Imp.			
279		S.I. 3	Row	2	6/4	2/4	1/3	60/			- 3/7/12	Died 26/2/13.
302		S.I. 3	Row	1	2/0	1/0	1/0	Satis.				Off list
304	27/10/	S.I. 2	Row	1	2/1	1/1	1/1	23/	Arr.			
430			Asy- lum	—	—	—	—	—				Not Notified. Discovered from Registrar's return.
468		S.I. 3	Row	2	2/1	2/0	2/0	30/				Died 31/3/13.
475	14/10/	S.I. 3	Cot.	2	6/2	1/0	1/0	Satis.	Stat.		+ 3/12/12	
49			Row	2	5/1	2/0	0	Satis.		21/1 +		Died 23/3/13.
53	15/10/	S.I. 13	Row	2	4/0	3/0	1/0	20/				Died 27/12/13.

## New Monkland—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
57	3/2/13	E. W.	F.	7	S.	D.	Scholar	3 months	At school	Cough, Spit	U. 11/2/13—13/8/13
111	6/3/13	M. M <sup>c</sup> E.	F.	15	S.	D.	Scholar, Mill girl	6 weeks	6 wks.	Cough, Wasting	U. 3/4/13—16/5/13
155	25/3/13	J. O'H.	M.	40	S.	I.	Miner	4 years	2 wks.	Cough, Spit	—
114	5/3/13	S. F.	F.	36	M.	D.	Servant, Housewife	4 years	Work-ing	Cough, Hæmop.	U. 19/3/13—1/5/14
125	11/3/13	J. B.	F.	20	M.	D.	Servant, Housewife	8 months	Work-ing	Cough, Spit	U. 20/3/13—9/7/13
200	23/4/13	C. K.	M.	6	S.	D.	Scholar	2 years	1 week	Pneu-monia	U. 28/4/13—6/8/13
204	25/4/13	M. R.	M.	5	S.	D.	Scholar	6 months	6 mos.	Cough, Wasting	—
244	29/5/13	J. C.	M.	36	M.	I.	Miner	1 year	10 days	Cough, Hæmop.	U. 19/6/13—10/9/13
269		G. A.	M.	34	M.	I.	Commercial traveller, Barman	10 weeks	10 wks.	Cough, Wasting	—
271	14/6/13	R. M <sup>c</sup> G.	F.	8	S.	D.	Scholar	2 weeks	2 wks.	Cough	U. 4/7/13—25/9/13
290	30/6/13	J. B.	M.	37	M.	I.	Scavenger, Labourer	18 months	Work-ing	Cough, Hæmop.	—
297	2/7/13	S. L.	M.	30	S.	I.	Factory worker	5 months	9 wks.	Pleurisy	—
310	2/7/13	J. C.	M.	56	M.	I.	Miner	3 years	2 mos.	Cough	M. 7/8/13—6/9/13
364	10/9/13	G. A.	M.	19	S.	I.	Clerk	2 months	2 wks.	Cough, Spit	St. 9/9/13—still in
455	13/11/13	J. S.	M.	45	M.	I.	Farm servant, Signalman	3 years	1 week	Pleurisy	U. 21/11/13—still in
461	18/11/13	R. F.	M.	8	S.	D.	Scholar	3 months	At School	Cough	—
466	24/11/13	M. M <sup>c</sup> A.	F.	22	S.	I.	Domestic servant	6 weeks	6 wks.	Cough, Weakness	Sh. 29/12/13—still in
479	23/12/13	H. C.	M.	40	M.	I.	Labourer	6 years	10 wks.	Hæmop.	—
499	29/12/13	J. L.	M.	33	M.	I.	Farmservt., Brick-worker	7 months	3 mos.	Pleurisy	—



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
57		S.I. 1	Row	1	3/3	3/2	3/2	20/				Died 13/8/13.	
111		S.I. 1	Cot.	1	4/0	3/0	1/0	25/				Died 27/6/13.	
155	21/10/	S.I. 3	Row	1	1/0	0	0	40/		2/7 -		Left district.	
114	18/11/	S.I. 2	Cot.	2	3/3	1/1	0	25/	Imp.	19/2 +			
125		S.I. 2	Row	1	2/1	1/1	1/0	30/				Died 13/8/13.	
200	27/10—30/12/	S.I. 2	Row	1	4/1	4/0	2/0	30/	Imp.				
204		S.I. 1	Cot.	2	6/2	4/1	2/0	Am- ple				Also Tuberculosis Peritonitis. Died 29/4/13.	
244	17/10—18/11/	S.I. 3	Row	1	2/0	1/0	1/0	28/	Stat.	27/5 +			
269		S.I. 1	Ten.	1	2/3	1/3	1/0					Not notified. Dis- covered in Regis- trar's returns.	
271	27/10	S.I. 3	Row	1	2/6	2/5	0/2	35/	Arr.			At school.	
290	14/10	S.I. 3	Row	2	2/0	1/0	1/0	25/	Stat.	+		Admitted to Sana- torium 2/1/14.	
297		S.I. 1	Row	2	9/1	4/0	1/0	Am- ple				Left district.	
310	27/10		Row	2	6/2	3/2	1/1	44/		-		Off list.	
364			Ten.	3	6/2	1/0	1/0	50/		8/11			
455	18/11	S.I. 1	Row	2	4/1	2/1	0	40/					
461	18/11	S.I. 1	Cot.	2	2/3	2/1	0/1	25/	Imp.				
466	3/12	S.I. 1	Row	2	7/2	1/0	0	30/		18/11 +			
479		S.I. 1	Row	2	4/4	3/2	1/1	26/	Wse.				
499	31/12	S.I. 1	Row	2	4/3	1/0	1/0	Am- ple	Imp.				

## New Monkland—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
505	30/12/13	R. P.	M.	25	S.	I.	Steelworker	6 months	15 wks.	Cough	—
457	20/11/12	M. G.	F.	12	S.	D.	Scholar	1 year	1 year	Cough, Spit	U. 19/11/12—13/12/13
<b>Old Monkland.</b>											
16	30/6/05	N. G.	F.	8	S.	D.	Scholar	1 year	—	Cough, Emaciation	M./05, M./06, B./06, Sh./06, B./10, U. 29/9/13. Still in
39	27/7/05	P. O'K.	M.	42	M.	I.	Miner	7 years	Work-ing	Cough, Spit	L./05, B. 9/10/12—25/1/13
105	3/5/06	T. D.	M.	20	S.	I.	Miner	5 years	Work-ing	Cough, Night-sweats	L./06
281	28/11/06	Mrs M'A	F.	51	M.	D.	House-keeper, Housewife	5 years	Work-ing	Cough, Spit	U./06
76	15/4/07	A. E.	M.	13	S.	D.	Scholar	2 years	At School	General debility	L./07
121	15/6/07	Mrs R.	F.	42	M.	D.	Domestic, Housewife	5 years	Work-ing	Cough	—
65	28/2/08	M. M'G.	F.	31	S.	N.I.	Domestic	3 years	2 mos.	Cough, Haemop.	M./08, B./12
70	11/3/08	C. R.	M.	17	S.	I.	Miner	4 years	4 wks.		B./12
96	25/3/08	J. M'M.	M.	33	M.	I.	Miner, Lamp-lighter	10 years	Work-ing	Pneu-monia	L./08. L. 7/3/13—30/7/13 U. 24/12/13. Still in
264	4/8/09	R. S.	M.	17	S.	I.	Miner	3 years	Work-ing	Asthma	St./09, U. 11/12/12—18/1/13
360	6/11/09	Mrs K.	F.	30	M.	D.	Domestic, Housewife	6 years		Cough, Wasting	U./09, B./11, U. 9/10/12—6/1/13 L. 19/7/13—21/7/13
374	27/11/09	G. G.	M.	41	S.	I.	Soldier, Miner	2 years	Work-ing	Cough, Spit	U./10, B/11
379	20/9/11	H. B.	M.	18	S.	I.	Pithead worker	3 years	3 wks.	Cough, Spit, Wasting	U./10, U./11, St./12, U./12, U. 8/11/13. Still in
394	6/9/10	Mrs S.	F.	28	M.	I.	Brick-worker, Housewife	1½ years	Work-ing	General debility	B./10, St./12



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
505	29/12	S.I. 1	Ten.	2	5/0	0	0	30/	Stat.	+	16/10	T.B. found while in M.W. Hospital as Enteric Fever.	
457			Row	1	3/3	3/2	0	25/	Imp.				
16		S.I. 7 H.V. 7	Row	2	4/2	1/0	1/0	14/					
39	7/10—17/12	H.V. 9	Row	1	3/4	3/4	1/0	14/	Imp.		+ 1905	Working	
105		S.I. 3 H.V. 8	Row	2	4/2	1/2	1/2	30/	Imp.			Suffers from recurrent attacks of Pleurisy	
281	20/10—26/11	S.I. 2 H.V. 4	Row	4	6/0	4/0	1/0	40/	Imp.		+ 1906	Doing housework	
76	21/2		Row	2	4/1	1/0	1/0	47/				Off list	
121	22/12	S.I. 1	Cot.	2	4/3	2/2	1/1	40/	Imp.			Doing housework	
65	6/11—24/11	S.I. 2 H.V. 6	Row	2	6/0	3/0	0	22/	Imp.	+	18/12	+ 1908	Doing housework
70	23/12	S.I. 2 H.V. 6	Row	1	4/0	3/0	0	11/11	Imp.			- 3/2/12	Case of tuberculous cervical adenitis
96	10/10—17/12	S.I. 4	Row	1	2/2	1/2	1/2	20/				+ 11/3/12	
264		S.I. 4	Row	2	4/3	1/0	1/0	62/	Arr.	-	20/1	—	Case of tuberculous pleurisy
360	15/7	S.I. 3 H.V. 4	Row	1	2/4	1/4	1/0	24/				—	Case of Bronchiectasis Off list
374	26/11	S.I. 2 H.V. 5	Row	1	2/0	1/0	0	45/	Arr.			—	Working
379	9/10	S.I. 2 H.V. 6	Row	2	7/2	3/2	1/1	25/				—	
394	19/11	H.V. 7	Row	1	4/1	3/1	1/1	30/	Imp.				

## Old Monkland—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
83	24/2/11	Mrs M'S	F.	36	M.	D.	Farm servant, Housewife	3 years	Working.	Cough, Loss of appetite	U./11
130	23/3/11	M. O'N.	F.	8	S.	D.	Scholar	18 months	At school	Cough, Night-sweats	U. /11—St. /12 U. 8/11/13. Still i
172	18/4/11	S. C.	F.	20	S.	I.	Domestic, Dressmaker	3 years	Working	Pneum.	L. /11.
289	5/7/11	J. L.	M.	5	S.	N.I.	Scholar	1 year	At school	Pleurisy	U. 18/12/13. Still
309	27/7/11	A. M'C.	F.	9	S.	N.I.	Scholar	1½ years	At school	Pneum.	Sh. /11
428	27/11/11	A. T.	M.	44	M.	N.I.	Mason	2 years	3 wks.	Loss of Appetite, Cough	St. /12 U. 4/12/13. Still i
429	29/11/11	M. O'K.	M.	17	S.	I.	Miner	3 weeks	1 wk.	Cough, Spit, Vomiting	St. /12—U. /12 U. 8/11/13—24/12/1 Sh. 24/12/13. Still
6	5/1/12	L. F.	F.	6	S.	D.	—	4 weeks	—	Cough	—
100	25/3/12	J. F.	M.	8	S.	D.	Scholar	5 weeks	5 wks.	Cough, Spit	—
102	26/3/12	M. B.	M.	6	S.	D.	Scholar	2 years	14 days	Cough, Spit, Wasting	St. /12
103	28/3/12	A. E.	F.	8	S.	D.	Scholar	6 weeks	6 wks.	Pain in chest, Cough	St. /12
167	2/5/12	A. M'I.	M.	41	M.	N.I.	Craneman None	2 years	1 year	Cough, Spit	B. /12
172		J. B.	M.	18	S.	N.I.	Miner	1 year	1 year	Pleurisy	L. 1/5/13—9/9/13 Sh. 9/9/13. Still in
67	28/12/12 Renoti'd	E. B.	M.	26	S.	I.	Labourer	5 years	Working	Pleurisy	L. /05
205	23/8/06	J. C.	M.	13	S.	I.	Pit head worker Plumber	5 years	6 mos.	Pneum.	L. /06
181	2/6/08	Mrs. B.	F.	35	M.	D.	Housewife	3 years	?	Cough	—
195	20/5/12	A. C.	M.	16	S.	I.	Bottle worker Lampman	1 month	1 mo.	Cough, Spit	U. 15/6/13—7/9/13



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.						Condition at end of Year.	SPTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartment.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.		1913.	Previous Results.	
13	14	15	16	17	18	19	20	21	22	23	24	25
83	15/12	S.I. 4	Ten.	2	3/4	2/3	1/1	37/				Off list
130	7/10	S.I. 2 H.V. 6	Row	1	4/4	4/3	0/3	30/		9/11		
172		S.I. 2 H.V. 5	Row	1	3/0	2/0	1/0	26/	Imp.			Working.
289	26/11	H.V. 4	Ten.	2	6/1	2/0	0	70/				Case of Tuberculous Pleurisy.
309		S.I. 2	Row	1	6/7	6/6	2/4	?				No evidence of Pulm. Tub.
428	26/11	S.I. 3 H.V. 7	Cot.	4	4/3	0	0	7/				
429	9/10	H.V. 7	Row	1	4/0	4/0	1/0	60/			—	
6	10/10	S.I. 2 H.V. 7	Row	1	2/3	2/2	0	30/				Off list.
100		S.I. 1	Ten.	2	7/1	2/0	0	57/				Removed from district 8/3/13.
102	22/10	H.V. 7	Row	2	4/3	2/2	0/1	35/	Imp.	+25/10/12		At school.
103	24/10	H.V. 5	Row	2	2/2	0	0	30/	Imp.			At school.
167		H.V. 3	Ten.	3	4/1	0	0	25/		+9/5/12		Died 3/4/13.
172		S.I. 2	Row	1	4/1	3/1	0	30/		+29/5/12		
67		S.I. 2 H.V. 4	Row	2	7/2	0	0	26/				Left district 12/6/13.
205		S.I. 1	Row	2	3/0	0	0	70/				Left district 20/2/13.
181			Cot.	4	5/0	0	0	Am- ple				Left district March, 1913.
195	23/10	S.I. 2 H.V. 6	Ten.	1	6/1	5/1	2/0	17/6	Imp.		—	Working.

## Old Monkland—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
226	6/6/12	J. C.	M.	12	S.	D.	Scholar	3 months	1 mo.	Cough, Spit, Weakness	U. 15/6/13—31/8/13
238	12/6/12	J. C.	M.	21	S.	I.	Miner, Hawker	—	Working	—	U./12 U.13/6/13—10/10/13
254	19/6/12	M. B.	F.	6	S.	D.	Scholar	5 weeks	6 wks.	—	B./12
278	9/7/12	T. L.	M.	19	S.	N.I.	Clerk	2 months	1 mos.	Cough	Bellefield
325	16/8/12	L. D.	F.	19	S.	I.	Domestic	4 months	3 wks.	Pleurisy	St./12
335	21/9/12	J. T.	M.	43	S.	I.	Miner	3 months	7 wks.	Cough, Spit	St./12
347	4/8/12	D. D.	M.	9	S.	D.	Scholar	?	At school	Wasting	St./12
392	2/10/12	J. G.	M.	21	S.	I.	Miner	7 years	9 wks.	Night-Sweats, Wasting	St./12
398	7/10/12	M. J.	F.	17	S.	I.	Dressmaker Factory worker	2 months	Working	Pleurisy	U./12
399	8/10/12	E. H.	F.	9	S.	D.	Scholar	16 months	At school	Pneumonia	U.26/10/12—18/1/13
439	5/11/12	M. T.	F.	16	S.	I.	Servant	7 months	Working	Haemop.	U.12/12/12—7/6/13
452	15/11/12	F. G.	F.	11	S.	D.	Scholar	17 months	At school	Adenitis	U.12/12/12—22/2/13
464	29/11/12	J. D.	F.	14	S.	D.	Scholar	1 year	2 wks.	Cough, Spit and Haemop.	U.12/12/12—11/1/13
476	9/12/12	A. R.	M.	17	S.	I.	Clerk	2 weeks	Working	Pleurisy	—
478	13/12/12	M. D.	F.	48	M.	D.	Outdoor worker Housewife	10 years	3 wks.	Cough, Spit, and Wasting	B.24/12/12—9/1/13
479	16/12/12	R. A.	F.	13	S.	N.I.	Scholar	2 months	1 mo.	Cough, Spit, Wasting	U. 7/1/13—13/5/13 Sh. 27/10/13—Still in
488	20/12/12	M. B.	F.	22	M.	D.	Dom. servt., Housewife	3 months	3 mos.	Pleurisy	—



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.						Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.		1913.	Previous Results.	
13	14	15	16	17	18	19	20	21	22	23	24	25
226	25/11	H.V. 7	Ten.	1	6/3	5/3	2/0	40/				Off list.
238		S.I. 1 H.V. 6	Ten.	1	6/1	5/1	2/0	17/6	Imp.			Working
254	25/11 15/12	S.I. 2 H. V. 9	Row	2	2/2	1/0	0	24/	Imp.			At school
278			Farm	7	10/1	0	0	Satis.				Not to be visited
325		S.I. 1 H.V. 8	Ten.	2	4/2	0	0	42/	Imp.			Working
335	9/10 16/10	H.V. 7	Row	2	7/0	3/0	1/0	60/	Imp.		+ 18/8/12	Working
347	20/10 26/11	S.I. 1 H.V. 7	Ten.	2	4/2	3/1	0/1	42/	Imp.			
392	26/11	H.V. 10	Ten.	2	6/1	1/0	1/0	65/	Imp.		+ 28/9/12	Working
398	7/10 17/12	S.I. 3 H.V. 3	Row	2	4/1	1/0	1/0	25/	Imp.			Working
399	11/11	H.V. 7	Row	2	5/2	3/1	1/0	40/	Imp.		-	At school
439			Ten.	3	6/0	2/0	0	Satis.			+	Left district
452	26/11	H.V. 8	Ten.	2	6/1	2/0	2/0	65/	Imp.			
464			Row	2	7/3	4/2	2/0	53/				Removed from list.
476		S.I. 1	Cot.	4	6/0	1/0	1/0	Satis.				Left district
478		S.I. 1 H.V. 9.	Ten.	1	3/0	2/0	1/0	35/			+ 10/12/12	Left district
479	21/10		Ten.	1	4/1	3/1	0	Am- ple				
488		S.I. 1 H.V. 5	Row	1	2/1	1/1	0/1	25/	Imp.			Doing housework,

## Old Monkland—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
489	21/12/12	J. S.	M.	25	M.	I.	Blacksmith	2 years	4 wks.	Pleurisy	U. 7/1/13—31/3/13
493	24/12/12	W. M'L.	M.	39	S.	I.	Miner	2 years	8 wks.	Cough, Spit	U. 7/1/13—16/4/13
—	8/7/12	M. L.	F.	10	S.	D.	Scholar	5 weeks	6 wks.	Cough, Abdom. Pain	U. /12
5	4/1/13	Mrs. K.	F.	36	M.	D.	Farmservt., Housewife	2 years	Work- ing	Cough, Spit	L. 6/3/13—17/5/13
6	2/1/13	M. G.	F.	32	M.	D.	Housewife	2 years	2 wks.	Cough, Haemop., Spit	—
7	2/1/13	J. S.	F.	10	S.	D.	Scholar	4½ years	3 mos.	Cough, Spit, Wasting	B. 12/5/13—9/8/13
16	10/1/13	J. M'C.	F.	16	S.	D.	None	2 months	—	Weakness Cough, Spit	—
62	6/2/13	A. C.	F.	52	M.	D.	Farmservt., Housewife	1 year	Work- ing	Cough, Spit, Wasting	—
68	7/2/13	H. E.	M.	17	S.	I.	Miner	4 months	Work- ing	Cough, Spit	St. 15/2/13—24/5/13
96	26/2/13	M. C.	F.	8	S.	D.	Scholar	8 weeks	6 wks.	Weakness Cough, Spit	U. 29/3/13—16/7/13
104	3/3/13	H. K.	F.	24	M.	D.	Housewife	2 years	3 wks.	Pleurisy	L. 13/3/13—10/5/13
105	3/3/13	L. D.	F.	45	M.	D.	Housewife	5 months	3 wks.	Pleurisy	L. 4/4/13—23/4/13
112	6/3/13	J. A.	M.	5	S.	D.	Scholar	4 years	4 wks.	Cough, Wasting	B. 28/3/13—19/7/13
132	11/3/13	A. E.	F.	27	M.	D.	Nurse, Housewife	5 years	Work- ing	Asthma	B. 16/4/13—9/8/13
133	14/3/13	B. C.	F.	10	S.	D.	Scholar	1 year	6 wks.	Pleurisy	B. 28/3/13—6/6/13
189	—	N. A.	F.	31	S.	D.	—	—	—	—	—
201	22/4/13	D. H.	M.	58	M.	I.	Pitheadman	6 months	1 week	Influenza	B. 1/5/13—26/7/13



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartment.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
489	24/10	S.I. 5	Ten.	1	2/1	1/1	1/0	30/	Imp.			Working.	
493	1/11—23/12	S.I. 5	Row	1	4/0	3/0	1/0	13/	Wse.		- 20/12/12	Not working.	
		S.I. 1	Row	1	4/3	3/3	1/1	30/				Left district 12/4/13.	
5		S.I. 2 H.V. 1	Row	1	2/3	1/3	1/0	30/		+ 20/5	+ 25/12/12	Died 31/7/13.	
6			Ten.	2	7/0	4/0	1/0	Am- ple			- 28/12/12	Left district.	
7	22/10	H.V. 8	Ten.	2	7/1	2/0	2/0	60/	Wse.				
16	19/11	S.I. 2 H.V. 9	Ten.	2	6/1	2/0	0	Am- ple				Left district.	
62		H.V. 3	Ten.	1	2/0	1/0	1/0	30/		+ 29/1		Died 3/3/13.	
68	23/12		Row	1	6/1	5/1	2/0	60/	Imp.	+ 29/1		Working.	
96			Ten.	2	2/4	2/3	0/2	Am- ple				Left district.	
104			Row	2	2/2	1/2	1/2	30/				Died 11/6/13.	
105		H.V. 2	Row	2	5/1	3/1	1/1	62/		+ 25/2		Died 11/6/13.	
112	24/10		Row	1	4/2	4/1	1/1	Am- ple	Imp.			At school.	
132	9/10—25/11		Row	1	2/1	1/1	1/0	36/	Imp.	+ 9/3			
133		S.I. 1	Row	2	5/3	1/1	1/1	40/				Died in Sanatorium	
189												Not notified. Dis- covered in Regis- trar's Return.	
201			Cot.	3	3/2	0	0	Am- ple		+ 19/4		Died 15/10/13.	

## Old Monkland—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
210	29/4/13	P. R.	M.	21	S.	I.	Miner	4 months	2 mos.	Influenza	U. 8/5/13—30/10/13
224	8/5/13	J. D.	M.	33	M.	I.	Lorryman	2 months	Working	Influenza	U. 24/5/13—24/9/13
230	17/5/13	S. K.	M.	7	S.	D.	Scholar	5 weeks	5 wks.	Whooping Cough	—
246	30/5/13	B. R.	F.	30	M.	D.	Housewife	5 months	Working	Cough, Spit	L. 16/6/13—6/9/13 U. 4/12/13—Still in
255	18/6/13	J. C.	F.	3	S.	D.	—	3 months	—	Whooping Cough	—
257	10/6/13	T. S.	M.	5	S.	D.	Scholar	6 weeks	1 mon.	Whooping Cough	—
276	28/12/13	D. B.	M.	7	S.	D.	Scholar	2 years	At School	Cough	L./10
288	24/6/12	J. G.	M.	45	M.	I.	Furnace-man	10 weeks	8 wks.	Cough, Spit	U. 5/7/13—11/12/13
307	8/7/12	E. B.	F.	10	S.	D.	Scholar	3 years	1 mon.	Cough	L. 22/7/13—still in
311	13/8/12	J. B.	M.	7	S.	D.	Scholar	18 months	6 wks.	Cough, Wasting	U. 16/8/12—4/1/13
374	29/7/13	J. M.	M.	3	S.	D.	—			Cough, Weakness	—
326	30/7/13	A. C.	M.	22	S.	I.	Miner	1 year	1 mon.	Haemop.	L. 2/8/13—9/9/13 Sh. 9/9/13—15/9/13
400	30/10/11	A. B.	F.	38	M.	D.	Domestic servant, Housewife	10 months	Working	Cough, Spit	—
345	20/8/13	J. M'O.	M.	34	M.	I.	Carter,	4 months	4 mos.	Cough	U. 3/9/13—9/12/13
368		B. K.	F.	1½	S.	D.	—	6 months	—	Cough	—
384	25/9/13	H. M.	M.	20	S.	I.	Steelworker	4 years	Working	Cough	U. 6/10/13—24/12/13
396	2/10/13	D. E.	M.	16	S.	I.	Miner	month	1 week	Pleurisy	U. 27/10/13—28/10/13



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
18	14	15	16	17	18	19	20	21	22	23	24	25	
210	19/11		Cot.	2	7/2	2/0	2/0	80/				Died 6/12/13.	
224	18/10—23/12		Row	1	2/1	1/1	0	28/	Imp.			Working.	
230	15/11	S.I. 1	Row	1	2/1	2/0	1/0	30/				Off list.	
246	25/11		Ten.	2	2/2	1/1	1/1	40/					
255	15/11	S.I. 2	Ten.	1	2/4	2/3	0/1	27/				Off list.	
257	7/10	S.I. 6	Row	2	5/3	3/2	1/1	40/	Imp.				
276		S.I. 1	Row	1	2/3	2/2	0/1	30/				Off list.	
288		S.I. 1	Row	2	8/2	2/1	0	90/				Died in sanatorium.	
307	7/10	S.I. 1	Row	1	4/4	4/3	0	35/					
311		S.I. 1	Ten.	2	5/5	2/3	1/1	44/				Died in sanatorium.	
374		S.I. 1	Ten.	1	4/3	4/2	0	Satis				Died 8/8/13 from whooping cough.	
326		S.I. 1	Ten.	3	6/3	1/0	1/0	90/	Imp.				
400	19/11	S.I. 1 H.V. 1	Row	2	6/2	2/2	1/1	40/				Off list.	
345	20/11		Ten.	1	2/2	1/2	0	10/	Imp.	+ 15/8 + 24/11			
368		S.I. 1	Ten.	2	6/1							Not notified. Discovered in registrar's returns.	
384		S.I. 1	Row	2	8/2	3/0	1/0	71/				Left district December 1913.	
396	8/10—22/12		Row	1	5/1	4/1	1/0	50/	Imp.			Refused to stay in sanatorium.	

## Old Monkland—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
397	2/10/13	S. C.	F.	5	S.	D.	Scholar	4 weeks	4 wks.	Cough, Spit	—
438	10/11/13	A. D.	F.	7	S.	D.	Scholar	4 months	At School	Cough	Sh. 27/10/13—still in
456	12/11/13	J. M.	M.	40	M.	I.	Mason, Labourer	4 years	Working	Cough	Sh. 12/12/13—still in
458	17/11/13	J. C.	M.	19	S.	I.	Pitheadman	3 months	1 mon.	Cough, Spit	U. 26/11/13—still in
464	20/11/13	R. G.	F.	17	S.	I.	Tailoress	2 years	2 yrs.	Weakness, Cough	—
470	28/11/13	J. D.	M.	16	S.	I.	Pithead worker	6 weeks	6 wks.	Influenza	—
483	10/12/13	J. Q.	M.	21	S.	I.	Miner	2 months	1 week	Cough	—
504	30/12/13	J. F.	M.	36	M.	I.	Barman	1 year	6 mos.	Cough	Kinross
—	17/11/13	M. D.	F.	10	S.	D.	Scholar	18 months	6 wks.	Abdominal Pain	D. 29/11/13—still in
—	12/4/13	I. S.	F.	11	S.	D.	Scholar	1 year	2 mos.	Stiffness of Knee	M. 5/4/13—2/10/13
159	10/5/12	A. J.	M.	12	S.	D.	Scholar	6 months	3 wks.	Pleurisy	St. /12
<b>Shotts.</b>											
36	5/2/06	T. N.	M.	28	S.	I.	Miner	8 years	3 yrs.	Pneum.	—
37	5/2/06	R. A.	M.	54	M.	N.I.	Miner	4 years	6 yrs.	Wasting, Influenza	—
221	10/9/06	C. D.	M.	32	S.	I.	Miner, Hallkeeper	4½ years	2 yrs.	Cough, Spit	Sh. /06, Sh. /10, Sh. /12
61	30/3/07	J. B.	M.	16	S.	I.	Miner	4 years		Influenza	B. /12
153	14/5/08	M. B.	F.	26	S.	D.	Servant, At home	4 years	Working	Influenza	—
43	11/2/09	J. T.	F.	36	M.	D.	Servant, Housewife	5 years	Working	Pleurisy	Sh. /09
68	11/2/10	J. L.	M.	37	S.	N.I.	Miner, Labourer			Cough	



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.						Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.		1913.	Previous Results.	
13	14	15	16	17	18	19	20	21	22	23	24	25
397	21/10—24/11	S.I. 1	Ten.	2	6/3	1/1	1/1	40/				Off list.
438	20/10—24/11	S.I. 1	Ten.	2	4/2	3/0	3/0	30/				
456	3/12	S.I. 1	Cot.	5	4/1	0	0	Satis		+		
458	18/11	S.I. 1	Ten.	2	5/0	3/0	1/0	64/		6/11		
464	1/12	S.I. 1	Ten.	2	5/0	0	0	Satis	W'se			
470	26/11	S.I. 1	Row	4	4/1	1/0	1/0	Satis	W'se			Admitted to sanatorium 3/1/14.
483			Row	2	7/0	3/0	0	66/				Not to be visited.
504		S.I. 1	Cot.	6	8/1	0	0	Satis	W'se			
—	26/11	S.I. 1	Ten.	4	5/1	1/0	1/0	Satis				Tuberculous Peritonitis.
—	21/10—26/11	S.I. 1	Row	2	7/3	2/1	0	55/6				Tuberculous Arthritis of knee-joint.
159			Row	2	5/1	3/0	1/0	Satis	Imp.	+		Residing temporarily outwith the district.
										17/5/12		
36		S.I. 1	Row	2	4/0	3/0	0	9/				Off list.
37	12/11	S.I. 1	Row	2	8/0	3/0	1/0	60/				Died 24/11/13.
221		S.I. 1	Row	1	2/0	1/0	0	13/	Imp.			Working.
61	1/12	S.I. 1	Row	2	3/1	1/0	0	12/6	Arr.			Working.
153	21/12	S.I. 1	Cot.	2	5/0	2/0	2/0	50/	Arr.			Working.
43			Ten.	2	3/3	1/1	1/1	30/				Left district.
68			Poor-house						Stat.			

## Shotts.—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
102	5/3/10	J. B.	M.	42	M.	N.I.	Miner, None	6 years		Influenza	Sh. /09
125	16/3/10	M. C.	F.	16	S.	I.	Servant	2½ years	Work- ing	Cough, Spit	Bl. /10
154	6/4/10	B. G.	F.	23	S.	N.I.	Servant, At home	2 years	2 yrs.	Haemop. Wasting.	B. /10, B. 10, St. 11, Sh. /12, Sh. /12, Sh. /12
143	29/3/10	S. S.	M.	50	M.	N.I.	Miner, None	4 years	4 yrs.	Accident to Thorax	Sh. /10
145	29/3/10	J. C.	M.	20	S.	I.	Miner	1 year	Work- ing	Cough	Sh. /10
155	6/4/10	M. S.	F.	38	M.	D.	Housewife	3 years	Work- ing	Weakness	St. /10
193	29/4/10	M. M.	F.	14	S.	D.	Scholar	3 years		Cough	U. /10
305	11/7/10	J. T.	M.	46	M.	I.	Miner	2 years	Work- ing		Sh. /11
383	26/8/10	T. K.	M.	48	M.	I.	Miner	6 years	Work- ing		—
412	20/9/10	J. M'C.	F.	28	M.	D.	Servant, Housewife	3 years	Work- ing	Pleurisy	St. /10
460	20/10/10	L. K.	F.	28	M.	D.	Servant, Housewife	6 years	Work- ing	Weakness	B. 11, Sh. 3/10/12—8/2/13
29	23/1/11	A. H.	F.	47	M.	D.	Servant, Housewife	4 months	Work- ing	Cough, Weakness	U. /11
63	11/2/11	F. B.	F.	6	S.	N.I.	Scholar	1 month	1 mo.	Influenza	B. /11
231	18/5/11	J. R.	F.	36	M.	D.	Servant, Housewife	1 year	Work- ing	Cough, Spit	B. /11
306	26/7/11	P. B.	M.	34	S.	N.I.					—
332	14/8/11	R. B.	M.	18	S.	I.	Miner	1 month	2 wks.	Cough, Spit	St. /12
358	14/9/11	A. T.	M.	31	M.	I.	Miner	6 months	Work- ing	Cough, Gastritis	St. /11
412	3/11/11	J. J.	M.	13	S.	D.	Scholar	4 years	1 mo.	Haemop.	—
432	4/12/11	T. B.	M.	12	S.	D.	Scholar	2 months	1 mo.	Cough	B. /12



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
102			Row	1	6/3	5/3	1/1	26/	Wse.		- 21/3/10		
125			Row	1	6/3	5/3	2/0	25/	Imp.			Working.	
154	2/12	S.I. 2	Row	2	6/1	2/1	0	40/	Stat		- 1/4/10		
143	12/11		Row	2	5/5	3/2	1/1	15/	Imp.		- 21/3/10 + 22/4/10		
145	12/11		Row	2	6/1	1/0	0	45/	Arr.			Working.	
155		S.I. 1	Ten.	2	7/5	3/2	1/1	40/	Arr.			Working.	
193		S.I. 1	Row	2	6/5	2/3	1/1	45/				Left district 8/4/13.	
305		S.I. 1	Ten.	3	5/0	3/0	1/0	20/				Not to be visited.	
383			Cot.	2	6/3	2/1	0	45/	Imp.			Working.	
412			Ten.	1	2/1	1/1	1/0	28/	Imp.			Working.	
460	12/11	S.I. 1 H.V. 7	Ten.	1	3/2	2/2	1/0	25/	Stat.			Working.	
29	14/12	S.I. 3	Ten.	2	2/1	1/1	0	25/	Imp.			Working.	
63	12/11—1/12	S.I. 1	Row	1	2/2	2/1	0/1	10/	Imp.			At school.	
231			Row	2	4/1	1/1	1/0	25/	Imp.				
306			Poor- house									Died 6/1/13.	
332	1/12	S.I. 1	Row	2	5/1	2/1	0/1	12/6	Imp.			Working.	
358	1/12	S.I. 1	Row	2	2/2	1/2	1/0	25/	Imp.			Working.	
412		S.I. 1	Row	2	5/2	2/2	1/0	60/	Imp.			Working.	
432	1/12	S.I. 1	Row	2	4/1	1/0	1/0	12/6				Off list.	

## Shotts.—Continued

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
	28/5/11	A. M'G.	F.	9	S.	D.	Scholar	2 years	2 yrs.	Enlarged Cervical Glands	—
27	1/2/12	L. C.	F.	3	S.	D.		4 weeks		Cough	—
43	15/2/12	J. M.	M.	20	S.	I.	Miner	2 months	Working	Haemop., Wasting	—
56	23/2/12	M. S.	F.	16	S.	I.	Dressmaker	4 months	Working	Cough, Spit	St. /12
71	14/2/12	B. W.	F.	40	M.	D.	Servant, Housewife	2 years	Working	Influenza	—
97	20/3/12	J. M.	M.	20	S.	N.I.	Miner	5 weeks	5 wks.	Influenza	St./14/5/13—still in
134	18/4/12	A. M'L.	M.	7	S.	D.	Scholar	4 years		Pneumonia	Sh./12
179	14/5/12	J. D.	F.	16	S.	I.	Farmservt., Phead wker	4 months	4 mos.	Cough, Spit	B./12
183	13/5/12	J. F.	M.	16	S.	I.	Millworker	1 year	1 wk.	Cough, Wasting	U./12
256	20/6/12	S. S.	F.	17	S.	I.	Servant, At home	5 weeks	1 wk.	Hæmop., Wasting	St./12, Sh./10/2/13—3/6/13
267	27/6/12	M. W.	F.	47	M.	D.	Servant, Housewife	5 weeks	Working	Cough, Spit	—
277	8/7/12	J. M'L.	M.	9	S.	D.	Scholar	3 months	1 mo.	Cough	Sh./12
289	30/7/12	J. D.	M.	54	M.	N.I.	Miner	3 years	3 years	Cough, Wasting	—
346	4/9/12	J. P.	M.	56	M.	N.I.	Ironworker	—		Cough, Spit	—
382	25/9/12	M. N.	F.	30	M.	I.	Brickwker, Housewife	4 years	Working	Cough, Spit	—
403	14/10/12	J. W.	M.	67	M.	N.I.	Labourer	9 months	Working	Cough, Spit	U./12, U./13
425	29/10/12	S. W.	F.	51	M.	D.	Servant, Housewife	12 months	Working	Cough, Spit	—
444	12/11/12	P. S.	M.	58	M.	N.I.	Roadman	5 months	5 mos.	Pleurisy	—
446	4/11/12	S. K.	M.	52	M.	N.I.	Miner	12 months	12 mos.	Cough	—



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
	1/12		Row	1	2/5	2/4	0/1	30/	Well			Cervical Adenitis.	
27		S.I. 1	Row	1	3/3	3/2	2/1	40/	Imp.				
43		S.I. 1	Ten.	2	4/0	2/0	0	25/				Refused to have treat- ment. Left district.	
56	1/12	S.I. 1	Row	3	4/0	2/0	0	40/	Imp.			Working.	
71		S.I. 1	Row	2	2/2	1/2	1/0	30/				Left district.	
97		S.I. 2	Row	2	3/0	1/0	1/0	35/					
134		S.I. 1	Row	2	2/4	2/3	0/2	28/				Left district.	
179	4/11	S.I. 1	Row	1	4/2	3/2	2/1	20/	Imp.			Working.	
183	17/10, 24/11	S.I. 10	Row	2	5/1	2/0	2/0	44/	W'se				
256	14/2, 4/11	S.I. 1	Ten.	2	5/0	1/0	1/0	40/	Imp.				
267			Row	2	5/1	2/1	1/0	35/				Removed from list.	
277			Row	2	2/3	2/1	0	28/				Left district 16/9/13.	
289	12/11		Row	2	5/2	2/1	0	40/	W'se			Refused to have Sana. treatment.	
346			Poor- house	—	—	—	—	—	Stat.				
382		S.I. 1	Row	1	2/0	1/0	1/0	30/				Died 24/10/13.	
403		S.I. 1	Row	1	1/0	1/0	1/0	20/				Removed from list.	
425	12/11	S.I. 1	Row	2	7/0	2/0	0	80/	Imp.				
444			Cot.	1	2/0	1/0	1/0	Am- ple				Died 7/4/13.	
446			Row	3	9/1	3/0	1/0	2/1	Imp.			Working.	

## Shotts—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
480	16/12/12	M. M.	M.	53	M.	I.	Miner, Insur. agent	1 month	2 wks.	Pleurisy	—
487	18/12/12	G. A.	M.	10	S.	D.	Scholar	3 weeks	3 wks.	Cough, Spit	Sh. 19/12/12—16/13
15	10/1/13	R. S.	M.	62	M.	N.I.	Miner	2 years	2 years	Cough	—
17	11/1/13	A. R.	F.	40	M.	D.	Housewife	10 months	Working	Cough	—
18	12/1/13	T. L.	M.	43	M.	I.	Miner	3 years	1 mo.	Cough, Spit	Sh. 24/1/13—23/5/13 Sh. 3/10/13—24/12/13 trans. to St. 29/12/13—still
21	13/1/13	M. P.	F.	44	M.	D.	Housewife	9 months	2 wks.	Cough, Spit	Sh. 14/1/13—10/5/13
55	3/2/13	M. M'C.	F.	36	M.	D.	Housewife	6 weeks	4 wks.	Cough, Spit	Sh. 10/2/13—21/4/13
75	12/2/13	J. M.	M.	6	S.	D.	Scholar	1 year	3 wks.	Cough, Spit, Wasting	Sh. 21/2/13—2/4/13
110	5/3/13	E. M'S.	F.	34	M.	D.	Housewife	6 weeks	3 wks.	Cough	Sh. 7/3/13—4/6/13
116	8/3/13	D. H.	M.	24	S.	I.	Miner	12 months	2 wks.	Cough, Spit	St. 14/3/13—21/7/13
129	12/3/13	P. M'M.	M.	32	S.	I.	Labourer	5 months	1 mo.	Haemop.	—
142	18/3/13	M. D.	F.	12	S.	D.	Scholar	7 months	6 mos.	Cough, Spit	Sh. 22/3/13—15/5/13
165	31/3/13	M. N.	F.	12	S.	D.	Scholar	3 months	3 mos.	Cough, Wasting	—
167	31/3/13	J. O'N.	F.	31	M.	D.	—	—	—	—	—
157	26/3/13	N. F.	M.	35	M.	I.	Miner	6 weeks	3 wks.	Cough, Wasting	Sh. 4/4/13—4/4/13
183	10/4/13	M. S.	F.	17	S.	D.	None	2 months	2 mos.	Cough, Spit	Sh. 22/4/13—27/5/13
243	27/5/13	M. W.	F.	35	M.	D.	Housewife	10 months	3 wks.	Cough	St. 31/5/13—23/8/13
252	7/6/13	J. D.	F.	42	M.	D.	Housewife	3 months	3 mos.	Weakness	—



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.						Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartment.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.		1913.	Previous Results.	
13	14	15	16	17	18	19	20	21	22	23	24	25
480	4/11/	S.I. 1	Ten.	2	5/1	2/0	0	42/				Died 17/11/13.
487		S.I. 1 H.V. 4	Ten.	2	4/5	3/2	1/1	50/	Imp.			Tuberculous Empyema.
15		S.I. 1	Row	2	6/1	2/0	0	40/				Died Jan., 1913.
17		S.I. 2	Row	2	6/2	3/2	1/1	55/	Arr.	8/1 -		Working.
18		S.I. 2	Row	2	5/1	3/0	1/0	10/		10/1 +		
21		S.I. 3	Ten.	2	5/3	2/2	0/1	30/		9/1 +		Died 16/9/13.
55		S.I. 2	Row	2	3/2	2/0	0	40/		30/1 +		Died 21/4/13.
75		S.I. 2	Row	1	3/3	3/2	1/1	25/				Removed from list.
110		S.I. 3	Cot.	2	5/5	1/1	1/1	40/				Left district Dec. 1913.
116	4/11/		Row	2	8/4	3/2	1/0	28/	Imp.			Working.
129			Poor-house	—	—	—		—	Stat.			
142		S.I. 2	Ten.	2	4/3	3/1	1/0	40/				Died 9/6/13.
165		S.I. 1	Cot.	7	8/0	0	0	65/				Died 29/7/13.
167			Poor-house	—	—	—	—	—				Died 31/3/13.
157			Row	2	2/4	1/4	1/0	30/				Died 4/4/13.
183		S.I. 1 H.V. 1	Row	2	6/2	2/0	0	60/		2/4 +		Died 7/6/13.
233	4/11	S.I. 1	Cot.	2	2/3	1/0	1/0	35/	Imp.			Working.
252		S.I. 1	Row	2	5/3	3/2	1/0	60/				Died 12/7/13.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
286	24/6/13	B. B.	M.	38	S.	N.I.	Footballer, Barman	6 months	—	Cough, Spit	St. 10/9/13—13/13
287	24/6/13	M. G.	F.	33	S.	I.	Millgirl	5 months	3 mos.	Pneumonia	—
313	16/7/13	T. S.	M.	46	M.	N.I.	Farmer	3 months	3 mos.	Pleurisy	—
355	29/8/13	J. S.	M.	54	M.	N.I.	Farmer	4 months	3 mos.	Pleurisy	St. 5/9/13—26/13
393	30/9/13	J. M'M.	M.	18	S.	N.I.	Hawker	7 months	3 mos.	Cough, Spit	—
417	17/10/13	Mrs. C.	F.	38	M.	D.	Housewife	2 years	Working	Weakness	—
422	21/10/13	S. W.	M.	33	M.	I.	Miner	3 months	5 wks.	Pleurisy	U. 8/11/13—still
447	7/11/13	W. M.	M.	36	S.	N.I.	Miner	2 years	—	Cough, Spit	—
—	5/12/13	J. M'A.	F.	5	S.	D.	—	9 weeks	—	Influenza	—
—	20/3/13	J. M'C.	F.	39	S.	N.I.	Out worker	years	Working	Pneumonia	—

### Clinical Records.

Sanatorium and hospital treatment provided in seven of the institutions situated throughout the County, five in the Middle Ward, one in the Upper Ward, and one in the Lower Ward, is now reported upon. In considering the results obtained regard must be had to the stage of the disease on admission. This is explained in the following note, which gives the Turban-Gerhardt classification slightly extended :—

STAGE I.—Disease of slight severity, limited to small areas of one lobe, that, for instance, in case of affection of both apices, may not extend beyond the spine of the scapula and the clavicles; in case of affection of one apex, frontal, beyond the second rib.

By disease of slight severity is to be understood : disseminated foci manifested by slight dullness, impure, rough, feeble, vesiculobronchial or bronchovesicular breathing, and fine or medium rales.

STAGE II.—Disease of slight severity, more extensive than I., but affecting at most the volume of one lobe; or severe disease, extending at most to the volume of one half lobe.



Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
286	4/11	S.I. 1	Ten.	6	4/3	0	0	Satis		27/3 +		Died 10/11/13	
287		S.I. 1	Row	2	6/0	1/0	0	Satis				Left district day of notification.	
313		S.I. 1	Cot.	6	3/0	0	0	Satis				Died day of notifi- cation.	
355		S.I. 1	Cot.	7	3/0	0	0	Satis		9/6 — 18/8 — 18/8 G. P. —		Died 27/11/13.	
393		S.I. 1	Poor- house	—	—	—	—	—	Stat.				
417	20/10	S.I. 1	Row	2	5/3	3/1	1/0	45/	Wse.				
422	4/11	S.I. 1	Row	1	4/3	3/3	1/1	10/					
447		S.I. 1	Poor- house	—	—	—	—	—	Stat.				
—		S.I. 1	Row	1	2/3	2/2	2/0	40/				Died 3/12/13. Noti- fied after death.	
—		S.I. 1	Poor. house	—	—	—	—	—	Stat.				

By severe disease is to be understood: compact infiltration, recognised by great dullness, very weak bronchovesicular or bronchial breathing with or without rales. Pleuritic dullness, if only a few centimeters in extent, is to be left out of account; if it is extensive, pleuritis should be specially mentioned under tuberculous complications.

STAGE III.—All cases extending beyond II., and all such with considerable cavities.

Considerable cavities, to be recognised by tympanitic sound, amphoric breathing, and extensive coarse consonating rales, come under Stage III.

The stage of the disease is to be indicated for each side separately. The case, as a whole, is to be classified according to the more diseased side. For example, RII, LI=Stage II.

For the purposes of this report, the cases in Stage I. and in Stage II. have each been further divided into two groups, lettered A and B. Those in Group A are cases which had at some time tubercle bacilli in the sputum, or which had a history of hæmoptysis. In Group B clinical symptoms were present, but no tubercle bacilli were found, or there was no history of hæmoptysis.



## COUNTY SANATORIUM, STONEHOUSE.

RESIDENT MEDICAL OFFICER—J. R. SUTHERLAND, M.B., Ch.B., D.P.H.

*Buildings and Grounds.*—The County Sanatorium, Stonehouse, is situated about half a mile from the town of Stonehouse, in an agricultural district, to the east of the River Avon. The site extends to 15 acres; elevation, 526 feet; soil is somewhat clayey; and the climate is bracing. The public roads lead mostly to farms, and are unfrequented, so that they can be utilised for exercising patients. The grounds are divided into two lots, one for females and one for males. The administrative buildings are of freestone, and include a steam laundry, a steam disinfecter, and sputum sterilizer.

*Patients' Quarters.*—The patients' dining room is to the rear of the kitchen, and it is fitted with steam sterilizing sinks.

Ward Pavilion I. has ten beds arranged in two rooms of four beds each and two rooms of one bed each. Ward Pavilion II. has two large wards with seven beds each. Near this is a chalet with four beds, thus providing twenty-eight beds for patients in the old part of the building.

A new pavilion on sanatorium lines, built chiefly of wood, has twenty beds, arranged in eight rooms with two beds each and one room with four beds. Spray baths and lavatories are placed in the centre at the rear. This accommodation is erected on ground recently acquired. There are also two two-bed shelters, making the total bed accommodation available in the institution fifty-two beds for both sexes.

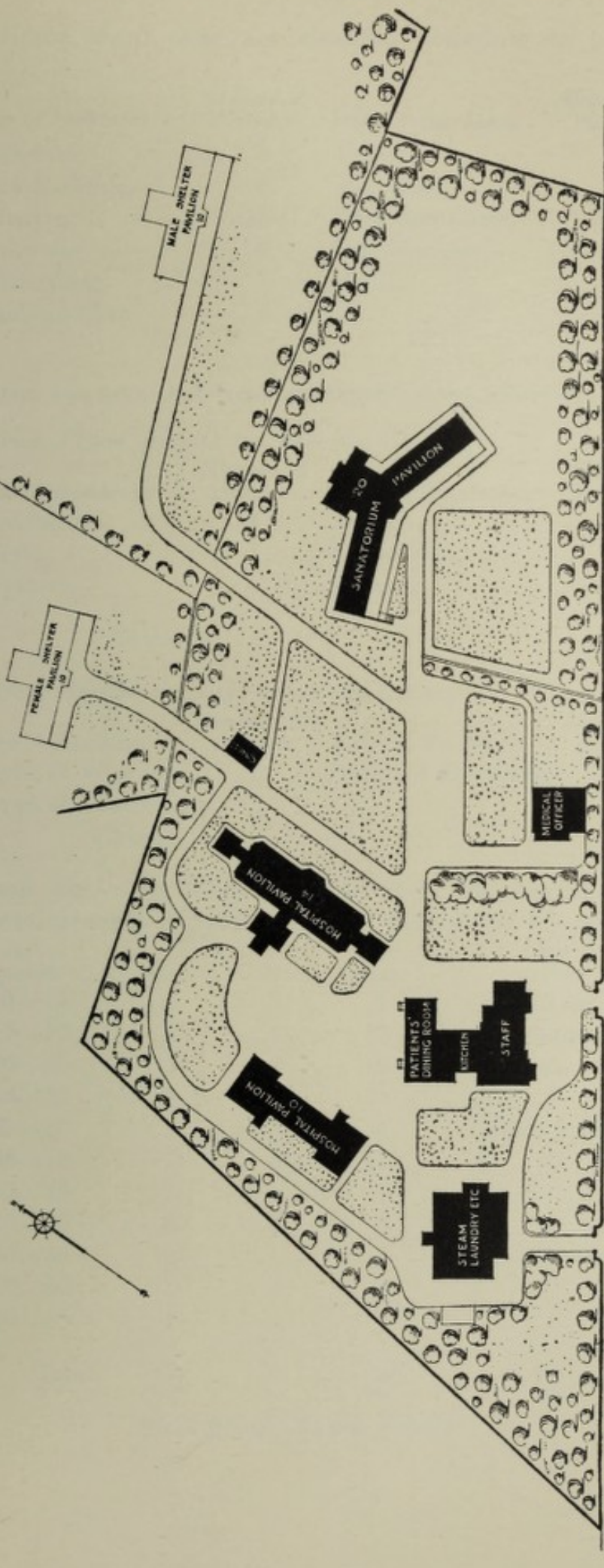
The indoor staff consists of a Resident Medical Officer, a Matron, a Ward Sister, five Nurses, and ten Maids. The outdoor staff comprises an engineer and two gardeners.

*Patients Treated.*—There were in residence at the beginning of the year 20 patients, and during the year 101 patients were admitted, making the total number under treatment 121. The patients discharged during the year numbered 90. These 90 patients are classified in four groups, and the more important clinical data for each case is given in the tabular statements which follow. It will be found that 15 were in Group I., 19 in Group II., 50 in Group III., and 6 in Group IV.

*Place of Residence.*—These patients were drawn not only from the Middle Ward District, but also from the Upper Ward, from Burghs within the County, and from places outwith the County altogether.



# COUNTY SANATORIUM STONEHOUSE



ALICE CULLEN LITCHFIELD & BROWN  
ARCHITECTS HAMILTON.





The Middle Ward cases are classified according to parish, as follows :—

Place of Residence.	Number of Patients.	Place of Residence.	Number of Patients.
Avondale, - -	3	Dalserf, - -	8
East Kilbride, -	3	Hamilton, -	6
Blantyre, - -	20	New Monkland, -	1
Bothwell, - -	15	Old Monkland, -	1
Cambuslang, - -	7	Shotts, - -	2
Cambusnethan, -	4		—
Total, - -	-	- - - -	<u>70</u>

1 patient was admitted from the Upper Ward District.

*Patients from Places outwith the County :—*

Place of Residence.	Number of Patients.	Place of Residence.	Number of Patients.
Clydebank, - -	4	Alloa, - -	1
Bervie - -	1	Stonehaven, -	1
Ayrshire, - -	1	Millport, - -	1
Total, - -	-	- - - -	<u>9</u>

*Patients from Burghs situated within the County :—*

Place of Residence.	Number of Patients.	Place of Residence.	Number of Patients.
Burgh of Wishaw, -	2	Burgh of Hamilton, -	6
Burgh of Coatbridge, -	2		—
Total, - -	-	- - - -	<u>10</u>

*Age and Sex.*—The following table shows the Age and Sex (in quinquennial groups) of patients treated throughout the year :—

Age period.	M.	F.	Both sexes.	Age group.
10—15	...	3	3	School age 3
15—20	6	7	13	} Adolescence
20—25	12	7	19	
25—30	9	6	15	} Early mature
30—35	1	3	4	
35—40	7	5	12	
40—45	7	...	7	
45—50	5	1	6	} Late mature
50—55	2	...	2	
55—60	1	1	2	
60—65	1	...	1	
Total,	<u>51</u>	<u>33</u>	<u>84*</u>	<u>84</u>

\*6 in group IV. not included.

*Duration of Illness.*—Patients with pulmonary lesions have been classified according to duration of illness on admission, stated in monthly periods :—

Months,	1-3	3-6	6-12	12-18	18-24	Over 24	Indefinite.	Total.
Patients,	9	15	22	10	4	23	1	84

*Earliest Symptoms recognised.*—Cough, 48; pleurisy or pain in the chest, 10; hæmoptysis, 7; influenza, 6; weakness, 5; loss of weight, 3; dyspepsia, 2; anæmia, 2; indefinite, 1; total, 84.

#### STAGE OF DISEASE.

Complications.	Group I.	Group II.	Group III.	Total.
Tuberculous Laryngitis, ...	...	...	6	6
Other Tuberculous Lesions,	2	1	8	11
Hæmoptysis, ...	...	1	3	4
Dyspepsia, ...	1	...	1	2
	—	—	—	—
Total, ...	3	2	18	23
	—	—	—	—

*General Results.*—Patients classified according to stage of disease :—

	Group I.	Group II.	Group III.	Total.
Arrested, ...	5	2	...	7
Improved, ...	7	8	14	29
Stationary, ...	3	7	26	36
Worse, ...	...	2	6	8
Died, ....	...	...	4	4
	—	—	—	—
Total, ...	15	19	50	84
	—	—	—	—

#### LENGTH OF RESIDENCE IN DAYS.

	Aver.	Max.	Min.
Group I., ...	70	111	9
Group II., ...	104	326	11
Group III., ...	74	292	1

*Sputum Examinations.*—Of 106\* patients reported on, 78 proved positive at some time during the patient's residence in sanatorium, while 28 were negative throughout.

\* This number includes 1914 cases up to 15/6/14.



Two of the positive results were obtained only by animal inoculation, the records being as follows:—

		Smear.	7 days.	G. P.
$\frac{25}{1913}$	R. P.	$\frac{28/3/14,}{-}$	$\frac{21/4/13,}{-}$	$\frac{28/4/13.}{+}$
			7 days.	G. P.
$\frac{18}{1913}$	H. F.	$\frac{12/3/13,}{0}$	$\frac{8/4/13,}{0}$	$\frac{15/5/13,}{+}$
				$\frac{13/6/13,}{0}$
				$\frac{14/7/13.}{0}$

The value of animal inoculation in the examination of sputum reported negative by ordinary methods is further illustrated in the following case:—

G. A.	$\frac{12/9/13,}{M.}$	$\frac{13/10/13,}{F.}$	$\frac{30/10/13,}{V.F.}$	$\frac{19/12/13,}{0}$	$\frac{6/1/14,}{0}$
		7 days.	G. P.		
		$\frac{22/1/14,}{0}$	$\frac{21/1/14.}{+}$		

In all 20 inoculations were made, but in 17 of them the results corresponded with those obtained by other methods. Twenty-one 7-day specimens were examined, but in all cases the result corresponded with smear either before or after, and in no case was the result obtained of much value.

7 patients whose sputum on admission contained T.B. were discharged without T.B. in their spit. The stage of disease and general health on admission to sanatorium and a few notes on subsequent history to the present time are added:—

$\frac{60}{1913}$	A. A. (12).	$\frac{18/8/13,}{V.F.}$	$\frac{19/9/13,}{V.F.}$	$\frac{20/10/13.}{0}$
-------------------	-------------	-------------------------	-------------------------	-----------------------

On admission the general health is recorded as favourable, and the disease was in Stage II.

Since discharge from sanatorium this patient has become much worse, and was readmitted to sanatorium on 15/6/14, when the sputum was found to contain T.B.

Duration of treatment—82 days.

G. A. (19).	$\frac{12/9/13,}{M.}$	$\frac{13/10/13,}{F.}$	$\frac{30/10/13,}{V.F.}$	$\frac{19/12/13,}{0}$	$\frac{6/1/14,}{0}$
		7 days.	G. P.		
		$\frac{22/1/14,}{0}$	$\frac{21/1/14.}{+}$		

On admission the general health was favourable, and the disease was in Stage II. Since discharge on 28/3/14 this patient has fully maintained the improvement gained in sanatorium.

$\frac{48}{1913}$  T. C. (30).  $\frac{28/6/13,}{V.F.}$   $\frac{29/7/13,}{F.}$   $\frac{6/3/14,}{M.}$   $\frac{2/4/14,}{M.}$   $\frac{30/4/14,}{V.F.}$   $\frac{29/5/14,}{0}$

On admission the disease was in Stage III., and patient's general health was unfavourable. He suffered from diarrhœa.

Since discharge in August, 1913, patient has got worse, and was readmitted in February, 1914, when sputum contained T.B.

J. D.  $\frac{3/9/13,}{M.}$   $\frac{30/9/13,}{M.}$   $\frac{6/10/13,}{M.}$   $\frac{24/12/13,}{M.}$   $\frac{4/2/14,}{0}$   $\frac{18/2/14,}{0}$   $\frac{10/3/14,}{0}$  <sup>7 days.</sup>  
 $\frac{19/3/14.}{O. G. P.}$

$\frac{3}{1912}$  B. E.  $\frac{29/11/12,}{F.}$   $\frac{4/1/13,}{M.}$   $\frac{2/4/13,}{V.F.}$   $\frac{2/5/13,}{0}$   $\frac{3/6/13,}{0}$

On admission disease was in Stage III., general health was unfavourable, and patient was confined to bed for three weeks on account of evening temperature rising to 100-101° F. (month temp.).

Since discharge patient has improved still further, has now no cough or spit, and is working as a nurse in a well-known Scotch sanatorium, having passed a medical examination before commencing duty on 5/1/14.

$\frac{15}{1912}$  J. R. (23).

On admission general health favourable, and disease in Stage I.

$\frac{3/2/13,}{V.F.}$   $\frac{27/2/13,}{V.F.}$   $\frac{28/3/13,}{0}$   $\frac{29/4/13,}{0}$   $\frac{24/5/13,}{0}$

Since discharge this patient has been working in the Burgh of Hamilton, and is said to be keeping well.

$\frac{58}{1913}$  C. S.  $\frac{25/8/13,}{V.F.}$   $\frac{30/9/13,}{0}$

On admission Stage III.; general health unfavourable.

On 1/6/14 patient is reported as keeping very well. Has no cough and no spit.

The following record of a patient who has been in sanatorium for 19 months may be of interest:—

$\frac{29/11/12,}{O.}$   $\frac{10/12/12,}{O.}$   $\frac{16/12/12,}{V.F.}$   $\frac{14/1/13,}{O.}$   $\frac{10/3/13,}{O.}$   $\frac{10/4/13,}{O.}$   $\frac{9/5/13,}{O.}$   
 $\frac{11/6/13,}{V.F.}$   $\frac{9/7/13,}{O.}$   $\frac{9/8/13,}{O.}$   $\frac{10/9/13,}{V.F.}$   $\frac{13/10/13,}{V.F.}$   $\frac{30/10/13,}{V.F.}$   $\frac{24/12/13,}{O.}$   
 $\frac{31/1/14,}{V.F.}$   $\frac{27/2/14,}{F.}$   $\frac{8/4/14,}{O.}$   $\frac{18/5/14,}{V.F.}$   $\frac{11/6/14,}{V.F.}$

If the progress of the case is judged by the result of the sputum examination on admission and on discharge, it is found that 20 have improved and 18 have got worse. The rest, including 28, who were negative throughout, show no change.



## Clinical Records.

### EXPLANATORY NOTE.

The more important data in these records have been extracted in such a way as to give the greatest amount of information in the smallest possible space, and the consequent use of abbreviations and signs necessitates the following explanatory notes.

#### CONDITION ON ADMISSION.

*Number of Lobes.*—Column 8. R. = right lung, L. = left lung. Small numbers indicate number of lobes involved in each case. In a few instances the letters A and B are given instead of figures signifying apex and base respectively.

*Temperature Range.*—Columns 9 and 18. The temperature range on admission is taken as the average of the morning and evening temperature of the first 3 complete days after admission, and on discharge, of the last 3 complete days in residence.

*General Health.* Column 10. Favourable and unfavourable.

*Sputum.* Column 11. The amount of sputum is denoted by a figure, 0 = no sputum, 1 = scanty, 2 = moderate, and 3 = abundant sputum.

#### CONDITION ON DISCHARGE.

*General Result.* Column 15. The following terms are used to describe the condition of patients on discharge from the sanatorium:—

Arrested = General health restored in every respect. No signs except such as are compatible with a healed lesion. Sputum, if still present, free from tubercle bacilli.

Improved = General health completely restored or considerably improved, but physical signs not completely cleared up or bacilli still present in sputum.

Stationary = No appreciable improvement in physical signs or in general health.

Worse = Deterioration of general or local condition, or of both.

Died =

*T.B.*—Column 20. The examinations recorded all apply to 1913, the dates signifying the day and month of examination, a + or - sign indicating the presence or absence of tubercle bacilli at the date recorded. 7-d occurring after the date indicates that a seven days' specimen of sputum was examined, and G.P., that a guinea-pig inoculation was performed. Full details are given in the reports on the various institutions.

## Stonehouse.

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
<b>I.A</b>										
15 1912	—	J. D.	M.	23	5 months	Influenza, - -	L <sub>1</sub>	97—98	Fav.	1
3 1913	1 1913	Mrs. M.	F.	29	6 months	Influenza, - -	L <sub>1</sub>	97.4—98.6	Unfav.	1
11 1913	—	S. M.	M.	38	6 months	Cough, Spit, -	L <sub>1</sub>	97.4—97.8	Fav.	1
16 1913	—	J. B.	M.	29	3 months	Cough, - -	R <sub>1</sub>	97—97.6	Fav.	1
20 1913	—	A. N.	M.	27	2 years	Indigestion, -	R <sub>1</sub>	97.4—98.8	Fav.	1
24 1913	137 1913	W. S.	M.	17	6 months	Cough, - -	R <sub>1</sub>	97.6—98.6	Fav.	1
<b>I.B</b>										
2 1913	—	A. M.	F.	23	1 month	Cough, - -	R <sub>1</sub>	97—97.4	Fav.	1
7 1913	56 1913	G. B.	M.	23	3 weeks	Pain in Chest, Pleurisy	L <sub>1</sub>	97.4—98.4	Fav.	1
17 1913	94 1913	Mrs. B.	F.	36	5 weeks	Tiredout feeling	L <sub>1</sub>	97.6—98	Fav.	1
30 1913	181 1913	Mrs. H.	F.	23	2 years	Pleurisy, - -	R <sub>1</sub>	97—97.4	Fav.	1
37 1913	115 1909	J. K.	M.	35	4½ years	Influenza, - -	L <sub>1</sub>	96.8—97.2	Fav.	1
49 1913	249 1913	C. M'G.	M.	17	6 months	Cough, Spit, -	R <sub>1</sub>	97.4—98.4	Fav.	1
65 1913	347 1911	Mrs. H.	F.	39	2½ years	Pleurisy, - -	L <sub>1</sub>	97.2—98.2	Fav.	1
69 1913	353 1913	B. C.	M.	23	5 months	Cough, - -	R <sub>1</sub>	98—98.6	Fav.	1
79 1913	406 1913	Mrs. H.	F.	39	8 months	Cough, Spit, -	R <sub>1</sub>	97.4—98	Fav.	1
<b>II.A</b>										
16 1912	288 1909	T. K.	M.	20	3 years	Cough, - -	L <sub>1</sub>	97.4—98.4	Fav.	2
17 1912	238 1911	P. S.	M.	28	12 months	Loss of appetite, weakness	L <sub>2</sub>	97.2—98.2	Fav.	2



## STONEHOUSE.

Reg. No.	Complications.	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	NOTES.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
15 1912	—	168	Imp.	8	+19	97.2—98.2	1	2/2+29/4—24/5— 27/2+28/3—	—
3 1913	—	66	Arr.	2	+24	97.6—98.2	0	10/1+	—
11 1913	—	18	Stat.	0	+6	97.6—98	1	15/2+	Family not being supported.
16 1913	—	86	Imp.	8	+16	97—97.6	1	3/3+4/4—	—
20 1913	Hyper-acidity	95	Imp.	6	+9	97—98	1	18/3+19/4—20/5—	—
24 1913	—	111	Arr.	2	+12	97—98	1	26/3—8/4, 7d.— 15/4—29/4—G.P. 13/6—	Haemoptysis.
2 1913	—	9	Stat.	0	+0	97—97.4	1	12/1—	—
7 1913	—	42	Arr.	4	+15	97.2—98.4	0	6/2—8/3—	—
17 1913	—	67	Arr.	2	+14	97.2—98	1	10/3—22/3 7 d.— 15/4—G.P.	—
30 1913	—	44	Imp.	0	+14	97—97.4	1	15/4—19/4— 2/5 7 d.—2/7—G.P.	Left to look after children.
37 1913	—	80	Arr.	4	+17½	97—97.6	1	9/5—14/5 7 d.— 26/5—G.P. 7/7—G.P.	—
49 1913	—	94	Imp.	2	+14	97—98.4	1	26/6—28/7— 3/9—G.P.	—
65 1913	—	33	Stat.	0	+3	97.2—98.2	1	29/8—	—
69 1913	—	101	Imp.	4	+18	97.4—99	1	9/9—23/9 7 d.— 4/10—1/11—G.P. 1/12—	—
79 1913	Pleurisy	43	Imp.	1	+8	97.4—98	1	21/10—20/11—	—
16 1912	—	326	Wse.	6	+15	97.4—98.6	2	12/3+12/9+ 29/11+	—
17 1912	—	73	Stat.	2	+15	97.2—98	2	1/5—	—

## Stonehouse—Continued.

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
<b>II.A</b> —Continued.										
18 1912	443 1912	H. K.	M.	38	2 months	Weakness, -	L <sub>1</sub> R <sub>1</sub>	97·2—98·2	Unfav.	3
19 1912	—	J. C.	F.	26	18 months	Cough, - -	L <sub>2</sub> R <sub>1</sub>	97·4—98	Fav.	1
12 1913	68 1913	H. E.	M.	17	6 months	Cough, - -	R <sub>1</sub>	97·6—98	Unfav.	2
22 1913	181 1912	A. M.	M.	21	16 months	Cough, - -	R <sub>2</sub>	97·4—98·4	Fav.	1
25 1913	—	R. P.	M.	29	8 months	Tired out feeling,	L <sub>2</sub>	97·2—98·6	Fav.	1
42 1913	—	P. K.	M.	40	6 months	Cough, spit, -	R <sub>2</sub>	98·4—99·8	Unfav.	1
46 1913	207 1913	Mrs. L.	F.	48	3 months	Cough, - -	R <sub>1</sub>	97·6—99	Unfav.	2
50 1913	278 1913	Mrs M'C	F.	24	2 months	Cough, - -	L <sub>1</sub>	97·4—98·8	Unfav.	2
52 1913	295 1913	J. H.	M.	41	5 months	Influenza, -	L <sub>2</sub>	97·2—98·4	Fav.	3
58 1913	322 1913	C. S.	F.	12	2 years	Loss of flesh, -	R <sub>1</sub> L <sub>1</sub>	97·8—98·4	Unfav.	1
60 1913	342 1913	A. A.	F.	12	8 months	Cough, spit, -	L <sub>2</sub>	97·8—99	Fav.	1
61 1913	—	D. M'K.	M.	62	8 months	Haemoptysis, -	R <sub>1</sub>	97·4—98·4	Fav.	2
<b>II.B</b>										
15 1913	79 1913	M. L.	F.	26	7 months	Cough, spit, -	L <sub>2</sub>	97·6—98	Fav.	1
38 1913	243 1913	Mrs. W.	F.	34	9 months	Cough, - -	L <sub>1</sub>	97·4—98·2	Fav.	1
45 1913	—	H. C.	M.	41	5 years	Cough, - -	R <sub>2</sub>	97·6—98	Fav.	1
62 1913	—	W. R.	M.	27	6 months	Cough, spit, -	R <sub>2</sub>	98·2—100·4	Unfav.	1
99 1913	491 1913	Mrs. L.	F.	24	2 years	Anaemia, - -	R <sub>1</sub> L <sub>1</sub>	97·6—98·2	Fav.	0



## STONEHOUSE—Continued.

Reg. No.	Complications.	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	Notes.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
18 1912	—	110	Imp.	2	+4	97.4—98	2	22/11 + 24/12 + 30/1 +	—
19 1912	—	168	Imp.	6	+14	97.4—98.4	1	5/12 + 31/1 + 3/3 + 4/4 + 5/5 + 5/6 +	—
12 1913	—	98	Imp.	4	+18	97.4—98	1	18/2 + 2/4 + 19/4 +	—
22 1913	—	188	Imp.	8	+2	97—98	1	22/3 + 23/4 + 22/5 + 25/6 +	—
25 1913	—	89	Stat.	2	+3	97.2—98.2	1	28/3 - 21/4, 7d. - 23/5 + G.P.	—
42 1913	—	39	Imp.	0	+8	97.2—98.2	1	17/6 + 17/7 +	—
46 1913	—	28	Stat.	0	+10	97.6—98.6	1	26/6 +	—
50 1913	—	22	Stat.	0	+1½	97.2—98.8	2	24/8 +	Left against advice.
52 1913	—	86	Stat.	0	+17	97.4—99	2	17/7 + 18/8 + 18/9 +	—
58 1913	—	149	Arr.	0	+21	97.6—98	1	25/8 + 30/9 -	—
60 1913	—	82	Imp.	1	+12	98—98.4	1	18/8 + 18/9 + 20/9 -	—
61 1913	Haemop.	65	Wse.	0	+5	97.8—98.6	2	18/8 + 24/9 +	—
15 1913	—	144	Imp.	0	+18	97.2—98.2	1	3/3 - 20/3 - 15/4 - G.P. 23/5 -	—
38 1913	—	84	Imp.	0	+8	97.2—98.4	1	3/6 - 12/6, 7d. - 5/7 - 1/8 - G.P.	—
45 1913	—	84	Arr.	2	+20	97—98.2	1	26/6 - 17/7, 7d. - 25/7 - 19/8 - G.P.	—
62 1913	Abdomin. Tub.	28	Stat.	0	+4	97.6—99.4	1	25/8 -	—
99 1913	—	11	Stat.	0	+½	97.2—98	0		Left on account of domestic trouble.

## Stonehouse—Continued.

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
<b>III.</b>										
2 1912	274 1912	M. M.	F.	18	2 months	Cough, - -	R <sub>2</sub> L <sub>1</sub>	98·4—99·2	Unfav.	1
3 1912	337 1912	B. E.	F.	24	4 months	Cough, - -	R <sub>3</sub> L <sub>2</sub>	99·2—100·6	Unfav.	2
4 1912	291 1912	B. M.	F.	18	12 months	Cough, - -	R <sub>1</sub> L <sub>2</sub>	97·6—98·6	Fav.	2
5 1912	431 1912	J. B.	M.	22	34 months	Pleurisy, - -	R <sub>3</sub> L <sub>2</sub>	97·4—98·4	Unfav.	2
6 1912	441 1912	J. M.	M.	58	12 months	Cough, - -	R <sub>2</sub> L <sub>1</sub>	97·8—99	Unfav.	3
7 1912	358 1912	T. B.	M.	22	30 months	Cough, - -	R <sub>2</sub> L <sub>2</sub>	97·6—98·4	Unfav.	3
8 1912	—	A. G.	M.	21	12 months	Cough, Spit, -	R <sub>1</sub> L <sub>2</sub>	97·6—98·6	Fav.	3
9 1912	460 1912	Mrs. H.	F.	38	30 months	Cough, - -	R <sub>2</sub> L <sub>2</sub>	97·2—98	Unfav.	2
10 1912	463 1912	J. B.	M.	22	3 months	Haem., - -	L <sub>2</sub> R <sub>1</sub>	97·6—98·2	Unfav.	2
11 1912	465 1912	J. M'T.	F.	18	5 months	Cough, Spit, -	L <sub>2</sub>	97·4—99	Fav.	2
12 1912	381 1912	J. P.	M.	27	2 months	Cough, - -	R <sub>2</sub> L <sub>1</sub>	98—99	Fav.	3
13 1912	472 1912	R. J.	M.	18	6 months	Influenza, - -	L <sub>2</sub>	97·2—98·8	Fav.	1
14 1912	—	P. B.	M.	19	12 months	Cough, - -	R <sub>2</sub> L <sub>2</sub>	97—98	Unfav.	3
4 1913	—	J. G.	M.	50	3 years	Cough, - -	R <sub>2</sub>	97—97·4	Unfav.	2
5 1913	38 1913	G. M.	M.	38	15 months	Weakness, - -	R <sub>1</sub> L <sub>1</sub>	97·4—99·4	Unfav.	3
6 1913	—	W. P.	M.	44	4 years	Influenza, - -	R <sub>2</sub> L <sub>1</sub>	97·4—98·6	Unfav.	3
8 1913	47 1913	J. M.	F.	25	3 months	Loss of Weight,	R <sub>1</sub> L <sub>1</sub>	99·2—101	Unfav.	3



## STONEHOUSE—Continued.

Reg. No.	Complica- tions.	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	NOTES.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
<u>2</u> 1912	Tub. Laryng.	262	Imp.	4	+20	97·2—98·4	1	31/7/12+30/1+ 28/3+	—
<u>3</u> 1912	—	292	Imp.	6	+48	97·2—98·2	1	29/11/12+16/1+ 2/4+2/5—3/6—	—
<u>4</u> 1912	—	137	Stat.	—	—2	98—100·4	2		—
<u>5</u> 1912	Haem.	224	Wse.	—	—24	97·6—98·8	3	9/11/12+ 10/12/12+ 16/1+27/2+ 28/3+29/4+ 24/5+	—
<u>6</u> 1912	—	60	Wse.	—	—2	98·4—99·4	3	24/12/12+	—
<u>7</u> 1912	—	314	Stat.	—	+28	97·2—99	3	24/12/12+8/3+ 10/4+9/5+11/6+ 9/7+8/8+9/9+	—
<u>8</u> 1912	—	195	Imp.	8	+14	97·4—98·4	1	27/11/12+25/1+ 22/3+23/4+ 22/5+	—
<u>9</u> 1912	—	112	Stat.	—	+9	97·4—99	2	29/11/12+14/1+	—
<u>10</u> 1912	Haem.	56	Wse.	—		99—102	3	4/12/12+	Acute Pneu., Tuber- culosis, following; profuse Haemoptysis.
<u>11</u> 1912	—	75	Imp.	4	+7½	97·6—98	1	10/12/12+12/2+	—
<u>12</u> 1912	—	128	Imp.	4	+31	97—98·4	2	10/12/12+14/1+ 27/2+	—
<u>13</u> 1912	—	85	Imp.	4	+13	97—97·8	1	19/12/12+1/2+ 8/3+	—
<u>14</u> 1912	—	75	Stat.	—	+1	97·2—98·4	3	19/12/12+	—
<u>4</u> 1913	—	89	Imp.	4	+16	97·4—98·2	2	22/1+3/3+4/4+	—
<u>5</u> 1913	Ischio- Rectal Abscess, Diarrhoea	21	Stat.	0	—½	97—97·4	3	25/1+	—
<u>6</u> 1913	Haemorr- hoids	89	Stat.	0	+15	97·4—99	3	28/1+27/2+ 26/3+	—
<u>8</u> 1913	Tub. Larynx	181	Stat.	0	+8	97·4—98·4	1	8/2+15/4+20/5+ 13/6+14/7+	—

## Stonehouse—Continued.

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
III.—Continued.										
9 1913	46 1913	P. A.	M.	28	5 months	Pain in Chest, -	L <sub>2</sub>	97—100	Fav.	1
10 1913	59 1913	J. M'G.	M.	42	5 months	Pain in Chest, -	L <sub>2</sub>	98—101	Unfav.	2
13 1913	—	G. M'L.	M.	48	6 months	Cough, - -	L <sub>2</sub>	98·2—99·6	Fav.	3
14 1913	77 1913	M. M.	F.	22	3 months	Cough, Spit, -	L <sub>2</sub>	97·8—99·4	Unfav.	1
18 1913	103 1913	H. F.	M.	20	2 years	Haemoptysis, -	R <sub>1</sub> L <sub>2</sub>	97—98·2	Unfav.	2
19 1913	—	P. M'D.	M.	29	9 months	Cough, - -	R <sub>1</sub> L <sub>2</sub>	97—98·4	Unfav.	3
21 1913	122 1913	J. C.	F.	15	2 months	Cough, - -	R <sub>2</sub> L <sub>1</sub>	100—101·6	Unfav.	1
23 1913	138 1913	W. F.	M.	37	2 years	Influenza, Pleur.	L <sub>2</sub>	97·4—98·2	Unfav.	2
26 1913	130 1913	J. M.	M.	20	3 months	Cough, - -	R <sub>2</sub> L <sub>2</sub>	101·4—102·6	Unfav.	3
27 1913	68 1919	C. C.	F.	16	27 months	Pleurisy, - -	L <sub>2</sub>	98·4—100·4	Unfav.	3
28 1913	—	W. M'G.	M.	17	4 years	Haemoptysis, -	R <sub>2</sub>	97·6—99·2	Unfav.	1
32 1913	392 1911	Mrs. W.	F.	28	2 years	Cough, - -	R <sub>2</sub> L <sub>2</sub>	99—100	Unfav.	2
33 1913	338 1910	R. S.	M.	44	3 years	Cough, - -	R <sub>3</sub> L <sub>2</sub>	97—99·4	Unfav.	3
35 1913	223 1913	Mrs. B.	F.	58	1 year	Cough, - -	R <sub>2</sub> L <sub>1</sub>	97·2—98·4	Unfav.	2
39 1913	81 1912	J. F.	M.	39	18 months	Cough, - -	L <sub>2</sub>	98—99	Unfav.	3
40 1913	236 1913	D. M'C.	M.	26	6 years	Haemoptysis, -	R <sub>3</sub> L <sub>2</sub>	97·4—101·2	Unfav.	3
41 1913	237 1910	P. R.	M.	48	3 years	Cough, - -	R <sub>2</sub> L <sub>2</sub>	97—98·2	Fav.	3
47 1913	275 1913	M. S.	F.	17	6 months	Anaemia, - -	L <sub>2</sub>	99·6—101	Unfav.	3
48 1913	123 1911	T. C.	M.	30	2 years	Cough, - -	R <sub>2</sub> L <sub>2</sub>	97·6—98·4	Unfav.	3



## STONEHOUSE—Continued.

Reg. No.	Complications.	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	NOTES.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
9 1913	Tub. Larynx	121	Stat.	4	+9½	97·2—98·4	2	8/2+8/3+10/4+9/5+	—
10 1913	Renal Tub.	30	Stat.	0	+1	98·4—100	2	11/2—	—
13 1913	—	89	Stat.	0	+4½	98—99	2	27/2+26/3+29/4+	—
14 1913	—	83	Imp.	0	+19	97—97·8	1	3/3—20/3, 7d.+19/4+	—
18 1913	—	127	Stat.	2	+5	97·2—98·2	2	12/3—8/4, 7d.—27/5+G.P. 13/6—15/7—	—
19 1913	Haemop.	161	Imp.	0	+21	97—98·6	3	29/3+23/4+	—
21 1913	Tub. Abscesses Arms and Legs	91	Imp.	0	+12	97·2—99·4	0	20/3—8/4, 7d.—	—
23 1913	—	124	Imp.	2	+14	97·2—98·4	2	26/3+28/4+22/5+25/6+	—
26 1913	Laryngitis Pleurisy	102	Died	0	—	97—99·6	3	25/3+28/4+22/5+	—
27 1913	Pleurisy	161	Stat.	0	+12	97—98·4	2	8/4+9/5+11/6+9/7+8/8+9/9+	—
28 1913	Indigestion	92	Stat.	0	+10	97·4—99·4	0	15/4—	—
32 1913	—	59	Stat.	0	+4	97·6—98·8	2	19/4+	—
33 1913	—	26	Stat.	0	—¾	99—100	3	5/6+	—
35 1913	—	81	Imp.	0	+17	97—98	1	5/6+5/7+	—
39 1913	—	45	Stat.	0	+9	97·4—98·2	3	5/6—16/7—	—
40 1913	Tub. Laryng.	85	Wse.	0	—8	97·4—101·2	3	10/6+9/7+8/8	—
41 1913	—	35	Stat.	0	+10	97·2—99	3	15/6+14/7+	—
47 1913	Tub. Larynx	40	Wse.	0		99—102	3	26/6+25/7+	—
48 1913	Diarrhoea	40	Stat.	0	+10	97—99	3	28/6+28/7+	—

## Stonehouse—Continued.

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
III.	—Continued.									
53 1913	255 1913	Mrs. G.	F.	34	4 months	Pleurisy, -	L <sub>2</sub>	97·6—99·6	Unfav.	3
54 1913	311 1913	F. C.	M.	43	2 years	Cough, Spit, -	R <sub>2</sub>	97·2—98·8	Unfav.	3
59 1913	329 1913	A. H.	F.	21	10 months	Cough, Spit, -	R <sub>2</sub> L <sub>2</sub>	101·4—102·6	Unfav.	3
66 1913	75 1909	P. D.	M.	48	4 years	Cough, -	R <sub>2</sub> L <sub>2</sub>	97·2—98·6	Unfav.	3
70 1913	355 1913	J. S.	M.	54	4 months	Pain in Chest, -	R <sub>2</sub>	98·6—100·2	Unfav.	1
72 1913	286 1913	B. B.	M.	39	6 months	Cough, -	R <sub>2</sub> L <sub>1</sub>	97—98·6	Unfav.	3
73 1913	354 1913	Mrs. P.	F.	33	19 months	Cough, -	R <sub>2</sub> L <sub>2</sub>	97·6—99·6	Unfav.	3
74 1913	290 1912	S. F.	M.	43	14 months	Haemoptysis, -	L <sub>2</sub>	98·2—98·8	Fav.	2
75 1913	381 1913	M. N.	F.	35	12 months	Cough, Spit, -	R <sub>1</sub> L <sub>1</sub>	97·8—98·8	Unfav.	3
76 1913	382 1913	J. G.	M.	19	1 month	Haemoptysis, -	R <sub>2</sub> L <sub>2</sub>	97·4—98·2	Unfav.	1
80 1913	—	Mrs. J.	F.	28	19 months	Indigestion, -	R <sub>2</sub> L <sub>2</sub>	99·6—101·6	Unfav.	1
88 1913	—	J. W.	M.	23	6 months	Cough, Spit, -	R <sub>1</sub> L <sub>2</sub>	100·6—101	Unfav.	2
89 1913	425 1913	M. M'Q.	F.	14	6 months	Loss of Flesh, -	R <sub>1</sub> L <sub>2</sub>	98·4—100	Unfav.	1
94 1913	371 1912	C. B.	M.	46	—	—	—	—	—	—



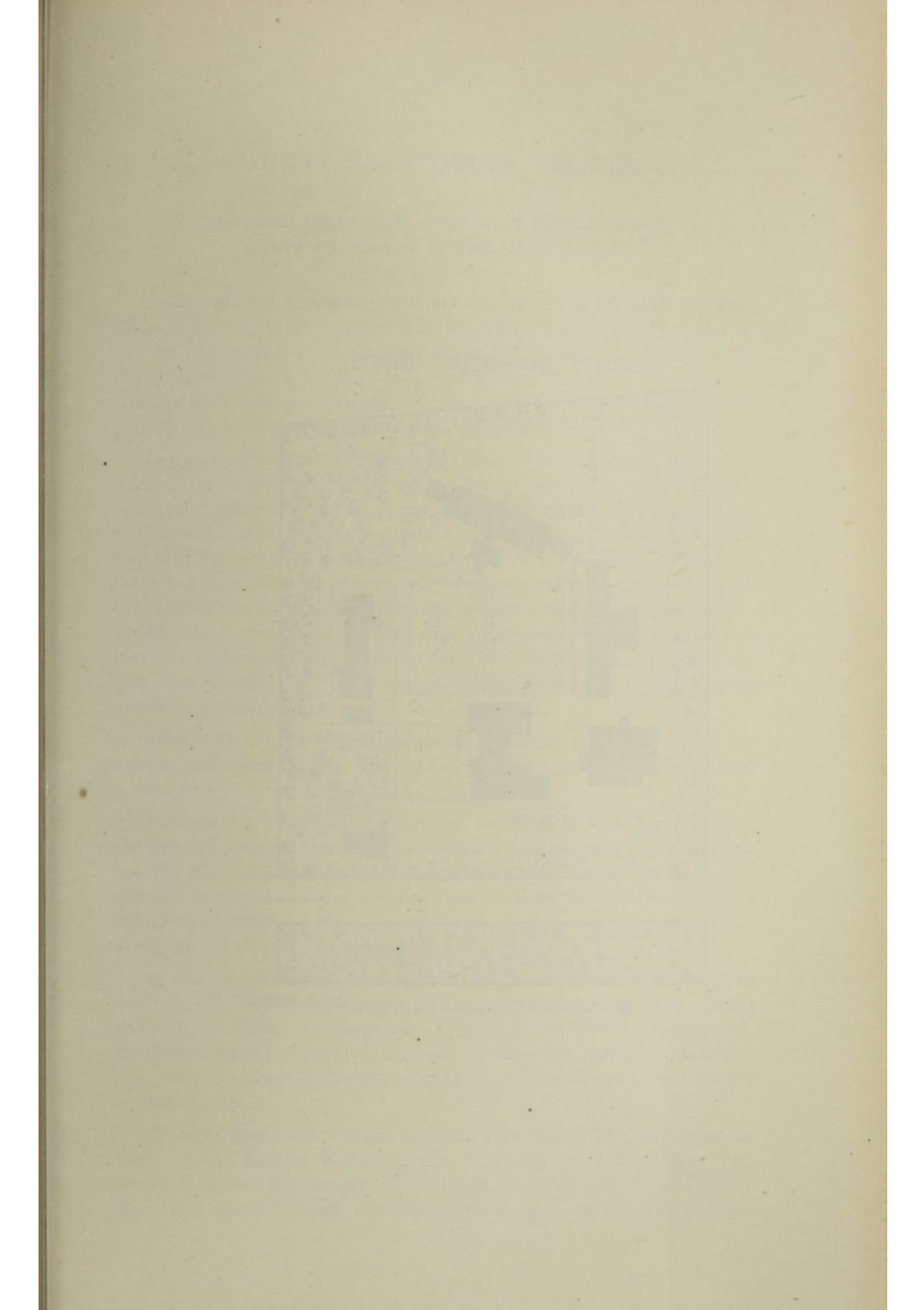
## STONEHOUSE—Continued.

Reg. No.	Complications.	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	Notes.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
53 1913	—	89	Stat.	0	+6	97·4—98·6	3	17/7+18/8+ 18/9+	—
54 1913	—	91	Stat.	0	+6	97·4—98·4	2	14/7+18/8+ 18/9+	—
59 1913	—	30	Died	0		102·4—103·6	3	18/8+2/9+	—
66 1913	—	48	Stat.	0	+11	97·4—98·4	3	29/8+30/9+	—
70 1913	Pleural Effusion	21	Wse.	0	-5	98—100·8	1	12/9-	—
72 1913	—	2	Stat.	0	± 0	—	3	12/9+	Dismissed.
73 1913	—	51	Stat.	0	+5	100·4—102	3	24/9+	—
74 1913	—	81	Imp.	0	+16	97·8—98·2	1	30/9+10/12+	—
75 1913	—	82	Imp.	0	+28	97·6—98	1	8/10+31/10+ 21/11-	—
76 1913	Renal Tub.	87	tat.	0	+13	97·2—98·4	1	4/10+20/11+	—
80 1913	—	50	ied	0		99—99·8	1	24/10+	—
88 1913	Fistula in Ano.	47	Died	0		97—99	3	4/10+	—
89 1913	—	44	Stat.	0	+2	98—98·6	0	2/12-	—
94 1913	Melan- cholia	1	Stat.	0	± 0	—	0	—	Discharged.

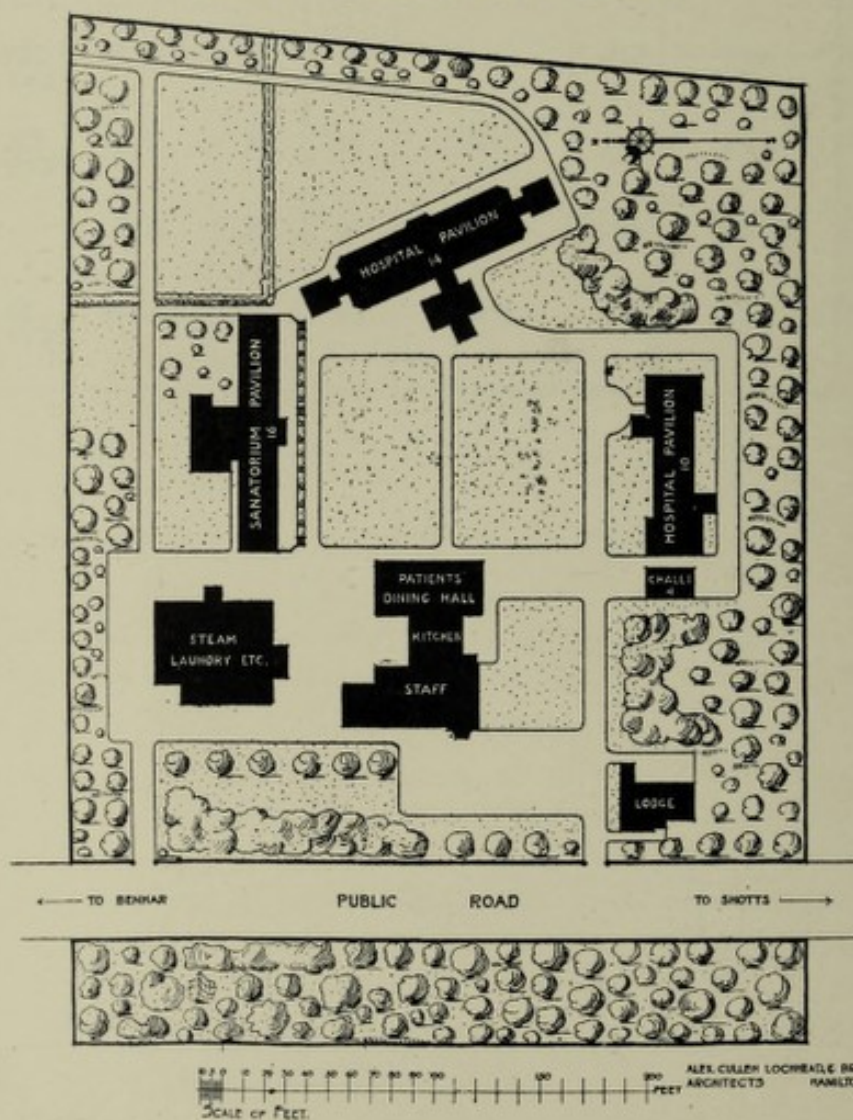
## COUNTY SANATORIUM, STONEHOUSE

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.	CONDITION ON DISCHARGE.		REMARKS.
					General Health.	Weight in Lbs.	General Health.	
IV.								
1 1913	486 1912	G. B.	M.	34	Fav.	+10	Arr.	No definite signs.
29 1913	348 1911	T. L.	M.	37	Fav.	+14	Fav.	No definite signs.
31 1913	224 1910	E. D.	F.	19	Fav.	+13	Fav.	No definite signs.
34 1913	185 1913	J. F.	M.	15	Fav.	+2	Fav.	No definite signs.
44 1913	—	J. H.	M.	44	Unfav.	+22	Fav.	Bronch., Emphysema.
1912	47 1912	W. D.	M.	10	Fav.	+8	Fav.	No definite signs.





# COUNTY SANATORIUM. SHOTTS.





## COUNTY SANATORIUM, SHOTTS.

**Tuberculosis Officer**—J. W. MILLER, M.B., Ch.B., D.P.H.

**Visiting Physician**—J. M'MILLAN, M.B., Ch.B.

*Buildings and Grounds.*—The sanatorium is situated in the outskirts of Shotts, in a moorland district, where there are some collieries and an iron works. The site extends to 3 acres at present, but additional ground is to be acquired; elevation, 750 feet. The administrative buildings are of brick, and include a steam laundry, a steam disinfecter, and sputum steriliser.

*Patients' Quarters.*—Hospital Pavilion I. has ten beds, arranged in two rooms of four beds each, and two rooms of one bed each. Hospital Pavilion II. has two large wards with seven beds each. There is also a chalet with four beds, making a total of twenty-eight beds provided for patients in the original part of the building. Recently there has been added a sixteen-bed Sanatorium Pavilion, arranged in two-bedded rooms, with the following accommodation in the centre:—nurses' duty room and kitchen with dish steriliser, spray bath and lavatory accommodation, dressing room, drying corridor, linen room, and boot closet. The total bed accommodation is forty-four beds, available for both sexes.

*Staff.*—The indoor staff consists of a matron, a charge nurse, six nurses, and seven maids. The outdoor staff consists of a gardener and a fireman.

*Patients Treated.*—There were in residence at the beginning of the year 22 patients, and during the year 100 patients were admitted, making the total number under treatment 122. The patients discharged during the year numbered 93. These 93 patients are classified into four groups, and the more important clinical data for each patient are given in the tabular statements which follow.

It will be found that 13 were in Stage I., 20 in Stage II., and 42 in Stage III. Of the remaining 18 cases, 15 were in Group IV., being patients in whom the diagnosis of tuberculosis was not confirmed. In discussing the clinical data these 15 cases are therefore excluded. The other 3 are non-pulmonary forms of the disease, and are referred to in the text.

*Place of Residence.*—These patients were drawn not only from all parts of the Middle Ward District, but also from the Upper and Lower Wards of the County, from Burghs situated within the County, and from places outwith the County altogether. Taking the Middle

Ward patients first, and classifying them according to the parish from which they were drawn, the following is the result:—

Residence.	No. of Patients.	Residence.	No. of Patients.
Avondale, ... ..	2	Dalserf, ... ..	1
Blantyre, ... ..	7	Dalziel, ... ..	4
Bothwell, ... ..	16	Hamilton, ... ..	5
Cambuslang, ... ..	7	Old Monkland, ... ..	1
Cambusnethan, ... ..	11	Shotts, ... ..	15
		Stonehouse, ... ..	1
Total, ... ..	70		
Upper Ward, ... ..	1	Lower Ward, ... ..	2
Total, ... ..	3		

*Patients from Burghs situated within the County.*

Residence.	No. of Patients.
Burgh of Coatbridge, ...	6
„ „ Hamilton, ...	4
„ „ Rutherglen, ...	1
„ „ Wishaw, ...	1
Total, ...	12

*Patients from places outwith the County.*

Residence.	No. of Patients.
Alloa, ... ..	1
Craigmillar, ... ..	1
Dalkeith, ... ..	2
Duns, ... ..	1
Inveraray, ... ..	1
Tillicoultry, ... ..	1
Clydebank, ... ..	1
Total, ...	8

*Age and Sex.*—The following table shows the age and sex of all patients treated throughout the year. The age is given in quinquennial periods and in age groups:—

Age Periods.	Males.	Females.	Both Sexes.	Age Groups.
Under 5	—	—	—	
10	3	2	5	} School age, 13.
15	4	4	8	
20	2	10	12	
25	8	5	13	} Adolescence 25.
30	9	8	17	
35	7	8	15	
40	3	2	5	} Early mature period 48.
45	9	2	11	
50	5	1	6	
55	1	—	1	} Late mature period 7.
60	—	—	—	
65	—	—	—	
Total,	51	42	93	93



### Pulmonary Tuberculosis.

*Duration of Illness.*—Patients with pulmonary lesions classified according to duration of illness, stated in monthly periods:—

	Months—1-3	3-6	6-12	12-18	18-24	Over 24	Indefinite.	Total.
Patients, ...	8	19	12	5	12	13	6	75

*Earliest Symptoms recognised.*—Cough and spit, 44; hæmoptysis, 3; pleurisy, 5; influenza, 3; debility, 1; anæmia, 1; asthma, 1; hoarseness, 1; indefinite, 16; total, 75.

*General Results.*—Patients classified according to stage of the disease:—

STAGE OF DISEASE.	No. of Patients.	Disease Arrested.	Improved.	Stationary.	Worse.	Died.
Group I., A. and B.	13	5	7	1	—	—
Group II., A. and B.	20	—	16	—	3	1
Group III.	42	—	12	9	11	10
Totals, ...	75	5	35	10	14	11

#### *Duration of Residence in Days—*

Average, ...	...	91	103	86	109	107
Maximum, ...	...	135	374	255	445	612
Minimum, ...	...	66	26	10	33	4

#### COMPLICATIONS.

Disease.	No. of patients in each group.		
	Group I.	Group II.	Group III.
Tub. Laryngitis, ...	—	1	4
Tub. Kidney, ...	—	—	1
Tub. Meningitis, ...	—	—	1
Tub. Meningitis and Enteritis, ...	—	—	1
Fistula in ano, ...	—	1	1
Dyspepsia, ...	—	4	5
Albuminuria, ...	—	1	—
Epilepsy, ...	—	—	1
Goitre, ...	1	—	—
Goitre, Exophthalmic, ...	1	—	—
Leucorrhœa, ...	—	1	—
Valvular disease of heart, ...	1	—	—
	3	8	14

*Examination of Sputum—*

Number of patients in whose sputum tubercle bacilli were found, ... ..	53
Number of patients in whose sputum tubercle bacilli were not found, ... ..	10
Number of patients whose sputum was not examined, ... ..	2
Number of patients without sputum, ... ..	10
	<hr/>
	75

Of the 10 patients from which no specimens were obtained, 6 were in Group I., 2 were in Group II., and 2 were in Group III.

Of the 6 patients in Group I., 4 had hæmoptysis either in sanatorium or before admission. Of the remaining 2 patients, one was a boy, A. M., 14 years, who, though suffering from slight cough, had never any sputum while in sanatorium. The other patient, A. B. M., a nurse from a fever hospital, had neither cough nor spit. She was put off duty on account of anæmia, but on examination of her chest an early lesion at one apex was discovered.

Of the 2 patients in Group II., one had a history of hæmoptysis, while in the other cough was unaccompanied by any spit. Some months after leaving sanatorium this patient's cough returned, and was accompanied by spit, which on examination proved positive.

Of the 2 patients in Group III., one had hæmoptysis several times in sanatorium, while in the other, a girl, M. S., 17 years, the cough was unaccompanied by any sputum.

In the 53 patients where the sputum proved positive, tubercle bacilli were detected by the ordinary smear method of examination, and in no case found negative by this method were T.B. subsequently discovered either in a seven days' specimen or by guinea-pig inoculation.

The following cases are of interest:—

$\frac{58}{1913}$  J. C. discharged with "disease arrested" 20/8 - 23/8 + 30/9 - 30/10 -

$\frac{34}{1907}$  Mrs. M'V. discharged as "worse" 21/8 + 4/10 + 4/11 -

The 10 patients in whose sputum no T.B. were detected are distributed thus:—4 in Group I.; 3 in Group II.; and 3 in Group III. The following are the details of the examination taken from the clinical report:—

## GROUP I.

$\frac{8}{1913}$	S.S.	10/2	3/3	17/3	14/4
		—	—	- 7 dys.	- G.P.
$\frac{51}{1913}$	M.K.	14/7	17/7	28/7	5/8
		—	—	- 7 dys.	- G.P.
$\frac{9}{1913}$	D.O'N.	12/2	3/3	No sputum obtainable.	
$\frac{57}{1913}$	A.G.	13/8	19/8	27/8	1/9
		—	—	- 7 dys.	- G.P.



## GROUP II.

$\frac{1399}{1912}$	L.V.	13/11	10/12	4/1	18/1	23/1
		-	-	-	-	- 7 dys.
$\frac{42}{1913}$	W.S.	6/6	14/6	26/6	5/7	
		-	-	- 7 dys.	- G.P.	
$\frac{53}{1913}$	R.H.	24/7	29/7	11/8	15/8	
		-	-	- 7 dys.	- G.P.	

## GROUP III.

$\frac{1400}{1912}$	Mrs. K.	4/1	8/1	25/1	1/2	
		-	-	- 7 dys.	- G.P.	
$\frac{1494}{1912}$	Mrs. R.	10/12	14/1	25/1	1/2	
		-	-	- 7 dys.	- G.P.	
25	R.W.	1/4	11/4	18/4	30/5	
		-	- 7 dys.	- G.P.	-	

**Non-Pulmonary Tuberculosis.**

Three cases. Two of the cases, H. G. and B. M'F., were suffering from tuberculous cervical adenitis. In H. G., a boy of 11 years, in addition to considerable glandular enlargement, there was a discharging sinus. He was treated with tuberculin (P.T.O.) in small increasing doses, at long intervals, and on discharge, after a residence of 133 days, the condition was much improved. He gained 12 lbs. in weight.

B. M'F., a woman of 31 years, had prior to admission undergone an operation in one of the Glasgow infirmaries, where glands in the right side of the neck were excised. On admission there was some tenderness and swelling at the site of the scar. The condition improved with hygienic-dietetic treatment, and she was dismissed after a residence of 51 days.

The remaining patient, D. S., was a man of 24 years, who, ten months before admission, was operated upon in the Royal Infirmary, Edinburgh, for what was apparently a psoas abscess. On admission he presented a healed scar in the right iliac region, and complained of pain in the lower part of back and down the right thigh, but no direct evidence of active disease was found. The lungs were normal. On discharge he was free from pain, and his general condition much improved. He was 110 days in residence.

## COUNTY SANATORIUM,

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
<b>I.A</b>										
1402 1912	402 1912	W. H.	M.	41	4 years	—	L <sub>2</sub>	97·5—98·2	Fav.	1
1408 1912	421 1912	Mrs. M.	F.	32	6 weeks	—	L <sub>1</sub>	98·3—98·5	Fav.	0
8 1913	256 1912	S. S.	F.	18	1 year	Haemoptysis,	L <sub>1</sub>	99—100·8	Fav.	1
51 1913	—	M. K.	F.	17	2 months	Cough, Spit,	R <sub>1</sub>	97—97·4	Fav.	3
58 1913	—	J. C.	M.	15	3 months	Cough, Spit,	L <sub>1</sub>	96·8—97·4	Fav.	1
77 1913	—	M. A.	F.	15	4 months	Haemoptysis,	R <sub>1</sub>	97—98	Fav.	0
84 1913	427 1913	Mrs. D.	F.	29	6 months	Haemoptysis,	R <sub>1</sub>	97·2—98·3	Fav.	0
<b>I.B</b>										
1365 1912	171 1912	V. A.	F.	9	—	—	L <sub>1</sub>	97—97·5	Fav.	3
—	—	A. B. M.	F.	—	—	Anaemia,	R <sub>1</sub>	97·6—97·4	Fav.	0
9 1913	61 1913	D. O'N.	M.	13	4 months	Cough, Spit,	L <sub>1</sub>	97·6—98·2	Fav.	1
27 1913	159 1913	M. R.	F.	7	3 years	Cough, Spit,	L <sub>1</sub>	97—97	Fav.	0
57 1913	—	A. G.	F.	19	9 weeks	Cough, Spit,	L <sub>1</sub>	97·4—97·8	Fav.	1
66 1913	473 1912	A. M.	M.	14	1 year	Cough,	R <sub>1</sub>	97·3—97·7	Fav.	0
<b>II.A</b>										
1394 1912	—	P. M'V.	M.	28	3 years	—	R <sub>2</sub>	97—98·4	Fav.	3
1396 1912	383 1912	I. S.	F.	21	4 months	—	L <sub>2</sub>	97·3—98·3	Fav.	2
1406 1912	412 1912	J. L.	M.	31	6 weeks	—	L <sub>2</sub>	98·4—100	Unfav.	2
18 1913	116 1913	D. H.	M.	23	9 months	Cough, Spit,	R <sub>2</sub>	97·6—99·4	Fav.	1
28 1913	118 1913	Mrs. C.	F.	30	6 months	Cough, Spit,	L <sub>2</sub>	98·2—99·7	Fav.	0
30 1913	173 1913	Mrs. S.	F.	40	5 months	Hoarseness,	L <sub>2</sub>	100·3—104·2	Unfav.	3
33 1913	184 1913	M. H.	F.	22	4 months	Influenza,	L <sub>2</sub>	98·8—100·8	Unfav.	1
36 1913	—	C. R.	M.	41	8 months	Cough, Spit,	R <sub>2</sub> L <sub>1</sub>	97·6—97·8	Fav.	3
37 1913	194 1913	P. S.	M.	52	4 months	Cough, Spit,	R <sub>2</sub> L <sub>2</sub>	97·8—98·4	Fav.	1
40 1913	46 1913	P. A.	M.	28	16 months	Pain in Chest,	R <sub>1</sub> L <sub>1</sub>	97—98·4	Fav.	1
45 1913	256 1913	Mrs. C.	F.	31	9 months	Cough, Spit,	L <sub>2</sub>	97·6—99·2	Fav.	3



## SHOTTS.

Reg. No.	Complications.	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	NOTES.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
1402 1912	—	135	Arr.	—	+7 $\frac{3}{4}$	97—97·4	0	17/10/12 + 10/1 —	—
1408 1912	—	95	Imp.	—	+12 $\frac{1}{2}$	97·8—97·9	0	—	Had Haemoptysis in Sanatorium
8 1913	Goitre	114	Imp.	—	+5 $\frac{3}{4}$	97·6—98·6	1	7-d. 10/2 — 3/3 — 17/3 — 14/4 — G.P.	—
51 1913	—	84	Arr.	3	+1 $\frac{3}{4}$	97—97·3	0	7-d. 14/7 — 17/7 — 28/7 — 5/8 — G.P.	Had Haemoptysis in Sanatorium
58 1913	—	80	Arr.	3	+9	97—97·4	1	20/8 — 23/8 + 30/9 — 30/10 —	—
77 1913	Exophthalmic Goitre	83	Imp.	—	+4 $\frac{1}{2}$	97—98·2	0	—	Had several Haemoptysis in Sanatorium
84 1913	—	12	Stat.	—	+0	97—97·4	0	—	Left on own accord
1365 1912	Valvular disease of the heart	374	Imp.	—	+1 $\frac{1}{2}$	97—97·9	0	—	—
—	—	43	Imp.	—	—	98·2—98·2	0	—	—
9 1913	—	66	Arr.	3	+13	97·4—98·2	0	12/2 — 3/3 —	—
27 1913	—	90	Arr.	2	+9	97·6—98·6	0	—	—
57 1913	—	63	Imp.	—	+6 $\frac{3}{4}$	97·7—99·4	1	7-d. 13/8 — 19/8 — 27/8 — 1/9 — G.P.	—
66 1913	—	80	Imp.	3	+8	97—97·4	0	—	—
1394 1912	—	126	Imp.	—	+20	97·2—98·6	2	13/11 + 11/1 + 12/3 +	—
1396 1912	—	123	Imp.	—	+14 $\frac{1}{2}$	97·5—97·4	2	6/11 + 4/1 +	—
1406 1912	Dyspep.	237	Wse.	—	-8 $\frac{1}{2}$	—	2	4/1 + 15/2 + 12/3 + 22/4 + 30/5	—
18 1913	—	130	Imp.	3	+10 $\frac{1}{2}$	97—97·4	1	26/5 + 1/7 +	Dismissed
28 1913	Dyspep.	87	Imp.	2	+11 $\frac{3}{4}$	97·1—97·8	0	—	T.B. found subsequently in sputum
30 1913	Tub. of Larynx	4	Died	—	—	—	—	—	Died after Haemoptysis.
33 1913	Dyspep.	85	Wse.	—	-12 $\frac{1}{2}$	98·1—98·6	3	22/4 + 3/6 +	—
36 1913	—	87	Imp.	3	+2 $\frac{1}{2}$	97—97·4	3	27/4 + 1/6 + 18/7 +	—
37 1913	Fistula	113	Imp.	3	+16 $\frac{1}{2}$	97—97·2	1	2/5 + 6/6 —	—
40 1913	—	182	Imp.	3	-3 $\frac{1}{2}$	97—98·4	1	10/6 + 14/7 + 15/8 + 27/9 + 30/10 +	—
45 1913	—	91	Imp.	2	+9	97·1—98·1	3	16/6 + 14/7 + 19/8 +	—

## COUNTY SANATORIUM,

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
<b>I.</b>	<i>Continued.</i>									
46 1913	—	Mrs. W.	F.	41	2 years	Cough, Spit, Hae.	L <sub>2</sub>	97·8—98·5	Fav.	0
47 1913	—	Mrs. H.	F.	26	15 months	Cough, Spit,	R <sub>2</sub> L <sub>1</sub>	97·5—98·8	Unfav.	3
48 1913	—	A. L.	M.	43	6 months	Cough, Spit,	L <sub>2</sub>	98·5—97·8	Fav.	3
50 1913	—	P. N.	M.	41	4 years	Cough, Spit,	R <sub>1</sub> L <sub>2</sub>	97·1—97·5	Fav.	1
55 1913	—	P. C.	M.	44	5 months	Influenza, -	R <sub>2</sub>	97·4—98·8	Fav.	3
82 1913	414 1913	L. O'C.	M.	32	18 months	Cough, Spit,	R <sub>1</sub> L <sub>2</sub>	97—97·9	Fav.	3
<b>II.B</b>										
1399 1912	376 1912	L. V.	F.	22	8 months	—	R <sub>2</sub> L <sub>2</sub>	97·6—98·2	Fav.	2
42 1913	251 1913	W. S.	M.	38	2 years	Cough, Spit,	L <sub>2</sub>	97—97·7	Fav.	3
53 1913	306 1913	R. H.	M.	21	4 months	—	R <sub>2</sub> L <sub>2</sub>	99·3—99	Fav.	1
<b>III.</b>										
1308 1912	—	D. R.	M.	43	6 months	—	R <sub>2</sub> L <sub>2</sub>	97·3—99	Fav.	3
1366 1912	149 1912	G. R.	F.	18	13 months	Cough, Spit,	R <sub>2</sub> L <sub>2</sub>	97·2—99·7	Unfav.	3
1393 1912	—	J. F.	M.	21	7 months	—	R <sub>2</sub> L <sub>2</sub>	98·8—99·1	Unfav.	3
1400 1912	460 1910	Mrs. K.	F.	28	1 month	—	R <sub>2</sub> L <sub>2</sub>	98·4—100·2	Fav.	3
1403 1912	400 1912	G. S.	M.	26	9 months	—	R <sub>2</sub> L <sub>1</sub>	97·6—98·8	Unfav.	3
1405 1912	—	A. R.	M.	28	10 months	—	L <sub>2</sub>	99—102	Unfav.	3
1407 1912	404 1912	R. D.	F.	13	2 years	Cough, Spit,	R <sub>2</sub> L <sub>2</sub>	97—98	Unfav.	3
1410 1912	447 1912	A. F.	M.	20	1 year	—	R <sub>2</sub> L <sub>2</sub>	98·3—101	Unfav.	1
1413 1912	—	J. O.	M.	34	3 months	Cough, Spit,	R <sub>2</sub> L <sub>2</sub>	97·4—99·2	Fav.	1
1494 1912	—	Mrs. R.	F.	26	5 years	Cough, Spit,	R <sub>2</sub> L <sub>2</sub>	97·6—98·4	Fav.	3
2 1913	21 1913	Mrs. P.	F.	42	8 years	Asthma, -	R <sub>2</sub> L <sub>2</sub>	97·6—99·8	Unfav.	3
3 1913	—	A. K.	M.	43	7 months	Cough, Spit,	L <sub>2</sub>	100·3—101·4	Unfav.	3
4 1913	18 1913	T. L.	M.	44	3 years	Cough, Spit,	R <sub>2</sub>	97—98·2	Fav.	3
5 1913	—	W. S.	M.	35	—	Cough, Spit,	L <sub>2</sub>	102·9—99·1	Unfav.	3
7 1913	—	J. M'K.	M.	28	2 years	Pleurisy, -	R <sub>2</sub> L <sub>2</sub>	100·7—102·4	Unfav.	2



## SHOTTS—Continued.

Reg. No.	Complications.	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	NOTES.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
46 1913	—	97	Imp.	2	+½	97·6—98·4	0	—	—
47 1913	Leucorrhoea	84	Wse.	—	+10½	97—98·9	3	24/6+24/7+ 20/8+	—
48 1913	Dyspep.	71	Imp.	3	+7	97—98·4	1	26/6+23/7+ 26/8+	Dismissed.
50 1913	—	84	Imp.	3	+4	97—97·6	1	14/7+18/8+ 22/9+	Dismissed.
55 1913	—	93	Imp.	3	+7½	97·1—97·7	3	26/7+1/8+2/10+	Left of own accord.
82 1913	—	66	Imp.	3	+4	97·1—98·8	3	24/10+26/11+	Transferred to Upper-town Sanatorium.
1399 1912	—	122	Imp.	—	+10½	98—98·4	1	13/11—10/12— 4/1—18/1—23/1—	—
42 1913	—	75	Imp.	3	+½	97—98	2	6/6—14/6—26/6— 5/7—G.P.	Left of own accord.
53 1913	Albuminuria	34	Imp.	—	+3½	97·4—97	1	24/7—29/7— 11/8—15/8—G.P.	Left of own accord.
1308 1912	Dyspep.	612	—	—	—	—	—	10/1+7/2+12/3+ 24/4+3/6+9/7+	Killed on Railway.
1366 1912	—	445	Wse.	—	+2	97·4—98·2	3	10/4+13/5+ 18/6+22/7+	—
1393 1912	Dyspep.	124	Died	—	—6	97·3—97·3	3	6/11+4/12+	—
1400 1912	—	129	Imp.	—	+12½	98·1—98·9	3	4/1—8/1—25/1— 1/2—G.P.	—
1403 1912	Dyspep.	183	Stat.	—	+10	97·5—99	3	27/10+12/3+	—
1405 1912	—	88	Died	—	—10½	97·3—97	3	27/10+4/1+	—
1407 1912	—	255	Stat.	—	+2½	97—98	3	1/11+	—
1410 1912	—	53	Wse.	—	—4½	98·5—100·9	1	17/12+11/1+	—
1413 1912	—	85	Imp.	—	+28½	97—98·8	1	27/12+3/1+1/2+ 8/3+	—
1494 1912	—	106	Imp.	—	+7½	97·4—98	3	10/12—14/1— 25/1—1/2—G.P.	—
2 1913	—	117	Stat.	—	+4¾	98·4—98·6	3	22/1+12/2+ 23/4+	—
3 1913	Tub. of Larynx	23	Died	—	—	100·4—102·2	3	30/1+	—
4 1913	—	121	Imp.	2	+15½	97·1—97·3	3	26/1+3/2+14/2+ 25/3+26/4+ 16/5+	—
5 1913	—	51	Died	—	+6	99·5—100·8	3	31/1+	—
7 1913	Tub. of Larynx	38	Died	—	—1½	99·8—99·3	3	8/2+	—



## COUNTY SANATORIUM.

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
III.	—	Continued.								
10	55	Mrs. M. C.	F.	35	3 months	Cough, Spit,	R <sub>3</sub> L <sub>2</sub>	100·6—102·4	Unfav.	3
1913	1913									
11	69	J. S.	M.	32	7 months	Cough, Spit,	R <sub>2</sub> L <sub>1</sub>	97·3—98·8	Fav.	1
1913	1913									
14	—	P. R.	M.	40	10 months	Cough, Spit,	R <sub>3</sub>	97·7—98·5	Fav.	3
1913	—									
15	106	M. S.	F.	16	2 years	Cough, Spit,	R <sub>3</sub> L <sub>2</sub>	97—101	Unfav.	3
1913	1913									
17	121	W. M.	M.	46	5 months	Cough, Spit,	R <sub>2</sub> L <sub>1</sub>	97·5—98·2	Fav.	1
1913	1913									
19	—	J. T.	M.	31	2 years	Cough, Spit,	R <sub>3</sub>	97·1—98·5	Fav.	3
1913	—									
20	375	J. H.	M.	30	1 year	Cough, Spit,	L <sub>2</sub>	98·4—99·8	Unfav.	1
1913	1912									
21	142	M. D.	F.	12	5 months	Cough, Spit,	R <sub>3</sub>	98·4—101	Unfav.	3
1913	1913									
25	154	R. W.	M.	29	5 months	Cough, Pain in Chest,	L <sub>2</sub>	99·8—101·3	Unfav.	3
1913	1913									
26	368	Mrs. L.	F.	24	2 years	Gen. Weakness,	R <sub>1</sub> L <sub>2</sub>	97·8—98·9	Unfav.	3
1913	1913									
32	470	R. S.	M.	50	5 years	Cough, Spit,	R <sub>3</sub> L <sub>2</sub>	97·6—99·2	Fav.	3
1913	1912									
35	183	M. S.	F.	17	—	—	R <sub>2</sub> L <sub>2</sub>	102—101·8	Unfav.	0
1913	1913									
39	225	J. H.	M.	33	5 months	Cough, Spit,	R <sub>2</sub>	99·6—101	Unfav.	3
1913	1913									
41	—	A. G.	M.	22	—	Cough, Spit,	R <sub>1</sub> L <sub>2</sub>	97—98·2	Fav.	1
1913	—									
44	255	Mrs. D.	F.	27	2 years	Influenza,	L <sub>2</sub>	97·6—98·4	Unfav.	1
1913	1911									
52	285	E. D.	M.	18	5 months	Cough, Spit,	R <sub>3</sub> L <sub>2</sub>	99—101·4	Unfav.	3
1913	1910									
54	237	P. R.	M.	48	years	—	R <sub>2</sub> L <sub>2</sub>	97—98·1	Fav.	3
1913	1910									
56	407	M. M. V.	M.	24	3 years	Cough, Spit,	R <sub>2</sub> L <sub>2</sub>	98—99·1	Unfav.	1
1913	1910									
59	123	T. C.	M.	30	2½ years	Cough, Spit,	R <sub>2</sub> L <sub>2</sub>	97·4—99·1	Unfav.	2
1913	1911									
61	34	Mrs. M. V.	F.	50	6 years	Cough, Spit,	R <sub>1</sub> L <sub>2</sub>	97·4—98·4	Unfav.	3
1913	1907									
63	—	C. B.	M.	30	6 months	Pleurisy,	L <sub>2</sub>	97·8—98·4	Fav.	1
1913	—									
65	338	Mrs. P.	F.	39	2 years	Cough, Spit,	L <sub>2</sub>	98·1—99·4	Unfav.	3
1913	1913									
69	—	P. H.	F.	17	4 months	Cough, Spit,	L <sub>2</sub>	97·7—98·2	Fav.	2
1913	—									
70	—	R. O. G.	F.	20	1½ years	Cough, Spit,	R <sub>3</sub>	98·1—100	Unfav.	3
1913	—									
74	363	J. G.	M.	48	11 months	Cough, Spit,	R <sub>2</sub> L <sub>2</sub>	97·3—98·2	Fav.	3
1913	1913									
75	386	P. C.	M.	21	4 years	Pains in Chest,	L <sub>2</sub>	97—97	Unfav.	0
1913	1913									
76	18	T. L.	M.	44	3 years	Cough, Spit,	R <sub>3</sub>	97—98·7	Fav.	3
1913	1913									



## SHOTTS—Continued.

Reg. No.	Complica- tions.	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	NOTES.
			General Result.	Walking miles per day.	Weight in lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
10 1913	—	71	Died	—	-3	98.8—100	3	11/2+	—
11 1913	Fistula	121	Imp.	3	+2 $\frac{3}{4}$	97—98	1	26/2+7/4+6/6+	—
14 1913	—	90	Imp.	2	+9 $\frac{1}{2}$	97—98.1	3	5/3-2/4+20/5+	—
15 1913	Tub. Ent. and Men.	4	Died	—	—	97.8—98.4	3	8/3+	—
17 1913	—	123	Imp.	3	+6	97—97.6	1	18/3+16/4+8/7+	—
19 1913	—	92	Imp.	2	+5	97.2—98.2	3	17/3+14/4+ 26/5+	—
20 1913	Dyspep.	90	Wse.	—	+3	97.7—99	1	20/3+18/4+ 29/5+	—
21 1913	—	55	Wse.	—	-3	100.4—101.8	3	25/3+10/5+	—
25 1913	—	67	Wse.	—	-8 $\frac{1}{4}$	97.8—99.9	2	1/4-11/4-18/4- G.P. 30/5-	—
26 1913	Preg.	33	Stat.	—	+6 $\frac{1}{2}$	97—98.4	3	1/4+	—
32 1913	—	123	Imp.	2	+6 $\frac{1}{2}$	97—98.4	3	19/4+27/5+ 15/7+	—
35 1913	—	36	Wse.	—	—	100.4—101.7	0	—	—
39 1913	Tub. of Larynx	64	Wse.	—	-3 $\frac{1}{4}$	97—98.7	3	26/5+1/7+	—
41 1913	—	79	Imp.	3	+1	97.3—99.1	1	6/6+12/7+16/8+	—
44 1913	Tub. of Larynx	10	Stat.	—	+ $\frac{1}{2}$	97—98	1	10/6+	—
52 1913	Tub. Mening.	36	Died	—	+2 $\frac{1}{2}$	97.3—98.5	3	17/7+19/8+	—
54 1913	—	81	Imp.	3	+8 $\frac{1}{2}$	97—97.3	3	25/7+28/8+ 4/10+	—
56 1913	Dyspep.	125	Died	—	-12 $\frac{1}{4}$	97—97.6	1	4/8+20/9+ 26/10+	—
59 1913	Tub. Kidney	93	Wse.	—	+1 $\frac{3}{4}$	97.3—98.4	2	20/8+22/9+ 30/10+	—
61 1913	—	89	Wse.	—	+1 $\frac{3}{4}$	97—98.1	3	21/8+4/10+ 4/11-	—
63 1913	—	26	Imp.	3	+ $\frac{3}{4}$	97—98.1	1	22/9+	—
65 1913	—	90	Wse.	—	+1	99.8—98.2	3	11/9+11/10+ 13/11+	—
69 1913	—	33	Stat.	2	- $\frac{1}{2}$	97.5—98.4	2	18/9+	—
70 1913	—	33	Wse.	—	+3 $\frac{1}{2}$	97.4—99.6	3	18/9+	—
74 1913	—	85	Stat.	2	+14 $\frac{3}{4}$	97.2—97.9	2	22/9+23/10+ 1/12+	—
75 1913	Epilepsy	53	Stat.	2	+3	97—97.3	—	—	Had Haem. several times in Sanatorium.
76 1913	—	83	Stat.	1	-1 $\frac{1}{2}$	97.2—97.8	3	6/10+4/11+ 11/12+	Case 4 readmitted. 1913



## COUNTY SANATORIUM, SHOTTS.

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.	CONDITION ON DISCHARGE.		REMARKS.
					General Health.	Weight in Lbs.	General Health.	
IV.								
1	499	J. M.	M.	25	Fav.	+½	Fav.	Thickened Pleura.
1913	1912							
12	75	J. M.	M.	5	Fav.	+½	Fav.	No definite signs.
1913	1913							
13	92	E. D.	M.	42	Fav.	+7	Fav.	„ „
1913	1913							
16	110	Mrs. M'G.	F.	30	Fav.	+1¾	Fav.	„ „
1913	1913							
22	—	S. S.	F.	17	Fav.	+3½	Fav.	„ „
1913								
23	157	N. F.	M.	35	Unfav.	—	Died	„ „
1913	1913							
24	127	Mrs. C.	F.	40	Fav.	+14	Fav.	„ „
1913	1913							
29	—	D. M'D.	M.	21	Fav.	+17¼	Fav.	Laryngitis.
1913								
31	168	J. M'I.	M.	8	Fav.	+1	Fav.	No definite signs.
1913	1913							
34	194	G. H.	M.	8	Fav.	+4¾	Fav.	„ „
1913	1913							
38	191	Mrs. F.	F.	35	Fav.	+4	Fav.	Thickened Pleura.
1913	1913							
49	196	M. G.	F.	13	Fav.	+9¾	Fav.	No definite signs.
1913	1910							
71	—	H. W.	F.	18	Fav.	± 0	Fav.	Thickened Pleura.
1913								
79	81	J. F.	M.	38	Fav.	+7	Fav.	Chronic Bronchitis.
1913	1912							
81	82	Mrs. R.	F.	29	Fav.	+4	Fav.	„ „
1913	1912							

**GRADUATED EXERCISE.**—Graduated exercise is now recognised as an essential part of sanatorium treatment, and was prescribed in suitable cases. By this means poisonous materials are liberated from the diseased lung into the system, and stimulate the defensive forces, thus aiding healing. The labour is graduated, and the patient passes from such light tasks as cleaning brasses, and weeding walks, to heavy work, such as grass cutting and delving. The following statement by a well-known authority is worth quoting:—

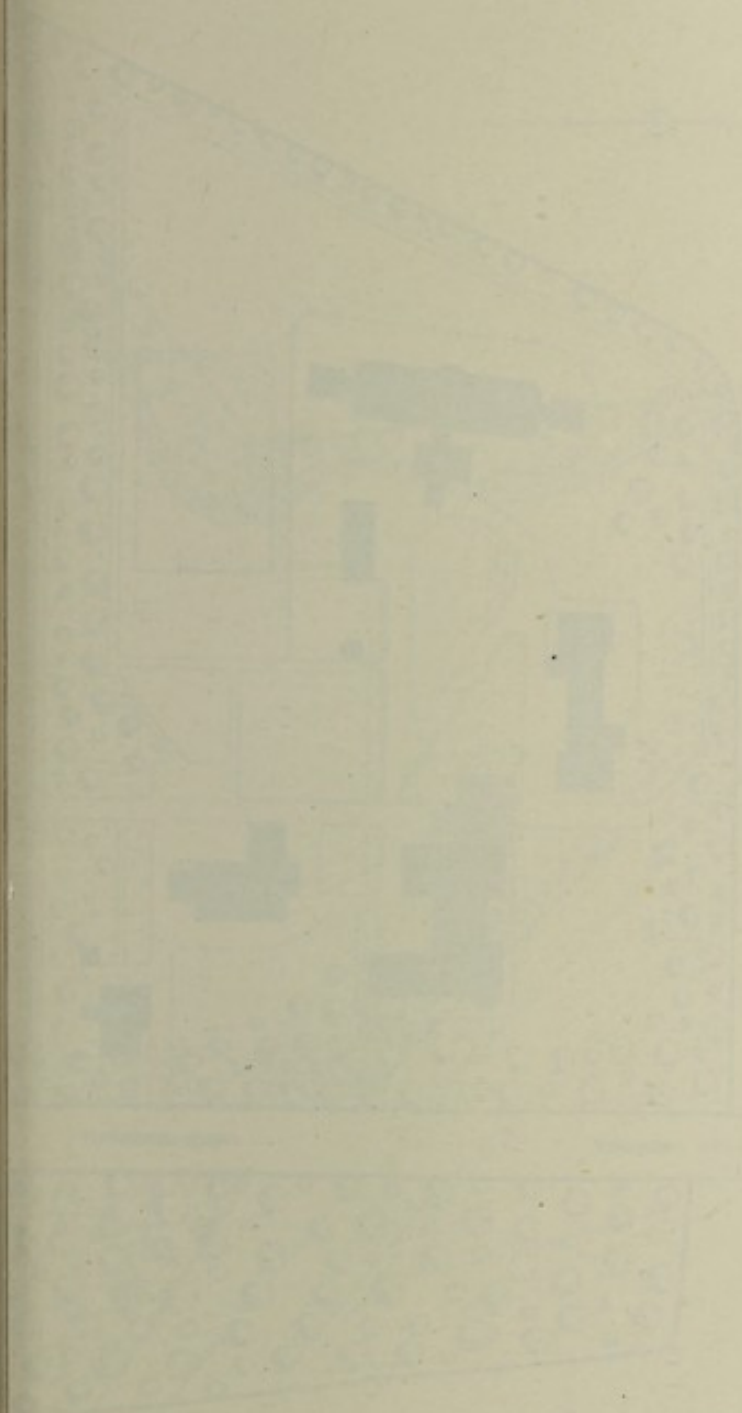
“To restore the patient's embonpoint and to destroy his working energy and capacity has been far too long the result of a sanatorium régime, and it is high time that a greater amount of common sense be applied to these highly important questions. The purpose of the sanatorium must be to maintain or improve the patient's working capacity, and that cannot be accomplished by a long-continued idleness.”

**RECREATION.**—The outdoor games are croquet and quoits, while carpet bowls, bagatelle, draughts, dominoes, and playing cards are the principal indoor games.

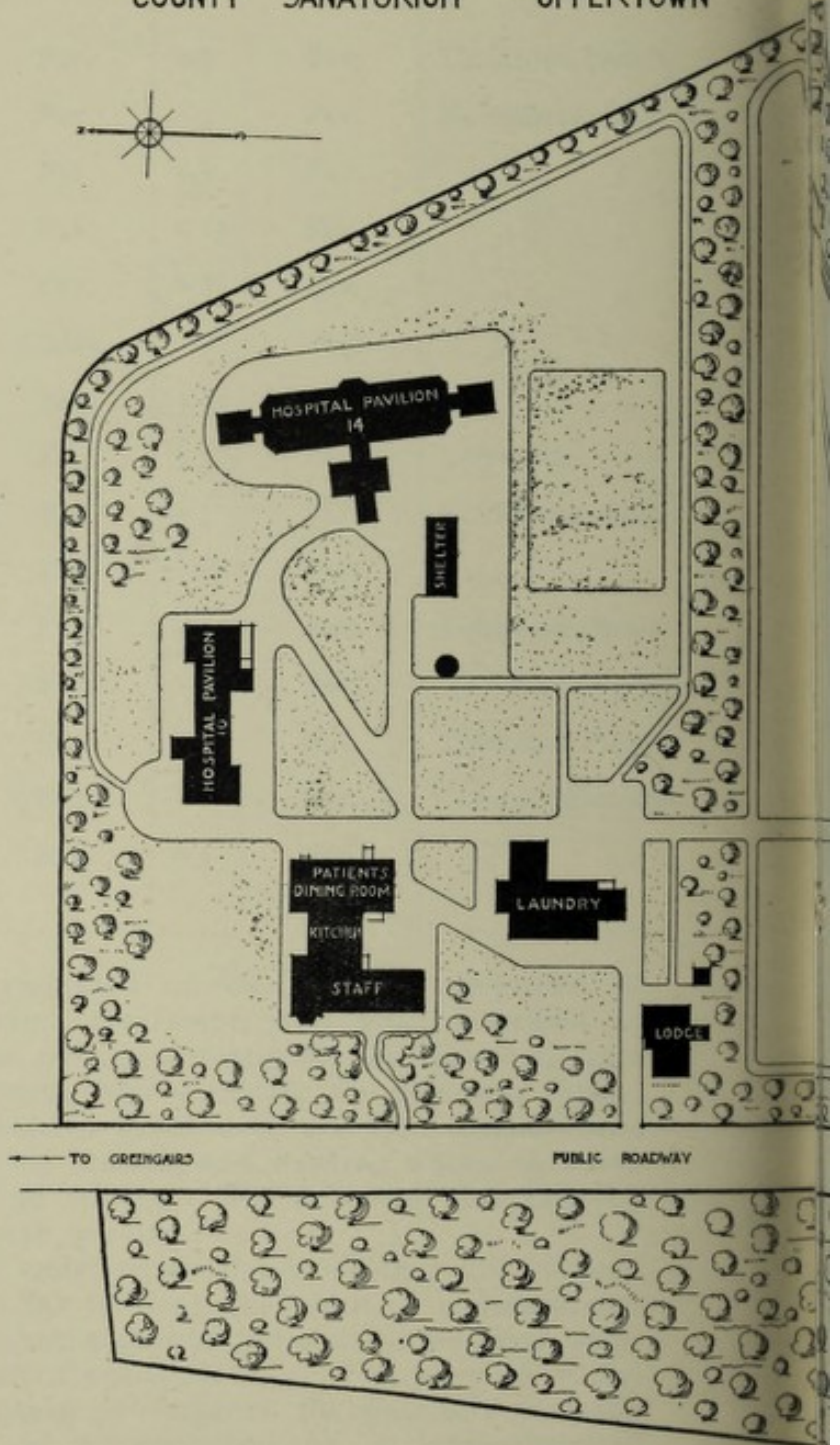
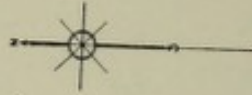
Indoor games, except in stormy weather, are to be discouraged, as they tend to keep patients indoors when they should be out in the open air. For the same reason, recreation rooms are not desirable, and their place should be taken by open shelters in the grounds.



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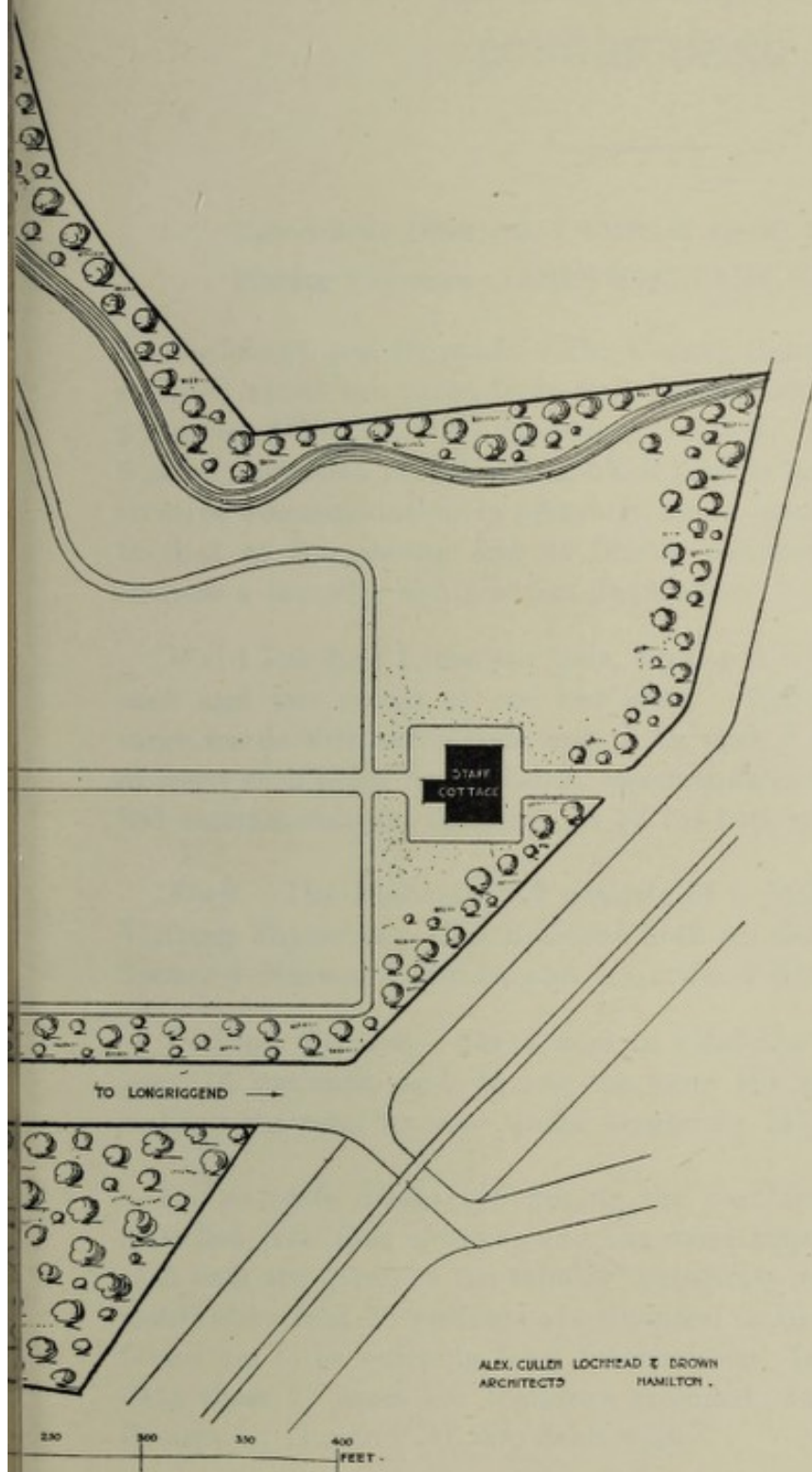


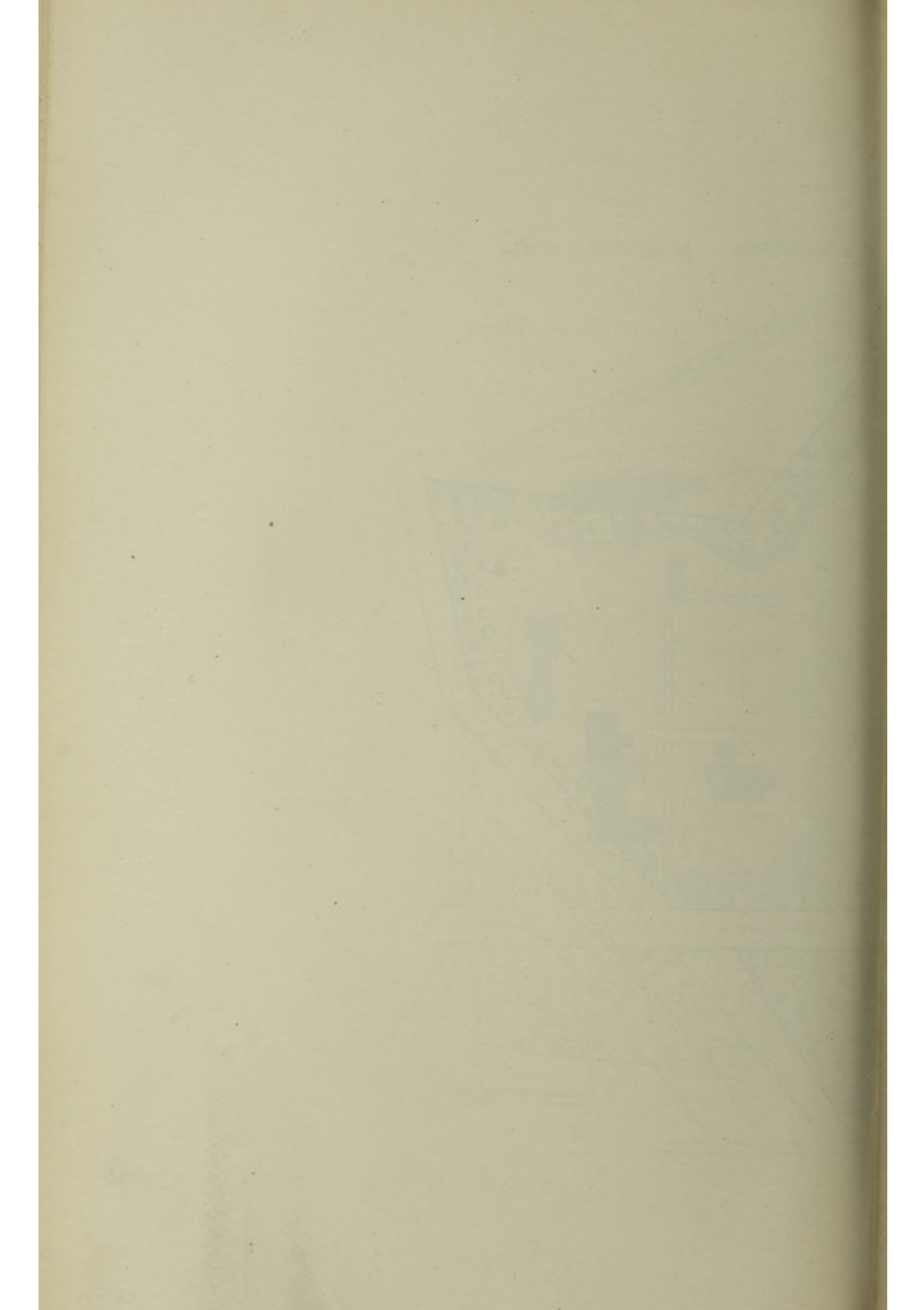
COUNTY SANATORIUM UPPERTOWN



0 10 20 30 40 50 60 70 80 90 100  
Scale of Feet.









## COUNTY SANATORIUM, UPPERTOWN, LONGRIGGEND.

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**Tuberculosis Officer**—J. THOMSON DICK, M.B., Ch.B., D.P.H.

**Visiting Physician**—JAMES KIRKLAND, L.R.C.P., L.F.P.S.

*Buildings and Grounds.*—The County Sanatorium, Uppertown, is situated about two miles from the nearest post town, Longriggend, in a moorland district, very sparsely populated. The site extends to over 6 acres; elevation, 600 feet. A block plan is here given. The administrative accommodation is presently being extended on a plan similar to that at Stonehouse and at Shotts Sanatoria. The outbuildings include a laundry and a steam disinfecter.

Ward Pavilion I. has ten beds, arranged in two rooms of four beds each and two rooms of one bed each. Ward Pavilion II. has two large wards with seven beds each. An open Pavilion or Shelter, built of wood with brick foundations, accommodates six patients. The total bed accommodation, therefore, is 30 for both sexes.

*Staff.*—The Medical Staff consists of a Tuberculosis Officer and a Visiting Physician. The Resident Staff consists of a Matron, a Ward Sister, 4 Nurses, 4 Maids, and 1 Gardener-Attendant.

*Patients Treated.*—There were in residence at the beginning of the year 16 patients, and during the year 101 patients were admitted, making the total number under treatment 117.

The patients discharged during the year numbered 91. These are classified into four groups, and the more important clinical data for each case are given in the tabular statements which follow. The statements show that 23 patients are classified in Group IV., being patients found not to be suffering from tuberculosis. In discussing the clinical data these 23 cases are therefore excluded, and only the 68 cases in Groups I., II., and III. are dealt with.

Of the total number of cases, 69 resided in the Middle Ward District, 1 in the Lower Ward, and 21 in Burghs within the County.

*Place of Residence.*—The residences in the Middle Ward were according to parish, as follows:—

Old Monkland, - - -	19	Bothwell, - - -	23
New Monkland, - - -	13	Cambusnethan, - -	3
Shotts, - - - - -	1	Cambuslang, - - -	6
Blantyre, - - - - -	4		
TOTAL, - - - - -			69
Lower Ward District, 1; Burghs—Airdrie, 8; Coatbridge,			
11; Hamilton, 1; and Rutherglen, 1, - - -			= 22
			—
TOTAL, - - - - -			91
			—

*Age and Sex.*—In the following table the cases are divided according to age and sex, and in the fifth column are given age-groups for both sexes:—

Quinquen. Periods	Males.	Females.	Both Sexes.	Age Group.	
- 10	4	4	8	School Age, -	21
- 15	5	8	13		
- 20	8	6	14	Adolescence, -	29
- 25	10	5	15		
- 30	8	3	11	Early maturity, -	32
- 35	2	4	6		
- 40	9	3	12		
- 45	2	1	3		
- 50	3	2	5	Late Maturity, -	8
- 55	3	...	3		
- 60	...	...	...		
- 65	...	...	...		
65 and over	1	...	1	Post Maturity, -	1
	55	36	91		

Of the 21 cases of school age, 11 were found not to be suffering from tuberculosis, while of the 10 actual cases, 3 were in Group I.B, 2 were in Group II.B, and 5 in Group III. T.B. were found only in 4 cases, all in Group III. Of the 29 and 32 patients contained respectively in the age-groups, Adolescence and Early Maturity, 9 were found to be non-tuberculous, while of the 9 patients over the age of 45, 2 were found to be suffering from chronic bronchitis, and 1 from asthma.

*Duration of Illness.*—68 patients in Groups I., II., and III. are classified below according to duration of illness on admission, stated in monthly periods:—

	Months—1-3	3-6	6-12	12-18	18-24	over 24	Total.
No. of Patients,	10	13	19	7	4	15	68
							—



The above table shows that out of a total of 68 patients, 26 had been ill for periods of twelve months or over previous to admission.

Of those who were ill for 12-18 months before admission, 4 were Burgh patients, of which there is no record as to previous treatment, while the other 3 were admitted to Sanatorium each within a fortnight of notification. Four patients were ill for 18-24 months previous to admission, and of these 3 were Burgh patients, while the other was admitted immediately notification was received.

Of the 15 patients admitted with illness extending over a period of two years or more there were 4 Burgh patients; in 2 patients, ill for two years and three years respectively, the illness began as pleurisy, the nature of which was apparently not recognised till pulmonary symptoms developed a few weeks before admission.

Four patients, M. O'K., Mrs. M'V., J. C., and Mrs. K., had each been in Sanatorium previous to this year, the first on three occasions, the second four times, the third once, and the fourth twice; the last, Mrs. K., must be regarded as a doubtful case. A. T., notified in 1909, refused Sanatorium treatment till the development of acute symptoms following an accident to his shoulder, which occurred two months previous to admission. The remaining 4 cases, Mrs. W., Mrs. E., J. M'O., and J. S., with histories of illness extending over two years, two years, seven years, and two years respectively, were each admitted immediately notification of the case was received.

*Earliest Symptoms recognised.*—In the following table the cases are classified according to the nature of the earliest symptoms:—

Cough, 42	Hæmoptysis, 4	Loss of Weight, 2
Pleurisy, 12	Influenza, 6	Pneumonia, 2
<hr/>		
TOTAL, - - -		68
<hr/>		

In those cases which began with cough the onset was almost always slow and insidious, the patient regarding the condition as due to chill or an ordinary cold, so that very frequently medical advice was not sought until the disease was considerably advanced and the prospect of cure extremely remote. In the cases in which an attack of pleurisy was the earliest indication of illness valuable time was often lost either owing to the patient making an apparently good recovery from the acute attack and resuming work, or owing to the nature of the original illness passing unrecognised. So-called influenza was a somewhat common mode of onset.



*General Health relative to Stage of Disease.*—Below is given a table which shows the general health of the patients on admission :—

	Favourable.	Unfavourable.	TOTAL.
Group I., - - -	12	...	12
„ II., - - -	15	...	15
„ III., - - -	13	28	41

*General Results and Duration of Residence.*—In the following table are classified the cases in each group according to their general condition on discharge, while below is given for each class the duration of residence, stated in days :—

	No.	Arr.	Imp.	Stat.	Worse.	Died.
Group I., - - -	12	6	6	...	...	...
„ II., - - -	15	1	13	1	...	...
„ III., - - -	41	...	19	9	4	9
TOTAL, - - -	68	7	38	10	4	9

*Duration of Residence  
in Days—*

Average, - - -	118	103	62	96	104
Maximum, - - -	188	394	112	176	185
Minimum, - - -	73	38	6	40	9

*Complications.*—In the table given below the complications present in Groups I. and II. and in Group III. are stated :—

Disease.	Groups I. & II.	Group III.	TOTAL.
Tub. Laryngitis, - - -	...	7	7
„ Peritonitis, - - -	1	2	3
„ Adenitis, - - -	1	1	2
„ Meningitis, - - -	...	1	1
„ Ulcer of Tongue, - - -	...	1	1
„ Disease of Sternum, - - -	...	1	1
Bronchitis, - - -	2	...	2
Pregnancy, - - -	1	...	1
Hemiplegia, - - -	...	1	1
	5	14	19

In Groups I. and II. tuberculous disease other than pulmonary was present in only 7·4 per cent., while in Group III. 31·7 per cent. of the patients had some other tuberculous lesion in addition to that present in the lung.

*Sputum Examinations.*—Of a total of 91 cases discharged during the year, the sputa of 88 were examined for the presence of T.B., while of the other 3, 2 had no spit and the third did not remain in the institution long enough for a specimen to be obtained.



The cases may be classified as follows:—

1. Those in whose spit T.B. were found, ... .. 51
2. Those suffering from pulmonary tuberculosis, in whose sputa  
T.B. were not found (one had no spit), ... .. 17
3. Those suffering from disease of the respiratory tract other  
than tuberculosis, ... .. 23

In 23 cases, where examination by other methods had failed to demonstrate the presence of T.B., animal inoculation was performed, and in one instance a positive result was obtained in this way.

The examinations in this case were:—

Smear.	7 days.	G.P.
27/9/13 -, 13/11/13 -, 27/11/13 +.		

The patient was a male, A.T., aged 37 years, whose illness had begun 12 months previous to admission, with pleurisy. Two lobes of the right lung were affected, and the case was complicated by tuberculous peritonitis. He had no sputum on admission, developed a scanty expectoration during his stay, while this again ceased before discharge. He was under treatment for 84 days, during which time he gained 23½ lbs. in weight, and was dismissed very much improved. He was able to resume his work.

In the other cases in which animal inoculation was performed the results merely verified those obtained by other methods.

Five cases were admitted with T.B. present in the sputum, and were discharged with spit free from infection.

Those cases were:—

$\frac{86}{1913}$  J. C. 12/3/13 +, 12/4/13 -, 5/5/13 -.

Patient, male, aged 28, had been ill for six months. The disease was in an early stage. The apex of the left lung was involved, and he had scanty spit on admission. He was under treatment for 76 days, and was discharged without spit and with the disease apparently arrested.

$\frac{179}{1913}$  W. C. 22/4/13 +, 12/6/13 -, 9/7/13 -.

The left lung was fairly extensively diseased, and the right one slightly. The spit on admission was moderate in amount, and he was running a febrile temperature. He was in residence for 86 days, and was discharged without spit and with considerable improvement in both his local and general condition.

$\frac{1077}{1912}$  Mrs. M'A. 14/11/12 +, 10/12/12 +, 21/1/13 +, 25/2/13 +, 15/4/13 -.

Patient, aged 30, was admitted after 8 months' illness with two lobes involved in each lung. She remained under treatment for 168



days, and on discharge had a scanty spit containing no T.B., and had gained 23 lbs. in weight. She has remained fit for household duties since then.

$\frac{34}{1907}$  Mrs. M'V. 11/2/13+, 19/3/13+, 15/4/13-.

Patient's illness had begun six years before with pneumonia, and on admission both lungs were diseased, though her general health was favourable. She had scanty spit containing very few T.B. She was under treatment for 83 days, and was discharged improved, and with spit for the time being free from infection.

$\frac{489}{1912}$  J. S. 20/1/13+, 12/2/13-, 19/3/13-.

Patient, male, aged 25, had had pleurisy three years previous to admission. The apex of the right lung was affected to a slight extent, and his general condition was good. Spit was scanty, and contained very few T.B. He was under treatment for 84 days, and was dismissed much improved and without spit, while his gain in weight was  $11\frac{1}{2}$  lbs. This gain has been maintained, he has been without symptoms, and he has worked regularly as a blacksmith since discharge.

In only one case, in addition to that of A. T., mentioned above, did any patient admitted with no T.B. in the spit show T.B. on subsequent examination, viz. :—

$\frac{57}{1913}$  E. W. 3/3/13-, 14/8/13+.

Patient was a girl of seven years, who had been ill for eighteen months with general weakness and emaciation. Though both lungs were very extensively diseased on admission she had no cough or spit, and only developed a very scanty expectoration shortly before she died, after a residence of 185 days.

From the records of the 252 examinations made, it would appear that the method of examining a seven days' specimen of sputum does not give any more reliable information than that gained by examining an ordinary smear.

The greatest number of examinations made in any one case was in that of M. O'K., 9/11/12-, 14/11/12-, 10/12/12-, 26/12/12-, 21/1/13-, 30/1/13-, 11/2/13-, 20/11/13-, 20/12/13-. Patient had had a constant cough and spit and several attacks of hæmoptysis during the previous three years. Physical signs were present in two lobes of the right lung and one of the left. No complication could be detected.



RECORDS OF THE

NAME		AGE		SEX		RELATION		DATE	
JAMES		25		M		HUSBAND		1880	
MARY		22		F		WIFE		1880	
JOHN		15		M		SON		1880	
ELIZABETH		12		F		DAUGHTER		1880	
WILLIAM		10		M		SON		1880	
ANNE		8		F		DAUGHTER		1880	
JAMES		5		M		SON		1880	
MARY		3		F		DAUGHTER		1880	
JOHN		1		M		SON		1880	
ELIZABETH		1		F		DAUGHTER		1880	
WILLIAM		1		M		SON		1880	
ANNE		1		F		DAUGHTER		1880	
JAMES		1		M		SON		1880	
MARY		1		F		DAUGHTER		1880	
JOHN		1		M		SON		1880	
ELIZABETH		1		F		DAUGHTER		1880	
WILLIAM		1		M		SON		1880	
ANNE		1		F		DAUGHTER		1880	
JAMES		1		M		SON		1880	
MARY		1		F		DAUGHTER		1880	
JOHN		1		M		SON		1880	
ELIZABETH		1		F		DAUGHTER		1880	
WILLIAM		1		M		SON		1880	
ANNE		1		F		DAUGHTER		1880	
JAMES		1		M		SON		1880	
MARY		1		F		DAUGHTER		1880	
JOHN		1		M		SON		1880	
ELIZABETH		1		F		DAUGHTER		1880	
WILLIAM		1		M		SON		1880	
ANNE		1		F		DAUGHTER		1880	
JAMES		1		M		SON		1880	
MARY		1		F		DAUGHTER		1880	
JOHN		1		M		SON		1880	
ELIZABETH		1		F		DAUGHTER		1880	
WILLIAM		1		M		SON		1880	
ANNE		1		F		DAUGHTER		1880	
JAMES		1		M		SON		1880	
MARY		1		F		DAUGHTER		1880	
JOHN		1		M		SON		1880	
ELIZABETH		1		F		DAUGHTER		1880	
WILLIAM		1		M		SON		1880	
ANNE		1		F		DAUGHTER		1880	
JAMES		1		M		SON		1880	
MARY		1		F		DAUGHTER		1880	
JOHN		1		M		SON		1880	
ELIZABETH		1		F		DAUGHTER		1880	
WILLIAM		1		M		SON		1880	
ANNE		1		F		DAUGHTER		1880	
JAMES		1		M		SON		1880	
MARY		1		F		DAUGHTER		1880	
JOHN		1		M		SON		1880	
ELIZABETH		1		F		DAUGHTER		1880	
WILLIAM		1		M		SON		1880	
ANNE		1		F		DAUGHTER		1880	
JAMES		1		M		SON		1880	
MARY		1		F		DAUGHTER		1880	
JOHN		1		M		SON		1880	
ELIZABETH		1		F		DAUGHTER		1880	
WILLIAM		1		M		SON		1880	
ANNE		1		F		DAUGHTER		1880	
JAMES		1		M		SON		1880	
MARY		1		F		DAUGHTER		1880	
JOHN		1		M		SON		1880	
ELIZABETH		1		F		DAUGHTER		1880	
WILLIAM		1		M		SON		1880	
ANNE		1		F		DAUGHTER		1880	
JAMES		1		M		SON		1880	
MARY		1		F		DAUGHTER		1880	
JOHN		1		M		SON		1880	
ELIZABETH		1		F		DAUGHTER		1880	
WILLIAM		1		M		SON		1880	
ANNE		1		F		DAUGHTER		1880	
JAMES		1		M		SON		1880	
MARY		1		F		DAUGHTER		1880	
JOHN		1		M		SON		1880	
ELIZABETH		1		F		DAUGHTER		1880	
WILLIAM		1		M		SON		1880	
ANNE		1		F		DAUGHTER		1880	
JAMES		1		M		SON		1880	
MARY		1		F		DAUGHTER		1880	
JOHN		1		M		SON		1880	
ELIZABETH		1		F		DAUGHTER		1880	
WILLIAM		1		M		SON		1880	
ANNE		1		F		DAUGHTER		1880	
JAMES		1		M		SON		1880	
MARY		1		F		DAUGHTER		1880	
JOHN		1		M		SON		1880	
ELIZABETH		1		F		DAUGHTER		1880	
WILLIAM		1		M		SON		1880	
ANNE		1		F		DAUGHTER		1880	
JAMES		1		M		SON		1880	
MARY		1		F		DAUGHTER		1880	
JOHN		1		M		SON		1880	
ELIZABETH		1		F		DAUGHTER		1880	

## COUNTY SANATORIUM,

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
<b>I.A</b>										
1067 1912	—	T. M.	M.	20	7 months	Cough, Spit, -	L <sub>1</sub>	98·2—98·4	Fav.	1
1082 1912	439 1912	M. T.	F.	16	10 months	Haemop., - -	R <sub>1</sub>	98·8—99	Fav.	1
1 1913	490 1912	J. D.	M.	19	3 months	Cough, Spit, -	L <sub>A</sub>	97—98	Fav.	1
2 1913	489 1912	J. S.	M.	25	3 years	Pleurisy, - -	R <sub>A</sub>	97·6—98·8	Fav.	1
25 1913	86 1913	J. C.	M.	28	6 months	Cough, - -	L <sub>1</sub>	97·8—98·2	Fav.	1
74 1913	392 1913	W. C.	M.	20	3 months	Cough, Spit, -	R <sub>A</sub>	97—97·4	Fav.	0
80 1913	415 1913	P. D.	M.	41	6 months	Influenza, - -	L <sub>A</sub>	97—98·4	Fav.	1
<b>I.B</b>										
1083 1912	452 1912	F. G.	F.	11	18 months	Cough, - -	R <sub>1</sub>	98·8—99	Fav.	0
5 1913	479 1912	R. A.	F.	12	2 months	Cough, Spit, -	R <sub>1</sub>	98—97	Fav.	1
39 1913	—	J. W.	M.	19	17 months	Pleurisy, - -	R <sub>2</sub>	97·4—98·4	Fav.	0
50 1913	238 1912	J. C.	M.	23	6 months	Cough, Spit, -	L <sub>2</sub>	97·2—98·6	Fav.	1
54 1913	271 1913	R. M'G.	F.	8	4 weeks	Cough, Sweating,	R <sub>1</sub> L <sub>1</sub>	97·2—97·6	Fav.	1
<b>II.A</b>										
1077 1912	—	Mrs M'A	F.	30	8 months	Cough, Spit, -	R <sub>2</sub> L <sub>2</sub>	98—98·4	Fav.	1
17 1913	9 1913	Mrs. W.	F.	34	2 years	Cough, Spit, -	L <sub>A</sub>	97—98·4	Fav.	3
28 1913	114 1913	Mrs. F.	F.	36	3 months	Haemop., - -	R <sub>2</sub>	97·6—98	Fav.	1
35 1913	160 1913	T. Y.	M.	39	5 months	Cough, Spit, -	R <sub>A</sub> L <sub>A</sub>	99—97·8	Fav.	1
74 1913	206 1913	J. K.	M.	50	3 months	Influenza, - -	L <sub>2</sub>	97·2—97·6	Fav.	1



## UPPERTOWN.

Reg. No.	Complications.	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	Notes.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
1067 1912	—	188	Arr.	9		97.2—98	1	18/9/12 + 21/11/12 — 8/12/12 — 19/1 — 30/1 — 8/2 — 2/3 — G.P.	—
1082 1912	—	179	Imp.	2	+ 12	98—98.4	1	19/12 — 26/12/12 — 21/1 — 4/2 — 1/3 — 20/5 — G.P.	—
1 1913	—	121	Imp.	6	+ 9	97.4—98	0	15/1 — 20/1 + 12/3 + 25/3 + 15/4 + 5/5 +	—
2 1913	—	84	Imp.	9	+ 11½	97—98.4	0	20/1 + 12/2 — 19/3 —	—
25 1913	—	76	Arr.	9	+ 11	97.2 — 98.4	0	12/3 + 15/4 — 5/5 —	—
74 1913	—	84	Imp.	9	+ 10½	97—97.4	1	14/10 + 20/12 +	—
80 1913	—	53	Imp.	9	+ 18½	97.6—98	1	13/11 +	Left without per- mission.
1083 1912	Tub. sores on skin and right ankle	73	Arr.	4	+ 3½	97—97	1	19/12 — 26/12 — 4/1 — 21/1 — 4/2 — 11/2 — G.P.	—
5 1913	—	127	Arr.	4	+ 10½	97 — 97.8	0	15/1 — 3/3 — 19/3 — 15/4 — 23/5 — G.P.	Shown marked re- action to diagnostic tuberculin.
39 1913	—	171	Arr.	11	+ 8	97—98	0	10/5 — 2/6 — 13/6 — 18/7 — G.P.	—
50 1913	—	121	Imp.	5	+ 17	98—98.4	1	18/6 — 2/7 — 18/7 — 8/9 — G.P.	R. leg amputated at age of 6 for tuberculosis.
54 1913	—	84	Arr.	2	+ 6	97.6—98	0	9/7 —	—
1077 1912	—	168	Imp.	4	+ 23	97.2—98.2	1	14/11 + 10/12 + 21/1 + 24/3 + 16/4 —	—
17 1913	7 months pregnant	80	Imp.	3	+ 16	97—98	3	8/2 + 19/3 + 15/4 +	—
28 1913	Hysteria	44	Imp.	4	+ 6½	97.6—98.4	1	25/3 — 2/4 — 22/4 — 13/5 — G.P.	—
35 1913	Bron. & Emphy.	85	Stat.	4	+ 7½	97—98	1	5/5 + 18/6 + 9/7 +	—
47 1913	—	85	Imp.	6	+ 12½	97—98	1	3/6 + 14/8 +	—

## COUNTY SANATORIUM,

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
<b>II.A</b>	<i>Continued.</i>									
61 1913	—	A. H.	M.	35	5 weeks	Cough, - -	R <sub>1</sub> L <sub>2</sub>	97.6—98.4	Fav.	1
67 1913	—	A. T.	M.	37	12 months	Pleurisy, - -	R <sub>2</sub>	97.2—97.6	Fav.	0
72 1913	53 1912	W. W.	M.	18	7 weeks	Cough, Spit, -	R <sub>2</sub>	98—98.6	Fav.	3
1070 1912	360 1909	Mrs. K.	F.	30	7 years	Cough, Spit, -	R <sub>1</sub> L <sub>1</sub>	98.2—98.2	Fav.	3
76 1913	405 1913	W. S.	M.	18	6 months	Influenza, - -	R <sub>1</sub> L <sub>1</sub>	98.4—99	Fav.	3
83 1913	429 1911	M. O'K.	M.	19	3 years	Haemop., - -	R <sub>2</sub> L <sub>1</sub>	97—98.4	Fav.	1
<b>II.B</b>										
1080 1912	405 1912	Mrs. E.	F.	34	2 years	Cough, - -	R <sub>2</sub> L <sub>2</sub>	98—98.4	Fav.	1
6 1913	12 1913	J. A.	M.	8	3 months	Pleurisy, - -	L <sub>2</sub>	97.4—98.2	Fav.	1
15 1913	28 1913	C. K.	M.	6	12 months	Pleurisy, - -	R <sub>2</sub>	99—99.8	Fav.	0
58 1913	—	L. M'K.	F.	19	7 months	Cough, Spit, -	R <sub>1</sub> L <sub>2</sub>	98—98.4	Fav.	0
<b>III.</b>										
1063 1912	311 1912	J. B.	M.	6	19 months	Cough, - -	R <sub>2</sub> L <sub>2</sub>	97—97	Unfav.	1
1078 1912	—	W. G.	M.	24	18 months	Cough, Haemop.	L <sub>2</sub>	99.6—100.4	Unfav.	3
1079 1912	457 1912	M. G.	F.	12	9 months	Cough, Spit, Wasting,	R <sub>2</sub> L <sub>2</sub>	99.6—102.2	Unfav.	3
3 1913	498 1912	Mrs. R.	F.	20	3 months	Cough, Spit, -	R <sub>1</sub> L <sub>2</sub>	98.4—100.2	Unfav.	3
8 1913	475 1912	M. R.	F.	18	8 months	Cough, Malaise,	R <sub>2</sub> L <sub>2</sub>	99.4—99.8	Fav.	2
10 1913	470 1912	R. S.	M.	50	5 years	Cough, Spit, -	R <sub>3</sub> L <sub>2</sub>	98—98.4	Unfav.	3
11 1913	—	F. C.	M.	10	6 months	Chill, - -	R <sub>AB</sub>	98.4—97	Fav.	1
12 1913	—	F. M'I.	M.	15	6 months	Cough, Spit, -	L <sub>AB</sub>	99.4—100	Unfav.	3



## UPPERTOWN—Continued.

Reg. No.	Complications.	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	NOTES.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
<u>61</u> 1913	—	86	Imp.	6	+21	97.6—97.8	1	5/9+8/10+	—
<u>67</u> 1913	Tuber. Periton.	84	Imp.	4	+23½	97.6—98.2	0	27/9—13/11— 27/11+G.P.	Transferred from Bells-hill.
<u>72</u> 1913	—	78	Imp.	6	+16	97—98	1	8/10+9-12+	—
<u>1070</u> 1912	Bron.	91	Imp.	3	+7	98—98.4	2	24/10/12—11/11/12— 21/11/12—14/12/12— 31/12/12—G.P.	Frequent attacks of haemoptysis.
<u>76</u> 1913	—	64	Imp.	4	+15	97.6—98	1	29/10—22/11— 9/12—20/12—G.P.	—
<u>83</u> 1913	—	47	Imp.	5	+8½	97.2—98.4	1	20/11—20/12—	Transferred to Shotts.
<u>1080</u> 1912	—	86	Imp.	4	+2½	98—98.4	1	3/12—17/12— 30/1—11/2— 7/3—G.P.	—
<u>6</u> 1913	—	96	Imp.	—	+4½	97.6—98	0	18/1—4/2—9/4—	—
<u>15</u> 1913	Tuber. Cervical Adenitis	109	Arr.	2	+4	97—98	0	4/2—	—
<u>58</u> 1913	—	89	Imp.	6	+22	97—97.4	0	14/8—	—
<u>1063</u> 1912	Tub. Periton.	142	Died	0	—	97—97.6	0	25/10+	—
<u>1078</u> 1912	Mening.	157	Died	0	—6	99.8—100	2	14/11+18/12+ 30/1+	—
<u>1079</u> 1912	—	394	Imp.	2	+8½	97—98	0	3/12/12+ 31/12/12+12/3+	—
<u>3</u> 1913	—	38	Imp.	0	+12	97.2—98	3	15/1+12/3+	—
<u>8</u> 1913	Tub. Laryn.	177	Imp.	1	+13	97.2—98.2	1	21/1+12/3+ 20/5+2/7+	—
<u>10</u> 1913	—	8	Stat.	0	—	99.8—101.8	3	4/3+	—
<u>11</u> 1913	Strumous Ophthal.	166	Imp.	—	+10½	98—97	0	4/2+2/4+2/6+	—
<u>12</u> 1913	—	98	Imp.	0	+2½	97—98.4	2	4/2+20/3—22/4+	—

## COUNTY SANATORIUM,

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
<b>III. —Continued.</b>										
18 1913	34 1907	Mrs M'V	F.	42	6 years	Pneumonia, -	R <sub>AB</sub> L <sub>AB</sub>	97—97.2	Fav.	1
20 1913	57 1913	E. W.	F.	7	18 months	Loss of flesh and weakness,	L <sub>AB</sub> R <sub>3</sub>	98—101	Unfav.	0
24 1913	—	A. P.	F.	37	3 years	Cough, - -	L <sub>2</sub> R <sub>3</sub>	98—101.4	Unfav.	3
26 1913	93 1913	J. M'C.	M.	29	1 year	Pleurisy, - -	R L <sub>2</sub>	97—97.2	Unfav.	3
29 1913	125 1913	Mrs. B.	F.	20	5 months	Cough, Spit, -	R <sub>3</sub> L <sub>1</sub>	98.8—99	Unfav.	3
30 1913	408 1910	A. T.	M.	48	3 years	Cough, Spit, -	L <sub>2</sub> R <sub>A</sub>	97.2—99	Unfav.	2
32 1913	111 1913	M. M'E.	F.	15	4 months	Cough, Spit, -	L <sub>2</sub> R <sub>1</sub>	97.4—100.6	Unfav.	1
33 1913	179 1913	W. C.	M.	28	5 weeks	Pleurisy, Haem.	L <sub>2</sub> R <sub>1</sub>	99.4—100.2	—	2
36 1913	161 1913	M. S.	F.	24	4 months	Cough, Pleurisy.	L <sub>AB</sub> R <sub>3</sub>	99.4—98.2	Unfav.	2
37 1913	—	W. L.	M.	46	17 months	Cough, Spit, -	R <sub>AB</sub>	97—98.4	Unfav.	3
40 1913	—	E. H.	F.	14	10 weeks	Cough, Spit, Wasting,	R <sub>3</sub> L <sub>2</sub>	100.6—99.8	Unfav.	3
42 1913	209 1913	P. R.	M.	22	5 months	Influenza, Bron- chitis,	L <sub>2</sub> R <sub>1</sub>	99.6—100.2	Unfav.	1
43 1913	216 1913	J. M.	M.	21	6 months	Cough, Spit, Haemop.	R <sub>3</sub> L <sub>1</sub>	97.2—99.8	Fav.	2
44 1913	224 1913	J. D.	M.	33	4 months	Influenza, - -	R <sub>2</sub> L <sub>2</sub>	97.6—97.8	Unfav.	2
45 1913	83 1913	M. G.	F.	23	6 months	Cough, Spit, -	R <sub>3</sub>	98.8—101	Unfav.	3
46 1913	117 1912	J. C.	M.	21	3 years	Cough, - -	R <sub>3</sub> L <sub>2</sub>	98.8—100.6	Unfav.	3
49 1913	—	H. M.	M.	18	8 months	Cough, - -	R <sub>2</sub> L <sub>2</sub>	97.4—99.2	Fav.	1
51 1913	—	J. P.	M.	25	9 years	Pleurisy, - -	L <sub>2</sub>	97—98.4	Fav.	1
52 1913	53 1913	Mrs. W.	F.	45	4 months	Cough, Spit, -	R <sub>2</sub> L <sub>1</sub>	98—98.8	Unfav.	3



## UPPERTOWN—Continued.

Reg. No.	Complications.	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	NOTES.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
18 1913	—	83	Imp.	2	+13½	97.4—97.8	1	11/2 + 19/3 + 15/4 -	—
20 1913	Paralysis of right arm and leg	185	Died	0	—	97—97	1	3/3 - 14/8 +	—
24 1913	Laryng.	54	Died	0	—	97.7—	3	3/3 +	—
26 1913	—	40	Wse.	0	+3	97—97	3	12/3 +	—
29 1913	—	112	Stat.	2	+1	97.8—98.2	1	25/3 + 20/5 + 2/7 +	—
30 1913	Ulcer of tongue	27	Stat.	0	+1	97—99	2	2/4 +	—
32 1913	—	44	Wse.	0	+1	101—103.6	1	9/4 +	—
33 1913	—	86	Imp.	4	+17	97.2—97.6	0	22/4 + 13/6 - 9/7 -	—
36 1913	—	89	Imp.	2	+7½	97.2—98.4	1	12/5 + 26/6 + 18/7 +	—
37 1913	—	88	Stat.	0	+7	97.2—98.6	2	12/5 + 9/7 +	—
40 1913	—	82	Died	0	—	96—96	3	12/5 +	—
42 1913	—	176	Wse.	0	-1¾	97—99.6	3	20/5 + 2/7 +	—
43 1913	—	188	Imp.	8	+9½	97—98	1	20/5 - 2/6 - 13/6 - 18/7 - G.P.	—
44 1913	Tub. Laryn.	125	Wse.	0	-4	97.6—98.8	2	2/6 + 18/7 + 5/8 + 9/9 +	—
45 1913	Tub. enteritis	165	Died	0	—	97.8—99	3	2/6 + 25/8 +	—
46 1913	—	9	Died	0	—	99.6—99.8	1	2/6 +	—
49 1913	Tub. Larynx	170	Imp.	5	+17¾	97.2—97.8	1	18/6 + 13/7 + 14/8 + 9/9 + 8/10 +	—
51 1913	Tub. of cervical glands	91	Stat.	3	+1½	97—98.2	1	18/6 + 5/8 + 9/9 +	—
52 1913	Tub. enteritis	100	Stat.	0	+8½	99.2—100	1	26/6 + 28/8 +	—

## COUNTY SANATORIUM,

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
<b>III. —Continued.</b>										
53 1913	244 1913	J. C.	M.	36	12 months	Cough, Spit, Wasting,	R <sub>2</sub> L <sub>2</sub>	97.6—99	Unfav.	2
55 1913	288 1913	J. G.	M.	45	9 weeks	Wasting, -	R <sub>AB</sub> L <sub>AB</sub>	100—98.2	Unfav.	2
57 1913	—	T. L.	M.	28	6 weeks	Cough, - -	R <sub>2</sub> L <sub>1</sub>	98.6—99	Unfav.	2
59 1913	—	N. S.	F.	22	4 years	Anaemia, Cough, Spit,	R <sub>1</sub> L <sub>2</sub>	97.6—97.8	Fav.	2
60 1913	—	T. B.	M.	36	8 months	Cough, Spit, -	L <sub>2</sub>	97.6—98.6	Fav.	1
63 1913	336 1913	P. S.	M.	44	6 weeks	Pleurisy, - -	R <sub>2</sub> L <sub>1</sub>	98.4—98.6	Fav.	2
64 1913	345 1913	J. M'O.	M.	34	7 years	Influenza, - -	R <sub>3</sub> L <sub>2</sub>	97.6—98.2	Unfav.	2
66 1913	—	Mrs M'F	F.	49	3 years	Cough, - -	R <sub>2</sub>	97—101	Unfav.	2
68 1913	—	A. G.	F.	10	1 year	Pleurisy, - -	R <sub>2</sub> L <sub>1</sub>	97.4—98.2	Fav.	1
69 1913	358 1913	Mrs. L.	F.	28	2 years	Pleurisy, - -	R <sub>3</sub>	98.6—98.8	Fav.	0
73 1913	385 1913	Mrs M'C	F.	25	10 weeks	Cough, Spit, Weakness,	R <sub>2</sub>	98.8—100	Fav.	1
90 1913	—	Mrs M'N	F.	29	6 months	Cough, Weakness,	R <sub>3</sub> L <sub>2</sub>	99.4—102.6	Unfav.	3
97 1913	395 1913	I. M.	M.	22	6 weeks	Cough, - -	R <sub>A</sub> L <sub>2</sub>	98—99	Unfav.	1
98 1913	485 1913	J. S.	M.	25	2 years	Pneumonia, -	R L <sub>AB</sub>	99.2—101.2	Unfav.	2



## UPPERTOWN—Continued.

Reg. No.	Complica- tions.	No. of day's Residence	CONDITION OF DISCHARGE.					T.B.	NOTES.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
<u>53</u> 1913	Tub. Larynx.	87	Imp.	2	+11	97—98.4	1	22/6 + 14/8 + 15/9 +	—
<u>55</u> 1913	Tub. of sternum	161	Died	0	—	97—97	3	9/7 + 27/9 +	—
<u>57</u> 1913	—	83	Died	4	-2	97.8—98.4	2	5/8 + 8/10 +	Died from sudden and profuse haemop.
<u>59</u> 1913	—	70	Imp.	4	+10½	97.2—98.2	1	25/8 + 8/10 +	—
<u>60</u> 1913	—	88	Imp.	6	+22½	97.2—98.2	1	25/8 + 15/9 - + 8/10	—
<u>63</u> 1913	—	83	Imp.	6	+24	97.4—98.6	1	25/8 + 14/10 +	—
<u>64</u> 1913	—	99	Imp.	4	+23	97.4—98.2	1	27/9 + 25/11 +	—
<u>66</u> 1913	—	91	Stat.	0	+5	97.2—101	1	10/7 + 14/8 + 27/9 +	Transferred from Bells- hill.
<u>68</u> 1913	—	86	Imp.	2	+1½	97.4—98.2	0		No sputum after first few days. Transferred from Lightburn
<u>69</u> 1913	Lumbago	69	Imp.	2	+16½	98—98.4	0	8/10 +	Only one specimen of spit obtained.
<u>73</u> 1913	—	44	Imp.	0	+8	97.4—97.8	1	14/10 +	Left without per- mission.
<u>90</u> 1913	—	6	Stat.	0	—	98.8—101.8	3	3/12 +	Refused to stay.
<u>97</u> 1913	Larynx	60	Imp.	3	+9	97.8—98.6	1	29/10 + 25/11 +	Left without per- mission.
<u>98</u> 1913	Larynx	13	Stat.	0	—	98.6—100	2	30/12 +	—

## COUNTY SANATORIUM, UPPERTOWN.

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.	CONDITION ON DISCHARGE.		REMARKS.
					General Health.	Weight in Lbs.	General Health.	
IV.								
1068 1912	193 1911	W. L.	M.	37	Fav.	+6	Imp.	Simple pharyngitis.
1073 1912	403 1912	J. W.	M.	67	Fav.	+9	Imp.	Chronic bronchitis.
1075 1912	399 1912	E. H.	F.	9	Fav.	+11½	Imp.	No spit. No physical signs.
1076 1912	426 1912	J. B.	M.	14	Fav.	+9	Imp.	No spit. No physical signs.
1081 1912	264 1909	R. S.	M.	50	Fav.	+14½	Stat.	Case of asthma.
1084 1912	464 1912	J. D.	F.	13	Fav.	+4	Imp.	No spit. Mitral disease.
4 1913	493 1912	W. M'L.	M.	39	Fav.	+13½	Imp.	Bronchiectasis.
7 1913	11 1913	W. B.	M.	12	Fav.	+8	Imp.	Bronchitis.
9 1913	40 1913	J. G.	M.	50	Fav.	+12½	Imp.	Bronchitis and atrophic rhinitis.
13 1913	30 1913	R. B.	M.	10	Fav.	+12½	Imp.	Thickened pleura at R. base.
14 1913	17 1913	J. G.	M.	7	Fav.	+7½	Imp.	Cardiac disease.
16 1913	39 1913	A. S.	F.	13	Fav.	+13½	Well	
19 1913	50 1913	A. S.	M.	38	Fav.	+22	Imp.	No physical signs.
21 1913	—	W. M.	M.	32	Fav.	+15	Imp.	Asthma.
22 1913	3 1910	N. B.	F.	13	Fav.	+1½	Imp.	No physical signs.
23 1913	2 1910	M. B.	F.	11	Fav.	+1	Imp.	No physical signs.
31 1913	96 1913	M. C.	F.	8	Fav.	+6½	Well	Bronchitis after measles.
34 1913	—	L. M'B.	F.	18	Unfav.	+11	Imp.	Tuberculous peritonitis.
48 1913	182 1911	A. H.	M.	11	Fav.	+5½	Well	No physical signs.
62 1913	330 1913	J. D.	M.	24	Fav.	+14½	Imp.	
65 1913	—	Mrs. S.	F.	38	Fav.	+7½	Imp.	Simple laryngitis. Epilepsy.
75 1913	384 1913	H. M.	M.	20	Fav.	+10½	Imp.	Neurasthenic.
92 1913	459 1913	F. O.	M.	28	Fav.	Not known	Stat.	Case of syphilis.



## COUNTY HOSPITAL, BELLSHILL.

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TUBERCULOSIS OFFICER, J. W. MILLER, M.B., Ch.B., D.P.H.

VISITING PHYSICIANS, { JAMES MUIR, M.D.  
                                  { WALTER S. FINDLAY, M.B., Ch.B.

*Buildings and Grounds.*—The site of this hospital was considered suitable for the treatment of smallpox, being about half-a-mile distant from the nearest populous place, viz., Bellshill. The grounds extend to about 3 acres, and the area can readily be extended. Underground workings, however, have seriously interfered with the grounds of the institution, and no extensions have taken place, as were planned some three years ago.

During that time this hospital was largely taken advantage of for the treatment of serious cases of tuberculosis, being somewhat centrally situated and convenient to the more populous areas. Towards the end of 1913 the accommodation was set aside for the treatment of acute infections, chiefly scarlet fever, and has continued to be so used.

*Patients Treated.*—There were in residence at the beginning of the year 31 patients, and during the year 70 patients were admitted, making the total number under treatment 101. These patients were all discharged before the close of the year. They are classified into four groups, and the more important clinical data for each patient are given in the tabular statements which follow. It will be found that 20 were in Group I.; 13 in Group II.; and 40 in Group III. Of the remaining 28 cases, 25 were in Group IV., being patients in whom the diagnosis of tuberculosis was not confirmed. In discussing the clinical data these 25 cases are therefore excluded. The other 3 are non-pulmonary forms of the disease, and are referred to in the text.

*Place of Residence.*—These patients were drawn not only from all parts of the Middle Ward District, but also from the Lower Ward of the County, from Burghs situated within the County, and from places outwith the County altogether. Taking the Middle Ward patients

first, and classifying them according to the parish from which they were drawn, the following is the result :—

Residence.	No. of Patients.	Residence.	No. of Patients.
Stonehouse, ...	1	Cambusnethan, ...	1
Blantyre, ...	8	Hamilton, ...	1
Bothwell, ...	49	Old Monkland, ...	5
Cambuslang, ...	19		
Lower Ward, ...	1		

*Patients from Burghs situated within the County—*

Coatbridge, ...	2	Hamilton, ...	7
Rutherglen, ...	3	Wishaw, ...	1

*Patients from places outwith the County—*Clydebank, 2; Kingussie, 1.

*Age and Sex.*—The following table shows the age and sex of all patients treated throughout the year. The age is given in quinquennial periods and in age groups :—

Age Periods.	Males.	Females.	Both Sexes.	Age Groups.
Under 5	2	—	2	
10	12	12	24	} School age, 50.
15	11	15	26	
20	4	6	10	
25	3	1	4	} Adolescence 14.
30	1	8	9	
35	2	5	7	} Early mature period 25.
40	4	—	4	
45	2	3	5	
50	2	3	5	} Late mature period 10.
55	1	2	3	
60	1	1	2	
65	—	—	—	
Total, ...	45	56	101	

### **Pulmonary Tuberculosis.**

*Duration of Illness.*—Patients with pulmonary lesions classified according to duration of illness, stated in monthly periods :—

Months,	Under 1.	1-3.	3-6.	6-12.	12-18.	18-24.	Over 24.	Indefinite.	Total.
Patients,	1	20	10	13	0	4	4	21	73

*Earliest Symptoms recognised.*—Cough and spit, 29; cough and hæmoptysis, 3; anorexia, 3; dyspepsia, 4; influenza, 3; not stated, 31; total, 73.



*General Results.*—Patients classified according to stage of the disease :—

	No. of Patients.	Disease Arrested.	Improved.	Stationary.	Worse.	Died.
Group I., A & B,	20	9	9	1	0	1
„ II., „	13	0	12	0	0	1
„ III., „	40	0	6	4	14	16
Totals, ...	73	9	27	5	14	18

*Duration of Residence*  
*in Days—*

Average, ...	...	100	129	77	78	42
Maximum, ...	...	135	273	176	107	172
Minimum, ...	...	83	26	5	21	3

*Complications—*

Disease.	Number of Patients in each Group.		
	Group I.	Group II.	Group III.
Laryngitis, ...	—	—	2
Pleurisy, ...	—	—	2
Dyspepsia, ...	—	—	1
Cer. Sinus and Meningitis, ...	1	—	—
Cer. Adenitis, ...	1	—	—
Peritonitis and Meningitis, ...	—	1	—
Enteritis, ...	—	—	1
	2	1	6

*Examination of Sputum—*

Number of patients in whose sputum tubercle bacilli were found, ...	34
Number of patients in whose sputum tubercle bacilli were not found, ...	13
Number of patients without sputum, ...	11
Number of patients where information was wanting, ...	15
	73

Of the 13 patients in whose sputum no tubercle bacilli were found, 6 were in Group I.; 4 in Group II.; and 3 in Group III.

Of the 11 patients without sputum, 5 were in Group I.; 3 in Group II.; and 3 in Group III.

Of the 34 patients with tubercle bacilli in the sputum, the following one in Group II.A is of interest :—

		7 dys.
$\frac{534}{1913}$ T.P.	8/3, 13/3, 29/3, 13/5.	
	- - + -	

**Non-Pulmonary Tuberculosis.**

3 cases. J. G., a boy of  $3\frac{1}{2}$  years, suffered from tuberculous peritonitis. The cervical glands on both sides were also involved. His general condition was very unsatisfactory, and signs of rickets were present. He was discharged after a residence of 399 days, but without apparent benefit, and died some months after leaving hospital.

R. M'R., a boy of 7 years, suffered from an early tuberculous lesion of lower end of right humerus and lower third of right femur. There was no joint involvement, and the skin over the lesions was not affected. Examination of the chest was negative. Under hygienic dietetic treatment the bone condition almost entirely disappeared, and his general health was much improved. There was a gain in weight of  $5\frac{3}{4}$  lbs.

H. M'C., a boy of 6 years, suffered from tuberculous peritonitis. He did not improve under treatment, and after a residence of 117 days in hospital was discharged on request of his parents.



1877-1878		1878-1879		1879-1880		1880-1881		1881-1882		1882-1883		1883-1884		1884-1885		1885-1886		1886-1887		1887-1888		1888-1889		1889-1890		1890-1891		1891-1892		1892-1893		1893-1894		1894-1895		1895-1896		1896-1897		1897-1898		1898-1899		1899-1900		1900-1901		1901-1902		1902-1903		1903-1904		1904-1905		1905-1906		1906-1907		1907-1908		1908-1909		1909-1910		1910-1911		1911-1912		1912-1913		1913-1914		1914-1915		1915-1916		1916-1917		1917-1918		1918-1919		1919-1920		1920-1921		1921-1922		1922-1923		1923-1924		1924-1925		1925-1926		1926-1927		1927-1928		1928-1929		1929-1930		1930-1931		1931-1932		1932-1933		1933-1934		1934-1935		1935-1936		1936-1937		1937-1938		1938-1939		1939-1940		1940-1941		1941-1942		1942-1943		1943-1944		1944-1945		1945-1946		1946-1947		1947-1948		1948-1949		1949-1950		1950-1951		1951-1952		1952-1953		1953-1954		1954-1955		1955-1956		1956-1957		1957-1958		1958-1959		1959-1960		1960-1961		1961-1962		1962-1963		1963-1964		1964-1965		1965-1966		1966-1967		1967-1968		1968-1969		1969-1970		1970-1971		1971-1972		1972-1973		1973-1974		1974-1975		1975-1976		1976-1977		1977-1978		1978-1979		1979-1980		1980-1981		1981-1982		1982-1983		1983-1984		1984-1985		1985-1986		1986-1987		1987-1988		1988-1989		1989-1990		1990-1991		1991-1992		1992-1993		1993-1994		1994-1995		1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014		2014-2015		2015-2016		2016-2017		2017-2018		2018-2019		2019-2020		2020-2021		2021-2022		2022-2023		2023-2024		2024-2025		2025-2026		2026-2027		2027-2028		2028-2029		2029-2030		2030-2031		2031-2032		2032-2033		2033-2034		2034-2035		2035-2036		2036-2037		2037-2038		2038-2039		2039-2040		2040-2041		2041-2042		2042-2043		2043-2044		2044-2045		2045-2046		2046-2047		2047-2048		2048-2049		2049-2050		2050-2051		2051-2052		2052-2053		2053-2054		2054-2055		2055-2056		2056-2057		2057-2058		2058-2059		2059-2060		2060-2061		2061-2062		2062-2063		2063-2064		2064-2065		2065-2066		2066-2067		2067-2068		2068-2069		2069-2070		2070-2071		2071-2072		2072-2073		2073-2074		2074-2075		2075-2076		2076-2077		2077-2078		2078-2079		2079-2080		2080-2081		2081-2082		2082-2083		2083-2084		2084-2085		2085-2086		2086-2087		2087-2088		2088-2089		2089-2090		2090-2091		2091-2092		2092-2093		2093-2094		2094-2095		2095-2096		2096-2097		2097-2098		2098-2099		2099-2100		2100-2101		2101-2102		2102-2103		2103-2104		2104-2105		2105-2106		2106-2107		2107-2108		2108-2109		2109-2110		2110-2111		2111-2112		2112-2113		2113-2114		2114-2115		2115-2116		2116-2117		2117-2118		2118-2119		2119-2120		2120-2121		2121-2122		2122-2123		2123-2124		2124-2125		2125-2126		2126-2127		2127-2128		2128-2129		2129-2130		2130-2131		2131-2132		2132-2133		2133-2134		2134-2135		2135-2136		2136-2137		2137-2138		2138-2139		2139-2140		2140-2141		2141-2142		2142-2143		2143-2144		2144-2145		2145-2146		2146-2147		2147-2148		2148-2149		2149-2150		2150-2151		2151-2152		2152-2153		2153-2154		2154-2155		2155-2156		2156-2157		2157-2158		2158-2159		2159-2160		2160-2161		2161-2162		2162-2163		2163-2164		2164-2165		2165-2166		2166-2167		2167-2168		2168-2169		2169-2170		2170-2171		2171-2172		2172-2173		2173-2174		2174-2175		2175-2176		2176-2177		2177-2178		2178-2179		2179-2180		2180-2181		2181-2182		2182-2183		2183-2184		2184-2185		2185-2186		2186-2187		2187-2188		2188-2189		2189-2190		2190-2191		2191-2192		2192-2193		2193-2194		2194-2195		2195-2196		2196-2197		2197-2198		2198-2199		2199-2200		2200-2201		2201-2202		2202-2203		2203-2204		2204-2205		2205-2206		2206-2207		2207-2208		2208-2209		2209-2210		2210-2211		2211-2212		2212-2213		2213-2214		2214-2215		2215-2216		2216-2217		2217-2218		2218-2219		2219-2220		2220-2221		2221-2222		2222-2223		2223-2224		2224-2225		2225-2226		2226-2227		2227-2228		2228-2229		2229-2230		2230-2231		2231-2232		2232-2233		2233-2234		2234-2235		2235-2236		2236-2237		2237-2238		2238-2239		2239-2240		2240-2241		2241-2242		2242-2243		2243-2244		2244-2245		2245-2246		2246-2247		2247-2248		2248-2249		2249-2250		2250-2251		2251-2252		2252-2253		2253-2254		2254-2255		2255-2256		2256-2257		2257-2258		2258-2259		2259-2260		2260-2261		2261-2262	
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## COUNTY HOSPITAL

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
<b>I. A</b>										
3061 1912	459 1912	F. R.	M.	8	—	—	R <sub>1</sub>	97—97·7	Fav.	—
12 1913	34 1913	J. M.	F.	51	1 month	Cough, Haemop.	L <sub>1</sub>	98·1—98·6	Fav.	1
11 1913	265 1911	M. M'G.	F.	42	6 months	Cough, Haemop.	R <sub>1</sub>	97·3—97·8	Fav.	1
<b>I. B</b>										
3031 1912	84 1912	S. K.	F.	9	7 months	—	R <sub>1</sub>	97·3—99·3	Fav.	—
3042 1912	268 1912	J. W.	M.	9	—	—	R <sub>1</sub>	97·7—98·5	Fav.	1
3046 1912	435 1912	J. B.	M.	8	—	—	R <sub>1</sub>	97·1—97·8	Fav.	—
3048 1912	229 1912	A. C.	F.	6	—	—	L <sub>1</sub>	97·5—98·3	Fav.	—
3049 1912	334 1911	S. T.	M.	6	—	—	L <sub>1</sub>	98·8—99·3	Fav.	—
3052 1912	—	N. W.	F.	7	—	—	R <sub>1</sub>	97·2—99	Fav.	—
3062 1912	218 1912	A. G.	M.	5	—	—	R <sub>1</sub>	97·4—98·4	Fav.	—
1 1913	495 1912	J. M'C	F.	14	2 years	—	R <sub>1</sub>	97·6—98	Fav.	—
4 1913	8 1913	J. H.	F.	12	1 month	—	R <sub>1</sub>	97—98	Fav.	—
8 1913	453 1912	B. D.	M.	11	—	—	R <sub>1</sub>	97·1—98·1	Fav.	—
14 1913	54 1913	A. C.	F.	14	1 month	Anorexia, Cough	R <sub>1</sub>	98·6—98·2	Fav.	1
18 1913	67 1913	J. T.	M.	12	—	Dyspepsia	R <sub>1</sub>	97·3—97·9	Fav.	0
25 1913	84 1913	N. M.	M.	12	1 month	Anorexia, Cough	L <sub>1</sub>	97·8—97·4	Fav.	0
33 1913	99 1913	R. M.	F.	11	1 month	Anorexia,	R <sub>1</sub>	98—98·3	Fav.	1
43 1913	133 1913	B. C.	F.	9	1 year	Cough,	L <sub>1</sub>	100·4—100·2	Fav.	0



## BELLSHILL.

Reg. No.	Complications.	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	NOTES.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
3061 1912	—	83	Imp.	—	+3	98.1—98		20/8+	
12 1913	—	9	Stat.	—	—	97.6—99.8	1	28/1—	
11 1913	—	29	Imp.	—	+8½	97—98.5	1	21/1—5/2— 14/2—G.P.	Left against advice.
3031 1912	—	135	Arr.	—	+6	97.4—98.1			
3042 1912	—	101	Arr.	—	+2½	97.8—98	0	2/11—	
3046 1912	—	126	Imp.	—	+3	97.7—97.5			
3048 1912	—	144	Imp.	—	+2	97.4—98		4/2—	
3049 1912	—	110	Arr.	—	+2	97.4—97.8			
3052 1912	—	273	Imp.	—	+4½	97.6—98.4			
3062 1912	—	103	Arr.	—	+5	97.7—98.2			
1 1913	—	84	Arr.	—	+21½	97.2—97.9			
4 1913	—	115	Arr.	—	+16½	97.4—98			
8 1913	—	86	Imp.	—	+4½	97.1—98			
14 1913	—	85	Arr.	—	+14	97.5—98.2	0	3/2—	
18 1913	—	86	Arr.	—	+10½	97.4—98	0		
25 1913	—	83	Arr.	—	+10	97.3—98.7	0		
33 1913	—	140	Imp.	—	+7¾	97.4—97.6	0	8/5—14/5—	
43 1913	Discharging Cervical Sinus, Menin.	61	Died	—	—½	98—102.9	0		

## COUNTY HOSPITAL,

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
<b>I.B—Continued.</b>										
50 1913	473 1912	A. M.	M.	14	3 months	Cough, - -	R <sub>1</sub>	97·2—97·9	Fav.	0
67 1913	262 1913	W. M.	M.	7	—	Cough, - -	L <sub>1</sub>	97·3—98·1	Fav.	0
<b>II.A</b>										
3055 1912	106 1911	K. D.	F.	13	—	—	R <sub>1</sub> L <sub>1</sub>	97·8—98·3	Fav.	1
34 1913	64 1913	T. P.	M.	50	9 months	Cough, Spit, -	R <sub>2</sub>	97·2—98·5	Fav.	2
23 1913	—	R. M.	M.	36	4 years	Cough, Haemop.	L <sub>2</sub>	97·1—98·4	Fav.	2
39 1913	147 1913	S. C.	F.	15	2 years	Cough, Spit, -	R <sub>1</sub>	97—98·4	Fav.	2
<b>II.B</b>										
3043 1912	420 1912	J. W.	M.	40	1 month	—	R <sub>1</sub>	97·7—99·6	Fav.	2
3044 1912	125 1912	A. R.	F.	13	—	—	L <sub>2</sub>	97·2—99·6	Fav.	
3047 1912	434 1912	E. B.	M.	10	—	—	L <sub>2</sub>	97·8—100	Fav.	0
3053 1912	451 1912	M. S.	F.	13	—	—	R <sub>2</sub> L <sub>1</sub>	97·3—98·1	Fav.	
27 1913	—	E. M.I.	F.	18	4 years	Cough, - -	L <sub>2</sub>	97·8—98·4	Fav.	1
37 1913	280 1911	W. H.	M.	11	2 years	Cough, - -	L <sub>2</sub>	97·7—98·2	Fav.	0
45 1913	140 1913	D. M.K.	M.	9	—	—	L <sub>1</sub>	97·2—97·8	Unfav.	0
41 1913	—	P. O.B.	M.	24	17 weeks	Cough, - -	L <sub>1</sub>	98·1—98·6	Fav.	3
73 1913	325 1913	E. H.	F.	46	6 months	Cough, - -	L <sub>1</sub>	97—97·1	Fav.	1
<b>III.</b>										
3037 1912	393 1912	M. P.	F.	8	2 years	—	L <sub>2</sub>	97·3—99·5	Unfav.	—
3039 1912	39 1905	P. O.K.	M.	42	7 years	—	R <sub>3</sub> L <sub>2</sub>	97·1—97·6	Fav.	—
3 1913	504 1912	J. L.	M.	39	6 weeks.	Cough, Spit, -	R <sub>3</sub> L <sub>1</sub>	100·8—101·2	Unfav.	3



## BELLSHILL—Continued.

Reg. No.	Complications.	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	NOTES.
			General Result.	Walking miles per day.	Weight in lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
50 1913	—	86	Imp.	—	+8½	97·4—97·6	0		
67 1913	Tub. Cervical Adenitis	86	Imp.	—	+¾	97—97·9	0		
3055 1912	—	107	Imp.	—	+28½	98—98·2	0	26/11 +	
34 1913		85	Imp.	—	+26	97·2—98	1	8/3 - 13/3 - 29/3 + 13/5 -	
23 1913	—	143	Imp.	—	+4¾	97—97·8	1	22/2 + 2/4 + 2/5 + 2/7 -	
39 1913	—	84	Imp.	—	+13	97·4—97·6	1	29/3 + 29/4 + 12/6 +	
3043 1912	—	100	Imp.	—	+30½	97·3—97·6	1	31/10/12 - 5/11/12 - 19/12/12 - 17/1 - 5/2 -	
3044 1912	—	98	Imp.	—	+9¾	97·4—98			
3047 1912	—	238	Imp.	—	+7¼	97·2—98	0		
3053 1912	—	83	Imp.	—	+2¾	97·3—98·2			
27 1913	—	140	Imp.	—	+18¼	97—98·2	0	26/2 - 10/4 -	
37 1913	—	167	Imp.	—	+7	97—98·7	0		
45 1913	Tub. periton. Menin.	80	Died	—	+6	97—97·7	0		
41 1913	—	112	Imp.	—	± 0	97—98·1	3	3/4 - 11/4 - 23/4 - 15/5 - G.P.	
73 1913	—	26	Imp.	—	+8	97—97·5	1	14/8 - 27/8 -	
3037 1912	—	90	Wse.	—	-4	98·2—100·2	—	—	—
3039 1912	—	108	Imp.	—	+16½	97·2—97·6	—	—	—
3 1913	Pleurisy	53	Died	—	+2	98·8—101·2	3	9/1 + 14/2 +	

## COUNTY HOSPITAL,

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
III. — <i>Continued.</i>										
38 1913	119 1913	M. W.	F.	29	2 months	—	R <sub>3</sub> L <sub>2</sub>	98·2—99·6	Unfav.	—
3065 1912	—	M. B.	F.	29	—	—	R <sub>3</sub> L <sub>1</sub>	97·6—98	Unfav.	—
3058 1912	460 1912	M. M'L.	F.	21	1 month	—	R <sub>2</sub> L <sub>2</sub>	97·5—100·7	Unfav.	3
3057 1912	448 1912	S. S.	F.	34	4 months	—	L <sub>2</sub>	101·8—98·7	Unfav.	3
3059 1912	445 1912	M. R.	F.	19	2 months	—	R <sub>2</sub> L <sub>2</sub>	97·8—98·1	Unfav.	3
3051 1912	—	A. E.	F.	41	—	—	R <sub>3</sub> L <sub>2</sub>	99·5—100·8	Unfav.	3
10 1913	22 1913	M. H.	F.	18	5 weeks	Dyspepsia,	R <sub>2</sub>	97·6—101·2	Unfav.	0
16 1913	51 1913	M. P.	F.	18	2 weeks	Cough, Spit,	L <sub>2</sub>	99·4—101·9	Unfav.	1
17 1913	65 1913	A. M'L.	M.	14	3 months	Cough, Spit,	R <sub>3</sub> L <sub>2</sub>	99·2—101·6	Unfav.	1
20 1913	—	M. M'B.	F.	31	7 months	Pain in Chest, Cough, Spit,	R <sub>3</sub>	97·3—99·9	Unfav.	2
21 1913	78 1913	M. M'L.	F.	15	2 months	Influenza, -	L <sub>2</sub>	101·2—100·9	Unfav.	1
22 1913	81 1913	P. B.	M.	23	1 year	Cough, Spit,	R <sub>3</sub> L <sub>1</sub>	97—98·1	Unfav.	1
31 1913	—	J. M'L.	M.	19	1 month	Influenza, -	L <sub>2</sub>	96·6—100·4	Unfav.	1
32 1913	—	G. K.	M.	34	5 months	Cough, Spit,	R <sub>2</sub> L <sub>2</sub>	99·2—99·6	Unfav.	1
35 1913	42 1913	A. T.	F.	8	—	Cough, Spit,	L <sub>2</sub>	97·3—100·8	Unfav.	1
36 1913	95 1913	I. C.	F.	12	3 months	Cough, -	R <sub>2</sub>	97—97·6	Unfav.	0
3050 1912	437 1912	M. W.	F.	30	5 months	Cough, Spit,	R <sub>2</sub> L <sub>1</sub>	98·3—100·4	Unfav.	2
42 1913	135 1913	M. C.	F.	5	6 months	Cough, -	R <sub>3</sub>	97·4—99·4	Unfav.	0
46 1913	437 1912	M. W.	F.	30	8 months	—	R <sub>3</sub> L <sub>2</sub>	98·6—101·1	Unfav.	1
48 1913	172 1913	J. Y.	M.	35	3 months	Influenza, -	R <sub>3</sub> L <sub>2</sub>	99·2—100·3	Unfav.	2



## BELLSHILL—Continued.

Reg. No.	Complica- tions.	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	NOTES.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
38 1913	—	83	Stat.	—	+4	97·1—99·	—		—
3065 1912	—	176	Stat.	—	+4	97·8—99·5	7	31/12/12+25/3+ 29/4/+ 12/6/+	—
3058 1912	—	53	Wse.	—	-13½	97·4—100·6	3	27/11+30/12+	—
3057 1912	—	48	Wse.	—	-15	98·7—101·2	3	30/11+	—
3059 1912	—	97	Wse.	—	+3	97·4—98·3	3	20/12+23/12+	—
3051 1912	—	71	Died	—	+7¾	98·8—101·2	3	22/12+15/2+ 10/1+	—
10 1913	—	84	Wse.	—	-10½	97·3—98·2	0		—
16 1913	—	85	Wse.	—	-13	99·6—102·1	0		—
17 1913	—	7	Died	—	9	98·—101·9	1	15/2-	—
20 1913	—	72	Wse.	—	-27½	98·2—100·6	2	22/2+4/4+30/4+	—
21 1913	—	53	Died	—	-5	100·9— 103·8	2	7/3+11/4+	—
22 1913	—	172	Died	—	+21½	97·—99·8	3	22/2+3/4+8/5+ 2/7+	—
31 1913	—	22	Died	—	9	97·1—98·4	1	8/3+	—
32 1913	—	87	Wse.	—	-8¾	100·7— 101·3	3	2/3+2/4+	—
35 1913	—	22	Died	—	-2½	98·—99·1	1		—
36 1913	—	112	Stat.	—	+7½	97·5—98·	1	18/3-11/5+9/7+	—
3050 1912	—	80	Wse.	—	-15	100·—101·1	2	22/3+29/4+5/6+	—
42 1913	—	10	Died	—	±0	97·—97·6	0		—
46 1913	Tub. enteritis	89	Wse.	—	-7½	97·8—99·	1	5/4+13/5+	This is number 38 readmitted. 1913
48 1913	Tub. of larynx	11	Died	—	±0	97·9—98·4	2	11/4+	—

## COUNTY HOSPITAL,

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
III.	—	Continued.								
51 1913	202 1913	M. M. B.	F.	14	1 year	—	R <sub>2</sub>	98.3—98.6	Fav.	1
49 1913	132 1913	A. C.	F.	26	4 months	Cough, Spit,	R <sub>3</sub> L <sub>1</sub>	97.4—99.6	Fav.	2
55 1913	201 1913	D. H.	M.	58	3 months	Cough, Spit,	R <sub>3</sub>	97.5—100.7	Unfav.	1
58 1913	7 1913	J. S.	F.	11	7 months	—	L <sub>2</sub>	97.8—98.6	Fav.	3
61 1913	211 1913	J. T.	M.	15	3 months	Dyspepsia, Lassitude,	L <sub>2</sub>	99.8—102.5	Unfav.	2
60 1913	217 1913	J. G.	M.	27	4 months	Cough, Spit,	R <sub>3</sub> L <sub>2</sub>	99.7—100.5	Unfav.	1
62 1913	233 1913	E. P.	F.	33	6 months	Dyspepsia, Loss of Strength,	R <sub>3</sub> L <sub>2</sub>	101.8—103	Unfav.	3
63 1913	245 1913	M. H.	F.	19	1 year	Cough,	L <sub>2</sub>	98.6—100.8	Unfav.	2
66 1913	263 1913	C. E.	F.	59	—	—	L <sub>2</sub>	97.5—99.6	Unfav.	3
70 1913	312 1913	T. S.	M.	45	1 year	Cough, Spit,	R <sub>3</sub>	97—97.8	Fav.	2
72 1913	—	J. H.	F.	30	1 year	Cough,	R <sub>3</sub> L <sub>2</sub>	97.1—100.6	Unfav.	2
74 1913	—	M. A.	F.	42	6 months	Cough, Spit,	R <sub>2</sub> L <sub>2</sub>	97.6—100.4	Unfav.	3
75 1913	—	F. R.	M.	23	1 year	Cough,	R <sub>2</sub> L <sub>2</sub>	99.1—100.5	Unfav.	3
83 1913	—	J. B.	F.	19	1 year	Cough,	L <sub>2</sub>	100—99	Fav.	1
3068 1912	497 1912	A. Q.	F.	8	—	—	—	98.6—101.3	Unfav.	—
2 1913	377 1912	H. K.	M.	19	—	—	—	97—98.6	Unfav.	2
19 1913	—	C. W.	F.	53	3 years	Cough, Spit,	R <sub>2</sub> L <sub>1</sub>	97.4—98.4	Fav.	2
NON-PULMONARY										
3009 1912	—	J. G.	M.	3½	—	—	—	97—97.6	Unfav.	—
63 1913	—	R. M. R.	M.	7	—	—	—	98.1—97.6	Fav.	—
5 1913	—	H. M. C.	M.	6	—	—	—	97—98.2	Unfav.	—



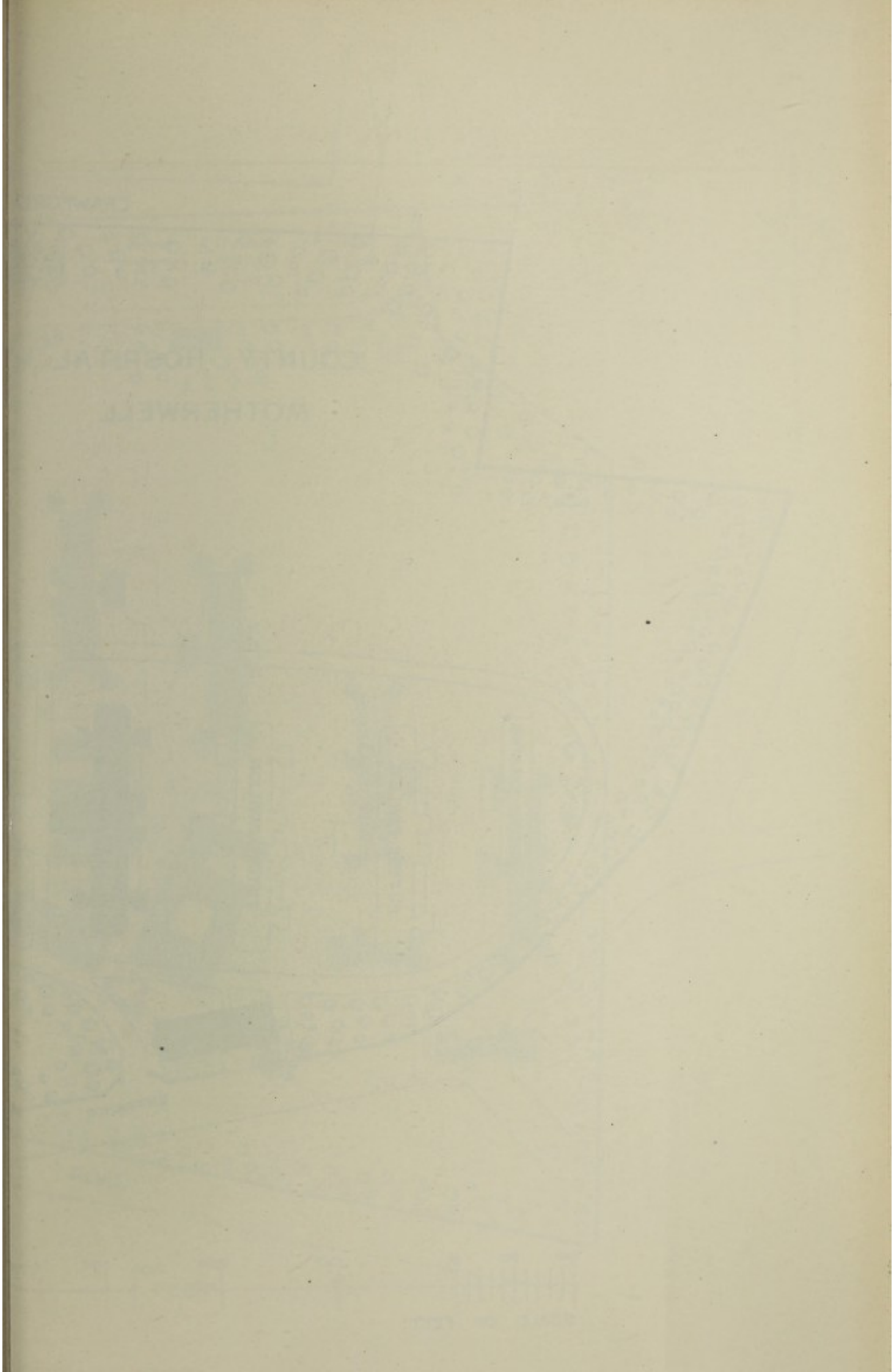
## BELLSHILL—Continued.

Reg. No.	Complications.	No. of day's Residence	CONDITION OF DISCHARGE.					T.B.	NOTES.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
51 1913	—	113	Imp.	—	+1½	98·6—99·3	1	23/4+5/6+4/7+ 15/7+2/8+	—
49 1913	Pleurisy	110	Imp.	—	+15	97·2—97·6	2	26/4+6/6+15/7 6/8+	—
55 1913	—	87	Wse.	—	-11	99·8—102·	1	5/5+12/6+22/7+	—
58 1913	—	90	Imp.	—	+4½	98·—98·2	3	19/5-29/5-12/6 -4/7-2/8-	—
61 1913	—	51	Died	—	9	98·9—99·3	2	20/5+	—
60 1913	Tub. of larynx	107	Wse.	—	-1½	97·8—99·7	2	20/5+6/7+10/8+	—
62 1913	—	33	Died	—	-3½	97·3—97·6	3	29/5+	—
63 1913	—	101	Wse.	—	-12½	99·4—101·9	2	5/6+14/7+20/8+	—
66 1913	—	81	Died	—	9	97·6—98·6	3	10/7+20/8+	—
70 1913	—	42	Imp.	—	+12½	97·1—98·	2	22/7+	—
72 1913	—	19	Died	—	—	97—98·2	2	27/7+	—
74 1913	—	16	Died	—	—	97·4—100	3	15/8+	—
75 1913	Dyspepsia.	21	Wse.	—	+½	98—98·8	3	20/8+	—
83 1913	—	5	Stat.	—	—	98·2—99·4	1		Left against advice.
3068 1912	—	4	Died	—	—	97·6—101	—		
2 1913	—	3	Died	—	—	—	2	7/1+	
19 1913	—	105	Imp.	—	+18½	97·8—98·7	1	19/2-5/3-12/3-	
TUBERCULOSIS.									
3009 1912	—	399	Stat.	—	+3½	97—98·5	—	—	Tub. Peritonitis.
63 1913	—	46	Imp.	—	+5¾	97·4—98	—	—	Osseous Tuberculosis.
5 1913	—	117	Stat.	—	+1½	97·9—100·6	—	—	Tub. Peritonitis.

## COUNTY SANATORIUM, BELLSHILL.

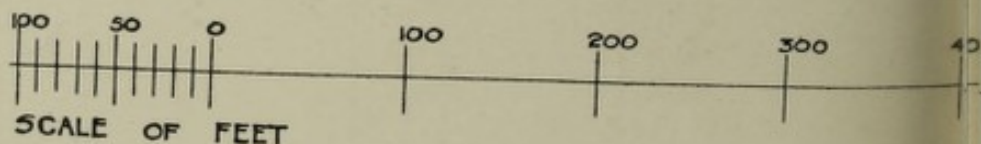
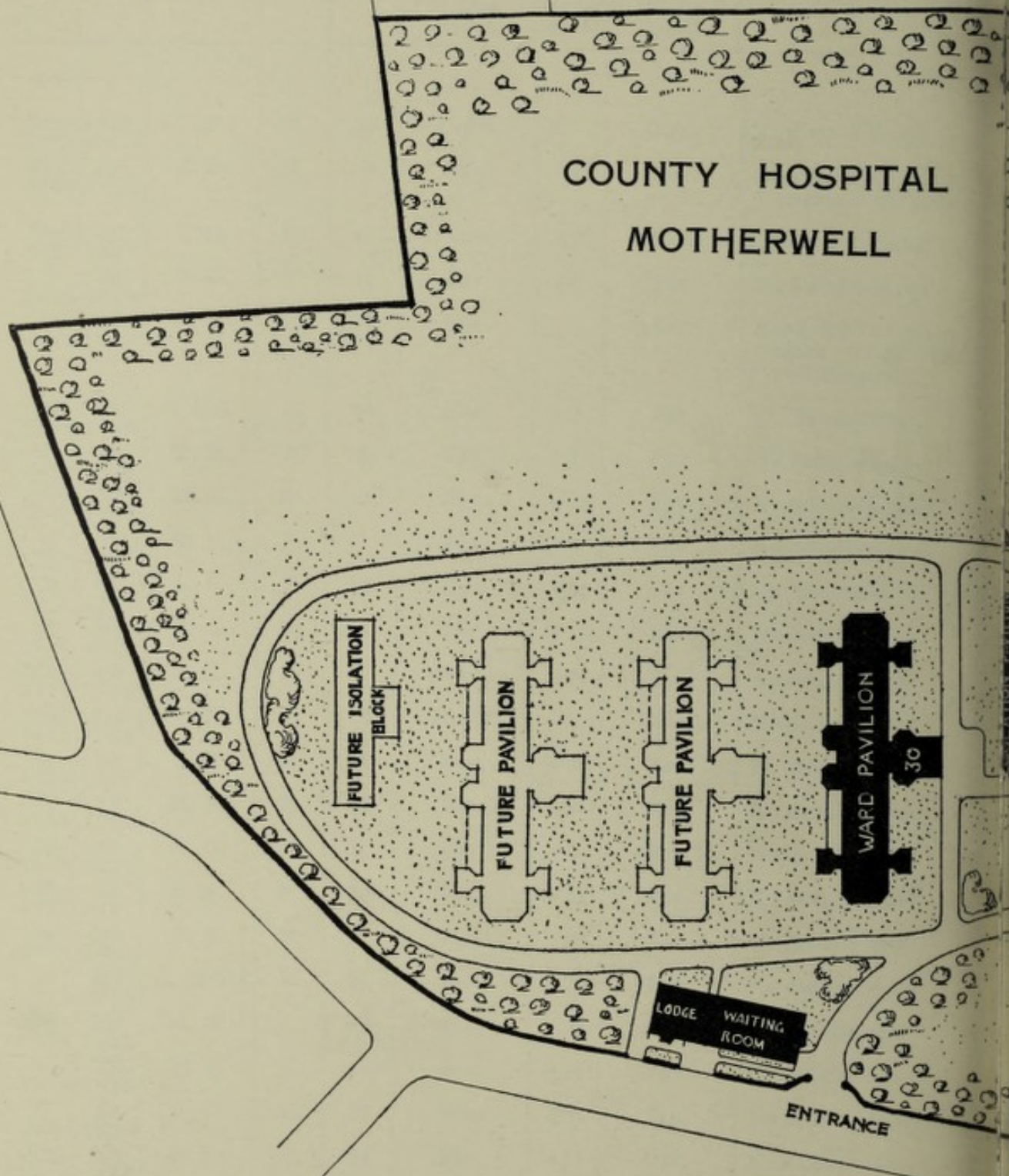
Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.	CONDITION ON DISCHARGE.		REMARKS.
					General Health.	Weight in Lbs.	General Health.	
IV.								
3032 1912	370 1912	J. F.	M.	40	Unfav.		Unfav.	Tumour of Lung.
3038 1912	304 1911	J. R.	M.	9	Fav.	+4	Fav.	Abscess at site of re- section of rib scar.
3045 1912	423 1914	P. Q.	M.	47	Fav.	+20	Fav.	Thickened Pleura.
6 1913	60 1912	A. C.	F.	11	Fav.	+2	Fav.	No definite signs.
15 1913	45 1913	J. S.	M.	14	Fav.		Fav.	Resolving Pneumon.; trans. to Mother- well Hospital.
24 1913	64 1906	S. M'L.	F.	34	Fav.	+0	Fav.	Ch. Bronchitis.
28 1913	80 1913	M. M.	F.	6	Fav.	+3	Fav.	No definite signs.
30 1913	357 1909	M. G.	M.	16	Fav.	+1½	Fav.	No definite signs.
40 1913	158 1913	M. C.	F.	7	Fav.	+9	Fav.	No definite signs.
49 1913	132 1913	A. E.	F.	26	Fav.	+31	Fav.	Ch. Bronchitis.
56 1913	208 1913	J. A.	M.	4	Fav.	+1¾	Fav.	No definite signs.
3056 1912	450 1912	J. H.	F.	7	Fav.	+2½	Fav.	No definite signs.
3043 1912	483 1912	E. B.	F.	14	Unfav.		Unfav.	No definite signs.
9 1913	288 1912	A. H.	M.	12	Fav.	+9	Fav.	No definite signs.
13 1913	44 1913	M. B.	F.	26	Fav.	+25½	Fav.	No definite signs.
26 1913	99 1911	R. D.	M.	11	Fav.	+4	Fav.	No definite signs.
29 1913	59 1911	F. M.	F.	14	Fav.	+5¼	Fav.	No definite signs.
44 1913	112 1913	J. A.	M.	5	Fav.	+2	Fav.	No definite signs.
47 1913	171 1913	A. M'V.	F.	11	Fav.	+7¼	Fav.	No definite signs.
59 1913	241 1912	M. M.	F.	12	Fav.	+4½	Fav.	No definite signs.
64 1913	260 1913	M. S.	F.	48	Fav.	+4½	Fav.	No definite signs.
7 1913	10 1913	C. D.	M.	18	Fav.	+31	Fav.	No definite signs.
3054 1912	315 1912	A. D.	M.	54	Fav.	+13	Fav.	No definite signs.
3044 1912	478 1912	M. D.	F.	48	Fav.	+4	Fav.	No definite signs.
3046 1912	—	J. G.	F.	34	Fav.	+0	Fav.	No definite signs.



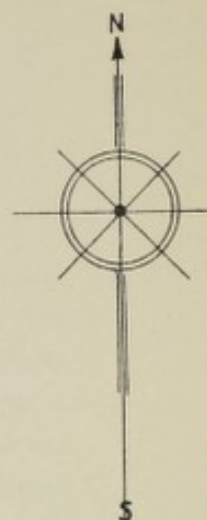
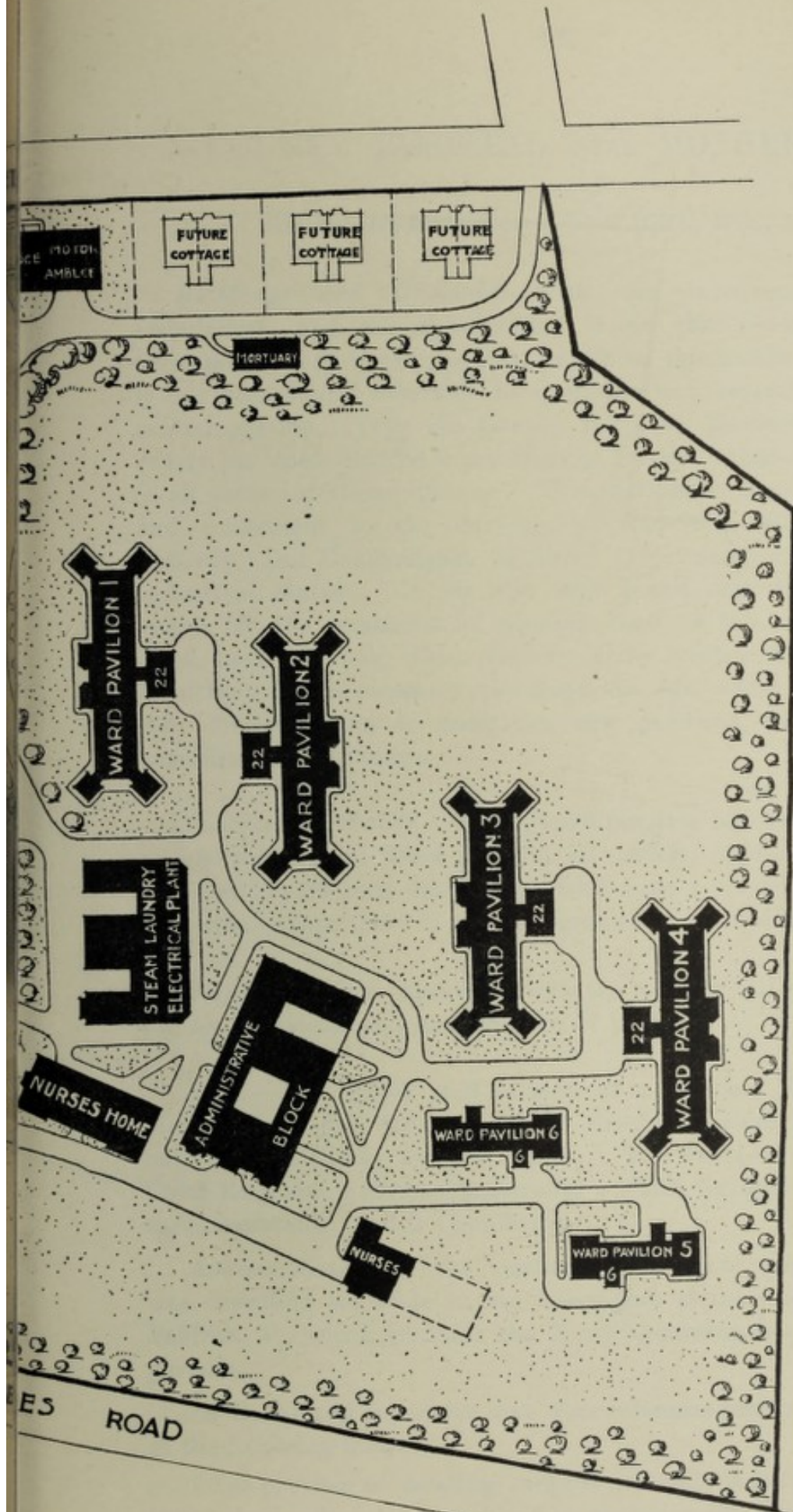


CRAWFORD

# COUNTY HOSPITAL MOTHERWELL

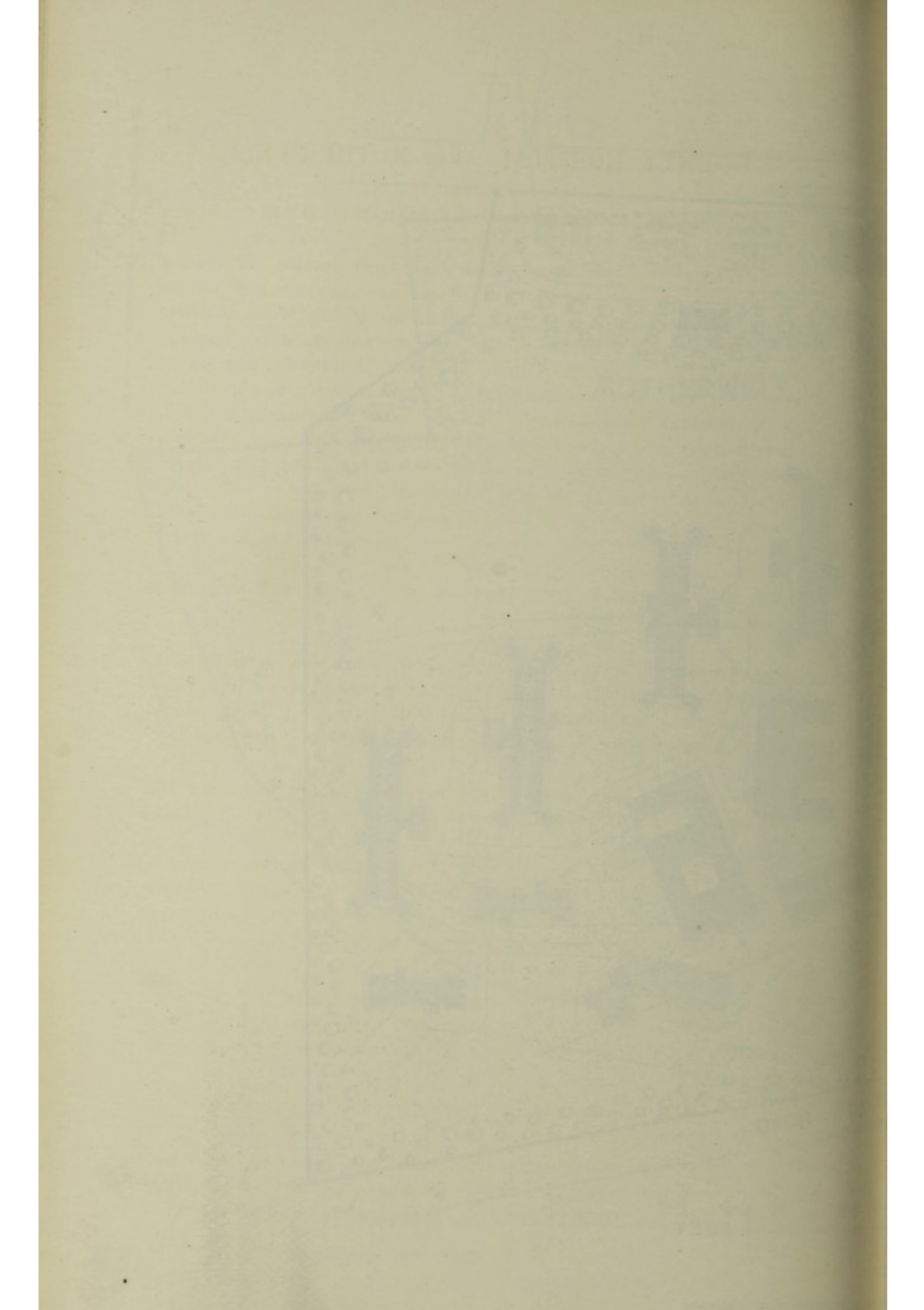






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FEET

LOCHHEAD & BROWN  
HAMILTON.





## COUNTY HOSPITAL, NEAR MOTHERWELL.

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Resident Medical Officer—JOHN REID, M.D., D.P.H.

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*Buildings and Grounds.*—With the introduction of motor ambulances, and the development of an efficient tramway service throughout most of the populous places in the Middle Ward District, it has been found desirable to specialise and centralise the hospital accommodation. Thus the County Hospital, Motherwell, now serves nearly the whole Middle Ward District for the isolation and treatment of all acute infectious diseases. This institution is centrally situated, and convenient to the Parishes of Hamilton, Blantyre, Dalserf, Bothwell, and Cambuslang, in which are situated most of the large industrial centres. It has also been found desirable to make provision for the treatment of surgical cases of tuberculosis, and skin cases, such as lupus, which require X-ray treatment. It has, therefore, been found necessary to extend the site, which now amounts to fully 20 acres, and to erect two new pavilions, as well as further administration buildings.

*Tuberculosis Wards.*—A new ward pavilion has been set aside, with an operating room fitted up with all modern appliances. This ward pavilion has 32 beds, and is provided with a verandah on the south-west side, where there is suitable ground for recreation purposes.

*Dispensary.*—In connection with the waiting hall provision is made for consultations and examination of patients.

*Staff.*—The indoor staff consists of a Resident Medical Officer, a Matron, a Night Sister, 6 Ward Sisters, 8 Staff Nurses, 24 Probationers, a Clerk, and 18 Maids. The outdoor staff comprises a Chief Engineer with two assistants, a Chief Gardener-Attendant with three assistants, and 2 Chauffeurs.

Accommodation for the treatment of surgical cases of tuberculosis was definitely set aside in the latter part of the year 1912, and Ward Pavilion V., which contains the X-ray apparatus, has been used for the purpose.

In the annual report for that year reference was made to the subject in the following terms:—

“The problem of treating surgical tuberculosis is one of considerable importance. Such cases, unless the operative procedure is of an urgent nature, have the greatest difficulty in being admitted to a general hospital.



Their discharging sinuses preclude them from convalescent homes, and their lot consequently, if the home conditions are unsatisfactory, is not an enviable one."

Thirteen cases were dealt with during that year. Four were discharged improved, and nine were in hospital at the end of the year. Those latter cases are given in detail later. The four discharged are here described :—

**Region of the Buttock (sacro-iliac joint).**—D. F., aged 34, had been in Glasgow Royal Infirmary, where several operations had been performed. On admission there was a large psoas abscess, which was secondarily infected with streptococci, while he also suffered from advanced pulmonary lesions. As is usual in those cases the progress was rapid. While in hospital the psoas sheath was drained through the lumbar region. The lung condition also advanced rapidly, and the patient died after a residence of 24 days.

**Epididymitis.**—P. S., aged 28, had advanced pulmonary tuberculosis of a very chronic nature. He has been ill for four years, improving in the sanatorium and getting worse after being out a few months. In the latter part of 1912 it was noticed that the right testicle was swollen and somewhat painful. The anterior part of the testicle became attached to the scrotum and an abscess burst. The cord was nodular. The inguinal canal was opened up. The testicle along with the cord up to the internal ring was removed along with the ulcer on the scrotum. For some time a sinus remained, which, however, healed up.

**Cervical Adenitis.**—P. S., aged 17, had had swollen glands in the neck for four years. When he came under treatment it was noted that a mass of infiltrating and broken-down gland tissue formed a collar round the neck. The skin was ulcerated, undermined, and unhealthy. The broken-down tissue was scraped away. With general hygienic dietetic treatment and the aid of tuberculin and X-rays the ulcers healed, and the patient went home much improved.

**Lupus of Ear.**—P. E., aged 17. This patient attended as an out-door patient for X-ray treatment of the ear. His case is mentioned later.

During 1913, 55 cases of tuberculosis were admitted and discharged; 41 of these were non-pulmonary forms, and of these 18 required surgical treatment. The cases might be classified according to the seat of the disease as follows :—Osseous, 12; glandular, 11; abdominal, 3; meningeal, 4; skin, 8; scrotal, 1; kidney and bladder, 1; mammary glands, 1.



### Non-Pulmonary Tuberculosis.

**Bones and Joints.**—15 cases of osseous tuberculosis, including 3 re-admissions, were treated during the year. Of those 12 individual cases, the hip joint was involved in three instances, and the sacro-iliac joint in 2 cases. In the remaining 7, the non-articular part of bone was involved: rib, 1; femur, 2; tibia, 1; vertebra, 1; metacarpal and phalanx, 1; os calcis, 1.

*Sex.*—The males were 6 in number and the females also 6.

*Age.*—Five cases were under 10 years of age, two were between 10 and 15 years, and the others were adults.

*Period in Hospital.*—The residence in hospital was necessarily prolonged, as bone and joint conditions heal slowly. Three cases went home within 3 months, six under 6 months, and three within 9 months.

*Treatment.*—In addition to general hygienic dietetic treatment, in order to increase the patient's natural resistance to tubercle, complete rest to the part affected was commenced at once. This was effected by means of splints or plaster of Paris bandages. When the pain in the joint cases subsided plaster of Paris bandages were applied. The patients were thus able to spend most of the day in the open air going about on crutches.

*Operations.*—The extent of the disease and the situation affected precluded any extensive operative procedure. At the same time, much was done by opening abscesses, excising unhealthy sinuses and removing sequestra to aid nature in the healing process. In three cases—a hip, a spine, and a sacro-iliac case—large abscesses were aspirated and treated with iodoform emulsion. In a case of tuberculous osteomyelitis of the great trochanter of the femur, a number of sinuses were opened up and a considerable amount of carious bone removed. In another case where the lower end of the femur was extensively excavated, the sinus was enlarged for ease in dressing the wound.

*Tuberculin.*—As an adjunct to hygienic dietetic, and operative treatment tuberculin (T.R. and B.E.) was employed.

*Results.*—Without attempting to credit to any particular form of treatment its correct value, the results were considered favourable. In the cases of disease of the rib and tibia the condition was cured. The patient with disease of the spine with abscess went home *in statu quo*. The others were discharged improved.

**Hip Joint.**—D. C., aged 8. This boy came under observation with signs of early disease of the left hip-joint. Six months before the hip had become painful after walking or running about. The mother noticed that



the boy was limping. On examination, it was found that the limb was apparently lengthened and the foot was slightly everted, all the movements were limited, the muscles of the buttock atrophied. The leg was kept in extension until the pain had disappeared, when plaster of Paris bandages were applied and the patient sent home on crutches. The boy remained at home for nearly three months. When seen again the general condition was poor and an abscess had formed on the outer side of the thigh. This was aspirated several times, when iodoform emulsion was injected. Later a sinus formed which is still discharging. Tubercle bacilli of the bovine variety were present in the fluid first aspirated.

I. S., aged 11.—This girl had had a fall one year before; soon after she began to limp and complain of pain in region of the right hip-joint. When first seen the patient was very delicate and the right hip-joint was painful on movement. The muscles were much more atrophied than in the former case. All movements were limited and the leg was shortened. The disease was considered to be in the second stage. After the pain had subsided and the leg had been in extension for several months, plaster of Paris bandages were applied, and the child was sent home after a residence of seven months.

M. P., aged 18.—This patient has signs of a chronic tuberculous lesion at either apex. There was no cough or spit. She had been in a sanatorium for six months with marked improvement. Three months later the left hip joint began to give trouble. When she came under observation the joint was painful on movement, and all movements were limited. There was no sign of abscess formation. With general treatment and tuberculin the patient improved considerably, although she is not able to walk about yet.

**Buttock (sacro-iliac joint).**—F. C., aged 35. Two and a half years before, the patient was struck on the back with a hutch while working in the pit. Ten weeks after an abscess formed in inner side of the thigh. It was opened and continued to discharge. Pain and stiffness in the lower back persisted and patient could not work. When the patient came under observation a sinus was present in Scarpa's triangle of the left side. The lower spine was stiff, but no definite pain was present. Bacteriologically the discharge contained no organism. The wound was dry at the end of three months when patient went home improved. For four months he remained well, then pain of a severe nature developed in the lower back. The slightest movement would make him cry out in agony. Examined under chloroform nothing very definite was detected. Extension and a long splint were applied to the left leg. The pain subsided and in two months he was able to walk about.



M.D., aged 20, showed signs of a healed tuberculous lesion of the right knee joint. Two months before coming under observation a swelling appeared over the right buttock, and the right sacro-iliac joint was tender to pressure. On three occasions the abscess was aspirated and iodoform emulsion injected. After the third tapping it leaked for several days, but no secondary infection took place. This patient went home at the end of 101 days very well, with no signs of abscess, and was able to walk without pain.

**Chest wall (Rib).**—P. G., aged 3, had a portion of the ninth rib of the left side resected for empyema a year before admission to hospital. A sinus communicating with the rib remained. It periodically healed up and discharged again when the child got run down in health. The lung showed signs of partial collapse and the pleura was greatly thickened. The child was treated on ordinary hygienic dietetic principles, and the wound healed up in a month's time.

**Thigh (lower end of Femur).**—A. B., aged 4. Before coming under observation this patient had been operated on, in two other hospitals, several times for tuberculosis of the femur. He also had had the left testicle removed. The child was pale but fairly well nourished. There was no signs of involvement of the lungs. Over the lower end of the right femur towards the outer side was a narrow sinus leading down to the popliteal surface, which, for a considerable space was denuded of periosteum. An opening was detected leading into the medulla of the bone. When the opening was enlarged, it was found that the whole of the lower end of the femur was extensively excavated. The joint was not involved. Locally the sinus was scraped and the opening into the bone enlarged, so that the wound could be dressed from the bottom. Any vigorous treatment would have resulted in a pathological fracture or involvement of the joint. Bier's treatment and tuberculin were given. The general condition improved, but at the end of six months no improvement locally had taken place.

**Thigh (Great Trochanter of Femur).**—W. M., aged 33. This patient was in hospital on two occasions. He had had a history of a fall twelve years before. An abscess formed over the left great trochanter. It afterwards began to discharge. On several occasions he has been in the infirmary where the sinus was opened and the trochanter scraped. The wound usually healed up a certain distance, but never completely dried. The hip-joint was quite free. The wound was opened up again while patient was in hospital and packed from the bottom. It healed up all but a small sinus which refused to close. Patient's general condition improved greatly.



**Leg (Tibia).**—M. M'L., aged 8. Many scars were present over the right tibia. There was one sinus on the inner side leading down to bare bone. In a month's time this was completely healed.

**Spine.**—M. F., aged 21. About fourteen months before a swelling appeared in the mid dorsal region in the middle line. He was getting weaker and thinner, but had no pain. The spinal curve increased rapidly and he got a plaster jacket applied, which did not improve matters. When he first came under observation there was no abscess, but one soon developed. The pus was thick and creamy. It was sterile. The abscess was aspirated and washed out with weak iodine on two occasions. It afterwards burst. At the end of two months patient went home not any improved. He afterwards died.

**Hands and Feet (Dactylitis).**—S. S., aged 3 years. This was a very advanced case. The hands and feet were covered with old scars and discharging sinuses. On the hands the phalanges were shortened and thickened. Nothing short of amputation would have been of any use. With general treatment and tuberculin much improvement took place.

**Foot (os calcis).**—J. M'D., aged 14, had several superficial tuberculous sores on the right thigh and buttock. The most serious lesion was on the right foot. A deep sinus communicated with the external malleolus and another one on the inner side with the os calcis. The latter was scraped and a considerable amount of carious bone removed. At the end of 97 days the ulcers and sinuses had healed up and patient's general condition was greatly improved.

In addition to these 12 non-pulmonary cases, mention should be made of one pulmonary case which also had bone lesions.

**Fore-arm, &c. (Cold Abscesses).**—J. C., aged 15, had signs of early pulmonary tuberculosis at both apices, but had neither cough nor spit. A number of cold abscesses formed over the left external malleolus and left fore-arm. After being incised they would heal up, when others in different situations would appear. This girl improved greatly in a sanatorium, so that now the chest signs are almost gone, but the right ulna and either external malleoli are involved in the tuberculous process.

**Lymphatic Glands.**—Eleven cases were treated throughout the year. In 10 of them the disease was limited to the glands, and in these either an abscess or sinus was present. In the other one an extensive lesion was detected in the lungs.



*Situation.*—Sub-maxillary, 1; sub-maxillary and sub-mental, 4; mastoid, 1; anterior cervical, 2; anterior and posterior cervical, 2; inguinal, 1.

*Sex.*—Six of the patients were males and the remaining 5 belonged to the female sex.

*Age.*—Nine were 15 years or under, 1 was 18 years, and 1 was 27 years.

*Period in Hospital.*—Four were dismissed within 1 month, and 3 within 3 months.

*Treatment.*—The principles of treatment for the glandular cases are identical with those for tuberculosis in other situations. The abscesses were opened in 3 cases, and in the others the sinuses and necrotic skin were scraped. In one case only were the glands intact; these were excised.

In addition to the above, we have two valuable adjuncts to the treatment of glandular tuberculosis, namely, tuberculin and X-rays. These, in suitable cases, were administered.

*Tuberculin.*—In 3 cases T.R. was given, in other 5 B.E., and in 1 P.T.O. It was thought that fully better results were obtained from T.R.

*X-rays.*—Where an abscess is present, neither X-rays nor tuberculin will do much good. With small doses administered twice weekly, sinuses healed up remarkably well. If the gland be not broken down, an aluminium screen is interposed between the tube and the skin.

*Results.*—Five cases were discharged with their sinuses healed and 5 were greatly improved. One went home at the end of a month not improved.

**Abdomen.**—Three cases of abdominal tuberculosis were admitted.

A female, aged  $2\frac{1}{2}$ , had been getting thinner and weaker for about 18 months. There had been diarrhoea alternating with constipation. When admitted, the patient was extremely thin and emaciated—she weighed only 1 stone  $2\frac{1}{2}$  lbs. Large masses were adherent to the abdominal wall. At the umbilicus a faecal fistula was present. The fistula was followed into a loop of bowel attached to the abdominal wall below the umbilicus. The child got gradually weaker and died in 36 days.

Another case, a girl aged 18 years, had been ill for a year with symptoms pointing to appendicitis. At the operation, however, it was found that the peritoneum was studded over with miliary tubercles. After the wound healed considerable pain remained. The temperature was remittent in character and averaged  $100^{\circ}$  F. The pulse remained about 100 per minute. At the end of 3 weeks she had not improved and desired to go home.

Another case, a boy aged 4 years, was admitted in the last stages of abdominal tuberculosis. He was removed home next day, and died a few days later.



**Brain.**—Two cases notified as enteric fever and 2 as cerebro-spinal meningitis were found to be suffering from tuberculous meningitis.

*Case 1.*—A female, aged 4, notified cerebro-spinal meningitis, had been ill for two weeks with severe headache, sickness, and pain in the neck muscles. When admitted to hospital she was thin and emaciated. The neck and leg muscles showed a considerable degree of rigidity. The abdomen was retracted and boat-shaped. All the muscles were tender and irritable when touched. The eye muscles were normal. The knee jerks were absent but the plantar reflexes were active and flexor in type. 20 c.c. of cerebro-spinal fluid came away quite rapidly. It was quite clear and contained a large number of mononuclear leucocytes. No organism was detected. The animal inoculation was negative. The temperature remained between 100° and 101° and the pulse was rapid and thready. The child gradually got weaker and died 9 days after admission.

*Case 11.*—A girl, aged 6, had had headache and sickness for 12 days. This patient was very irritable and tender all over, although there was no rigidity of the muscles. The eyes were normal. 20 c.c. of cerebro-spinal fluid came away quite easily. It contained many leucocytes, the majority of which were lymphocytes. No organism was detected. The temperature in this case ranged between 98.4° and 102°. The pulse was small and rapid. Lumbar puncture was performed on two occasions. The fluid remained quite clear. An animal inoculated with the deposit died too early for any result to be obtained. The patient gradually became comatose, and died a week after admission. A post-mortem was obtained on this patient and typical signs of tuberculous meningitis were discovered at the base of the brain.

*Class III.*—A male, aged 8, notified enteric fever, had been losing interest in things generally for about six weeks. He had no definite pain or complaint, but was inclined to sit about the fire. When admitted to hospital he was dull, but not unconscious. The left side of face was paralysed, and there was distinct weakness of the left arm and leg. The reflexes on that side were absent. There was no muscular rigidity or headache. 60 c.c. of clear cerebro-spinal fluid were obtained. Acid fast bacilli and a great excess of lymphocytes were present. The patient gradually became comatose and died in six days.

*Case IV.*—A male, aged 11, had complained of headache for two weeks. When seen first he was dull, but quite conscious, and there was no irritability or rigidity of the muscles. The knee jerks were absent and the plantar reflexes were extensor in type. 40 c.c. of cerebro-spinal fluid were obtained. The fluid was under pressure and slightly opalescent. It contained a few acid fast bacilli. The animal inoculated with the deposit showed marked signs of tuberculosis. This patient died in 7 days. The post-mortem appearances showed great excess of fluid in the ventricles; the membranes at the base of the brain were thickened and oedematous.



**Lupus Vulgaris.**—Eight cases of skin tuberculosis were admitted. A male, aged 16, came under treatment for an ulcerated condition of the face and neck. The lesion presented the appearance of lupus vulgaris. The condition had commenced 4 years before as a small brownish papule under the right ear. The spot ulcerated and gradually spread over the right cheek, the right side of the neck, then round the whole of the neck and on the left cheek. When first seen, the edges were raised and infiltrated. In many parts brownish nodules were apparent, in parts much scarring had occurred. A large part of the right cheek and neck was ulcerated and extremely painful. During his residence in hospital, 77 days, the general condition of the patient was greatly improved by carefully regulating his diet, and keeping him in the open air most of the day. In addition, gradually increasing doses of new tuberculin (T.R.) were administered at 10-day intervals. X-raying with small doses at frequent intervals was also tried. The result was very satisfactory. The whole of the ulcerated surface was healed in a few weeks and, although much scarring was present, the scar was quite pliable. The patient afterwards attended as an out-door patient for some months, but, as usually happens in such cases when considerable improvement had taken place, he suddenly stopped attending.

A female, aged 12, had had an abscess of the cheek opened eight years before. The wound did not heal up but slowly spread, producing a typical patch of lupus vulgaris. The father died of pulmonary tuberculosis. She had a number of tuberculous glands in the neck. The edges were raised and irregular, showing many typical nodules. The centre was cicatrised. This case with general treatment, X-rays, and tuberculin (B.E.) improved. She is still attending as an outdoor patient.

A female, aged 13.—This patient presented a circular patch, about three inches in diameter, on the fore-arm. The clinical appearances were those of lupus verrucosus. The patch was dry and covered with horny scales of a warty nature. The base was much infiltrated. This patient had only attended as an out-door patient receiving X-ray treatment. Although she had only had a few applications, the result was satisfactory.

A male, aged 17.—This patient had had a patch of lupus vulgaris on the ear healed the year before. He returned with a slight recurrence. After a few applications of X-rays it healed satisfactorily.

A female, aged 14, suffered from an erythematous form of lupus. This condition is rare in persons so young as the patient. It is also to be noted that, although it is included under the heading of tuberculosis, it is now recognised by most authorities not to be a tuberculous disease, but rather the result of some toxæmia, the exact nature of which is unknown at present. The patient was a small ill-nourished anæmic girl. She presented a small discoid patch on either cheek, joined by a narrow strip across the nose. The edges were slightly raised and crenated. The colour



was brownish-pink. The centre presented atrophic scarring. During the three months patient was in hospital she improved markedly with general treatment, X-rays, and the administration of tuberculin. When seen some months later, the patient was working on the pit-head, and the condition had got much worse—the tips of the fingers and ears were then affected.

**Scrofuloderma.**—Three cases of tuberculosis of the skin, with a superimposed pyogenic infection, were treated.

A male, aged 10, had the diseased area on the heel excised. He went home well.

A female, aged 20, in addition to an extensive tuberculosis of the face, had a chronic nephritis. She made no improvement, and died soon after going home.

A female, aged 40, had small areas of scrofuloderma over the trunk. She improved considerably.

**Other Tuberculous Lesions.—Epididymitis.**—This patient was a male, aged 21. The epididymis and cord were involved. As he refused operation general treatment was resorted to. The general condition improved, but the local disease remained *in statu quo*. The discharge contained many degenerated leucocytes, many gram negative bacilli, but no acid fast bacilli. An animal was inoculated with negative result.

**Kidney and Bladder.**—A female, aged 31, had, in addition to a tuberculous kidney, a cystitis, probably of tuberculous origin. The urine contained acid fast bacilli and coliform organisms. The animal experiment was negative. In addition to general treatment she had tuberculin (T.R.) and local applications to the bladder. She went home slightly improved.

**Breast.**—A female, aged 32. The breast was riddled with tuberculous sinuses. A large pyogenic abscess formed in the axilla. It healed up quite well after opening. This patient improved considerably with general treatment. The organism obtained from the abscess was a *staphylococcus*.

**Summary of Treatment of Surgical Tuberculosis.**—The terms “surgical tuberculosis” and “children” require some explanation. By the former is meant tuberculous disease of bones, joints, glands, and skin. As the active growth of bone ceases at the age of 15 years, all under that age are regarded as children.



Of late years it has been proved by leading orthopædic surgeons that the results obtained in surgical tuberculosis in extra-urban hospitals are superior to those got in urban hospitals, and also that, although the percentage of cases treated in the extra-urban hospitals were greater, the number of operations necessary were much fewer than they were in urban hospitals. The result of this has been the adoption of climatic treatment, conservative methods, and the recognition of the disease as a general one, and not a local condition to be treated by incomplete surgical measures.

On these lines during the past year treatment has been carried out.

Number of tuberculous bone cases treated—7				Number under 15 years—5			
„	„	joint	„	—5	„	„	15 „ —2
„	„	gland	„	—11	„	„	15 „ —9
„	„	skin	„	—8	„	„	15 „ —3

**GENERAL AND CLIMATIC TREATMENT.**—The hospital is situated in an extra-urban area, and, although near a town, plenty of fresh air is obtainable. The grounds are extensive and suitable for exercising such cases. Every effort was made to have the cases outside most of the day in dry weather.

In children the natural immunity against tubercle is great and every effort was made to stimulate it by a carefully-regulated and nutritious diet, containing much fat and carbohydrate.

Physiological rest was enforced in cases that required it. The mouth and teeth in all cases were carefully attended to, and the bowels cleaned out every second day, a point of considerable importance as some children suffer greatly from intestinal toxæmia.

*X-ray Treatment.*—X-rays are valuable not only in treatment, but also in the diagnosis of the disease. By this means the effect of treatment can be watched in bone cases. Only the gland and lupus cases were treated by X-rays. No extraordinary results were obtained in the gland cases as they were chiefly caseous and broken-down ones. The best results were got in the lupus cases. They responded well to this form of treatment. One large dose (5 H.) at the onset, then smaller ones at frequent intervals were administered.

*Tuberculin Treatment.*—New tuberculin and bacillary emulsion were given in the bone, gland, and skin cases. The tuberculin was given in doses just sufficient to produce a mild focal reaction at long intervals. Among the osseous and joint cases little benefit resulted, but it seemed to stimulate the chronic sinuses of the glandular cases to heal.

*Operative Treatment.*—The details are given in the table of operations. In all 18 tuberculous cases were operated upon. The operations chiefly consisted of opening abscesses, scraping sinuses, and excising a few glands. While conservative surgery is to be commended, no amount of tuberculin or X-rays will absorb a caseous gland, and a great deal can be done to assist nature by removing sequestra and large glands which are not responding to general treatment.



### **Pulmonary Tuberculosis.**

*Number and Type.*—These cases numbered 14. With one exception they were all advanced cases and came under Class III. of Turban-Gerhardt's classification.

*Sex.*—The males were 8 in number and the females 6.

*Age.*—Of the males, 2 were under 20 years of age, 3 were between 20 and 30 years, 1 was between 30 and 40 years, and 2 were over 40 years; 5 females were 20 years of age or under, and 1 was between 20 and 30 years of age.

*Period in Hospital.*—Seven cases were in hospital under 1 month, 4 up to 2 months, 1 remained in for 10 weeks, and 2 for 15 weeks.

*Treatment.*—With the exception of three cases—1 female, aged 16, who, in addition to having pulmonary tuberculosis, had a number of tuberculous abscesses, and 2 males, who, although advanced and infectious, were able to go about—all were confined to bed and required hospital treatment. They also were expectorating tubercle bacilli in considerable numbers. In addition to the usual hygienic dietetic treatment, two of them had antiseptic inhalations during their residence, and also very small doses of tuberculin (I.K.) without any marked result.

*Results.*—One, the girl with the tuberculous abscesses, was dismissed improved, 8 remained *in statu quo*, 2 went home worse, and 3 died in hospital. It has been ascertained that since discharge other 7 have died. Therefore, of the 14 cases treated 10 have died and 4 are in sanatoria still. One is improving and the other 3 are likely to remain permanently in hospital or other institution.



MEMORANDUM

The following is a list of the names of the persons who have been appointed to the various offices of the County of ...	
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97. ...	...
98. ...	...
99. ...	...
100. ...	...

Reg. No.	Rec. No.	Initials.	Sex.	Age.	Duration of Illness.	Seat of Disease	Temperature Range.	General Health.
BONES AND JOINTS.								
223		P. G.	M.	3	1 year	Ninth rib, . . .	98—98·4	Unfav.
1197		A. B.	M.	4	$\frac{1}{2}$ year	Femur, . . .	97·4—98·4	Fav.
144		D. C.	M.	8	$\frac{1}{2}$ year	Hip joint, . . .	97·6—99·4	Fav.
1239		M. F.	M.	21	1 year	Spine, with abscess, .	97·2—98·4	Unfav.
1219		W. M.	M.	34	12 years	Great trochanter, . .	97·2—97·4	Fav.
1238		F. C.	M.	35	2 $\frac{1}{2}$ years	Sacro-iliac joint, . .	97—98	Fav.
168		S. S.	F.	3	$\frac{1}{2}$ year	Metacarpals & phalanges,	97·6—98	Unfav.
332		W. M. L.	F.	8	3 years	Tibia, . . .	97—98	Fav.
321		I. S.	F.	11	1 year	Hip joint, . . .	99—99·2	Fav.
432		J. M. D.	F.	14	$\frac{1}{4}$ year	Os calcis, . . .	98—98	Unfav.
224		M. P.	F.	18	$\frac{1}{4}$ year	Hip joint, . . .	97·2—97·6	Fav.
451		M. D.	F.	20	2 years	Sacro-iliac joint, . .	98·6—98	Fav.
GLANDS.								
1272		J. C.	M.	6	$\frac{1}{2}$ year	Mastoid, . . .	99·6—101	Fav.
416		A. P.	M.	7	$\frac{1}{2}$ year	Anterior cervical, . .	97—97·2	Fav.
425		J. M. G.	M.	10	$\frac{1}{2}$ year	Submaxillary, . . .	97·2—97·8	Fav.
272		W. P.	M.	12	$\frac{1}{4}$ year	Inguinal, . . .	98—98·4	Fav.
1214		P. S.	M.	17	4 years	Submax. and subment, .	97·2—97·8	Fav.
417		W. H.	M.	20	1 year	Anter. and post. cervical,	97—99	Fav.
1264		S. R.	F.	5	3 years	Submax. and subment, .	97—98	Fav.
854		J. M. P.	F.	6	2 years	Submax. and subment, .	97·2—97·6	Unfav.
424		M. B.	F.	9	2 years	Submax. and subment, .	97—97·4	Unfav.
403		A. A.	F.	11	2 years	Anterior cervical, . .	97—98·6	Fav.
602		J. S.	F.	14	1 year	Posterior cervical, . .	97—98	Fav.
ABDOMINAL.								
273		D. B.	M.	4	$\frac{1}{2}$ year	Peritoneum, . . .	100—100	Unfav.
929		E. M. B.	F.	18	1 year	Peritoneum, . . .	98—102·4	Fav.
427		M. R.	F.	3	1 $\frac{1}{2}$ years	Peritoneum, . . .	97—103·4	Unfav.



## HOSPITAL.

## TUBERCULOSIS.

Reg. No.	No. of Days' Residence.	General Result.	Weight in Lbs.	SPECIAL TREATMENT.			NOTES.
				Operative.	Tuberculin.	X-Rays.	
223	73	Well	+10	—	I. K.		
1197	219	Improved	+2½	Scraped	I. K.		
144	131	Improved	—	—	B. E.		
1239	63	I. S. Q.*	+2	Aspirated	T. R.		
1219	126	Improved	+5	Scraped	T. R.		
1238	85	Well	+10	—	T. R.		
168	197	Improved	+3	—	B. E.		
332	33	Well	+1	—	I. K.		
321	240	Improved	—	—	B. E.		
432	97	Improved	-3	Scraped	B. E.		
224	150	Improved	—	—	B. E.		
451	101	Well	+3	Aspirated	B. E.		
1272	93	Improved	-2	—	T. R.	+	
416	35	Well	+2	Incision	B. E.		
425	31	Well	+1	Scraped	B. E.		
272	56	Well	+3	—	B. E.		
1214	113	Improved	+4	Scraped	T. R.	+	
417	27	I. S. Q.	+2	Opened	B. E.		
1264	105	Improved	+2	—	T. R.	+	
854	39	Improved	+2	—	T. R.		
424	17	Improved	+2	Opened	B. E.		
403	91	I. S. Q.	+2	Excised	P. T. O.	+	
602	47	Well	—	Incised	—		
273	1	I. S. Q.	—	—	—		
929	21	I. S. Q.	—	—	—		
427	36	Died	—	—	—		

\* *In statu quo.*

## MOTHERWELL

## NON-PULMONARY

Reg. No.	Rec. No.	Initials.	Sex.	Age	Duration of Illness.	Seat of Disease.	Temperature Range.	General Health.
BRAIN.								
201		J. L.	M.	8	6 weeks	Meninges, - - -	98—101	Unfav.
848		W. S.	M.	11	2 weeks	Meninges, - - -	99—101·6	Unfav.
34		C. B.	F.	6	2 weeks	Meninges, - - -	98·4—102	Unfav.
1195		J. R.	F.	4	3 weeks	Meninges, - - -	99—103	Unfav.
SKIN.								
1202		E. G.	M.	16	4 years	Lupus vulg., face & neck,	97—99·4	Fav.
1013		P. E.	M.	17	2 years	Lupus vulgaris, ear, -	—	Fav.
1121		L. B.	F.	13	5 years	Lupus verrucosus, arm, -	—	Fav.
493		M. C.	F.	12	8 years	Lupus vulgaris, face, -	97·6—97·8	Fav.
690		H. F.	F.	14	1 year	Lupus erythematosus, face,	98·4—99	Fav.
319		H. M'D.	M.	8	$\frac{3}{4}$ year	Heel, - - -	98·4—99	Fav.
219		M. G.	F.	18	3 years	Face and foot, - -	98—102	Fav.
191		Mrs. C.	F.	36	1½ years	Trunk, - - -	98—101·4	Unfav.
OTHERS.								
208		Mrs. M.	F.	30	$\frac{1}{2}$ year	Breast, - - -	99—102·4	Unfav.
538		Mrs. C.	F.	29	$\frac{2}{3}$ year	Kidney, - - -	97—98·8	Fav.
1299		O. Q.	M.	19	$\frac{1}{2}$ year	Epididymis, - - -	97—97·6	Fav.



## HOSPITAL.

TUBERCULOSIS—*Continued.*

Reg. No.	No. of Days' Residence.	General Result.	Weight in Lbs.	SPECIAL TREATMENT.			NOTES.
				Operative.	Tuberculin.	X-Rays.	
201	6	Died		—	—		
848	7	Died		—	—		
34	7	Died		—	—		
1195	9	Died		—	—		
1202	77	Improved	+4	—	T. R.	+	
1013	1	I. S. Q.	-	—	—	+	
1121	1	I. S. Q.	-	—	—	+	
493	83	Improved	+6	—	B. E.	+	
690	124	Improved	+5	—	B. E.	+	
319	27	Well	+2	Excised	I. K.		
219	83	I. S. Q.	-14	Scraped	B. E.		
191	32	Improved	-3½	—	—		
208	84	Improved	-1½	Incised	I. K.	-	
538	86	Improved	+20	—	P. T. O.	-	
1299	68	Improved	+	—	T. R.	-	

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
<b>II. B</b>										
318	<u>122</u> 1913	J. C.	F.	15	7 weeks	Cough, Spit, -	R <sub>1</sub> L <sub>1</sub>	99—99	Fav.	0
<b>III.</b>										
498	<u>73</u> 1907	T. S.	M.	50	7 years	Haemorrhage, -	R <sub>2</sub> L <sub>2</sub>	100·4—103·8	Unfav.	3
428	<u>237</u> 1913	O. M'G.	M.	46	2 months	Cough, Spit, -	R <sub>2</sub> L <sub>2</sub>	97—101·8	Unfav.	3
429	<u>232</u> 1913	A. R.	M.	35	6 months	Easily tired,	R <sub>2</sub> L <sub>2</sub>	99·2—101·2	Unfav.	3
1283	—	J. M'K.	M.	28	2 years	Pleurisy, - -	R <sub>2</sub> L <sub>2</sub>	99—102	Unfav.	3
507	<u>238</u> 1911	P. S.	M.	28	3 years	Wasting, Cough,	R <sub>2</sub> L <sub>1</sub>	97—97·8	Fav.	1
902	<u>358</u> 1912	T. B.	M.	25	3 years	Cough, Spit, -	R <sub>1</sub> L <sub>1</sub>	98—99	Fav.	1
830	—	W. D.	M.	17	1 year	Wast., Haemop.,	R <sub>2</sub> L <sub>2</sub>	99·6—100·4	Unfav.	2
712	<u>142</u> 1916	J. D.	M.	13	3 years	Wasting, Cough,	R <sub>2</sub> L <sub>2</sub>	98·6—99·6	Unfav.	3
291	—	Mrs. S.	F.	27	1 year	Pleurisy, - -	R <sub>1</sub> L <sub>2</sub>	99·8—100	Unfav.	1
829	<u>245</u> 1913	M. H.	F.	19	1 year	Easily tired, -	R <sub>1</sub> L <sub>2</sub>	98—101	Unfav.	3
828	—	J. B.	F.	19	1 year	Cough, - -	R <sub>1</sub> L <sub>2</sub>	98—98·4	Unfav.	3
1266	<u>22</u> 1913	M. H.	F.	18	2 weeks	General Pains, -	R <sub>1</sub> L <sub>1</sub>	99·6—101·8	Fav.	0
831	—	K. C.	F.	14	3 months	Cough, - -	R <sub>1</sub> L <sub>2</sub>	98·4—98·8	Unfav.	3



## HOSPITAL.

## TUBERCULOSIS.

Reg. No.	Complica- tions.	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	NOTES
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
318	Abscesses	106	Imp.	4	+9½	97.4—97.8	0		To Shotts Sanatorium.
498	—	73	Wse.	—	-3	99.6—102	3	16/6 + 10/8 +	—
428	—	10	Died	—	—	103.2—104	3	25/5 - 30/8 -	—
429	—	28	Died	—	-6	97.2—98.8	3	1/6 +	—
1283	—	57	Stat.	—	-3½	101.4—102.4	3	14/12 +	To Shotts Sanatorium.
567	Tubercle of testicle	107	Wse.	3	+6	98.2—102.4	2		To Dalserf Hospital.
902	Osteo- myelitis	9	Stat.	4	—	98—98.4	1	27/9 +	To Dalserf Hospital.
830	Hæmop- tysis	26	Stat.	—	+¾	100.2—100.8	3	10/9 + 1/10 +	To Blantyre Hospital.
712	—	45	Stat.	—	-1½	98.4—99	3	30/8 + 1/10 +	To Blantyre Hospital.
291	Empyema	14	Died	—	—	97.4—98	1	4/4 -	Abscess bursting through chest.
829	—	43	Stat.	—	-9	100.8—103.6	3	12/8 + 10/10 +	To Blantyre Hospital.
828	—	26	Stat.	—	+1	99.6—101.2	3	30/8 +	To Blantyre Hospital.
1266	—	40	Stat.	—	—	99.8—100.2	0		Notified enteric fever.
831	—	18	Wse.	—	-1	101—101.4	3	10/8 + 20/8 +	—



### Note on Tuberculin Treatment.

By Dr. F. H. SCROGGIE.

*Selection of Cases.*—Tuberculin was given irrespective of the extent of the lesion, provided the patient was not confined to bed suffering from the extreme weakness associated with the latest stages of the disease, and provided the temperature was not markedly febrile. Laryngeal disease and hæmoptysis were not regarded as contra indications. One or two advanced cases with persistent fever were treated.

*Variety of Tuberculin used and Method of Administration.*—Bovine tuberculin was used almost exclusively. The majority of the cases were given P.T.O. alone, but in a few of those who reached the higher doses P.T. was substituted. A few cases were treated with T.R. and B.E. The inoculations were all made into the subcutaneous tissues of the upper arm, this site being chosen as convenient for frequent inspection. The site of inoculation was cleansed with soap and water, and the part moistened with 1-20 carbolic acid, through which the puncture was made. This method, although more cumbersome than painting with iodine solution, was preferred in order that slight local reactions, *e.g.*, redness or skin reaction, might not be obscured by staining of the skin.

*Preparation of Dilutions.*—The dilutions were freshly prepared for each injection from tuberculin, as supplied by Meister Lucius & Brünning. The bottles, pipettes, and syringes were sterilised on each occasion by boiling before use.

*Dosage.*—The initial dose of P.T.O. was .0005 c.c., this being found to be reactionless unless in exceptional cases, while it is not so low as to waste time giving doses which are apparently inert. At the beginning of the course inoculations were given twice weekly, the dose being increased according to Pope's scale of graduated doses, beginning with No. 5 series, in which the rate of increase on each occasion was approximately 60 per cent. If the rate of increase was found to be too rapid a smaller increase was substituted, taking usually series No. 10, in which the rate of increase is 30 per cent. In several cases it was found that an interval of three or four days between doses was not sufficient, and in these a weekly interval was substituted, while in all cases when the dose had reached .05 the inoculations were made once a week.

*Treatment.*—While the above scheme of dosage was generally carried out the results were carefully studied by the physician, who varied the dosage as seemed desirable in each case. The principle laid down was to proceed cautiously, and to avoid a general or marked reaction.

*Results.*—The experience so far gained does not warrant any definite criticism as to the value of tuberculin treatment, which is still being used and records carefully kept at all the institutions.



## SPECIMEN OF VISITOR'S CARD.

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 LANARK COUNTY SANATORIUM, SHOTTS.
 

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Date,.....19

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 VISITOR'S CARD—ADMITS TWO PERSONS.
 

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VISITING DAY : SATURDAY, FROM 2 P.M. TO 4 P.M.

*If unsuitable, a monthly visit on another day may be arranged by communicating with the doctor.*

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Visitors should note that the Sanatorium is situated about 1 mile from Shotts Station on the Caledonian Railway, and can be conveniently reached that way. It is also accessible from Newmains by taking the Bus from there to Shotts.

## REGULATIONS FOR VISITORS.

1. Not more than Two Visitors shall be admitted to see the same patient on the same day, and in certain circumstances only the near relatives of the patient shall be admitted.
2. If the patient is dangerously ill notice is sent to the friends, and visitors may call at the Sanatorium at any time on receiving such notice.
3. Gifts of fruit, tobacco, &c., for the patients should be handed to the Matron or Nurse in charge, and will be given to the patients if approved of by the Physician. *No Whisky or other stimulants, Medicine or Drugs, shall be introduced.*
4. Visitors admitted to the wards shall not sit upon the beds or unnecessarily expose themselves to infection. They shall not interfere in any way with the treatment, or with the Nurse in her duties, and shall conduct themselves with propriety, and avoid causing any disturbance.
5. Any Visitor offering to the Nurses or other officials any present, whether in money or in kind, shall be prevented from again entering the Sanatorium.

## LANARK COUNTY SANATORIA.

## REGULATIONS FOR PATIENTS.

Patients should realise that these Rules have been drawn up entirely in their interests, having due regard to the successful treatment of the disease.

1. Patients will only be admitted on condition that they comply with the Regulations.

2. They will provide themselves with the articles mentioned under heading "Clothing."

3. Walking exercise or light work will be prescribed by the Doctor according to the condition of the patient, who must not leave the grounds without permission.

Patients must not loiter about the gates or boundary walls, and must not (unless under the direction of the Medical Superintendent) enter the Laundry or Boiler-house.

4. They are provided with spittoons, and are not to spit elsewhere.

5. They are required to have baths as prescribed by the Doctor.

6. Smoking before breakfast is forbidden, also while doing light work or exercise.

Patients confined to bed will be allowed to smoke only by permission.

7. They must not interfere with the adjustments of windows or other means of ventilation.

8. *Patients shall not introduce whisky or other liquor by themselves or through visitors.*

*Any patient infringing this rule shall be dismissed.*

9. They must not use profane or improper language or show disrespect to the Staff.

10. Patients infringing any of the foregoing Rules shall be liable to instant dismissal.

VISITORS.—Relatives and friends of patients will be admitted on Saturdays on presenting an official card of admission, but no patient may receive more than Two Visitors on each occasion.

## CLOTHING.

*Male.*

- 1 Overcoat
- 1 Suit of clothes.
- 2 Flannel shirts.
- 2 Semmits.
- 2 Pair drawers.
- 2 Pair socks.
- 1 Pair strong boots.
- 2 Pair slippers or soft shoes.
- 1 Hairbrush and comb.
- 1 Razor and strop.

*Female.*

- 2 Sets flannel underclothing.
- 2 Pair stockings.
- 1 Pair strong boots.
- 1 Pair slippers or soft shoes.
- 1 Heavy coat.
- 1 Shawl or wrap.
- 1 Hairbrush and comb.



## GENERAL ADVICE TO PATIENTS ON LEAVING SANATORIUM.

The following information is to assist you in fighting your illness, and prevent the spread of the disease to those with whom you come into contact.

Always keep in touch with your doctor.

Spend as much of your time as you can in the open air.

*Your Room.*—If possible, occupy a room by yourself, but always have a bed to yourself. There should be no carpet or heavy curtains in the room; small rugs and washable curtains may be allowed. Dusting should always be done with a moist cloth, and the floor scrubbed and washed at least once a week. The bed should be aired daily, and outside if the weather permits. The window should be kept open night and day.

*Your Clothing, Dishes, &c.*—Handle soiled clothing, bed clothes, and especially handkerchiefs, as little as possible in the dry state. When soiled place these articles in water until ready to be washed. They should be washed by themselves.

You should have your own dishes, knife, fork, and spoons. The dishes should be of a different pattern from the others in the house. The knife, fork, and spoons should also be different from the others. They should all be washed in a basin by themselves.

*Disposal of Sputum.*—Carelessness in the disposal of sputum is sure to cause the spread of the disease to others. The proper disposal of the sputum also protects the patient himself from taking the same germs into his system again, either by inhaling dust containing particles of dried sputum or by infecting himself through sores. All sputum should be deposited in a proper spittoon, and afterwards emptied down the water-closet or into the fire. The spittoon should be cleaned with hot water. Before the spittoon is used it should be partially filled with disinfectant. The spittoon should always be kept covered to prevent the access of flies. When away from home, or if the use of a pocket spittoon is not practicable, use handkerchiefs of muslin or paper to expectorate in. The handkerchiefs should be kept in a leather pouch or in an ordinary large rubber tobacco pouch, used only for that purpose, until you can burn them on your return home. It is not safe to wipe your nose with the same handkerchief which you use to wipe your mouth after having expectorated, since in this way an infection of the nose is possible. The expectoration should never be swallowed. When coughing always cover your mouth with a handkerchief, as during the act of coughing small droplets of saliva containing germs are expelled into the air, and might be the means of spreading infection. Never kiss anyone on the mouth, nor allow it to be done to you.

Always wash your hands before touching food.

*Disinfection.*—Rooms and beds should be thoroughly disinfected before being used by others. Requests for disinfection should be made to the Public Health Department, District Offices, Hamilton.

Sputum bottles, disinfectant, and soap can be obtained free of charge from the local Sanitary Inspector.



## UPPER WARD DISTRICT.

Tuberculosis Officer and Assistant Medical Officer of Health.

JAMES R. ADAM, M.B., CH.B., D.P.H.

### Tuberculosis.

*Mortality.*—The deaths from the various forms of tuberculosis registered during 1913 have been arranged in age groups in the following table, which shows that 36 persons died from the pulmonary form of the disease, 6 from meningeal, 6 from abdominal, and 1 from other forms. The deaths from pulmonary forms of the disease in the various registration districts from the year 1891 onwards will be found in Table VII. at the end of this section of the report.

	AGE PERIODS.							Total.	Death-rates per 1000 Population.
	1.	1-5.	5-15.	15-25.	25-45.	45-65.	Over.		
Pulmonary,	—	1	2	12	13	5	3	36	0·83
Meningeal,	1	2	3	—	—	—	—	6	0·14
Abdominal,	2	1	3	—	—	—	—	6	0·14
Other Forms,	—	1	—	—	—	—	—	1	0·02

### Pulmonary Tuberculosis.

The following table shows the number of cases notified each year since 1906; the number surviving at 1st January, 1913; the changes occurring during the year; and the number surviving at 1st January, 1914 :—

TABLE II.

Year.	Cases Notified.	Cases Surviving, 1st Jan., 1913.	Changes during 1913.		Cases Surviving, 1st Jan., 1914.	Cases taken off List, Disease Arrested, or Diagnosis Revised.
			Died.	Left District.		
1906,	27	6	0	1	5	0
1907,	26	1	0	0	1	0
1908,	54	8	1	1	6	0
1909,	29	4	1	0	3	0
1910,	43	9	0	0	9	0
1911,	56	18	4	2	12	1
1912,	52	35	13	5	17	1
Total,	287	81	19	9	53	2
1913,	43	43	17	5	21	0
Totals,	330	124	36	14	74	2



Thus the number notified during 1913 was,	...	43
And the total number under observation during 1913,	...	124

50 cases were removed from the records during the year for the following reasons:—

Died,	...	36
Left the district,	...	14

Of the latter, 6 are known to have found work in the following places:—Glasgow, 3; Airdrie, 1; Glassford, 1; and America, 1. Of the remaining 8, 7 are distributed as follows:—Glasgow, 1; Larkhall, 1; Quarrier's Homes, 1; Dumfries, 1; Fauldhouse, 1; Fraserburgh, 1; and Ayr, 1. The remaining patient went to Glasgow, and died there.

#### NOTIFICATION.

New cases notified,	...	43
New cases not notified (deaths),	...	0
Old cases re-notified by same doctor,	...	0
Old cases re-notified by different doctor,	...	0
		—
Total,	...	43
		==

These cases were dealt with during the year as follows:—

Admitted to hospital,	...	20
Waiting admission at close of year,	...	0
Visitors or left the district,	...	5
Hospital treatment not desired,	...	15
Notified "Do not visit,"	...	3
		—
Total,	...	43
		==

Of the above cases, 17 or 39·5 per cent. died before 31st January, 1914. The average number of days which elapsed between notification and death was 91·7, the longest period being 255 days, while the shortest was 1 day.

*Age.*—The cases notified for the first time during 1913 are classified in the following tables according to Parish, Age Period, and Occupation :—

TABLE III.

Parish.	Age-Periods in Years.				Total.
	5-15	15-25	25-45	45-65	
Biggar, ...	—	—	1	1	2
Carluke, ...	—	1	3	1	5
Carmichael, ...	—	2	3	—	5
Carnwath, ...	—	—	3	—	3
Carstairs, ...	—	—	1	—	1
Covington, ...	—	—	1	—	1
Crawford, ...	—	2	1	1	4
Crawfordjohn, ...	—	1	2	—	3
Douglas, ...	1	—	—	—	1
Lamington, ...	—	1	—	—	1
Lanark, ...	—	5	—	—	5
Lesmahagow, ...	2	4	3	2	11
Symington, ...	—	—	1	—	1
	3	16	19	5	43

## OCCUPATION.

*Scholars*, 4.

*Miners*, 3.

*Domestic Work.*—Housewives, 13; servant, 1; child, 1.

*Factory and Workshop Employees.*—Millworkers, 3; grocers, 2; blacksmiths, 2; dressmaker, 1.

*Hospital nurses*, 2.

*Labourers*, 3.

*Miscellaneous.*—Gamekeeper, 1; artist, 1; unknown, 1; bank clerk, 1; none, 4.

*Deaths in Relation to Notification.*—It is gratifying to note that there were no fatal cases unnotified before death took place. There were, however, 5 fatal cases notified less than one month before death took place, and 5 between one and three months, showing that over 20 per cent. of the cases notified were so seriously ill when notified that there was no hope of recovery.



TABLE IV.

Year.	Cases Notified	Fatal Cases.		Fatal Cases Notified. Period between Notification and Death.				
		Un- notified.	Notified	1 Month.	1-3 Months.	3-6 Months.	6-12 Months.	Over 1 Year.
1906, ...	27	33	6	3	2	1	0	0
1907, ...	26	21	16	8	3	2	3	0
1908, ...	54	4	29	12	6	4	3	4
1909, ...	29	12	24	5	5	2	6	6
1910, ...	43	10	22	7	4	3	2	6
1911, ...	56	4	25	6	5	5	4	5
1912, ...	52	3	26	8	2	4	5	7
1913, ...	43	0	43	5	5	5	2	0
	330	87	191	54	32	26	25	28

*Insurance Act.*—There were 18 patients notified in 1913 entitled to claim sanatorium benefit under the National Insurance Act. Of these, 11 applied for and received the necessary treatment.

6 other insured persons notified in previous years also applied for and received sanatorium benefit, bringing the total number up to 17.

Table V. shows all cases receiving sanatorium treatment during the year, classified according to whether they were Insured, Dependant, or Non-insured persons.

TABLE V.

SHOWING NUMBER OF INSURED, DEPENDANT, AND NON-INSURED PERSONS RECEIVING SANATORIUM TREATMENT DURING THE YEAR.

Notified previous to 1913.			Notified during 1913.			Total
Insured.	Dependant.	Non-Insured.	Insured.	Dependant.	Non-Insured.	
6	4	0	11	6	3	30
			Received Sanatorium Treatment.	Remaining in Sanatorium at end of year.	Average duration of stay.	Exclusive of those remaining in Sanatorium.
Insured, ...	...	17	4	44	42.9	
Dependants, ...	...	10	...	46.4	...	
Non-Insured, ...	...	3	2	73.6	160	

The results of sanatorium treatment in the above cases is now shown in the following Table VI. :—

TABLE VI.

RESULTS OF SANATORIUM TREATMENT, EXCLUSIVE OF THOSE CASES STILL IN HOSPITAL AT THE END OF 1913.

Notified.		Improved.	Stationary.	Worse.	Died.	Totals.
1906-1912	...	6	...	1	1	8
During 1913	...	9	2	3	2	16
	Totals,	15	2	4	3	24

*Bacteriological Examination of Sputum.*—163 specimens of sputa were sent to the County Laboratory at Hamilton by general practitioners. 37 showed the presence of tubercle bacilli, and notification followed in each case.

4 other notifications were received of patients, whose sputa gave a negative result.

50 specimens were sent from hospitals in the Upper Ward, and 27 showed tubercle bacilli.

1 specimen of urine was sent for examination by a general practitioner, and proved to be negative.

All results of examination of sputa, &c., are communicated from the laboratory to the Tuberculosis Officer, who is thus able to ascertain whether all patients having a positive sputum are notified, and also to offer his services in the diagnosis of any doubtful case.

*Administration.*—The appointment of Tuberculosis Officer to be resident in the Upper Ward was made in September, 1913. Prior to that date the work was undertaken by the Sanitary Inspectors, aided when necessary by the Assistant Medical Officer of Health. The former reported on the housing conditions. The latter was only able to visit a small proportion of the cases owing to other duties and the widely scattered character of the district.

*Procedure on Notification.*—As soon as possible, after receiving a notification, the case is visited by the Tuberculosis Officer, and all particulars obtained. A sketch plan is also made, showing rooms and allocation of beds. Any sanitary defect or the existence of overcrowding is noted, and steps taken to remedy it. If a general practitioner does not wish his patient to be visited, he writes "Not to be visited" on his notification form, and the Tuberculosis Officer



calls and receives from him all the necessary information. This is rarely done now, and was more common when only the Sanitary Inspector was available to visit notified cases.

*Sanatorium Treatment.*—As there is at present no sanatorium in the Upper Ward, cases are treated at one of the Middle Ward institutions, but there is very little delay between notification and removal.

- (a) Insured cases are admitted at once, and the Insurance Committee are informed.
- (b) Non-insured and dependants are similarly admitted, and the District Committee kept informed by a monthly report. Thus delay in obtaining sanction for treatment is avoided.

When a patient is discharged from sanatorium the Tuberculosis Officer receives a report on his condition, with notes regarding treatment. He sends the patient's doctor a résumé of this, or what has been found to be a better plan, visits the doctor, and discusses the case with him.

*Domiciliary Treatment.*—So far what has been done is:—

- (a) General medical treatment where desired, and with the approval of the general medical practitioner, *e.g.*, medicine, cod liver oil, &c.
- (b) Supply of sputum flasks and disinfectants.
- (c) Advice as regards rules of living, *e.g.*, fresh air, bed and room to self, &c.
- (d) Examination of other members of household.
- (e) Remedying any sanitary defects or overcrowding.

*Visits.*—No rule is laid down as regards number of visits. The Tuberculosis Officer goes as often or as seldom as the needs of the case may require. Some may be visited once or twice a year, others several times a week.

*Nurses.*—No Tuberculosis Nurse has been appointed as yet, while the question of utilising the District Nursing Organisations already in existence is still being considered. Owing to the wide area involved, a nurse would have considerable difficulty in visiting patients, more especially during the winter months.

TABLE VII.

PULMONARY TUBERCULOSIS IN EACH REGISTRATION DISTRICT OF THE UPPER WARD.—AVERAGE ANNUAL NUMBER OF DEATHS FOR QUINQUENNIAL PERIODS OF 1891-1910 AND FOR EACH OF THE YEARS 1911, 1912, AND 1913.

Registration District.	Popula- tion. Census 1911.	1891-1895.	1896-1900.	1901-1905.	1906-1910.	1911.	1912.	1913
Biggar, - - -	605	0.4	0.6	0.6	...	1	1	...
Carlisle, - - -	9,619	11.0	13.2	8.2	10.4	6	6	7
Carmichael, - - -	1,471	0.2	...	1.4	.4	...	1	4
Carnwath, - - -	3,741	4.0	3.6	2.8	2	4	2	2
Forth, - - -	2,031	1.6	2.0	1.6	.4	...	...	...
Huywood, - - -	674	0.6	0.8	...	.2	1	...	...
Carstairs, - - -	1,878	3.4	2.6	2.8	1.8	...	...	1
Covington and Thank- erton, - - -	385	0.6	0.8	0.8	.4	1	...	...
Crawford, - - -	681	1.0	1.0	0.4	.8	1	...	2
Leadhills, - - -	839	2.2	1.8	1.8	2	...	2	1
Crawfordjohn, - - -	617	1.0	0.6	1.0	.4	...	...	...
Culter, - - -	372	0.8	0.6	0.6	.2	1	...	...
Dolphinton, - - -	245	0.2	0.4	...	...	...	...	1
Douglas, - - -	2,509	3.2	2.8	5.6	2.2	1	1	1
Dunsyre, - - -	175	0.2	0.2	...	.2	...	...	...
Lamington and Wandel,	271	0.6	0.4	...	.2	...	...	...
Lanark, - - -	3,078	3.0	2.0	3.8	2.4	2	1	6
Lesmahagow, - - -	10,641	8.0	9.0	7.2	7.2	9	9	9
Kirkfieldbank, - - -	1,349	1.2	1.4	2.0	1.4	2	4	1
Libberton, - - -	461	0.6	...	...	.2	...	...	...
Pettinain, - - -	261	0.2	0.2	0.4	...	...	...	...
Symington, - - -	420	0.4	0.6	1.2	1	1	...	1
Walston, - - -	255	0.4	0.6	0.6	.2	1	...	...
Wiston and Roberton, -	400	0.6	1.8	0.6	.8	...	...	...
Upper Ward District, -	42,978	45.4	47.0	43.4	34.6	31	27	36
Average Quinquennial Death- rate per 10,000 of the Popu- lation, - - -		12.02	11.90	10.58	8.13	7.20	6.25	8.28



### Non-Pulmonary Tuberculosis.

2 cases of non-pulmonary tuberculosis were brought to the notice of the Tuberculosis Officer during the year. Both were insured persons, and were treated in sanatoria, returning home much improved.

### Domiciliary Supervision.

*Number of Cases.*—The cases under supervision during the year 1913 amounted to 124 (see Table II., column 3, last line). Of these, 43 were notified during the currency of the year. Of those notified in previous years the cases known to be surviving in the district at 1st January numbered 81. The changes recorded during 1913 in each of these groups are shown in columns 4 and 5 of the table. Of those notified in 1913 no less than 17 died, and 5 had left the district, leaving 21 surviving in the district. Of those notified in former years 19 died and 9 had left the district, leaving 53 surviving in the district. The number of cases on record at the close of the year was thus 74 (see column 6, last line). The Tuberculosis Officer, in the course of his enquiries and visits, obtained information that enabled him to revise this list, and in this way 2 names have been removed. Both of these had been notified in previous years (see column 7), and were patients found to be suffering from chronic bronchitis. The number of cases on record at 1st January, 1914, was therefore 72.

*Age and Sex—Insurance—Conjugal State.*—The following table shows the number of cases in each age period, classified according to sex, insurance, and conjugal condition :—

Age Period.	Total. 1	Male. 2	Female. 3	Insured. 4	Depend't 5	Non-Ins. 6	Married. 7	Single. 8
-1 ...	0	0	0	0	0	0	0	0
1-5 ...	1	0	1	0	0	1	0	1
5-15 ...	12	4	8	0	6	6	0	12
15-25 ...	38	15	23	16	6	16	3	35
25-35 ...	36	15	21	14	10	12	19	17
35-45 ...	22	13	9	9	4	9	15	7
45-55 ...	8	4	4	4	2	2	6	2
55-65 ...	3	2	1	2	0	1	1	2
65-75 ...	1	0	1	0	0	1	1	0
75 up ...	0	0	0	0	0	0	0	0
Total,	121	53	68	45	28	48	45	76



Thus, out of 121 cases 96 are shown to be between the ages of 15 and 45 (see column 1). This clearly illustrates the serious effect pulmonary tuberculosis has on the working years of life of the population. Column 3 also bears out previous knowledge in that it shows an excess of females affected over males, more especially between the ages of 15 and 45, the figures being 53 as against 43.

When the cases are considered with reference to the Insurance Act it is found that there were 45 insured and 48 non-insured persons, while 28 were dependants of insured persons. (See columns 4, 5, and 6). A considerable modification of these figures may be expected in future years, particularly in the direction of a proportionate decrease in the number of non-insured. The figures representing conjugal conditions show that out of 121 persons 76 were single and 45 married. (See columns 7 and 8.) When the age periods, 15-45, are considered it is seen that out of 96 persons 59 were single and 37 married.

*Occupation.*—The occupations of all cases under supervision, as far as could be ascertained, were as follows:—

*Domestic Work.*—Housewives, 26; servants, 3; children, 2.

*Scholars, &c.*—Scholars, 14; teachers, 2.

*Mining, &c.*—Miners, 10.

*Factory and Workshop Employees.*—Millworkers, 7; dressmakers, 2; tailors, 2; blacksmith, 1; joiner, 1.

*Shopkeepers, &c.*—Grocers, 3; barman, 1; butcher, 1; shop-girls, 2.

*Miscellaneous.*—Labourers, 6; hospital nurses, 3; ploughmen, 4; bank clerks, 2; gamekeeper, 1; artist, 1; steward, 1; gardener, 1; traveller, 1; coachbuilder, 1; quarryman, 1; mason, 1; vanman, 1; telephone operator, 1; tinsmith, 1; tileworker, 1; policeman, 1; none, 5; not stated, 14.

The more important of the figures given above are:—*Housewives* 26, including all females, whether married or single, known to be engaged in the duties of housework; *Children* 2, children under school age; *Scholars* 14, children of school age known to be attending or to have attended school; *Miners* 10, including pithead workers; *Millworkers* 7, including all persons engaged in factories; *Labourers* 6, including outdoor workers, but excluding ploughmen and those specifically mentioned under *Miscellaneous*.

*Parish of Residence.*—The distribution of all cases under supervision, according to parish, is shown in the following table. It will thus be seen that out of 124 cases 46 were notified prior to 1912 (see column 1), 35 were notified in 1912 (column 2), and 43 were notified



in 1913 (column 3). The Parish of Lesmahagow has 39 cases, while the Parishes of Carluke and Lanark have 17 each.

Parish.	Prior to 1912.	1912.	1913.	Totals.
	1.	2.	3.	4.
Biggar, - -	0	1	2	3
Carlukc, - -	9	3	5	17
Carmichael, -	1	2	5	8
Carnwath, - -	2	2	3	7
Carstairs, - -	1	3	1	5
Covington, - -	0	0	1	1
Crawford, - -	3	1	4	8
Crawfordjohn, -	2	0	3	5
Coulter, - -	0	0	0	0
Dolphinton, - -	0	1	0	1
Douglas, - -	2	3	2	7
Dunsyre, - -	0	0	0	0
Lamington, - -	0	1	1	2
Lanark, - -	3	9	5	17
Lesmahagow, -	21	8	10	39
Libberton, - -	1	1	0	2
Pettinain, - -	0	0	0	0
Symington, - -	1	0	1	2
Walston, - -	0	0	0	0
Wiston, - -	0	0	0	0
	46	35	43	124

*Duration of Illness.*—In many cases the duration of illness, as stated by the patient cannot be relied on, as the tendency is to date the onset of the disease from the first serious symptoms, or from the date on which the patient was compelled to cease work. The subjoined table gives the duration of illness, in monthly periods, of all cases, except those in which the earliest symptom was pleurisy, and, under the same monthly periods, those cases where it was ascertained that the patient had suffered from an attack of pleurisy, the date of this attack being taken as representing the onset of the disease, in preference to the date of onset given by the patient, which, in most cases, was found to be several years later.

Months—	-1	1-2	2-3	3-6	6-12	12-18	18-24	24 and over	
Patients (excluding Pleurisies), ...	12	11	9	20	11	3	0	20	86
Patients (with Pleurisy) ...	0	1	1	1	1	0	0	6	10
Total, ...	12	12	10	21	12	3	0	26 =	96



Thus, of 86 cases without history of pleurisy, 52 had been ill for less than 6 months, and 63 for less than a year, while 20 had been ill for at least 2 years. Of the 10 cases with a definite history of pleurisy, only 4 had been ill for less than 1 year, the remaining 6 having a history of illness extending for over 2 years.

*Earliest Symptoms Recognised.*—These have been classified according to information received from the patient, and the preponderance of cases where cough was the first symptom is very noticeable, namely, 60 out of 87 cases where information is available—cough, 60; hæmorrhage, 8; pleurisy, 10; influenza, 1; pneumonia, 5; weakness, 2; bronchitis, 1.

*Home Conditions*—To ascertain these, it has been found advisable to classify dwellings into tenement, cottage, and row, where the dwelling-house has not more than 6 apartments. Where there are 7 or more apartments, dwellings are referred to as house or institution. Bothies are treated separately. The following table shows the number of dwellings with not more than 6 apartments, classified according to number of apartments and whether they are tenement, cottage, or row. It also shows what proportion the number of houses bears to the total number of similar houses in the District :—

No. of Aparts.	Ten.	Cott.	Row.	Total.	Total in District.	Percentage of Total Houses in District.
1	3	0	5	8	1,213	0·66
2	7	21	21	49	4,016	1·22
3	3	9	5	17	1,435	1·18
4	1	8	2	11	770	1·42
5	0	6	0	6	427	1·4
6	0	0	1	1	308	0·32

It is thus shown that, out of 92 houses, 49 consisted of two apartments, and of these 21 were in rows, 7 in tenements, and 21 were cottages. The total number of two-apartment houses in the district was 4,016, so that houses of two apartments in which cases of pulmonary tuberculosis were known to reside comprised 1·22 per cent. of the total number of two-apartment houses in the district. The number of one-apartment houses shown here is smaller than is usually considered to be the case, while the number of three, four, and five apartment houses is perhaps slightly larger. 3 cases occurred in houses of seven or more apartments, of which there are 649 in the district, the average being



therefore 1·84. 9 cases occurred in institutions within the district. 1 case occurred in a bothy, in which there were 4 inmates, including the patient. There were 2 beds, with 2 persons per bed.

The number of houses with apartments numbering from 1 to 8, with the total number of inmates and the average per house and room, were ascertained to be as follows:—

No. of Apartments.	No. of Houses.	No. of Inmates.	Average per House.	Average per Room.
1	8	26	3·25	3·25
2	39	115	3·0	1·5
3	13	64	4·92	1·64
4	9	53	5·89	1·47
5	6	35	5·83	1·16
6	1	5	5·0	0·83
7	—	—	—	—
8	1	7	7·0	0·87

*Sleeping Accommodation.*—Out of 85 cases, 42 had each a room to themselves. This is a very gratifying number when the average size of house in the district is considered. In the same way, out of 85, 61 had each a bed to themselves.

7 further cases had each a bed to themselves, but it was not known whether the room contained any other inmates or not. The following table shows the sleeping accommodation in tabular form:—

	Room.	Bed.
Alone, ... ..	42	61
Shared with 1 person, ... ..	15	18
Shared with 2 persons, ... ..	12	5
Shared with 3 persons, ... ..	10	1
Shared with 4 or more persons, ... ..	6	—

*N.B.*—In this table a child under 12 years is considered as the equivalent of one adult, as the question under discussion is one of possibilities of spread of infection.

*Weekly Income.*—The following table shows the average weekly income of 47 families, comprising 216·5 persons, including lodgers—two children under 12 years being considered as equivalent to 1 adult—and the average number of persons dependant on that income:—

Average Weekly Income.	Under 20/.	20/-25/.	25/-30/.	30/-35/.	35/-40/.	40/-50/.	50/ & up
No. of Families,	6	10	3	8	5	9	6
No. of Inmates,	14	37	10	36	22	52·5	45
Av. No. Dependand,	2·33	3·07	3·33	4·0	4·4	5·83	7·5

*Domiciliary Visits.*—During the period from 23rd September to 31st December, 1913, 59 visits were made to persons suffering from pulmonary tuberculosis by the Tuberculosis Officer. During the year, 115 visits were also made by the District Sanitary Inspectors.

*Institutional Treatment—*

Treated in institutions within the District, ...	25
Treated in institutions outwith the District, ...	5*
Did not wish treatment, ... ..	92
Not tuberculosis, ... ..	2
Unsuitable, ... ..	0
	<hr/>
	124
	<hr/>

\* One patient left an institution within the district for one outwith during the year.

Of the 124 cases under observation during the year, 46 had had sanatorium treatment on one occasion, and 8 on two occasions.





## Upper Ward.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
12	10/9/06	J. M'C.	M.	34	M.	I.	Ploughman	—	—	—	—
13	10/9/06	J. M.	M.	44	S.	N.I.	—	12 years	12 years	Pleurisy	—
27	31/10/06	A. W.	M.	11	S.	N.I.	Scholar, Gardener	—	—	Pneumonia	—
16	28/9/06	Mrs. F.	F.	37	M.	N.I.	Housewife	3 years	—	Pleurisy	—
28	/06	J. D.	M.	23	S.	N.I.	Miner	—	—	—	Rd. 30/1/13
23	/06	J. M'C.	M.	34	M.	N.I.	—	—	—	—	—
9	31/12/07	M. S.	F.	25	S.	I.	Servant, Dressmaker	10 months	—	Cough	—
170	13/6/07	I.H.W.	M.	25	M.	I.	Traveller	—	—	—	—
34	1/2/08	G. T.	F.	42	S.	N.I.	—	4 months	—	—	Bridge of Weir
51	23/2/08	E. T.	F.	24	S.	N.I.	—	2 years	—	Cough	—
264	8/11/08	M. G.	F.	20	S.	N.I.	Dressmaker Housewife	5 months	—	Haem.	R.M., /11
20	15/1/08	J. T.	M.	34	S.	N.I.	—	10 years	7 mos.	Pneum.	—
120	7/6/08	C. G.	F.	4	S.	N.I.	—	—	—	—	—
35	5/2/08	Mrs. S.	F.	27	M.	D.	Housewife	5 months	—	Cough	R.M., /08
130	16/6/08	Mrs. B.	F.	33	M.	D.	Servant, Housewife	2 years	—	Cough	R.M., /08, /12 U /10
93	6/5/09	Mrs. B.	F.	49	M.	D.	Housewife	12 months	—	—	R.M., /09, /09
99	25/5/09	J. C.	M.	28	S.	N.I.	Steward, Clerk	5 years	4 mos.	Cough	R.M., /12
115	28/6/09	A. S.	M.	24	S.	I.	Lead Miner	8 years	—	Cough	—
189	5/11/09	W. P.	M.	20	S.	I.	Joiner	2 months	—	—	—



## RECORDS.

Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
12	—	—	Cot.	2	—	—	—	—	L. D.			Gone to Airdrie.	
13	15/10	16/1/13	Ten.	1	/1	0	0	3/6	Stat.			Has recurrent attacks of Asthma.	
27	—	—	—	—	—	—	—	—	Imp.			Gardener, doing very well,	
16	—	6/4/08 30/10/12	Cot.	2	—	—	—	—	Imp.			Very much improved.	
28	—	—	Row	2	—	0	0	—	Wse.			Getting steadily weaker.	
23	—	N. T. B. V.	—	—	—	—	—	—	Wse.			Getting steadily weaker.	
9	—	4/1/08 15/7/12	Cot.	3	—	—	—	—	L. D.			Gone to New Zealand.	
170	26/10	28/6/07	Row	2	/2	1	1	—	Imp.			Working regularly.	
34	—	13/2/08	Ho.	—	—	0	0	—	Died			Died 29/11/13 at home.	
51	—	24/2/08	Cot.	2	/2	0	0	—	L. D.			Much improved.	
264	29/10	31/10/11	Cot.	2	—	—	—	—	Imp.		+ 1911	Works at home. Very 'satisfactory.	
20	20/11	18/1/08 30/1/13	Ten.	2	—	0	0	—	Wrse			Gradually getting worse.	
120	12/12	24/11/08	Cot.	4	—	—	—	—	Imp.			Health very good.	
35	—	3/2/08 21/2/08	Ten.	2	4/2	2	1	—	Stat.			No improvement.	
130	—	18/6/08 28/2/12	Cot.	2	6/2	3	0	20/	Imp.		- 1912	Making satisfactory progress.	
93	—	8/5/09 28/5/09	Cot.	2	2/3	3	1	—	Imp.		+ 17/6/09 - 10/8/09	Progress satisfactory.	
99	—	11/3/12	Row	2	/2	0	0	5/	Died		+ 23/6/09 + 10/8/09 + 24/9/09	Died 26/1/13 at home.	
115	2/10 7/11	7/10/13	Cot.	3	/2	0	0	10/	Imp.			Much improved.	
189	17/12	4/1/13	Ten.	3	—	—	—	—	Imp.		+ 25/10/09	Working regularly.	

## Upper Ward—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
72	10/6/10	J. D.	M.	32	M.	I.	Miner	8 months	1 wk.	Cough	R.M., /10 St., 3/11/13
73	10/6/10	C. B.	F.	8	S.	N.I.	Scholar	1 month	—	—	—
105	24/9/10	H. C.	F.	27	S.	I.	Outdoor worker	2 years	—	Haem.	R.M., /10
106	24/9/10	G. M'A.	M.	19	S.	I.	Coach builder	1 year	10 mos.	—	R.M., /09, /10, /10
153	29/11/10	Mrs. J. R.	F.	38	M.	D.	Housewife	5 months	—	Weakness	—
78	20/6/10	S. D. B.	F.	21	S.	I.	Nurse	3 years	—	Cough	R.M., /10 Douglas, 24/10/13
95	20/8/10	J. F.	F.	18	S.	N.I.	Shopgirl	2 months	—	—	—
129	27/10/10	D. M.	M.	21	S.	N.I.	—	—	—	—	—
71	2/6/10	K. C. (Mrs. M'C.)	F.	22	M.	D.	Servant, Housewife	4 months	2 wks.	Cough	R.M., /10
97	31/3/11	M. M'F.	F.	17	S.	D.	Scholar, Servant	—	—	—	—
125	24/5/11	A. B.	M.	14	S.	D.	Scholar	2 months	—	—	R.M. /11
130	26/5/11	Mrs. C.	F.	25	M.	D.	Housewife	5 months	—	Pneumon.	—
182	5/11/11	M. S.	F.	9	S.	D.	Scholar	2 months	1 mo.	Cough	—
184	16/11/11	Mrs. L.	F.	50	M.	N.I.	Housewife	—	—	—	—
185	16/11/11	A. S.	M.	45	M.	I.	Pitman, Quarryman	5 years	—	Cough	R.M., /11 & /12
115	21/4/11	A. T.	M.	40	S.	N.I.	Vanman	—	—	—	—
122	17/5/11	E. M.	F.	9	S.	D.	Scholar	3 months	3 wks.	Cough	—
156	4/9/11	Miss G.	F.	43	S.	N.I.	—	—	—	—	—
175	26/10/11	A. C.	M.	26	S.	N.I.	Bank clerk	6 weeks	6 wks.	Cough	—



## RECORDS.

Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
72	31/10	14/6/10	Row	2	2/2	0	0	20/	Imp.		+ 9/6/10	Improving in Sanatorium.	
73	23/9	14/6/10	Ho.	—	—	0	0	—	Imp.			Chalet in garden.	
105	23/9	26/9/10 3/12/12	Cot.	2	/2	1	1	—	Imp.			Works regularly.	
106	23/9	26/9/10 21/12/10	Cot.	4	/6	0	0	—	Imp.		- 21/10/10	Working. Very satisfactory.	
153	23/12	5/12/12	Cot.	4	—	—	0	—	Imp.			Very satisfactory case	
78	17/12	7/10/13	Cot.	4	3/3	0	0	—	Imp.	-	+	Doing well in Sanatorium.	
95	20/11	5/9/10 3/1/13	Row	3	—	—	0	—	Stat			Making no progress.	
129	—	N.T.B.V.	—	—	—	—	—	—	—		+ 1910	Reported stationary.	
71	17/12	6/6/10	Cot.	3	1/2	2	1	20/	Imp.			Married Doing very well.	
97	—	N.T.B.V.	Row	2	—	—	—	—	L D.			In service, Glasgow.	
125	—	25/15/11	Cot.	2	2/3	0	0	—	Imp.		+ 19/5/11	Improving gradually.	
130	—	26/11/12	Row	1	—	—	—	—	—			Left district for Lark-hall.	
182	24/9	6/11/11	Row	2	—	—	—	—	Imp.		+ 1911	Doing well at school.	
184	23/12	N.T.B.V.	—	—	—	—	—	—	Imp.		+ 15/11/11	Making satisfactory progress.	
185	24/9	21/11/11	Row	2	4/5	4	0	42/	Stat.		- 1912	Doing light work.	
115	12/12	N.T.B.V.	Row	2	—	0	0	—	Wrse		+ 13/4/11	Getting steadily worse	
122	18/12	31/5/11	Row	2	3/3	0	0	—	Imp.			Attending school irregularly.	
156	—	—	—	—	—	—	—	—	—				
175	—	2/11/11	Cot.	4	3/3	0	0	—	Died		+ 17/7/11	Died 14/4/13.	

## Upper Ward—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
96	30/3/11	J. M'C.	F.	26	S.	N.I.	—	10 months	—	—	—
200	26/12/11	R. B.	F.	30	S.	I.	Weaver	2 weeks	2 wks.	Cough	—
107	11/4/11	M. S.	F.	18	S.	N.I.	Housewife	4 months	—	Cough	R.M., /11
113	20/4/11	J. A.	F.	26	S.	N.I.	Servant	—	—	—	—
189	29/11/11	R. L.	M.	27	S.	N.I.	Railwaym'n Butcher	14 years	8 mos.	Cough	—
176	28/10/11	C. H.	F.	22	S.	N.I.	Housewife	7 months	—	Weakness	Ochilhills, /
132	5/6/11	Mrs. C.	F.	50	M.	N.I.	—	—	—	—	—
177	30/10/11	G. M.	M.	37	M.	I.	Pithead	2 months	—	—	—
40	20/3/12	M. S.	F.	7	S.	N.I.	Scholar	6 months	14 days	Cough	R.M. /12
64	1/5/12	B. B.	F.	9	S.	D.	Scholar	5 months	5 mos.	Cough	R.M. 19/3/13—3
94	22/6/12	L. C.	F.	21	S.	I.	Telegraph operator	3 months	—	Cough	R.M. /12
113	31/7/12	K. S.	M.	34	S.	N.I.	—	—	—	—	—
120	16/8/12	A. B.	M.	42	M.	I.	Miner, Labourer	4½ years	1 mo.	Pleurisy	R.M. /12 Dou. 23/11/12—13
151	11/10/12	Mrs. K.	F.	30	M.	D.	Servant, Housewife	2 years	—	Cough	R.M. 30/10/12—4
229	26/12/12	Mrs. J. S.	F.	72	M.	N.I.	—	—	—	—	—
70	11/5/12	A. M.	M.	28	M.	I.	Tinsmith	5 months	5 wks.	Cough	R.M. /12
107	23/7/12	C. S.	F.	25	S.	I.	Factory hand	2 months	6 wks.	Cough	—
223	24/12/12	R. E.	M.	26	—	—	—	—	—	—	—
121	16/8/12	Mrs. W.	F.	39	M.	D.	Housewife	3 months	—	Cough	—



## RECORDS.

Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
96	23/11	3/4/11	—	—	—	0	0	—	Imp.		+ 14/1/11 + 5/4/11 + 5/2/12	Doing very well.	
200	—	27/12/12	Row	1	/3	2	0	9/6	Died		+ 22/12/11	Died 28/8/13 at home.	
107	19/11	29/4/11	Cot.	3	—	—	—	—	Imp		- 10/5/11	Doing very well.	
113	—	—	Cot.	2	—	—	—	—	L. D.		+ 27/4/11	Gone to Canada.	
189	—	15/8/12	Cot.	3	/4	0	0	—	Died		+ 28/11/11	Died 2/12/13.	
176	—	8/11/11 15/8/12	Ho.	8	2/5	0	0	—	Died		+ 28/9/12	Died 28/1/13.	
132	—	N. T. B. V.	—	—	—	—	—	—	—			Reported doing well.	
177	24/9	9/11/11 7/12/11	Row	1	3/2	4	1	—	Imp.		- 1911	Working regularly.	
40	23/9	21/3/12 11/3/13	Row	1	1/3	3	0	25/	Imp.		+ 1912	Now doing well.	
64	15/10	1/5/12	Cot.	2	5/3	2	0	35/	Imp.		+ 1912	Doing well.	
94	15/10	27/6/12	Row	3	/4	0	0	43/	Imp.		+ 1912 + 5/7/12	Working regularly.	
113	—	N. T. B. V.	—	—	—	—	—	—	Imp.		+ 9/7/12 + 13/9/12	—	
120	23/9	5/7/12 24/8/12	Row	3	5/5	1	1	39/	Imp.	+		Improving slowly.	
151	23/12	15/3/13 14/10/12	Cot.	2	3/3	1	1	28/	Imp.		- 30/11/12	Doing well.	
—	—	—	—	—	—	—	—	—	Died			—	
70	20/11	20/5/12	Row	1	/2	1	0	22/	Stat.		+ 11/5/12	Working. Very slight improvement.	
107	—	7/8/12	Cot.	4	/5	0	0	—	Died			Died 31/1/13.	
—	—	—	—	—	—	—	—	—	Died			Died 1/1/13	
121	—	2/9/12	Cot.	2	4/4	3	0	33/	L. D.			Visitor. Returned to Glasgow.	

## Upper Ward—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
4	4/1/12	M. F.	F.	9	S.	N.I.	Scholar	—	—	—	Smyllum Hosp
129	2/9/12	J. G.	F.	23	S.	N.I.	Tile worker	6 months	9 mos	Cough	Lanark Poorho
80	26/5/12	R. L.	F.	15	S.	N.I.	Scholar	—	—	—	—
130	2/9/12	T. H.	M.	52	S.	I.	Mason	3 years	3 yrs.	Cough	Lanark Poorho (Chalet)
131	6/9/12	R. D.	M.	24	S.	I.	Tailor	6 months	1 mo.	Cough	Stobhill
200	5/12/12	J. W.	M.	46	M.	I.	Weaver	1 week	1 wk.	Cough	—
205	9/12/12	Mrs. C.	F.	30	M.	N.I.	Farm servant	5 years	5 yrs.	Pleurisy	R.M. 22/1/13—22
231	31/12/12	A. G.	F.	14	S.	N.I.	Scholar	—	—	—	Smyllum Hospi
68	2/5/12	E. H.	M.	33	M.	I.	Dealer, Labourer	1 month	1 mo.	Cough	R.M. /12
115	5/8/12	R. A.	M.	46	—	—	—	—	—	—	—
190	21/11/12	T. R. M.	M.	40	M.	N.I.	Motor agent Labourer	—	—	—	—
146	8/10/12	G. B.	F.	24	S.	D.	Servant, Housek'per	6 years	2 mos.	Cough	R.M. /12
19	25/1/12	T. D.	M.	36	M.	I.	Farm serv't. Police	4½ months	—	Cough	R.M. /12
217	16/12/12	S. G.	M.	20	M.	I.	—	—	—	—	—
118	12/8/12	B. M. B.	M.	38	M.	N.I.	Labourer	11 years	11 yrs.	Bron. and pleurisy	R.M. /12
112	28/7/12	D. N.	F.	16	M.	D.	Factory hand	1 month	3 wks.	Cough	R.M. /12
133	7/9/12	Mrs. A. G.	F.	43	M.	D.	Servant, Housewife	3 months	—	Cough	R.M. /12
117	8/8/12	J. D.	M.	15	S.	I.	Scholar, Miner	3 weeks	3 wks.	Cough	Douglas /12
191	20/11/12	J. Y.	M.	23	S.	I.	Miner	2 years	2 yrs.	Pleurisy	R.M. 16/1/13—17



## RECORDS.

Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartment.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
4	—	—	Inst.	—	—	—	0	—	Died			Boarded at Smyllum. Died 26/3/13.	
129	—	6/9/12	Inst.	—	—	—	0	—	Died			Died Poorh'se, 8/2/13.	
—	—	—	Inst	—	—	—	—	—	L.D.			Gone to Quarrier's Home.	
130	—	6/9/12	Inst.	—	—	0	0	—	Died	+ 31/8/12		Died 18/7/13, Lanark Poorhouse.	
131	—	10/9/12	Row	2	7	1	0	40/	Died	+ 5/9/12		Died Stobhill, Glasg'w	
200	—	10/12/12	Row	2	3	0	0	35/	L.D.			Left district for America.	
205	—	13/11/12	Cot.	2	5	1	0	—	L.D.			Gone to Dumfries.	
231	—	—	Inst.	—	—	—	0	—	Imp.	+ 1912		Improving slowly.	
68	—	24/5/12	Row	2	2/5	3	3	—	Died	+ 1912		Died Linlithgow, 1913.	
115	—	6/8/12	—	—	—	—	—	—	—			—	
190	—	N.T.B.V.	—	—	—	—	—	—	Imp.			—	
146	22/10	20/10/12	Cot.	2	1/4	1	1	—	Imp.	- 22/10/12 - 30/11/12		Doing very well.	
19	9/12	25/1/12	Cot.	2	6/2	2	0	30/	Imp.	+ 21/1/12		Working. Much Imp.	
217	—	—	—	—	—	—	—	—	Died			Died 30/6/13.	
118	—	15/8/12	Cot.	2	4/3	1	0	—	Stat.	- 1912		Diagnosis doubtful.	
112	—	6/8/12	Cot.	3	6	0	0	—	Died	+ 19/8/12 + 16/10/12 - 19/11/12		Died 7/2/13, Glasgow.	
133	—	10/9/12	Cot.	5	3/8	1	1	74/	Imp.	+ 18/9/12 - 30/11/12		Improving slowly.	
117	25/9 13/11	12/8/12	Row	4	3/9	5	1	—	Imp.			Working regularly.	
191	—	29/11/12	Row	3	2/6	2	0	40/	Died	+ 8/11/12		Died 1/3/13 at home.	

## Upper Ward—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
90	18/6/12	Mrs. J. B.	F.	26	M.	D.	Housewife	6 months	—	Pleurisy	R.M. /12
18	24/1/12	M. W.	F.	28	S.	I.	School teacher	2 months	2 mos.	Cough and spit	—
63	29/4/12	T. K.	M.	34	M.	I.	Ploughman, Miner	8 weeks	1 mo.	Cough	R.M. /12
73	16/5/12	J. M.	M.	33	M.	I.	Miner	5 years	5 yrs.	Haem.	—
138	11/9/12	C. R.	M.	32	S.	I.	Barman	3 months	1 mo.	Inf. cold	R.M. 21/5/13—27/7/13
4	10/1/13	R. H.	M.	22	S.	I.	Weaver	2 years	1 wk.	Haem.	R.M. 23/1/13—29/3/13
5	11/1/13	A. B.	M.	50	M.	I.	Byreman, Farm hand	2 years	12 wks.	Cough	R.M. 29/1/13—12/4/13
6	13/1/13	J. M'L.	F.	33	M.	D.	Servant, Housewife	1 month	2 wks.	Pleurisy	R.M. 22/1/13—
9	14/1/13	J. B.	M.	23	S.	I.	Farm hand	4 years	—	Cough	R.M. 4/2/13—3/5/13
16	27/1/13	K. H.	F.	16	S.	D.	Housewife	2 months	—	Cough	R.M. 3/2/13—19/4/13
17	27/1/13	W. A.	F.	50	M.	D.	Farm servt., Housewife	13 years	—	Cough	Douglas Hosp. twice
20	1/2/13	W. G.	M.	16	S.	I.	Miner	2 weeks	2 wks.	Cough	Dou. 24/3/13—14/6/13
30	12/2/13	D. R.	M.	55	S.	I.	Miner, Lead miner	4 months	4 mos.	Cough	—
33	19/2/13	R. H. W.	M.	42	S.	I.	Grocer	6 weeks	1 mo.	Cough	—
37	28/2/13	J. M'C.	M.	43	M.	I.	Blacksmith, Grocer	6 months	5 wks.	Cough	—
38	3/3/13	J. D.	F.	17	S.	D.	Factory hand	2 weeks	2 wks.	Cough	Dou. 1/4/13—14/6/13
41	7/3/13	M. L. B.	F.	56	M.	N.I.	Housewife	1 year	—	Cough	—
43	13/3/13	J. A.	M.	21	S.	I.	Gamekeeper	1 month	1 mo.	Cough	R.M. 2/4/13—11/4/13
46	18/3/13	M. S.	F.	17	S.	N.I.	Scholar	6 weeks	—	Cough	—



## RECORDS.

Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.						Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.		1913.	Previous Results.	
13	14	15	16	17	18	19	20	21	22	23	24	25
90	6/10	8/3/13 26/6/12	Cot.	2	2/2	3	1	20/	Wrse		+ 18/6/12	Getting gradually worse.
18	—	1/2/12	Row	6	/5	0	0	—	Imp.		+ 2/1/12	L. D. Working at Glasford.
63	25/9	1/5/12	Row	2	2/2	3	0	30/	Imp.		+ 26/4/12	Working regularly.
73	25/9	31/5/12	Row	4	/5	2	0	48/	Imp.			Working.
138	—	17/9/12	Cot.	3	/3	0	0	23/	Died			Died 27 July, 1913, at Roadmeetings.
4	—	17/1/13	Ten.	2	3/5	3	0	64/	Died	+	- 2 years ago	Died 3/4/13 at home.
5	—	15/1/13	Ten.	2	/2	1	1	15/	Imp.	+		Working fairly regularly.
6	—	17/1/13	Row	3	2/2	1	0	40/	Died	+		Died 24/2/13 at Roadmeetings.
9	—	26/1/13	B'thy	1	/4	4	1	6/	L.D.	+		Gone to Glasgow.
16	—	29/1/13	Ten.	4	/7	0	0	30/	Died	+		Died 15/6/13 at home.
17	—	29/1/13	Ten.	2	/8	3	1	70/	Wse.	+		Getting gradually worse.
20	25/9, 13/11	4/2/13	Row	2	2/5	2	2	70/	Imp.	not ex.		Working; doing well.
30	—	15/2/13	Cot.	4	/2	1	0	—	Died	+		Died 15/8/13 at home.
33	19/11, 10/10	21/2/13	Cot.	3	/3	0	0	—	Imp.	—		Still unable to work.
37	—	28/2/13	Row	2	2/1	0	0	25/	Died	—		Died 18/3/13 Lanark Poorhouse.
38	12/11	7/3/13	Row	2	/3	0	0	30/	Died	+		Died 13/11/13 at home.
41	—	12/3/13	Ten.	1	/1	0	0	—	Died	+		Died 16/3/13 at home.
43	22/10	22/3/13	Cot.	4	/4	0	0	30/	Imp.	—		Working; doing well.
46	—	25/3/13	Inst.	—	—	—	0	—	Died	+		Died 12/9/13 at Smyllum.

## Upper Ward—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
55	26/3/13	J. M'C.	M.	10	S.	D.	Scholar	—	—	—	R.M. 3/4/13—10/9/13
60	1/4/13	E. S.	F.	32	M.	I.	Factory worker	4 years	2 wks.	Cough	R.M. 14/4/13—5/7/13
62	30/3/13	B. Y.	F.	38	S.	N.I.	Dressmaker	3 weeks	3 wks.	Cough	—
63	5/4/13	C. H. M.	F.	17	S.	N.I.	—	2 years	—	Cough	—
64	5/4/13	Mr. Y.	M.	29	—	—	—	—	—	—	—
65	11/4/13	D. R.	F.	30	M.	D.	Cook, Housewife	11 weeks	—	Pleurisy	R.M. 7/5/13—6/8/13
67	19/4/13	S. D.	M.	5½	S.	N.I.	—	5 weeks	—	Pneumon.	R.M. 23/4/13—3/9/13
69	22/4/13	A. W.	M.	63	S.	I.	—	4 months	—	Cough	—
74	30/4/13	A. B.	F.	22	S.	N.I.	—	7 months	—	Haem.	—
82	20/5/13	N. H.	F.	19	S.	I.	Servant	6 weeks	6 wks.	Bronch.	—
83	20/5/13	J. S.	M.	19	S.	N.I.	—	—	—	—	—
86	4/6/13	M. L.	F.	30	M.	D.	Servant, Housewife	2 weeks	—	Cough	R.M. 12/6/13—9/9/13
88	10/6/13	C. R.	M.	38	M.	I.	Blacksmith	6 months	1 mo.	Cough	—
89	9/6/13	M. M'B.	F.	25	S.	N.I.	Teacher	3 years	3 yrs.	Cough	—
90	19/6/13	S. Y.	F.	32	M.	D.	Housewife	1 week	—	Haem.	R.M. 23/6/13—25/7/13
93	29/6/13	W. D.	F.	31	M.	D.	Housewife	12 weeks	—	Pleurisy	—
96	2/7/13	M. R.	F.	39	M.	D.	Housewife	6 months	6 mos.	Cough	—
99	10/7/13	D. S.	M.	29	S.	N.I.	—	—	—	—	—
110	14/7/13	A. C.	F.	29	S.	N.I.	—	3 months	—	—	—



## RECORDS.

Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
55	27/10	20/2/14	Cot.	2	2/3	0	0	—	Imp.			Doing well; at school	
60	—	7/4/13	Ten.	1	2/4	5	2	30/	Died	+		Died 28/7/13.	
62	—	7/4/13	Row	2	/3	0	0	—	Died	+		Died 8/4/13 at home.	
63	—	10/4/13	Cot.	3	/3	0	0	30/	Died	+		Died 28/4/13 at home.	
64	—	10/4/13	Cot.	—	—	—	—	—	L.D.	+		Visitor for few weeks.	
65	18/10	25/4/13	Ten.	2	2/4	2	1	45/	Imp.	not ex.		Doing very well.	
67	—	22/4/13	Row	2	2/7	—	0	50/	Died	—		Died 13/10/13 at home.	
69	—	24/4/13	—	—	—	—	—	—	Died	+		Died 25/7/13 at home.	
74	—	—	—	—	—	—	—	—	Died			Died before notifica- cation 1/5/13.	
82	24/9	20/5/13	Row	2	5/4	0	0	47/6	Imp.	—		Doing very well.	
83	—	N.T.B.V.	—	—	—	—	—	—	—	—		Sleeps in Shelter.	
86	22/12	6/5/13	Ten.	3	5/2	6	2	23/	Imp.	—		Doing very well.	
88	20/11	19/6/13	Ten.	2	1/2	2	1	35/	L.D.	+		Gone to Glasgow; working.	
89	19/11	2/7/13	Cot.	5	/2	0	0	—	Imp.	+		Doing very well.	
90	29/10, 10/11	21/6/13	Cot.	2	2/3	2	2	20/	Imp.	+		Doing very well.	
93	—	3/7/13	Cot.	2	2/3	2	2	20/	Imp.	+		Doing very well.	
96	—	4/7/13	Cot.	5	2/5	1	1	23/	Died	+		Died 29/8/13 at home.	
99	—	N.T.B.V.	—	—	—	—	—	—	—	—		L.D. for some time.	
110	—	21/7/13	—	—	—	—	—	—	Died	—		Died 11/9/13 at home.	

## Upper Ward—Continued.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
114	18/7/13	J. W.	M.	21	S.	I.	Banker	—	—	—	—
120	2/8/13	H. S.	F.	42	M.	N.I.	Housewife	—	—	—	...
132	21/8/13	J. W.	M.	26	S.	I.	Grocer	1 month	Fort-night	Cough	St. 29/9/13
138	7/8/13	M.W.M.	F.	23	S.	N.I.	Nurse	2 weeks	—	Cough	Dou. 29/7/13—6/8/
165	10/10/13	L. W.	F.	15	S.	N.I.	Scholar	3 months	—	Cough	Smyllum Hospital
166	14/10/13	T. G.	M.	35	S.	I.	Miner	2 weeks	2 wks.	Haem.	St. 18/11/13—28/4/
167	26/10/13	C. M·N	M.	35	M.	I.	Labourer	3 weeks	3 wks.	Cough	St. 3/11/13—9/3/14
170	2/10/13	A. C.	F.	23	S.	I.	Nurse	3 weeks	3 wks.	Haem.	Bellefield San.
175	3/11/13	B. H.	F.	12	S.	D.	School	5 weeks	5 wks.	Cough and spit	Dou. 3/11/13—25/3/1
194	13/12/13	S. M.	F.	21	S.	N.I.	—	5 months	5 mos.	Pneu.	Douglas 29/12/13



## RECORDS.

Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
114	25/9	—	Cot.	5	2	0	0	—	Stat.	+		Condition unchanged, no improvement.	
120	N.T.B.V.	N.T.B.V.	—	—	—	—	—	—	—			Doing very well (Dr.'s report).	
132	27/9	28/8/13	Cot.	5	2/6	0	0	Am- ple	Died	+		Died in Douglas Sana- torium 15/11/13.	
138	—	9/8/13	Inst.	—	—	0	0	—	L.D.	+		Nurse in Inst.; went to Bridge-of-Weir.	
165	—	10/10/13	Inst.	—	—	0	0	—	Imp,	+		Child in Institution.	
166	16/10	10/10/13	Row	2	6/5	3	0	49/	Imp.	-		Doing very well in Sanatorium.	
167	31/10	29/10/13	Cot.	2	3/2	0	0	35/	Wse.	+		Not improving St. removed to Douglas	
170	3/10 5/10	—	Inst	—	—	—	—	—	L.D.	—		Nurse in institution. Left district.	
175	17/12	5/11/13	Ten.	3	4/3	1	1	—	Imp	+		Doing very well.	
194	19/12	19/12/13 10/9/12	Cot.	5	1/4	0	0	—	Imp	+		Doing well in Douglas	

### Sanatorium Treatment.

During the year 30 persons were treated in institutions within the district. Of these, 14 were males and 16 females, and the numbers of each sex at the various age periods were as given below:—

Sex.	5-15	15-25	25-35	35-45	45-55	55-65	65 and over	Totals
Male,	2	7	3	1	—	1	—	14
Female,	2	6	7	1	—	—	—	16
Totals,	4	13	10	2	—	1	—	30

Thus it is shown that out of 30 persons all but 1 were between the ages of 15 and 45, and that the figures for both sexes correspond very closely, with the exception of the age period 25-35, where the females exceed the males by 4.

*Classification of Cases.*—This has been done according to a modified Turban system already referred to:—Class I.A comprises 6 cases; I.B, 8; II.A, 4; II.B, 2; and III., 10.

*Results of Treatment.*—In 19 cases the general health on admission was considered to be favourable. Of these, 18 were discharged improved and 1 without improvement. In 11 cases, where the general health was unfavourable, 3 were discharged improved, 1 stationary, 4 worse, while 3 died, the net results being, therefore, that out of 30 cases admitted, 21 were discharged improved, 2 without improvement, 4 worse, while 3 died.

The complications noted during treatment were as follows:—Tuberculosis of larynx in 3 patients, 2 of whom improved and 1 died; tuberculosis of vertebrae in 1 patient, who improved; pleurisy with effusion in 1 patient, who was discharged worse; intestinal ulcer in 1 patient, discharged worse; and anæmia and dyspepsia in 1 patient, who improved.

The average duration of stay in sanatorium was 84·4 days, the shortest being 10, while the longest was 196 days. The duration of illness was ascertained in 23 cases, and the earliest symptoms in 28. Of the latter, 3 were given as pleurisy, and in these the duration of illness was respectively 5 months, 4 years, and 6 years. Cough was given in 18 cases, hæmoptysis in 2, and pneumonia hoarseness, pain in chest, weakness, and congestion of lungs in 1 each.

Excluding pleurisy, the average duration of illness prior to notification was, roughly, 23 months.



48 specimens of sputa were sent for examination from the two sanatoria under consideration. 15 showed no trace of tubercle bacilli, but of these 4 were from patients whose sputum in previous examinations had been shown to contain the bacillus.

The following table shows the effect of sanatorium treatment on the amount of sputum expectorated. This is of interest as regards the infectivity of the patient to others, as obviously a diminution in sputum containing tubercle bacilli is much to be desired. The amount of sputum is classified as slight, moderate, or profuse, the figures 1, 2, and 3 being appended thereto respectively. Only sputa containing the bacillus are taken into account.

	Amount of Sputa.	No. of Specimens.	None.	On Discharge.		
				Slight.	Moderate	Profuse.
Slight,	1	9	1	7	1	—
Moderate,	2	2	—	—	2	—
Profuse,	3	5	—	—	2	3

## UPPER WARD DISTRICT

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.						
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.	
I.A											
1427	5/13	A. B.	M.	59	2 years	Cough, Spit, -	L <sub>1</sub>	97—98·4	Fav.	1	
1432	9/13	J. B.	M.	20	4 years	Cough, - -	L <sub>1</sub>	97·5—98·5	Fav.	3	
1495	90/13	J. F.	F.	32	—	Haemoptysis, -	R <sub>1</sub>	98·6—99·5	Fav.	1	
1498	125/11	A. B.	M.	15½	—	Cough, - -	R <sub>1</sub>	98—100·2	Fav.	1	
1416	151/12	M. K.	F.	30	2¼ years	Cough, Spit, -	R <sub>1</sub>	97—98·6	Fav.	1	
I.B											
1439	16/13	K. H.	F.	16	1 year	Cough, - -	L <sub>1</sub>	97—101·4	Unfav.	0	
1463	55/13	J. M'C.	M.	10	—	—	R <sub>1</sub>	97·6—99·2	Fav.	0	
1470	67/13	S. D.	M.	5½	—	Pneumonia, -		97—98·4	Fav.	0	
1485	81/13	M. L.	F.	32	—	Cough, Spit, -		97—98·6	Fav.	1	
1462	43/13	J. A.	M.	21	—	Cough, - -	R <sub>1</sub>	98—98·5	Fav.	1	
II.A											
1492	---	D. D.	M.	23	16 months	Hoarseness, -	L <sub>2</sub>	99—101	Fav.	1	
1442	—	J. Y.	F.	18	6 months	Cough, - -	R <sub>1</sub> L <sub>1</sub>	99—103	Unfav.	3	
1424	4/13	R. H.	M.	22	1¾ years	Haemoptysis, -	L <sub>1</sub> R <sub>1</sub>	97·6—98·4	Fav.	1	
II.B											
1453	64/12	B. B.	F.	10	—	—	L <sub>1</sub> R <sub>1</sub>	97—99	Fav.	0	
1477	65/13	M. R.	F.	30	5 months	Pleurisy, - -	R <sub>1</sub> L <sub>1</sub>	98·2—99·8	Unfav.	1	



## HOSPITAL, ROADMEETINGS.

Reg. No.	Complications	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	NOTES.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
5/13	—	73	Imp.	4	+15	97—98	1	+4/2/13 +10/4/13	Burgh of Biggar case
9/13	—	88	Imp.	1	+17½	97·5—99	2	+10/2/13 + 7/4/13 +5/5/13	
90/13	—	29	Imp.	2	+5	98—99	1	-30/6/13 -26/7/13	
125/11	—	62	Imp.	1	+13	97·8—99	1	+12/7/13 -4/9/13	
151/12	—	33	Imp.	4	+8½	97·6—98	0	+1/11/12 -30/11/12 -24/12/12 -10/1/13	
16/13	—	75	Wse.	—	-3	99·2—102·4	0		
55/13	—	160	Imp.	6	+18	97—98·8	0		
67/13	Tub. of vertebræ	133	Imp.	—	+4	97—100	0		
81/13	—	89	Imp.	6	+18½	97·4—98·6	0	-16/6/13 -4/9/13	
43/13	—	15	Imp.	—	+7	97—97·2	0	-7/4/13	Discharged as not T.B.
—	Tub. of Larynx	50	Imp.	3	+6½	97·8—99·2	1	+26/6/13	Wishaw case
—	—	50	Died	—	—	98—105	3	+22/2/13 +10/4/13	Burgh of Lanark case
4/13	—	65	Imp.	—	+13	97—98	1	-27/1/13 -18/2/13 -28/2/13	
64/12	—	168	Imp.	6	+14½	97·8—99	0		
65/13	Anæmia, Dyspepsia	91	Imp.	1	+28	98—98·2	0	-12/5/13 -23/7/13	

## UPPER WARD DISTRICT

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
<b>III.</b>										
1428	28/06	J. D.	M.	31	12 years	Cough, - -	R <sub>3</sub> L <sub>1</sub>	97—98·4	Unfav.	3
1421	205/12	J. C.	F.	34	5 years	Cough, - -	R <sub>3</sub> L <sub>1</sub>	97·2—98·6	Fav.	1
1420	191/12	J. Y.	M.	23	2 years	Pain in chest, -	R <sub>3</sub> L <sub>2</sub>	97·4—99·6	Unfav.	3
1479	138/12	R. C.	M.	33	9 months	Cough, - -	L <sub>2</sub> R <sub>2</sub>	98·7—102	Unfav.	3
1466	60/13	E. S.	F.	39	6 weeks	Cough, - -	R <sub>3</sub>	99—100·5	Unfav.	1
1422	6/13	A. M'L.	F.	33	6 years	Pleurisy, - -	R <sub>3</sub> L <sub>2</sub>	99·4—103·6	Unfav.	3
1444	—	M. M'L.	F.	15	2 months	Weakness, -	R <sub>2</sub> L <sub>1</sub>	100—102	Fav.	1
1445	—	R. T.	M.	25	7 months	Cough, - -	R <sub>3</sub>	99·2—100·2	Fav.	1
<b>DOUGLAS COTTAGE HOSPITAL</b>										
<b>I.A</b>										
	138/13	M. M.	F.	23	2 weeks	Cough, Night sweats,	R <sub>1</sub>	98—98·6	Fav.	1
<b>I.B</b>										
	78/10	S. B.	F.	28	4 months	Cough, - -	—	97—99·2	Fav.	0
	20/13	W. G.	M.	16	6 weeks	Cough, - -	R <sub>1</sub>	98·4—100	Fav.	0
	175/13	B. H.	F.	12	5 weeks	Cough, Spit, -	R <sub>1</sub>	99—100	Fav.	0
<b>II.A</b>										
	120/12	A. B.	M.	42	4 years	Pleurisy, - -	R <sub>1</sub> L <sub>1</sub>	97—99	Unfav.	2
<b>III.</b>										
	194/13	S. M.	F.	21	6 months	Congestion of lungs,	R <sub>3</sub> L <sub>2</sub>	97·4—99·4	Unfav.	2
	38/13	J. D.	F.	17	8 weeks	Cough, - -	L <sub>7</sub> R <sub>1</sub>	98—103	Unfav.	3
<b>BRIDGE OF WEIR</b>										
<b>I.A</b>										
	138/13	M. M.	F.	23	2 weeks	Cough, Night sweats,	R <sub>1</sub>	97—98·6	Fav.	1



HOSPITAL, ROADMEETINGS.—*Continued.*

Reg. No.	Complications.	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	NOTES.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
28/06	—	90	Imp.	—	+8	97—98	2	+4/2/13 +7/4/13 +29/4/13	
205/12	—	90	Imp.	3	+18	97·6—98·4	1	+10/4/13 +25/1/13	
191/12	Pleurisy with effusion	32	Wse.	—	Stat.	98·4—102	3	+21/1/13 +18/2/13	
138/12	Tub. of Larynx	67	Died	—	—	97·8—100·4	—	+22/5/13	Died in hospital
60/13	—	82	Wse.	—	-2	99—101	2	+17/4/13 +9/7/13	
6/13	—	34	Died	—	—	97—99	3	+25/1/13	Died in hospital
—	—	87	Stat.	—	+9	98·8—104	1	+28/2/13 +5/5/13 +22/5/13	Burgh of Lanark case
—	Dyspepsia	91	Imp.	2	+10	98·4—100·6	1	+28/2/13 +14/4/13 +22/5/13 +29/5/13	Burgh of Lanark case
AND SANATORIUM.									
138/13	—	10	Imp.	—	—	97·6—98·6	1	+	Left of own accord
78/10	—	196	Imp.	8	+19	97—99·2	0	-21/7/13	Left of own accord
20/13	—	84	Imp.	8	+25	98·4—99	0		
175/13	—	77	Imp.	6	+13	98·4—98·9	0		
120/12	Tub. of Larynx	84	Imp.	8	—	97·4—98·6	2	+	
194/13	Intestinal ulcer	145	Wse.	—	—	97·4—103	2	+	
38/13	—	84	Stat.	—	-9	99—102	3	+	
SANATORIUM.									
138/13	—	91	Imp.	—	—	—	1	+	

# LOWER WARD DISTRICT.

Tuberculosis Officer and Assistant Medical Officer of Health.

ROBERT RICHARDS, M.A., M.B., Ch.B., D.P.H.

## Tuberculosis.

**Mortality.**—The deaths from the various forms of tuberculosis during 1913, arranged in age group, are as follows:—

TABLE I.

	Age-periods in years.						Total.	Death-rates per 1000 Population.
	1	1-5	5-15	15-25	25-45	45-65		
Pulmonary Tuberculosis, -	1	1	4	4	10	—	20	·67
Meningeal           ,, -	3	5	4	—	—	—	12	·40
Abdominal           ,, -	2	2	2	1	—	1	8	·27
Other               ,, -	—	—	—	—	1	1	2	·06
	6	8	10	5	11	2	42	1·4

The deaths from the pulmonary forms of the disease in the various registration districts for the year 1891 onwards will be found in Table VI. at the end of this section of the report, and shows that the average annual death rate has decreased from 12·8 to 6·7 per 10,000 of the population.

## Pulmonary Tuberculosis.

The number of cases notified each year since 1906, and the number remaining on record at the beginning of the year, the changes during the year, and the number remaining at the end of the year are given in the following table:—

TABLE II.

Year.	Cases Notified.	Cases Surviving beginning of year.	Changes during the year.		Remain- ing, 1st Jany., 1914.	Off List, Altered Diagnosis, or 'Cured.'
			Died.	Left District.		
1906,	72	4	...	...	4	2
1907,	66	1	...	...	1	...
1908,	50	1	1	...	...	...
1909,	70	3	...	...	3	1
1910,	69	6	...	1	5	1
1911,	59	7	2	1	4	...
1912,	98	13	5	...	8	...
	...	35	8	2	25	4
1913,	31	31	9	4	18	...
	515	66	17	6	43	4



There were thus 35 cases on Record, January 1st, 1913, 35

Removed from Record during the year :—

(a) Died, ... ..	8
(b) Left District, ... ..	2
(c) "Cured," ... ..	2
(d) Diagnosis altered, ... ..	2
	<hr/> 14

Number still on Record, December 31st, 1913, ... 

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21

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These may be analysed thus :—

Fit for work throughout the year, ... ..	14
Admitted to hospital, ... ..	3
Waiting admission, ... ..	1
Stationary, ... ..	2
Worse, ... ..	1
	<hr/> 21 <hr/>

NOTIFICATION.—The following table shows the cases brought to the notice of the Medical Officer of Health during the year :—

New cases notified, - - - - -	31
New cases not notified (deaths), - - - - -	4
Old cases renotified by different doctors, - - - - -	4
"      "      same doctor, - - - - -	1
	<hr/> 40 <hr/>

These cases were dealt with as follows :—

Admitted to hospital, - - - - -	23
Waiting admission, - - - - -	3
Refused treatment, - - - - -	4
Died before or soon after notification, - - - - -	7
Left district, - - - - -	1
Notified "Do not Visit," - - - - -	1
Admitted to institutions outwith County, - - - - -	3
	<hr/> 40 <hr/>

The number of nett deaths recorded during the year was 20, and of these 9 were notified during 1913. One case notified as pulmonary tuberculosis died during the year, the death being, however, certified as due to "acute bronchitis."

**Age.**—The cases notified for the first time during 1913 are classified in the following table according to parish and age, and the deaths registered according to age :—

TABLE III.

PARISH.	AGE-PERIODS IN YEARS.							TOTAL.
	Ages—1	1-2	2-5	5-15	15-25	25-45	45-65	
Barony, - - -	...	1	...	1	1	1	...	4
Cadder, - - -	...	...	1	2	2	5	2	12
Carmunnock, - - -	...	...	...	...	...	1	...	1
Rutherglen, - - -	...	1	...	3	8	2	...	14
Cases, - - -	...	2	1	6	11	9	2	31
Deaths, - - -	1	1	1	4	4	10	—	21

**Occupation.**—The new cases notified are classified according to occupation as follows :—

	TOTAL.
<i>Domestic Work.</i> —Housewives, 4 ; Children, 3, -	7
<i>Scholars,</i> - - - - -	6
<i>Miners, &amp;c.</i> —Pithead workers, 2 ; Miner, 1 ; -	3
<i>Metalworkers.</i> —Steelworker, 1 ; Cableworker, 1, -	2
<i>Factory and Workshop Employees.</i> —Ropeworkers, 2 ; Laundry worker, 1 ; Shuttlemaker, 1 ; Confectionery maker 1, -	5
<i>Stoneworkers.</i> —Quarryman, - - - - -	1
<i>Miscellaneous.</i> —Labourers, 2 ; Sawmiller, 1 ; Machine-man, 1 ; Telephone Linesman, 1 ; Teacher, 1 ; Clerk, 1, -	7
	<hr/> 31 <hr/>

**Deaths in Relation to Notification.**—Four cases of pulmonary tuberculosis died which had not been previously notified, and no fewer than 9 out of the 16 deaths among notified cases occurred within 3 months of notification. In a large proportion of the cases therefore the disease was so far advanced when advice was sought that treatment was of no avail. Of the 4 unnotified cases, 1 died in a private sanatorium outwith the area, whither he had been removed from Ardrossan where he was on holiday when he became ill ; a second case, notified in Greenock, came from there to her parents' home to die, and the certifying doctor only saw her once before death ; a third was a child of 4 months, who died in Glasgow Sick Children's Hospital of marasmus, found by autopsy to be due to tuberculosis of the lungs ; while the fourth had been notified in Glasgow by a practitioner other than the one who certified the death.



## DEATHS IN RELATION TO NOTIFICATION.

TABLE IV.

Year.	Total Cases Notified.	FATAL CASES.		FATAL CASES NOTIFIED.—PERIOD BETWEEN NOTIFICATION AND DEATH.				
		Un-notified.	Notified.	1 month.	1-3 months.	3-6 months.	6-12 months.	Over 1 year.
1906	72	40	22	8	10	4	...	...
1907	66	34	32	12	7	3	7	3
1908	50	9	41	10	10	5	9	7
1909	70	21	35	13	8	6	4	4
1910	69	10	49	10	10	15	5	9
1911	59	12	22	5	6	2	2	7
1912	98	10	39*	14	5	7	4	9
1913	31	4	17†	3	6	3	2	3
	515	140	257	75	62	45	33	42

\* Includes two deaths transferred to Glasgow, but notified in Lower Ward.

† Includes 1 case certified as "acute bronchitis," but notified as pulmonary tuberculosis.

The following table shows the total number of cases dealt with during the year :—

Cases on record at 1st January, 1913,	...	...	35
New cases notified,	...	...	31
New cases not notified,	...	...	4
			<u>70</u>

Of these 31 were removed from the record list for various reasons, as shown below, leaving 39 on record at the end of 1913 as compared with 35 at the end of 1912.

## Deaths from Pulmonary Tuberculosis :—

(a) Cases notified previous to 1913,	...	...	8*
(b) Cases notified during 1913,	...	...	9
(c) Cases not notified,	...	...	4
Left district,	...	...	6
Diagnosis altered,	...	...	2
Considered "cured,"	...	...	2
			<u>31</u>
Cases on record at 31st December, 1913,	...	...	39
Total,	...	...	<u>70</u>

\* One died of "acute bronchitis."

**Insurance Act.**—With regard to the question of Insurance, the total cases on record may be divided as follows :—

TABLE V.

	New cases during 1913.				Cases on record.		
	Notified.		Not notified.		1st Jan., 1913.		Totals
	Males.	Females.	Males.	Females.	Males.	Females.	
Insured, -	10	6	1	...	13	5	35
Dependents,	1	10	1	1	...	7	20
Non-insured,	2	2	1	...	2	8	15
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	13	18	3	1	15	20	70
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>

There were thus 17 new cases in 1913 qualified for Sanatorium Benefit under the Insurance Act. Of these 1 died without being notified, 4 refused treatment, and 12 applied for Sanatorium Benefit. 11 of these were admitted to Sanatoria during the year, and the 12th during the current year. Including cases previously notified 35 insured cases in all were dealt with, as shown in the following tables :—

	Cases notified prior to 1913.	Cases during 1913.
Admitted to hospital, ... ..	5	11
Waiting admission at close of year, ...	1	1
Refused treatment, ... ..	1	4
Well or at work all year, ... ..	7	—
Cured or diagnosis altered, ... ..	4	—
Died without notification, ... ..	—	1
	<hr/>	<hr/>
	18	17
	<hr/>	<hr/>

The following table analyses the insured cases :—

Total insured cases dealt with, ... ..	35	
Died (a) notified prior to 1913, ... ..	4	
Died (b) notified during 1913, ... ..	5	
Given as "cured," ... ..	2	
Diagnosis altered during year, ... ..	2	
Left the district, ... ..	3	
	<hr/>	16

Cases still on record 31st December, 1913 :—

In hospital, ... ..	4	
Waiting admission, ... ..	2	
Improved, ... ..	13	
	<hr/>	19
		<hr/>
		35
		<hr/>



Of the 17 non-insured cases and dependents notified prior to 1913, only 1 was admitted to hospital, making a stay of  $14\frac{1}{2}$  weeks; 8 were well and working throughout the year, 2 were not visited, by request of the doctor in attendance; 2 left the district, and 4 died.

Of the 14 non-insured cases and dependents notified in 1913—

Admitted to hospital,	-	-	-	8	3 in hospital at close of year.
Refused treatment,	-	-	-	4	
Left district,	-	-	-	1	
Died just after notification,	-	-	-	1	

---

14

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The average stay in hospital of those notified before 1913 was  $13\frac{1}{2}$  weeks, and 2 of these were still in hospital at the close of the year. 4 of them had had previous hospital treatment. Of the newly notified cases the average stay in hospital was  $12\frac{1}{2}$  weeks; while three cases were still in hospital at the close of the year.

The average stay in hospital of the non-insured cases and dependents was almost 12 weeks.

**Bacteriological Examination of Sputum.**—During the year, 52 specimens of sputum were received from medical practitioners for examination. Of these 13 were found to contain tubercle bacilli and 39 were negative. 2 specimens, both negative, were received from the School Medical Officer. Of the positive sputa, 11 cases were notified; 1 had been notified in the previous year by a different doctor, and 1 was notified to another local authority. 4 cases with negative sputa were also notified. Fully 50 per cent of the cases were thus notified without any bacteriological examination having been made, most of these cases being in such an advanced stage that diagnosis from clinical signs alone presented no difficulties.

43 specimens of sputa from 20 patients were also received from the physician at Lightburn Hospital, of which 22 were positive and 21 negative; and 12 from the Tuberculosis Officer, 4 positive and 8 negative.

When a negative result is obtained the medical attendant is usually communicated with in order that cases may be notified before the sputum contains bacilli or suspicious cases kept under observation until a definite diagnosis is arrived at.

**Administration.**—Until the appointment of the Tuberculosis Officer in October, the administrative control of these cases was carried out as in former years. Periodic visits were paid by the Sanitary Inspectors, and in certain cases also by the Health Visitor, who advised as to the means for prevention of infection, and gave assistance in carrying out the open air treatment at home so far as practicable. Sputum flasks and disin-



fectants where necessary were provided free. A record of the progress of the case was also kept, and the Medical Officers and the practitioners when these were not actually in attendance, were advised when the case seemed to require other treatment than was available at home. The Sanitary Inspectors, by their visits to the home, were able to discover and rectify insanitary conditions in the dwellings, particularly in regard to faulty windows with lack of ventilation, and to overcrowding and want of cleanliness. In most instances these visits were fully appreciated by the patients, most of whom, especially those who had received Sanatorium treatment, endeavoured to carry out the instructions faithfully. After the Tuberculosis Officer was appointed, the same plan of administration was carried out, but more systematically. Except in cases where the medical practitioner expressly desired that no visit should be paid, each case on record at that time, and notified subsequently, was visited regularly, according to the needs of the case, and examined personally by the Tuberculosis Officer, who made a careful record of the history, clinical findings, family history, and housing conditions. The medical practitioners in attendance on the patients were in most cases kept informed of the work done, and any special line of treatment was carried out only with their sanction. Thus the practitioners were informed of the admission and discharge of these cases from sanatoria, and of any change noted in the condition of the cases by the physician at the sanatorium or the Tuberculosis Officer in his visits.

Four of the cases received Tuberculin injections while under domiciliary treatment; 1 was so treated by his doctor, tuberculin being prepared in suitable doses by the Tuberculosis Officer and sent out periodically in phials to the doctor; the other 3 were treated by the Tuberculosis Officer. Each case was provided with a thermometer and with special Tuberculin Record Charts, on which pulse, temperature, weight, and general and local symptoms were recorded by patients, in order that this method of treatment might be successfully carried out. These patients displayed great pride in keeping their charts clean and in recording the necessary observations neatly and accurately; and in no case were any untoward symptoms evident during the course of treatment.

Examination of contacts in houses where cases resided was also begun during the closing months of the year; and as a result 7 cases are under observation—4 of these were found to have pulmonary signs sufficient to cause suspicion in those with a family history of tubercle and 1 of these was subsequently notified by the medical attendant, whose attention was drawn to the case by the Tuberculosis Officer; the other 3 had definite tuberculous adenitis.



TABLE VI.

PULMONARY TUBERCULOSIS IN EACH REGISTRATION DISTRICT OF THE LOWER WARD.—AVERAGE ANNUAL NUMBER OF DEATHS FOR QUINQUENNIAL PERIODS, 1891-1910, AND FOR THE YEARS 1911-1912-1913.

Registration District.	Population, Census 1911.	1891-1895.	1896-1900.	1901-1905.	1906-10.	1911.	1912.	1913.
*BARONY—								
Shettleston, - -	32,046	17'4	29'2	36'0	39'8	20	25	3
Springburn, } -	3,035	...	...	...	0'2	...	2	...
Maryhill, } -		0'6	1'0	0'8	0'4	...	...	...
Possilpark, } -		...	...	..	1'4	1	1	...
Garngadhill, } -		...	...	...	...	...	...	...
CADDER—								
Eastern, - - -	9,143	7'2	4'6	4'6	4'8	7	9	6
Western, - - -	5,585	4'2	3'4	6'0	4'8	3	7	3
CARMUNNOCK, - -	747	1'0	1'6	0'8	1'2	1	...	1
GOVAN, - - - -	2,394†	3'4	2'8	1'0	..	...	1	...
RUTHERGLEN, - -	4,024	6'2	4'2	4'6	4'6	2	2	7
LOWER WARD DISTRICT,	56,974	41'8	47'2	54'2	57'4	34	47	20
Average Quinquennial Death-rate per 10,000 of the Population, -		12'83	11'70	12'40	11'3	6'23	8'60	6'7

\* Barony Parish was in 1897 united with Glasgow, and is now so designated.

† By an extension of the Burgh of Govan 5,642 of the population was annexed as from 15th August, 1901, and all the rates for this year are calculated upon an *Average Population*.

The populations of Govan Combination Institutions, Shieldhall Fever Hospital, and Gartloch Asylum, are deducted in calculating the rates for the Lower Ward and also for the County.

### Non-Pulmonary Tuberculosis

The non-pulmonary forms of tuberculosis are not yet notifiable compulsorily or voluntarily in the Lower Ward, but occasional cases are brought to our notice by the attending practitioners. Five cases—2 of abdominal and 3 of cervical-gland tuberculosis were thus under observation during the year, and were visited by the Tuberculosis Officer and Health Visitor. One case of abdominal tuberculosis died, the other received institutional treatment in Glasgow. Of the glandular cases, 1 is receiving sanatorium treatment in the current year.

### Domiciliary Supervision.

*Number of Cases.*—The total number of cases on record throughout the year was 66. 31 of these, as is shown in Table II., column 3 of the general report, were notified during the year, while 35, notified in previous years, were known to be surviving at 1st January, 1913. The changes recorded during the year are shown in the same table, columns 4 and 5. 17 cases died, including 9 of those notified in 1913, and 6 left the district, including 4, notified in 1913, leaving on record 43 cases. This record list was revised, and for various reasons 4 cases were removed from it, making the nett number of cases at 1st January, 1913, 39.

*Age and Sex—Insurance—Conjugal State.*—In the following table the cases are classified according to Age (in quinquennial groups), Sex, and according to whether they were Insured, Non-Insured, or Dependants, and whether married or single:—

Age Periods.	Sex—M. F.		Insured.		Depend.		Non-Insured.		Total.	Married.		Single.	
	M.	F.	M.	F.	M.	F.	M.	F.		M.	F.	M.	F.
— 5	1	2	...	...	1	1	...	1	3	...	...	1	2
— 10	...	2	...	...	...	2	...	...	2	...	...	...	2
— 15	...	8	...	...	...	7	...	1	8	...	...	...	8
— 20	2	3	2	2	...	1	...	...	5	...	...	2	3
— 25	7	3	6	2	...	1	1	...	10	...	...	7	3
— 30	4	6	3	3	...	3	1	...	10	1	3	3	3
— 35	3	4	3	...	...	1	...	3	7	3	1	...	3
— 40	4	6	3	2	...	1	1	3	10	4	4	...	2
— 45	3	2	3	1	...	...	...	1	5	3	2	...	...
— 50	...	2	...	1	...	1	...	...	2	...	2	...	...
— 55	1	...	...	...	...	...	1	...	1	1	...	...	...
— 60	3	...	3	...	...	...	...	...	3	2	...	1	...
28 38			23	11	1	18	4	9	66	14	12	14	26
			34		19		13			26		40	



## OCCUPATION.

<i>Domestic Work.</i> —Housewives, 5 ; children, 3, - - -	8
Scholars, 10 ; teachers, 2, - - - - -	12
<i>Mining, etc.</i> —Miners, 2 ; pithead workers, 2 ; cokeworker, 1,	5
<i>Shopkeepers, etc.</i> —Grocer, 1 ; barman, 1, - - - - -	2
<i>Workshop Employees.</i> —Ropeworkers, 3 ; machinists, 3 ; confection workers, 2 ; cotton worker, 1 ; shuttlemaker, 1 ; milliner, 1, - - - - -	11
<i>Miscellaneous.</i> —Clerks, 5 ; labourers, 3 ; blacksmiths, 2 ; toolworkers, 2 ; weaver, 1 ; polisher, 1 ; carter, 1 ; mason, 1 ; cleaner, 1 ; cableworker, 1 ; sawmiller, 1 ; engineer, 1 ; telephone linesman, 1 ; machineman, 1 ; quarryman, 1 ; farm worker, 1 ; nil, 4, - - - - -	28
	66

*Parish of Residence.*—The parish of residence of the cases on record was :—Barony, 15 ; Cadder, 29 ; Rutherglen, 20 ; Carmunnock, 2.

*Duration of Illness.*—The duration of illness in monthly periods was as follows :—

<i>Months</i> —Not stated.	-1	1-2	2-3	3-6	6-12	12-18	18-24	over 24
<i>Cases</i> —	4	5	7	6	11	10	6	3
								14 = 66

*Earliest Symptoms recognised.*—The earliest symptoms recognised were :—in 35 cases, cough ; in 6, hæmoptysis ; in 6, pleurisy ; in 2, influenza ; in 2, debility ; in 2, measles ; in 1, whooping-cough ; in 1, pneumonia ; in 2, hoarseness ; in 2, sore throat ; in 1, peritonitis ; in 1, dropsy ; in 1, following an injury ; and in 4, the earliest symptoms are not recorded.

Thus, in over 50 per cent. cough was the initial symptom, while in 9 per cent. a pleurisy and in 9 per cent. an hæmoptysis ushered in the illness.

*Home Conditions.*—The number of cases occurring in tenements, cottages, and rows, and the number of apartments in the various dwellings, is given in the following table :—

No. of Apartments.	Tenement.	Cottage.	Row.	Institution.	Total Houses.
1	3	...	6	...	9
2	27	2	10	...	39
3	6	1	...	...	7
4 and upwards	...	10	...	1	11
	36	13	16	1	66



The majority of the cases thus occurred in two-apartment dwellings. Since the annexation it has not been possible to state exactly the percentages of the different sizes of dwelling-houses in the district, but an approximate percentage may be estimated. The parish of Cadder was unaffected by the annexation, and at last Census the percentage of one-apartment and two-apartment houses was 12·7 and 40 respectively—a total of 52·7 per cent. For the whole area the corresponding percentage was 62 in 1911. It is probable, therefore, that the percentage for the whole area now does not fall far short of 60. 48 cases, or about 70 per cent., occurred in houses of this class, but this excess may be explained by the fact that poverty, which is so often a sequel to lingering illnesses, such as tuberculosis, has driven these people to seek smaller and cheaper houses. In any case, the figures are too small to form a basis for any definite conclusions.

*Inmates.*—Of the 66 houses, there were thus 9 of 1 apartment, 39 of 2 apartments, 7 of 3 apartments, and 11 of 4 or more apartments. Of these, there is no available record of the number of inmates in 1 one-apartment and 4 of the 4 or more apartment houses. The total number of inmates in the others, with the average number of persons per room, was as follows:—

Apartments, - - -	1	2	3	4 and over.
Total inmates, - - -	33	211	37	35
Average number per room,	3·6	2·95	1·76	1·2

*Sleeping Accommodation.*—Of the 66 cases, 15 had a room to themselves. Of the remainder, 15 shared a room with 1 other person, 12 with 2 others, 11 with 3 others, 4 with 4 others, 2 with 5 others, and in 7 there is no record. Including the 15 who had a room to themselves, 26 occupied a bed alone, 25 had 1 other, 6 had 2 others, and 1 had 3 others, sharing a bed with them. In 8 cases there is no record.

*Weekly Income.*—In many of the cases, particularly among the cases notified during the first few years of compulsory notification, no record of the weekly wage is available. In 35 of the 66 cases, however, a record has been kept, and among these the average weekly wage works out, approximately, at 36s. If regard is had to the number of persons depending on the wage for livelihood, it is found that in the families of those 35 cases there was a total of 189 persons, making the average weekly income available per head, approximately, 6s. 7d.



The following table shows in detail the cases in relation to weekly income, with the number of persons depending on the income:—

WEEKLY INCOME CLASSIFIED IN GROUPS—AND NUMBER OF PERSONS  
DEPENDENT ON THE INCOME.

No. of Persons.	Income -20s.	20-25s.	25-30s.	30-35s.	35-40s.	40-50s.	50s. and upwards.
1	...	...	...	...	...	...	...
2	...	...	1	...	2	...	...
3	...	...	...	2	...	...	...
4	1	1	2	3	...	...	...
5	...	...	...	2	1	1	...
6	1	1	3	...	2	1	3
7	1	...	1	...	...	1	2
8	...	...	...	1	...	...	...
9	...	...	...	...	...	...	...
10	...	...	...	...	...	1	1
	3	2	7	8	5	4	6

*Domiciliary Visits.*—A total of 89 visits were paid by the Tuberculosis Officer to the homes of the patients, while 124 visits were paid by the Sanitary Inspectors and Health Visitor.

INSTITUTIONAL TREATMENT (AT ANY TIME).

Treated in County Institutions.	Treated in Institution outwith County.	Refused Treatment.	Left District or Not-Tuberculosis.	Unsuitable Cases.	
39	7	13	3	4	= 66

Received institutional treatment once,	-	-	-	30
"                    "                    "                    twice,	-	-	-	13
"                    "                    "                    thrice,	-	-	-	3

Total who have received institutional treatment, 46

CONDITION AT END OF YEAR.

Year of Notification.	Cases.	Arrested.	Improved.	Stationary.	Worse.	Died.	Off List.	Not to be Visited.
1906	4	1	1	...	...	...	1	1
1907	1	...	...	1	...	...	...	...
1908	1	...	...	...	...	1	...	...
1909	3	1	1	...	...	...	1	...
1910	6	1	3	...	...	...	2	...
1911	7	2	1	...	1	2	1	...
1912	13	...	6	1	1	5	...	...
1913	31	...	12	3	3	9	2	2
Totals,	66	5	24	5	5	17	7	3

SPUTUM.				
	+	-	Total.	
Examined in 1913, - - -	26	14	40	
Not examined in 1913 (but examined previously), - - -	3	3	6	
No record of any examination, - - -	...	...	20	
Totals, - - -	29	17	66	

### Domiciliary Records.

#### EXPLANATORY NOTE.

The more important data in these Records have been extracted and tabulated in such a way as to give the greatest amount of information in the smallest possible space, and the consequent use of abbreviations and signs necessitates explanatory notes.

*Insurance.* Column 7 indicates by letters whether the case was an Insured (I.), Dependant (D.), or Non-Insured (N.I.) person.

*Institutional Treatment.* Column 12. Hospitals and Sanatoria belonging to the County are denoted by the first letters of the name, indicating the place where the institution is situated, thus:—

- |                     |                   |
|---------------------|-------------------|
| (1) St.—Stonehouse. | (5) L.—Lightburn. |
| (2) Sh.—Shotts.     | (6) B.—Bellshill. |
| (3) U.—Uppertown.   | (7) Bl.—Blantyre. |
| (4) M.—Motherwell.  | (8) D.—Dalserf.   |

Rm.—Roadmeetings.

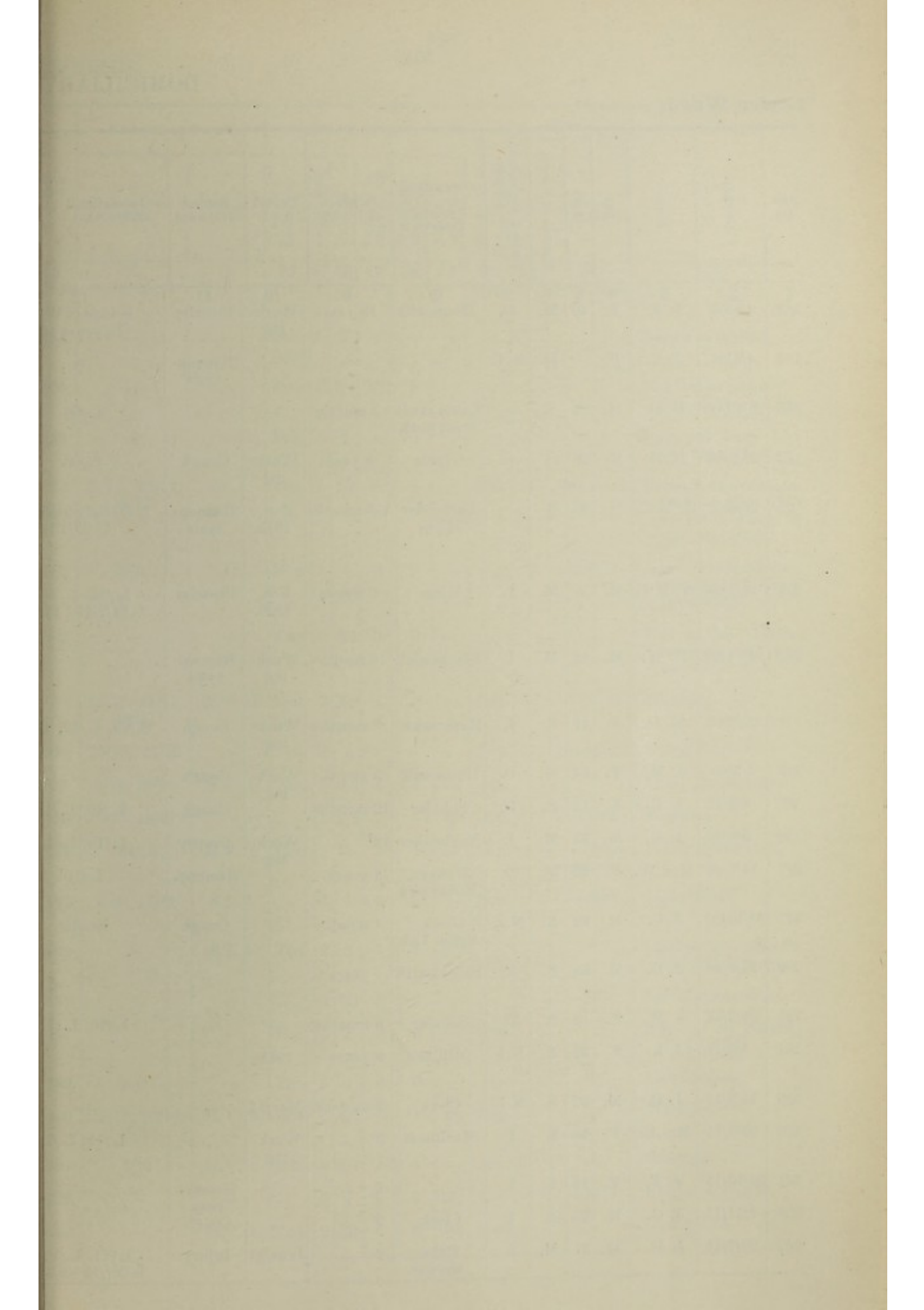
Names of institutions belonging to other authorities are printed in full. In cases which received institutional treatment in 1913 the dates of admission and discharge are given in full, while in cases which received institutional treatment in previous years the year is indicated; thus L./06 means that the patient received treatment in Lightburn Hospital in 1906.

*Domiciliary Visits.* Columns 14 and 15. In column 14 the visits by the Tuberculosis Officer are given—the day and month of each visit being given; for example, 6/9 means a visit paid by the Tuberculosis Officer on 6th September. The visits paid by the Health Visitor (H.V.) and Sanitary Inspector (S.I.) are in most instances not given in detail, but the total number of visits is given.

*Home Conditions.* Inmates. Column 18 gives the total number of inmates in the house. A distinction is drawn between those over 12 years and those under 12 years; thus 7/3 means 7 persons over 12 and 3 under 12 years. The same holds good for columns 19 and 20, which indicate the number of inmates sleeping in the same room, and in the same bed as the patient.

*Condition at End of Year.* Column 22. The same terms are used to describe the condition of the patient at the end of the year as to describe the general result of hospital treatment in the clinical records, viz., Arrested, Improved, Stationary, Worse, Died.





## Lower Ward.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
153a	4/8/06	J. F.	F.	40	M.	D.	Housewife	10 years	Working	Pleurisy	Bridge of We 10 years ago
154	4/8/06	J. L.	F.	—	M.	N.I.	—	—	—	Hæmop-tysis	—
335	20/12/06	D. C.	M.	26	S.	—	Labourer in brickwork	3 months	—	—	L./06
182	28/8/06	D. D.	M.	20	S.	—	Grocer	8 years	Working	Cough	L./06
25	25/6/07	J. M'C.	M.	22	S.	—	Bartender Miner	2-3 months	Jan. 1913	Hæmop-tysis	L./07 Bellefield / U.29/12
358	16/7/08	W. M'L.	M.	58	M.	I.	Miner	2 weeks	Feb. 1908	Pleurisy	L./08, L./11, L.24/2/13—5/3/
732	14/11/09	D. W.	M.	42	M.	I.	Blacksmith	16 months	Working	Hæmop-tysis	—
71	29/1/09	M. O.	F.	19	S.	I.	Ropemaker	6 months	Working	Cough	B./09, L./12, L./
319	4/5/09	J. M.	F.	34	M.	D.	Housewife	3 months	Working	Cough	—
99	8/3/10	L. C.	F.	13	S.	D.	Scholar	12 months	—	Cough	L./10, L./11
136	5/4/10	A. G.	M.	33	M.	I.	Toolmaker	12 „	Working	Dropsy	L./10, L./12
277	14/7/10	Mrs. W.	F.	45	M.	D.	Weaver, Housewife	8 years	„	Haemop.	L./10
417	10/10/10	J. C.	M.	22	S.	N.I.	Clerk, Agric. Lab.	4 months	„	Cough	St./10
208	26/5/10	J. C.	M.	58	S.	I.	Blacksmith	years	„	„	—
121	24/3/10	S. M.	F.	10	S.	D.	Scholar	6 months	—	„	L./10, L./11
191	3/6/11	J. K.	F.	32	S.	N.I.	Milliner	8 years	1911	„	—
389	11/9/11	J. D.	M.	27	S.	N.I.	Clerk	8 months	Mar/11	„	—
420	20/9/11	Mrs. C.	F.	48	M.	I.	Machinist	3 „	Working	„	L./11, L./12
521	30/10/11	J. F.	F.	15	S.	I.	„	6 „	„	Hoarse-ness	—
526	2/11/11	J. G.	M.	25	S.	I.	Clerk	9 „	„	Cough	—
262	27/7/11	J. M.	M.	37	M.	I.	Coke worker	2 „	June/11	Injury	L./11, L./12, L.26/13—9/4/13



## RECORDS.

Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
153a	30/10, 29/12	H. V. 6	Ten.	1	3	2	—	—	Imp.	+	No record	—	
154	—	—	Cot-tage	5	5	—	—	—	—			Not to be visited.	
335	—	—	Row	2	5/1	2/1	1	—	—			Not Tuberculosis ; removed from List.	
182	—	—	Ten.	3	8	—	—	—	—			Removed from List as Cured, 1913.	
25	31/10, 20/11, 15/12	S. I. 1	Ten.	2	2/3	0	0	—	Stat.	+	No record.	Patient removed from District from 1908 to 1913, when he was renotified.	
358	22/2,	S. I. 1	Row	1	1	0	0	—	—	—	—23/5/11	Not Tuberculosis ; died 2/11/13, Acute Bronchitis.	
732	—	—	Ten.	2	3/1	0	0	—	—			Not to be visited ; removed from List as Cured, 1913.	
71	9/11, 14/11, 20/11	H. V. 13	Ten.	2	4/2	1	—	—	Imp.	—	—17/8/12	Working.	
319	24/10, 27/10	—	Ten.	2	3	1	—	—	Imp.	—	No record.	Doing Housework.	
99	9/10, 26/11	H. V. 1	Ten.	2	6/2	1	1	—	Arr.			Doing Housework.	
136	7/10, 13/11	—	„	1	2/2	3	1	30/	Imp.		— 1910	Working.	
277	14/10	H. V. 1	Cot.	2	4	1	1	25/	Imp.	24/10 —	+(Date unknown)	Doing Housework.	
417	2/10, 11/11	S. I. 2	„	4	4	0	0	—	Imp.		+ 1910	Light Work.	
208	—	S. I. 1	Ten.	2	3	1	1	30/	—			Off List ; case of Bron. and Emphysema.	
121	—	—	„	2	5/1	2	2	—	—		— 1910	Left the district.	
191	—	—	Cot.	4	3	0	0	—	Wse.			Not to be visited ; died 1/1/14.	
389	20/11	—	Ten.	3	4	0	0	—	—			Left district.	
420	13/10, 20/10, 10/12	H. V. 2	Row	2	4/1	1	1	48/	Imp.			Working.	
521	7/10	H. V. 1	Cot.	4	8/1	1	1	—	Arr.			Working.	
526	—	—	„	5	5	0	0	35/	Arr.		+ 1912	Not to be visited.	
262	—	H. V. 1	Ten.	2	3/1	0	0	30/	Died	+		Died 9/4/13.	

## Lower Ward.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
482	18/10/11	A. W.	F.	30	S.	N.I.	Teacher	—	—	—	—
224	10/12/12	M. C.	F.	36	S.	N.I.	Machinist	6 months	May/12	Cough	Smithston/12
200	5/8/12	H. D.	F.	27	S.	I.	Clerkess	9 years	July/12	Haemop.	—
45	11/3/12	M. M.	F.	20	S.	D.	Polisher	6 months	Dec/11	Cough	L./12
65	13/4/12	P. G.	M.	22	S.	I.	Labourer	5 years	Feb/12	Pleurisy	L. 25/1/13—10/6/13 U. 21/10/13—12/1/14
67	16/4/12	W. P.	M.	36	M.	I.	Carter	2 „	Work- ing	Cough	Stobhill/12
225	18/12/12	L. M.	F.	15	S.	D.	—	1 month	—	„	Stobhill/12
107	16/7/12	T. D.	M.	30	M.	I.	Clerk	1 year	Work- ing	„	L./12
202	8/8/12	A. H.	M.	43	M.	I.	Labourer, Mason	3 years	„	„	Bellefield/10
207	28/12/12	S. M.	F.	6	S.	N.I.	Scholar	1 month	—	P'eriton.	—
208	3/9/12	R. W.	F.	6	S.	D.	„	1½ years	—	Pneumon.	L./12
226	25/12/12	J. W.	F.	29	S.	D.	Cleaner	6 months	1907	Cough	L. 8/1/13—26/4/13
214	2/10/12	M. W.	F.	22	S.	I.	Confection worker	5 weeks	Sep/12	Quinsy	L. 11/10/12—19/2/13
94	1/6/12	Mrs. M.	F.	38	M.	N.I.	—	3 months	—	Debility	—
1	11/1/13	A. J.	M.	57	M.	I.	Collier	2 weeks	Dec/12	Cough	L. 17/1/13—11/4/13
2	17/1/13	N. M.F.	M.	20	S.	I.	Clerk	4 „	Dec/12	„	—
4	10/2/13	K. M.	F.	26	S.	I.	Ropeworker	1 year	Jan/13	Loss of Weight	L. 17/2/13—14/5/13
6	14/2/13	A. P.	F.	38	S.	I.	House- keeper	6 months	Nov/12	Cough	U. 26/2/13—20/4/13
7	18/2/13	J. M.	M.	19	S.	I.	Pithead worker	2 „	Jan/13	„	B. 26/2/13—20/3/13
7a	19/2/13	M. M.	F.	12	S.	D.	Scholar	years	Feb/13	Wh. Cough	St. 15/10/13—28/3/14
8	4/3/13	R. M.	F.	22	S.	I.	Confection worker	1½ „	Feb/13	Cough	—
9	6/3/13	M. D.	F.	14	S.	D.	Scholar	3 weeks	Feb/13	„	L. 17/3/13—14/6/13



## RECORDS.

Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartments.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
482	—	—	—	—	—	—	—	—	Died			Not to be visited ; died 27/5/13.	
224	—	S.I. 1	Ten.	2	—	0	0	—	Died	+		Died 12/2/13.	
200	—	H.V. 1 S.I. 1	„	3	4	1	0	—	Died			Died 19/5/13.	
45	8/10, 26/12	H.V. 7 S.I. 1	„	3	7	2	1	45/	Imp.		+ 1912	Doing Housework.	
65	2/10, 7/10, 13/10	S.I. 4	Row	2	8/2	2	0	55/	Stat.	+	+ 1912	Not Working.	
67	17/10, 25/11, 12/12, 26/12	S.I. 1	Ten.	2	2/2	1	1	20/	Wse.	—	+ 1912	—	
225	—	H.V. 11	Row	2	4	3	1	28/	Died	+		Died 26/5/13.	
107	2/10, 10/11, 1/12	—	Ten.	2	2/1	1/1	0	—	Imp.	+	+ 1912	At Work.	
202	21/11	S.I. 3	„	2	3/1	0	0	15/	Imp.			Light Work.	
207	13/9, 10/12	H.V. 3	„	3	3/1	2	1	—	Imp.			At School.	
208	14/10, 10/12	H.V. 3	„	2	2/3	2	1	30/	Imp.		- 1912	At School.	
226	9/10	S.I. 1	Row	2	6/2	2/2	2	32/	Imp.	+		—	
214	—	—	Ten.	2	3/3	1	1	25/	Died	+		Died 14/3/13.	
94	—	—	Cot.	6	3	0	0	—	Died	+	+ 1912	Not to be visited ; died 28/2/13	
1	—	S.I. 3	Row	2	4/3	1/3	0	25/	—	—		Left district. Re- turned 1914.	
2	—	S.I. 1	Cot.	—	—	—	—	—	—	—		Not to be visited ; died 12/2/13.	
4	—	S.I. 3	Ten.	2	3/2	0	0	—	Imp.	—		Left district.	
6	22/2	S.I. 2	Cot.	5	6	0	0	—	Died	+		Died 20/4/13.	
7	22/2	S.I. 2	Ten.	2	6	3	1	63/	Died	+		Died 20/3/13.	
7a	1/10, 11/10	S.I. 1 H.V. 5	„	2	7	4	0	61/	Imp.	—		—	
8	—	H.V. 4 S.I. 2	„	2	6/1	2	0	—	Died	+		Died 25/6/13.	
9	23/10, 5/11, 18/11, 12/10	—	„	2	4	1	1	28/	Imp.	+		Received Tuberculin at home.	

## Lower Ward.

Rec. No.	Notified.	Initials.	Sex.	Age.	Married or Single.	Insured, Dependent, or Non-Insured.	Occupation. Past and Present.	Duration of Illness.	Ceased Work.	Earliest Symptoms.	Institutional Treatment.
1	2	3	4	5	6	7	8	9	10	11	12
10	8/3/13	A. P.	F.	25	M.	D.	Housewife	years	—	Pleurisy	L. 13/3/13—10/6/13 U. 30/10/13—21/2/14
11	13/3/13	D. T.	M.	20	S.	I.	Cable worker	2 weeks	Mar/13	Haemop.	L. 27/3/13—6/9/13
12	18/3/13	A. D.	F.	42	M.	I.	Ropeworker	2 months	Mar/13	Cough	L. 28/7/13—9/9/13 Bl. 9/9/13—16/9/13
13	26/3/13	S. J.	M.	38	M.	I.	Sawmiller	2 weeks	Mar/13	Cough	L. 31/3/13—30/7/13
14	18/4/13	J. W.	M.	1½	S.	D.	—	—	—	—	—
15	29/5/13	G. B.	M.	52	M.	N.I.	Engineer	3 years	1909	Influenza	—
16	4/6/13	H. H.	F.	44	M.	N.I.	Housewife	3 months	—	Cough	—
17	7/6/13	A. G.	F.	10	S.	D.	Scholar	1 year	1912	Cough	L. 13/6/13—9/9/13 U. 9/9/13—2/12/13
18	7/6/13	W. D.	M.	17	S.	I.	Pithead worker	6 weeks	Apr/13	Cough	L. 13/6/13—8/9/13 M. 8/9/13—4/10/13 Bl. 4/10/13—18/2/14
19	25/6/13	C. J.	F.	4	S.	D.	—	7 weeks	—	Measles	—
20	27/6/13	J. M.	M.	37	M.	N.I.	Telegraph Linesman	6 months	Work- ing	Cough	L. 12/7/13—10/9/13
21	10/7/13	C. B.	M.	30	M.	I.	Machine- man	2 months	May/13	Pleurisy	L. 14/7/13—9/9/13 Sh. 9/9/13—4/10/13
22	16/7/13	K. C.	F.	14	S.	D.	Scholar	6 weeks	June/13	Cough	L. 21/7/13—8/9/13 M. 8/9/13—26/9/13
23	11/8/13	J. T.	M.	22	S.	I.	Labourer	2 months	Work- ing	Cough	L. 18/8/13—9/9/13 Sh. 9/9/13—15/9/13
24	18/8/13	J. B.	F.	10	S.	D.	Scholar	1-2 years	—	—	—
26	30/9/13	M. J.	F.	30	S.	N.I.	Teacher	3 months	—	Sore throat	—
27	8/10/13	J. M.	M.	43	M.	I.	Quarryman	5 months	Sep/13	Cough	U. 21/10/13—12/1/14
29	6/11/13	M. M.	F.	29	M.	D.	Farm worker	3 months	Oct/13	Hoarse- ness	U. 21/11/13 26/11/13
30	3/11/13	E. M.	F.	1½	S.	N.I.	—	—	—	—	—
31	13/11/13	J. C.	M.	26	M.	I.	Steelworker	5 months	June/13	Influenza	U. 20/11/13—3/2/14
32	30/11/13	Mrs. C.	F.	26	M.	I.	Cotton worker	7 years	Dec/13	Cough	—
33	28/11/13	N. W.	F.	11	S.	D.	Scholar	6 years	—	Measles	Sh. 26/12/13—28/3/14
34	19/12/13	A. G.	F.	37	M.	I.	Shuttle maker	2 months	Dec/12	Pleurisy	—



## RECORDS.

Rec. No.	DOMICILIARY VISITS.		HOME CONDITIONS.							Condition at end of Year.	SPUTUM EXAMINATION.		NOTES.
	Tuberculosis Officer.	Others.	Tenement, Cottage, or Row.	Apartment.	Inmates.	Sleeping in same Room.	Sleeping in same Bed.	Weekly Income.	1913.		Previous Results.		
13	14	15	16	17	18	19	20	21	22	23	24	25	
10	17/10, 27/10	H.V. 2 S.I. 2	Ten.	1	2/2	1/2	0	30/	Imp	+		—	
11	7/10	S.I. 3	„	2	6/4	1/2	0	40/	Imp.	+		Left district; received Tuberculin at home.	
12	16/10, 27/10, 9/12	H.V. 6 S.I. 2	„	2	4/2	1/2	1/2	20/	Imp.	—		Fit for work.	
13	7/10, 13/11	S.I. 1	Row	1	2/4	1/4	1	27/	Imp.	—		At work.	
14	—	—	—	—	—	—	—	—	—			Died 19/4/13.	
15	—	S.I. 2	Cot.	2	6	0	0	12/	—			Left district.	
16	—	S.I. 1	Ten.	3	4/1	0	0	—	Died			Died 23/7/13.	
17	15/12	H.V. 1 S.I. 2	Row	2	4/2	2/1	0	36/	Wse.	+		—	
18	—	S.I. 1	„	2	5/2	2	2	72/	„	+		Died 18/2/14.	
19	7/10, 13/11	S.I. 1	„	1	2/4	2/3	1	27/	Imp.			—	
20	2/10, 9/10 20/10, 10/11 26/12	S.I. 2	Ten.	2	2/4	1/1	1/1	37/	„	+			
21	8/10, 20/11 26/12	S.I. 2	Row	1	2/3	1/3	0	31/	„	+		At work.	
22	—	S.I. 2	„	2	6	3	1	75/	Died	+		Died 30/9/13.	
23	9/10, 16/10 4/11	S.I. 2	Ten.	2	5/1	3	1	64/	Imp.	+		Received tuberculin at home.	
24	—	S.I. 1	Row	2	6/2	2	2	—	Died	+		—	
26	—	—	Cot.	—	—	—	—	—	„	+		Not to be visited.	
27	10/10, 17/10	S.I. 1	Ten.	2	6	1	1	49/	Imp.	+		—	
29	7/11, 14/11 27/11, 11/12 30/12	S.I. 1	Cot.	3	2/3	1	1	—	Wse.	+		Died 11/2/14.	
30	—	—	—	—	—	—	—	—	—			Notified from institution.	
31	14/11, 18/11 20/11	S.I. 1	Row	1	2	1	1	35/	—	—		—	
32	20/11	—	Row	1	2	1	1	35/	—	—		—	
33	5/12, 23/12	S.I. 1 H.V. 2	Ten.	2	3/1	2/1	0	30/	—	—		—	
34	24/12	H.V. 1 S.I. 1	Ten.	2	3/4	2	2	12/	—	—		—	

## LIGHTBURN JOINT-HOSPITAL.

Resident Medical Officer—JAMES JOHNSTONE, M.B., Ch.B., D.P.H.

The accommodation at Lightburn Hospital for cases of tuberculosis consists of a 20-bed pavilion, to which are attached two 2-bed open-air shelters, and one single-bed revolving shelter. This accommodation was available for the treatment of tuberculosis for the first eight months of 1913.

**Patients Treated.**—At the beginning of 1913, there were 11 patients suffering from pulmonary tuberculosis in residence, 1 from the Lower Ward, and 10 from Glasgow. During the 8 months the pavilion was used for the treatment of tuberculosis, 45 patients (including 1 readmission) were admitted. Of these 45, 17 came from the Lower Ward area, 11 from the Middle Ward, 14 from Glasgow, 2 from Clydebank, and 1 from Greenock. There were thus 56 patients under treatment during the year. These 56 patients are classified into four groups, and the more important clinical data for each are given in the tabular statements which follow.

Of these 10 were in Stage I. of the disease, 11 in Stage II., and 34 in Stage III. In one case only was the diagnosis of tuberculosis not established, and this case is omitted from the tables bearing on the clinical condition of the patients.

**Age and Sex.**—The following table shows the sex and age (in quinquennial periods) of all patients treated throughout the year :—

Age Period.	Males.	Females.	Both Sexes.	Age Groups.
-5	—	—	—	School Age, - - 7
-10	—	2	2	
-15	—	5	5	
-20	4	2	6	Adolescence, - - 16
-25	7	3	10	
-30	4	5	9	
-35	1	4	5	Early Mature Period, 26
-40	2	7*	9	
-45	2	1	3	
-50	2	2	4	Late Mature Period, 7
-55	1	—	1	
-60	2	—	2	
-65	—	—	—	
Totals,	25	31	56	

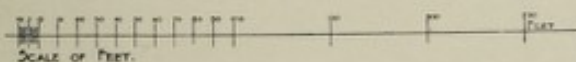
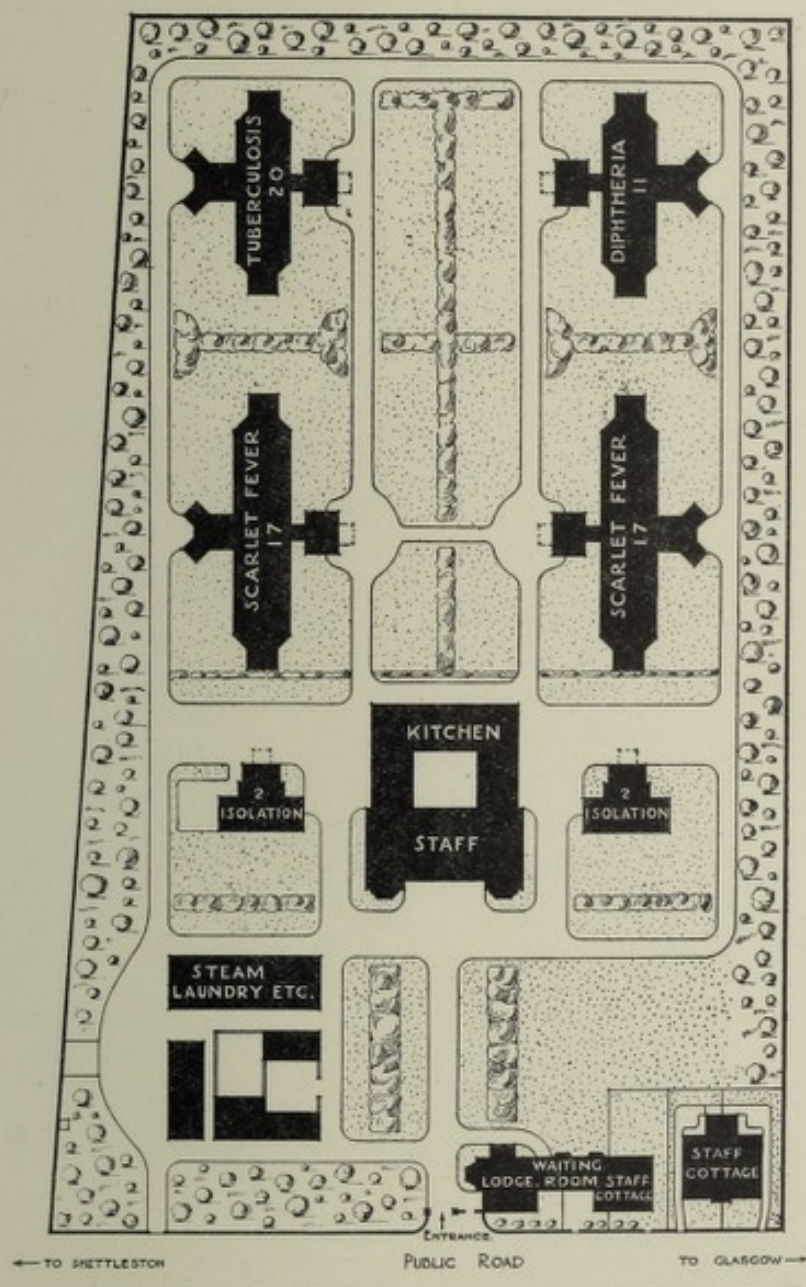
\* 1 case admitted twice.

**Duration of Illness.**—Patients with pulmonary lesions have been classified according to the duration of illness on admission, stated in monthly periods, and it is shown that about one-half of the patients had a history of more than 1 year's illness.

Months.	Not Stated.	-1	1-3	3-6	6-12	12-18	18-24	Over 24	Total.
Patients,	1	—	10	9	10	9	5	11	55

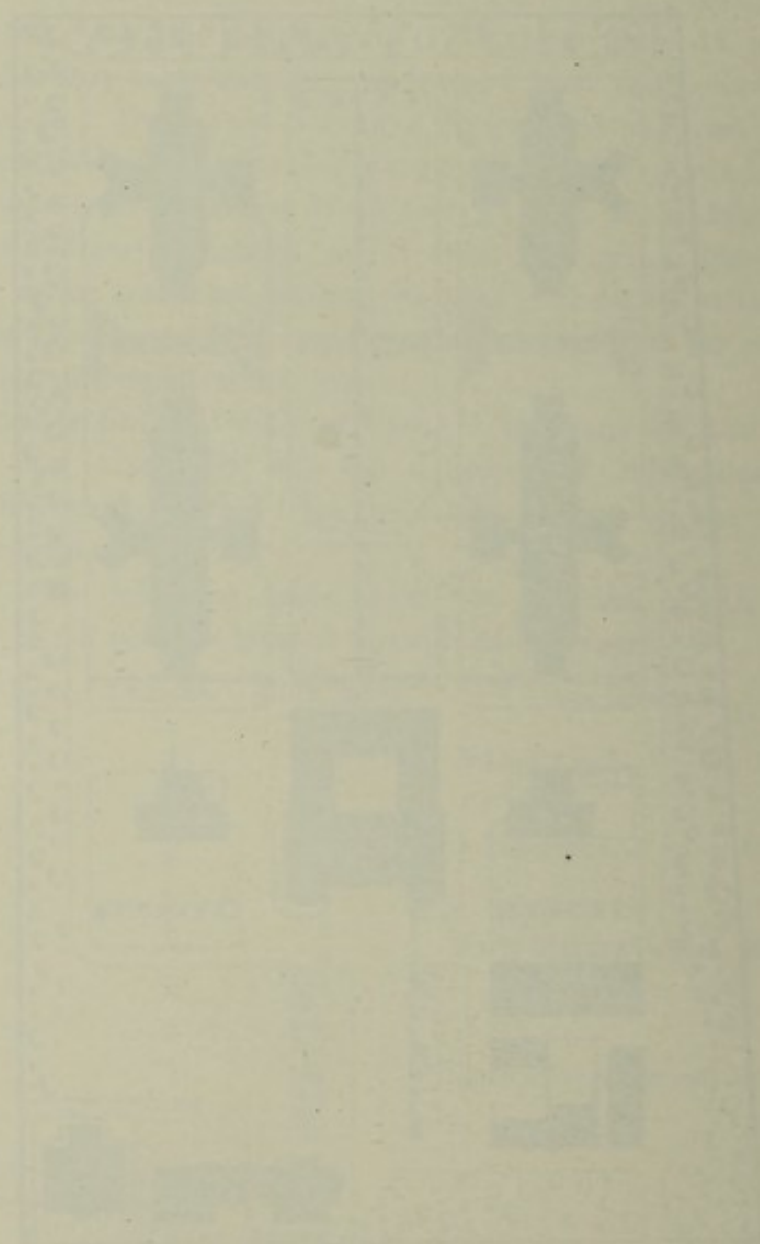


# LIGHTBURN JOINT HOSPITAL

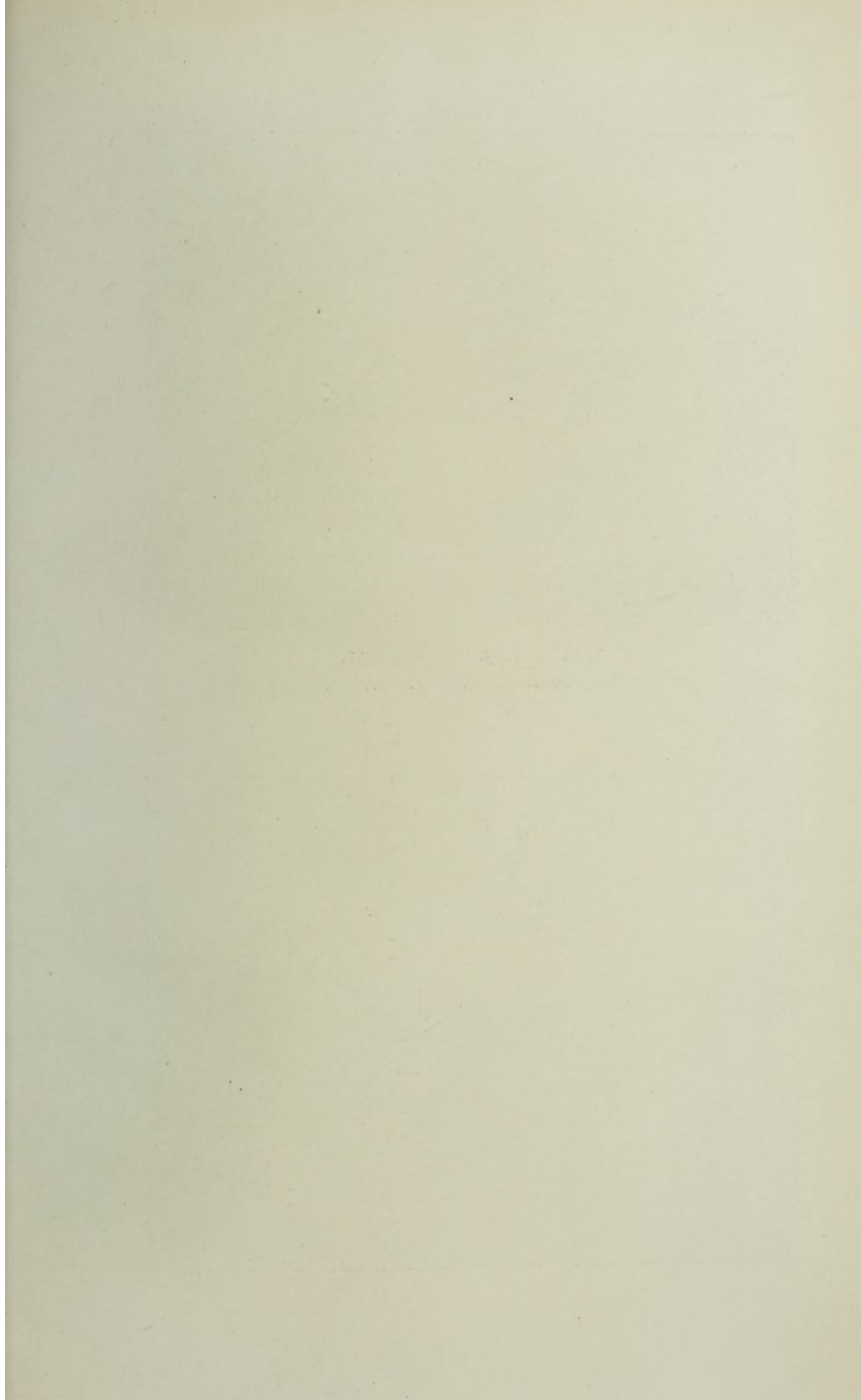


ALEX. CULLEN LOCHHEAD & BROWN  
ARCHITECTS HAMILTON.

JOINT HOSPITAL









LIGHTBURN JOINT HOSPITAL.  
TUBERCULOSIS PATIENTS AND STAFF, 1905.





**Earliest Symptoms recognised.**—These were, in 20 patients, cough and spit; in 6, hæmoptysis; in 7, pleurisy; in 2, influenza; in 10, debility; in 5, debility following a miscarriage or confinement; in 3 pneumonia, and in 1 dyspnoea. In 1 case there was no available record.

**Stage of Disease.**—The following table shows the patients classified according to the stage of the disease with the percentage in each group:—

STAGE OF DISEASE.			No. of Cases.	Percentage of Total Cases.
Group I.	ia.	5	= 10	17·9
	ib.	5		
Group II.	iiA.	6	= 11	19·8
	iiB.	5		
Group III.	...	...	34	60·6
Group IV.	...	...	1	1·7
			56	100·0

34 cases or fully 60 per cent. were thus in an advanced stage of the disease.

### General Results.

#### PATIENTS CLASSIFIED ACCORDING TO STAGE OF DISEASE.

STAGE OF DISEASE.	No. of Patients.	Arrested.	Improved.	Stationary.	Worse.	Died.	Not Stated.	Total.
Stage I. ia,	5	1	4	—	—	—	—	5
ib,	5	4	1	—	—	—	—	5
Stage II. iiA,	6	—	5	—	1	—	—	6
iiB,	5	—	5	—	—	—	—	5
Stage III.	34	—	20	6	5	2	1	34
Totals,	55	5	35	6	6	2	1	55

#### Duration of Residence in days—

Average,	...	98	86	35	102	52	—
Maximum,	...	164	186	89	198	64	—
Minimum,	...	57	23	13	50	41	—

#### Complications—

	STAGE OF DISEASE.					ALL.
	Ia.	Ib.	IIa.	IIb.	III.	
Laryngitis, ...	—	—	1	1	5	7
Adenitis, ...	—	—	1	1	4	6
Diarrhoea, ...	—	—	1	—	—	1
Pleurisy, ...	—	—	—	—	2	2
Other conditions, ...	—	—	—	1	3	4
Total Complications at each Stage, ...	—	—	3	3	14	20
Total Cases at each Stage, ...	5	5	6	5	34	55
Percentage, ...	—	—	50%	60%	41·1%	36·3%.

**Sputum Examinations.**—127 specimens of sputum in all were sent from Lightburn Hospital during the year, 110 ordinary specimens, 12 seven-day specimens, and 5 for animal inoculation. The following table shows the results of these examinations :—

Ordinary Specimens.		7-day Specimens.		Inoculation.		Total.
+	-	+	-	+	-	
71	39	0	12	0	5	
110		12		5		127

These specimens were derived from 52 patients, so that on the average 2·4 examinations were made in each of these cases. In 9 patients, 1 specimen was examined ; in 20, 2 specimens ; in 15, 3 specimens ; in 7, 4 specimens ; and in 1, 5 specimens. In 4 cases no specimen was examined. Of the 52 patients, 35 showed Tubercle Bacilli in the spit at some time during their stay in hospital, while 17 were negative throughout. Classifying the patients with positive and negative sputum according to the stage of the disease gives the following result :—

				Positive.	Negative.	Total.
Stage I.	...	...	...	5	5	10
Stage II.	...	...	...	6	5	11
Stage III.	...	...	...	24	7	31
				—	—	—
				35	17	52

Examination of seven-day specimens was only undertaken in cases negative to ordinary examinations, and in certain cases where both these examinations proved negative guinea-pig inoculation was performed. In 12 instances a 7-day specimen was examined, and in no case did it yield a positive result. In 5 a guinea-pig inoculation was performed, in each case with negative result. One of these cases is worthy of special mention,  $\frac{322}{1913}$  J. T. (22) was notified after a positive sputum examination on 9/8/13. He was removed to Lightburn Hospital, and while there his sputum was examined 3 times with the following result :—

25/8/13 - ; 5/9/13 7-day specimen - ; 9/9/13 guinea-pig inoculation - .  
Further specimens have been examined at intervals since 11/12/13 - , 7/2/14 + many long bacilli, and 4/5/14 - . At the same time this patient has steadily improved. These results show that a case may lose bacilli for long periods, even animal inoculation being negative, and yet infectivity return even when the general and local condition of the patient are improving. It is thus impossible to argue dogmatically about patients who lose their bacilli while in hospital, though the loss of bacilli is none the less a desirable end to attain. 4 patients lost their bacilli while under



treatment in Lightburn. The details of the sputum examinations in these cases are as follows :—

(1)	$\frac{133}{1913}$	D. T. (20)	3/4/13 + Many
			16/7/13 + Very few.
		Stage I.	6/8/13 + Very few.
			9/9/13 —
(2)	$\frac{14}{1913}$	J. W. (29)	15/1/13 + Many.
		Stage III.	29/4/13 —
(3)	$\frac{109}{1913}$	J. M'M. (34)	13/3/13 + Few.
			16/7/13 —
		Stage II.	30/7/13 —
(4)	$\frac{119}{1913}$	A. P. (25)	21/3/13 + Very few.
			3/4/13 —
		Stage III.	29/4/13 — 7 days.
			20/6/13 —

The after history of these cases is briefly :—

(1) Left hospital on 6/9/13; received tuberculin injections (P.T.O. 00002 to 0015cc.) from Tuberculosis Officer from October 29th to December 11th. No symptoms whatever persisting at that time; patient walking 12 miles daily. Weight, 10 stones 6 lbs. Patient left district at end of December and commenced work as a barman. Three months later he was reported quite fit, and without symptoms.

(2) Left hospital on 26/4/13. Has been fairly well ever since, able to do light housework. No great improvement in general or local condition. Sputum examined 22/1/14 with negative result

(3) Left hospital 28/7/13. Admitted to Uppertown in December, and stayed for three months. Sputum examinations there, 15/1/14 - 10/3/14 - 16/3/14, 7 days - . Since discharge, he has been well, but cough and spit persist.

(4) Left hospital 10/6/13. Had considerable domestic worry, and fell back in general health, and had Haemoptysis. Sputum 24/10/13 - Admitted to Uppertown on 30/10/13, where she had repeated Haemoptysis. Repeated sputum examination was negative, but guinea-pig inoculation gave a positive result.

## Clinical Records.

### EXPLANATORY NOTE.

The more important data in these records have been extracted in such a way as to give the greatest amount of information in the smallest possible space, and the consequent use of abbreviations and signs necessitates the following explanatory notes.

#### CONDITION ON ADMISSION.

*Number of Lobes.*—Column 8. R. = right lung, L. = left lung. Small numbers indicate number of lobes involved in each case. In a few instances the letters A and B are given instead of figures signifying apex and base respectively.

*Temperature Range.*—Columns 9 and 18. The temperature range on admission is taken as the average of the morning and evening temperature of the first 3 complete days after admission, and on discharge, of the last 3 complete days in residence.

*General Health.* Column 10. Favourable and unfavourable.

*Sputum.* Column 11. The amount of sputum is denoted by a figure, 0 = no sputum, 1 = scanty, 2 = moderate, and 3 = abundant sputum.

#### CONDITION ON DISCHARGE.

*General Result.* Column 15. The following terms are used to describe the condition of patients on discharge from the sanatorium :—

Arrested = General health restored in every respect. No signs except such as are compatible with a healed lesion. Sputum, if still present, free from tubercle bacilli.

Improved = General health completely restored or considerably improved, but physical signs not completely cleared up or bacilli still present in sputum.

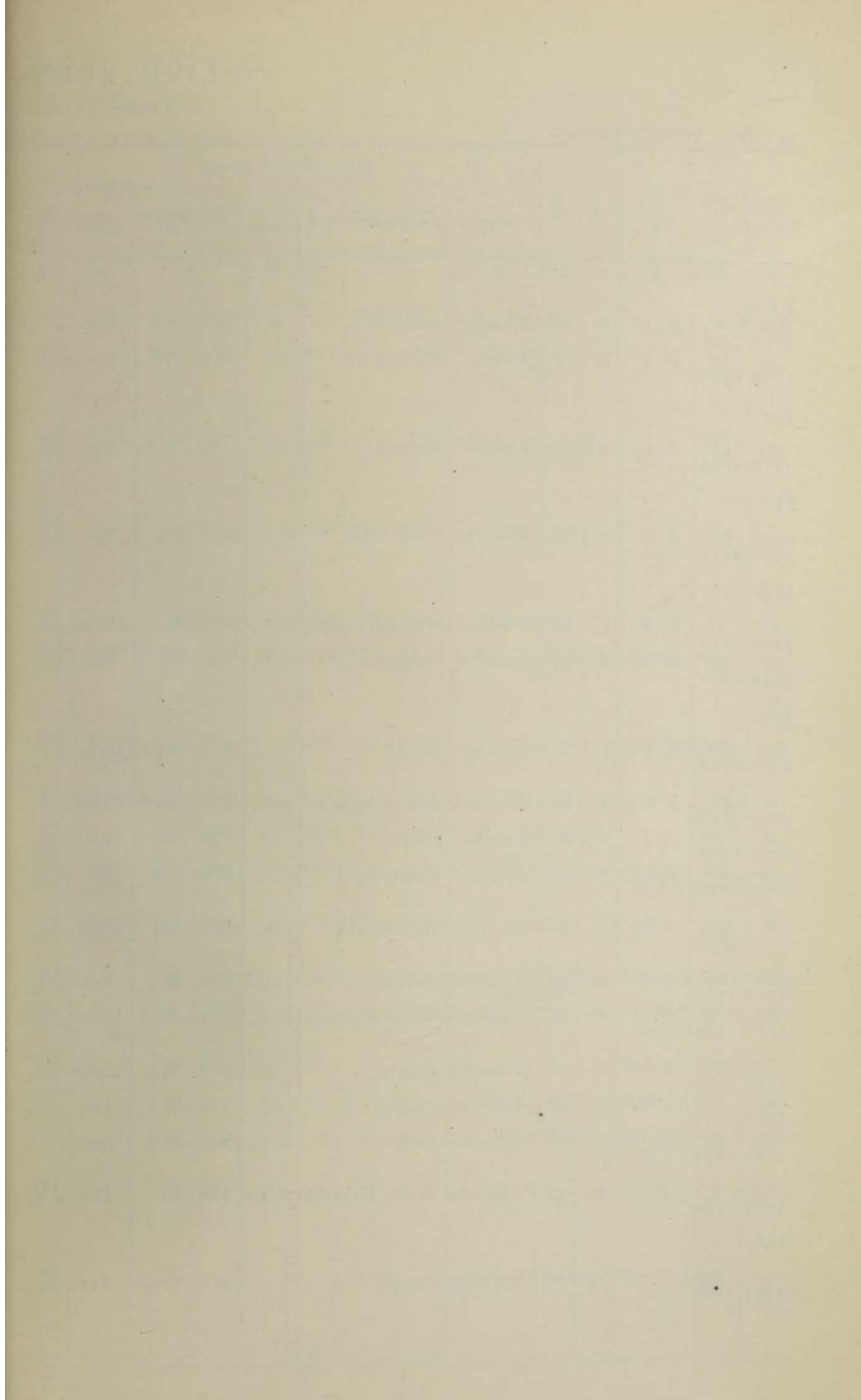
Stationary = No appreciable improvement in physical signs or in general health.

Worse = Deterioration of general or local condition, or of both.

Died =

*T.B.*—Column 20. The examinations recorded all apply to 1913, the dates signifying the day and month of examination, a + or - sign indicating the presence or absence of tubercle bacilli at the date recorded. 7-d occurring after the date indicates that a seven day's specimen of sputum was examined, and G.P., that a guinea-pig inoculation was performed. Full details are given in the reports on the various institutions.





# LIGHTBURN TUBERCULOSIS

## Lower Ward Cases.

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
<b>I. A</b>										
126 1913	9 1913	M. D.	F.	14	5 weeks	Influenza, - -	R <sub>1</sub>	98·1—99·7	Fav.	1
133 1913	11 1913	D. T.	M.	20	3 weeks	Haemoptysis, -	R <sub>1</sub>	97·6—97·7	Fav.	1
<b>I. B</b>										
134 1913	13 1913	S. J.	M.	38	4 weeks	Pleurisy, - -	R <sub>1</sub>	98—98·9	Fav.	2
<b>II. A</b>										
266 1913	20 1913	J. M.	M.	40	6 months	Cough, Spit, -	R <sub>1</sub> L <sub>1</sub>	100·1—102	Fav.	1
<b>II. B</b>										
81 1913	4 1913	K. M.	F.	26	8 weeks	Wasting, Cough,	R <sub>1</sub> L <sub>1</sub>	98·1—99·6	Unfav.	1
305 1913	12 1913	A. D.	F.	42	6 months	Cough, - -	R <sub>1</sub> L <sub>1</sub>	97—98	Fav.	1
<b>III.</b>										
582 1912	214 1912	M. W.	F.	22	6 weeks	Cough, - -	R <sub>3</sub> L <sub>2</sub>	97·8—101·7	Unfav.	2
14 1913	226 1912	J. W.	F.	29	8 months	Loss of Appetite	R <sub>1</sub> L <sub>2</sub>	97·6—100·3	Unfav.	3
37 1913	1 1913	A. J.	M.	57	5 weeks	Cough, - -	R <sub>2</sub>	98—100	Unfav.	1
58 1913	65 1912	P. G.	M.	21	4·5 years	Cough, Spit, -	R <sub>3</sub> L <sub>1</sub>	97·9—99·8	Fav.	2
78 1913	262 1911	J. M.	F.	39	1·2 years	Haemoptysis, -	R <sub>3</sub> L <sub>2</sub>	102·2—100	Unfav.	3
119 1913	10 1913	A. P.	F.	25	6 months	Pleurisy, - -	L <sub>2</sub>	97·4—98	Fav.	1
236 1913	18 1913	W. D.	M.	17	5 months	Cough, Haemop.	R <sub>1</sub> L <sub>1</sub>	101·1—101·8	Unfav.	2
237 1913	17 1913	A. G.	F.	10	15 months	Cough, - -	R <sub>3</sub>	98·2—98·5	Unfav.	2
267 1913	21 1913	C. B.	M.	29	6 months	Pleurisy, - -	L <sub>2</sub>	97·8—99·4	Fav.	2
289 1913	22 1913	K. C.	F.	14	3 months	Cough, - -	R <sub>1</sub> L <sub>2</sub>	98·8—98·2	Unfav.	1
322 1913	23 1913	J. T.	M.	22	2 months	Cough, Haemop.	R <sub>2</sub> L <sub>1</sub>	97·3—99	Fav.	1
<b>IV.</b>										
98 1913	358 1908	W. M.	M.	55	2·3 years	Cough - -		97·9—98·8	Fav	2



## JOINT HOSPITAL.

## PAVILION.

Reg. No.	Complications.	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	NOTES.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
126 1913	—	90	Imp.	3	+28	97·7—98·5	1	9/4+6/8+	—
133 1913	—	164	Arr.	6	+14	97—98	1	3/4+16/7+6/8+ 9/9—	—
134 1913	—	122	Arr.	4	+28	97·6—97·8	0	3/4—23/4—3/5— 7d—16/5—	—
266 1913	—	61	Imp.	—	+9	97·8—98·2	1	26/6+11/8+	—
81 1913	—	87	Imp.	3	+10	97—98·5	1	28/2—29/4—7d—	—
305 1913	Mastitis	44	Imp.	2	+11	97·2—98·4	1	6/8—29/8—9/9— G.P.	To Blantyre.
582 1912	Laryngitis	132	Wse.	—	-11½	97·8—100·5	1	28/11+9/1+	Died 14/3/13.
14 1913	Kyphosis	112	Imp.	—	+7½	97·8—101·2	2	15/1+29/4	—
37 1913	—	85	Imp.	3	+33	97·7—98·1	0	20/1—5/2—18/2— 7d—	—
58 1913	Laryngitis.	137	Imp.	—	+10	97·3—98·1	1	28/1+12/6+	In Lightburn, also in 1912, & Upperton 1913.
78 1913	Epistaxis Haemop.	64	Died	—	-14	97·6—98·2	—	11/2+	—
119 1913	—	90	Imp.	2	+11½	97·2—98·4	1	21/3+3/4—29/4— 7d—20/6—	Also in Upperton 1913.
236 1913	—	88	Wse.	—	-7	98·2—100·2	3	20/6+16/7—6/8+	To Motherwell. Died 18/2/14.
237 1913	—	89	Stat.	—	+5	97—97·8	3		To Upperton.
267 1913	—	58	Imp.	2	+8	97·2—98	1	25/7+12/8+	To Shotts.
289 1913	—	50	Wse.	—	-2	98—101·1	2	30/7+22/8+	To Motherwell. Died 30/9/13.
322 1913	—	23	Imp.	—	+9	97—97·4	1	21/8—4/9—7d— 9/9 G.P.	To Shotts. Positive before admission.
98 1913	—	10	—	—	—	—	—	26/2—27/2—28/2—	Bronchitis and Emphysema. Died 2/11/13 from "Acute Bronchitis."

## Glasgow Cases, Etc.

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					
					Duration.	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	Sputum.
1	2	3	4	5	6	7	8	9	10	11
<b>I.A</b>										
750 1912		Mrs. R.	F.	39	1 year	Debility, - -	R <sub>1</sub>	98—98·4	Fav.	1
788 1912		W. E.	M.	23	2 months	Cough, - -	R <sub>1</sub> L <sub>1</sub>	97·6—99·4	Fav.	2
20 1913		J. M.	M.	21	6 months	Loss of Appetite,	R <sub>1</sub>	98·8—100	Fav.	3
<b>I.B</b>										
736 1912		H. M.	F.	10	1 year	Debility, Cough,	R <sub>1</sub>	98—99·4	Fav.	1
34 1913		Mrs. T.	F.	37	6 months	Debility after Confinement,	R <sub>1</sub>	97·4—99	Fav.	1
185 1913		Mrs. W.	F.	31	18 months	Debility, - -	R <sub>1</sub>	97·2—97·4	Fav.	2
227 1913		E. W.	F.	8	3 years	Pneumonia, -	L <sub>1</sub>	98·2—98·4	Fav.	1
<b>II.A</b>										
402 1912		J. P.	M.	27	3 months	Dyspnoea, -	R <sub>1</sub> L <sub>1</sub>	98·6—99·8	Fav.	3
625 1912		W. M.	M.	49	3 months	Loss of Weight,	R <sub>1</sub> L <sub>1</sub>	97·2—98	Unfav.	3
700 1912		D. L.	M.	29	1 year	Pleurisy, - -	R <sub>1</sub> L <sub>1</sub>	98—98·6	Fav.	2
<b>II.B</b>										
184 1913		C. M.	F.	30	3 months	Cough, - -	R <sub>1</sub> L <sub>1</sub>	97·8—98·6	Unfav.	1
<b>III.</b>										
615 1912		W. D.	M.	42	2 years	Cough, - -	R <sub>2</sub> L <sub>1</sub>	97·2—98	Fav.	2
617 1912		R. L.	M.	39	1 year	Cough, - -	R <sub>2</sub>	97·4—98·6	Fav.	3
650 1912		J. C.	M.	28	18 months	Cough, - -	R <sub>2</sub> L <sub>1</sub>	99·1—100·4	Unfav.	3
782 1912		J. R.	M.	21	2 months	Cough, - -	R <sub>3</sub> L <sub>2</sub>	102·2—100·5	Unfav.	1
46 1913		Mrs. Q.	F.	27	2½ years	After Miscarriage,	R <sub>1</sub> L <sub>2</sub>	97·8—100	Unfav.	3
80 1913		Mrs. G.	F.	30	6 months	After Confinement	R <sub>2</sub> L <sub>2</sub>	99·8—101·4	Unfav.	3
142 1913		Mrs. F.	F.	37	18 months	Debility, - -	L <sub>2</sub>	99·4—99	Unfav.	2
149 1913		F. D.	M.	19	4 months	Malaise, - -	R <sub>2</sub> L <sub>2</sub>	97·2—99	Fav.	2
152 1913		Mrs. R.	F.	39	18 months	Debility, - -	R <sub>1</sub> L <sub>2</sub>	100·6—101	Fav.	3
164 1913		M. O.	M.	46	12 months	Cough, - -	R <sub>3</sub> L <sub>2</sub>	97·5—100·2	Unfav.	3
228 1913		Mrs. D.	F.	37	5½ years	Cough, - -	R <sub>3</sub> L <sub>1</sub>	98·8—99	Unfav.	1
254 1913		N. F.	F.	12	—	—	R <sub>2</sub> L <sub>1</sub>	97·4—98·4	Unfav.	2
318 1913		N. W.	F.	18	3 months	Pneumonia, -	R <sub>1</sub> L <sub>2</sub>	98·5—99	Fav.	2
30 1913		J. B.	M.	19	3 months	Influenza, -	—	—	—	—
273 1913		M. H.	F.	17	6 months	Cough, - -	L <sub>2</sub>	97·6—99	Fav.	2
279 1913		R. O.	F.	26	18 months	Cough, - -	R <sub>1</sub> L <sub>1</sub>	98—99	Fav.	2



## JOINT HOSPITAL—Continued.

Reg. No.	Complications.	No. of day's Residence.	CONDITION OF DISCHARGE.					T.B.	NOTES.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.	Sputum.		
12	13	14	15	16	17	18	19	20	21
750 1912	—	59	Imp.	2-4	+7	98—98·4	1	24/12 +	—
788 1912	—	85	Imp.	2-4	+18	97·2—98·4	3	9/1 + 13/3 +	—
20 1913	—	157	Imp.	2-4	+14	97·4—98·4	1	15/1 + 16/6 +	—
736 1912	—	58	Arr.	2	+11	97·8—98·4	0	9/1 - 21/1 -	—
34 1913	—	33	Imp.	2	+10	98—98·2	1	21/1 -	—
185 1913	—	57	Arr.	2-4	+7	97—97·6	1	20/5 - 4/6 - 7-d. 10/7 -	—
227 1913	—	93	Arr.	1-2	+5	97—98·6	0	25/7 -	—
402 1912	Diarrhœa	198	Wse	—	+ $\frac{3}{4}$	98·6—100·2	3	3/12 + 28/1 +	—
625 1912	—	86	Imp.	2-4	+9	97·6—98·8	2	21/11 + 15/1 +	—
700 1912	Laryngitis	87	Imp.	2-4	+8 $\frac{1}{2}$	97—98·2	3	28/11 + 21/1 +	From Clydebank.
184 1913	Laryngitis	73	Imp.	2-4	+11	97—98	1	20/5 - 4/6 - 7-d. 21/7 -	—
615 1912	—	86	Imp.	2-4	+24	97·2—98·1	1	29/10 - 3/12 - 6/12 - 9/1 -	—
617 1912	—	72	Imp.	2-4	+13	97·6—98·2	3	22/10 - 6/12 -	...
650 1912	—	99	Imp.	2-4	+15	97·2—97·4	3	21/11 + 21/1 +	From Clydebank.
782 1912	Laryngitis	94	Wse	—	-6	97·2—100·8	1	—	—
46 1913	Laryngitis	80	Imp.	—	+7	97·2—97·6	3	—	Positive before admission.
80 1913	—	150	Imp.	—	+21	97·6—99·5	2	11/2 + 4/7 +	—
142 1913	Preg., Pleurisy	13	Stat.	—	—	99·2—101·5	2	18/4 +	Left at desire.
149 1913	Cervical Adenitis	125	Imp.	2-4	+2	97·2—98·4	2	23/4 + 16/7 + 6/8 + 25/8 +	—
152 1913	—	15	Stat.	—	—	101—101·2	3	27/4 +	Same case as 750 above.
164 1913	—	41	Died	—	—	—	—	6/5 +	—
228 1913	Inguinal Adenitis	57	Imp.	1-2	+8	97·8—98·9	1	12/6 + 26/7 + 30/7 +	—
254 1913	—	89	Imp.	1-2	+12	97—97	2	25/7 - 29/8 7-d. - 9/9 G.P. -	—
338 1913	—	21	Stat.	—	+3	97—98·4	2	25/8 - 5/9 - 7-d. 7/9 G.P. -	Left at desire.
30 1913	—	42	—	—	—	—	—	—	From Greenock. No record available.
273 1913	Laryngitis.	56	Imp.	—	+ $\frac{1}{2}$	97—98·4	2	25/7 + 12/8 +	—
279 1913	Pleurisy	54	Stat.	—	+ $\frac{3}{4}$	98—99	2	25/7 + 12/8 +	—

## Middle Ward Cases.

Reg. No.	Rec. No.	Initials.	Sex.	Age.	CONDITION ON ADMISSION.					Sputum.
					Duration,	Earliest Symptoms.	No. of Lobes.	Temperature Range.	Gen. Health.	
1	2	3	4	5	6	7	8	9	10	11
<b>II A.</b>										
107 1913	5 1913	Mrs. K.	F.	36	5 months	Cough, - -	R <sub>1</sub> L <sub>1</sub>	97·8—98·1	Fav.	1
109 1913	96 1908	J. M.	M.	34	12 years	Haemoptysis, -	R <sub>1</sub> L <sub>1</sub>	97·7—98·6	Unfav.	3
<b>II B.</b>										
288 1913	307 1913	L. B.	F.	9	1 year	Cough, - -	L <sub>1</sub>	97·8—97·4	Fav.	—
311 1913	326 1913	A. C.	M.	22	1 month	Pleurisy, - -	R <sub>1</sub> L <sub>1</sub>	97·2—98·4	Fav.	1
<b>III.</b>										
65 1913	54 1907	C. D.	F.	20	15 months	Malaise, - -	R <sub>3</sub> L <sub>2</sub>	101·2—101·7	Unfav.	1
108 1913	244 1911	W. J.	M.	51	5 years	Pneumonia, -	L <sub>2</sub>	98·2—98	Fav.	2
120 1913	104 1913	Mrs. K.	F.	24	18 months	Pleurisy, - -	L <sub>2</sub>	99—109·2	Unfav.	3
138 1913	105 1913	Mrs. D.	F.	45	3 years	Cough after Miscarriage,	R <sub>1</sub> L <sub>2</sub>	99·8—98·4	Fav.	2
165 1913	172 1912	J. B.	M.	19	3 years	Pleurisy, - -	L <sub>2</sub>	97·8—99·8	Unfav.	2
235 1913	135 1906	Mrs. H.	F.	46	22 years	Haemoptysis, -	R <sub>1</sub> L <sub>2</sub>	98·4—98·4	Unfav.	2
240 1913	246 1913	Mrs. R.	F.	31	6 months	Cough after Confinement,	L <sub>2</sub>	100·4—101·7	Unfav.	2



## JOINT HOSPITAL.

Reg. No.	Complications.	No. of day's Residence.	CONDITION OF DISCHARGE.				Sputum.	T.B.	NOTES.
			General Result.	Walking miles per day.	Weight in Lbs.	Temperature Range.			
12	13	14	15	16	17	18	19	20	21
<u>107</u> 1913	—	107	Imp.	2	+8	97·6—97·5	3	13/3 + 20/5 +	—
<u>109</u> 1913	Adenitis of neck (old)	109	Imp.	2	+29	97—97·8	1	13/3 + 16/7 - 30/7 -	—
<u>288</u> 1913	—	51	Imp.	2	+13	97·4—97·8	—	—	—
<u>311</u> 1913	Adenitis (neck and axilla)	39	Imp.	2	+10	97—77·4	1	6/8 - 29/8 - 9/9 - G.P.	—
<u>65</u> 1913	Cervical Glands (old)	186	Imp.	—	+17½	97·2—99·1	2	5/2 + 24/4 + 19/7 + 30/7 +	—
<u>108</u> 1913	—	85	Imp.	2	+24	97·6—98·2	1	13/3 - 19/3 - 8/4 - 7d - 31/3 - 31/5 -	—
<u>120</u> 1913	—	50	Wse.	—	-7½	99·8 - 98	2	19/3 +	—
<u>138</u> 1913	—	20	Stat.	—	-2	97·5 - 98·8	2	10/4 +	Left at desire.
<u>165</u> 1913	Gastritis Pyuria	133	Imp.	2	+24	97·6 - 98·2	2	6/5 + 16/7 + 6/8 +	—
<u>235</u> 1913	—	60	Imp.	2	+7	98 - 98·4	1	16/6 + 22/7 + 11/8	—
<u>240</u> 1913	Morbus Cordis, Axillary Adenitis	83	Imp.	2	+7	97 - 98·4	1	20/6 + 22/7 + 12/8 + 30/8 +	—

## COUNTY BACTERIOLOGICAL LABORATORY.

J. HUME PATTERSON, L.R.C.P. & S.Ed., D.P.H.

In the additions to the County Offices in the year 1900 laboratory accommodation was provided for chemical and bacteriological work. A plan of the building is contained in the Annual Report for the year 1901. By October, 1902, the laboratory was equipped and opened for the examination of specimens from medical practitioners and others, the work being undertaken by one of the County Medical Staff. In the year 1908 I was appointed specially for bacteriological work.

The laboratory serves not only the three County Sanitary Districts, but the various Burghs situated within the County, and also one situated in a neighbouring County. Through the Medical Officers of Health of these various Burghs arrangements were concluded by the County Medical Officer, whereby medical practitioners send specimens from all these areas, and for which a moderate fee is paid to the County Authority by the Burghal Authority. Thus every medical practitioner practising in any part of the County, whether the patient be residing in a County or Burghal District, can have specimens examined free of cost. The names of the districts, with their respective populations, are given in the following statement:—

### PUBLIC HEALTH AUTHORITIES WITHIN THE ADMINISTRATIVE COUNTY OF LANARK.

Burgh Sanitary Districts.					Populations. Census 1911.	
Airdrie,	...	...	...	...	24,388	196,280
Coatbridge.	...	...	...	...	43,286	
Hamilton,	...	...	...	...	38,644	
Motherwell,	...	...	...	...	40,380	
Rutherglen,	...	...	...	...	24,319	
Wishaw,	...	...	...	...	25,263	7,226
Biggar,	...	...	...	...	1,326	
Lanark,	...	...	...	...	5,900	
County Sanitary Districts.						
Upper Ward,	(Offices, Lanark),	...	...	...	42,978	274,125
Middle Ward,	(Offices, Hamilton),	...	...	...	202,663	
Lower Ward,	(Offices, Glasgow),	...	...	...	*28,484	

\* The actual Census population in the Lower Ward was 56,974, but in November, 1912, the City of Glasgow annexed an area with 28,490 of this population.

This arrangement for the examination of specimens still continues, except in the Burgh of Motherwell, in which area the Burgh Medical Officer of Health, Dr. Jack, at present does practically all the work, only a few specimens being sent to the County Laboratory.





SPECIMENS OTHER THAN SPUTUM EXAMINED FROM THE VARIOUS SOURCES  
FOR THE TUBERCLE BACILLUS.

Year.	FLUIDS													
	Urines.		Pus.		Pleuritic.    Synovial.    Spinal.						Faeces.		Tissues.	
	+	O	+	O	+	O	+	O	+	O	+	O	+	O
1905,	1	2	—	—	—	—	—	—	—	—	—	—	—	—
1906,	2	6	—	—	—	—	—	—	—	—	—	—	—	—
1907,	2	11	—	—	—	—	—	—	—	—	—	—	—	—
1908,	—	7	—	2	1	2	—	—	—	—	—	—	—	—
1909,	2	3	—	3	1	—	—	—	—	—	—	—	1	—
1910,	3	17	—	4	—	2	—	—	—	—	—	—	6	—
1911,	3	11	3	14	1	4	—	—	—	—	—	1	—	—
1912,	3	12	2	6	1	4	—	2	1	—	—	2	—	—
1913,	2	17	1	4	1	1	—	1	1	2	—	1	—	1

It will be observed that the number of specimens of sputum that proved negative, *i.e.*, found not to contain tubercle bacilli, is large. As various methods of examination have been suggested that were said to yield a large number of positive results compared with the ordinary methods so long practised, a considerable amount of time has been spent in research work, the results of which will be found further on in the detailed report for 1913. The conclusions arrived at only strengthen the conviction, held from experience in the examination of milk deposits, that the original methods when carefully carried out by one experienced in such work yield quite as many positive results as the more recently advocated methods.

Medical practitioners evidently still lay great stress upon the examination of sputum and on obtaining a positive result before notifying an early case. It is hoped that in time Medical Officers of Health and the Bacteriologist will be more frequently consulted with regard to those negative specimens, many of which are repeat specimens, that is taken from the same case two or three times in succession. In many instances a guinea-pig might be inoculated. It may be safely assumed that the medical practitioner is not likely to be at the trouble of sending a specimen of sputum for examination unless there is some ground for suspecting the presence of tuberculosis. Whenever symptoms, therefore, of this disease are indicated, it would be desirable to have further specimens examined, and, if necessary, have animal inoculations carried out.



The specimens of sputum, &c., examined during the year 1913 may be detailed thus:—

		RESULTS OF EXAMINATION.						
		Wards.	Sputum.		Urine.		Miscellaneous	
			+	o	+	o	+	o
Medical Practitioners,	{	Upper,	37	126	—	1	—	—
		Middle,	121	442	—	6	—	3
		Lower,	14	52	—	—	—	—
		Burghs,	139	348	—	5	—	1
Hospitals and Sanatoria,	{	Upper,	27	23	—	—	—	—
		Middle,	573	387	2	5	3	5
		Lower,	66	51	—	—	—	—
Tuberculosis Officers,	{	Upper,	—	—	—	—	—	—
		Middle,	4	4	—	—	—	1
		Lower,	4	9	—	—	—	—
School Medical Officers,	{	Upper,	—	1	—	—	—	—
		Middle,	—	5	—	—	—	—
		Lower,	—	1	—	—	—	—
		Burghs,	—	3	—	—	—	—
			985	1,452	2	17	3	10
Total, ...			2,437		19		13	

*Sputum.*—Of the 2,437 specimens examined, 985 were found to be positive and 1,452 negative. The number received from medical practitioners amounted to 1,279, of which 968 or 75 per cent. proved negative.

#### Methods of Examination.

*Smear Preparations.*—The following extracts from the publications mentioned suggested a note being made and a record kept of the physical character of each sputum; the number, appearance, and distribution of the tubercle bacilli; the cellular content of the sputum; and the presence of other micro-organisms:—

Thus H. Hyslop Thomson\* says:—"Local improvement under treatment should be evidenced by lessening severity and frequency of the cough, while the expectoration, if present, should gradually decrease in amount and become less purulent in character. A scanty mucoid expectoration may generally be looked upon as pointing to early or quiescent disease, an abundant frothy muco-purulent expectoration suggests a widespread and irritating lesion, and a distinctly purulent spit indicates softening and cavity formation.

\* (Extract from "*Consumption in General Practice*," pages 122-124.)



The number of tubercle bacilli in the sputum should be regarded as of some prognostic value, although some authorities attach no importance to it. Generally speaking, the presence of tubercle bacilli in large numbers in the sputum is an unfavourable sign, and if they persist in large numbers the gravity of the outlook is increased. In the majority of such cases the response to treatment is unsatisfactory, and the ultimate prognosis is far from reassuring. On the other hand, in some cases of acute and rapidly progressive disease it may be impossible, even with careful and repeated examinations, to detect any tubercle bacilli in the sputum. Paradoxical as it may appear, this association of the evidence of acute and progressive pulmonary disease with the absence of tubercle bacilli in the sputum should always be regarded as a distinctly unfavourable indication. The frequency with which tubercle bacilli are absent from the sputum in miliary tuberculosis of the lungs need only be mentioned to illustrate this point. Indeed, in any case of pulmonary tuberculosis, with evidence of pronounced auto-inoculation, as indicated by fever, rapid pulse, &c., it is better, from the point of view of prognosis, to find the bacilli present in small or moderate numbers rather than absent altogether. The method of distribution of the bacilli in the sputum is of some prognostic value. When they are present in small numbers, and are arranged in clumps or within the body of the leucocytes, such arrangement may be regarded as a distinctly favourable sign. In the early stage of the disease, and in the absence of much constitutional disturbance, the absence of tubercle bacilli in the sputum indicates a non-reactive lesion which has not progressed sufficiently far to establish a communication with the air passages."

Riviere & Morland† say "the clinician should never be content with merely ascertaining the presence or absence of tubercle bacilli. Much further help is to be obtained from observing the number, size, and grouping of these; and whether they are intraphagocytic or not, the cellular content of the sputum, and the proportion of the various types of cells, the presence of other organisms in the washed sputum."

† (*Extract from "Tuberculin Treatment,"* pages 85-86.)



The results of the examinations of the physical characters are briefly summarised in the following table:—

TABLE SHOWING PHYSICAL CHARACTERS OF SPUTUM PER PATIENT.

Sanatorium.	Number of Patients.	Muco-purulent frothy.			Mucoid.			Purulent.		
		+	o	+ to o	+	o	+ to o	+	o	+ to o
Uppertown, ...	116	64	46	4	—	1	—	1	—	—
Stonehouse, ...	113	74	31	8	—	—	—	—	—	—
Shotts, ...	93	58	28	2	2	—	—	3	—	—
Bellshill, ...	71	41	26	—	—	1	—	1	2	—
Lightburn, ...	61	39	16	1	—	1	—	2	2	—
Roadmeetings,	30	14	10	1	—	4	—	1	—	—
Blantyre, ...	25	20	5	—	—	—	—	—	—	—
Dalserf, ...	3	1	2	—	—	—	—	—	—	—

The sputa from 65 of the above patients with muco-purulent frothy specimens were subjected to animal inoculation with negative results.

It will be seen from the above results that out of 512 patients, the results, according to the work of Hyslop Thomson, indicate only 9 in the early or quiescent stage of the disease, 491 with wide spread lesion, and 12 in the stage of softening and cavity formation. These results do not accord with the data of the sanatoria clinicians. One hundred and seventy-five of the above patients at no time showed tubercle bacilli in their sputa, and guinea-pigs inoculated with specimens from 65 of these showed no evidence of tuberculosis on post-mortem examination.

With regard to the number, appearance, and distribution of the tubercle bacilli, it may be said that the results have not been helpful.

The cells present in the greater number of the sputa have been lymphocytes.

Other and varied bacteria in large numbers were found in nearly all the specimens. This may be explained by the fact that most of the specimens come by post, and, consequently, the delay in transit encourages multiplication.



Since October, 1912, in combination with the Ziehl-Neelsen method of staining, three other methods were employed to determine if any of these would be more helpful in the detection of the bacillus than the Ziehl-Neelsen method alone. The following are the methods referred to:—

*Auto-Digestion Method* (Ellerman and Erlandsen) one volume of sputum, measuring from 10 to 15 c.c.'s, is placed in a corked vessel, with half volume of 0.6 per cent. sodium carbonate solution, and incubated at 37° centigrade for twenty-four hours. The greatest portion of the supernatant fluid is then poured off, and the remainder centrifuged, the supernatant fluid being again decanted. To one volume of the deposit four volumes of 0.25 per cent. sodium hydrate solution are added. The mixture is carefully stirred and allowed to digest at 37° centigrade for an hour or so, when it is centrifuged and the supernatant liquid decanted. After carefully mixing the deposit, either by stirring or shaking, films are prepared from small portions of it, and stained by the Ziehl-Neelsen method. To ensure the fixation of the film, the slides are first very thinly coated with glycerine and egg albumen fixing solution.

*Antiformin Method*.—A 15 per cent. solution of antiformin is added in amount, according to the nature of the sputum, and allowed to digest for fifteen minutes or so at room temperature. The mixture is then centrifuged, and the supernatant liquid poured off. The deposit is mixed with sterile water and again centrifuged. After decanting the supernatant liquid the deposit is mounted on a slide, and stained by the Ziehl-Neelsen method.

*Picric Acid Method* (Spengler).—Previous to making the film the sputum is homogenised by taking different parts of it and intimately mixing them on a slide. Films are now made by spreading the prepared spit in fairly thick layers on clean slides. The preparations are dried in air, and then passed through a Bunsen flame, great care being taken not to overheat. Each film is stained with carbol-fuchsine; and again care must be taken not to overheat, otherwise the fuchsine will form a dark deposit on film. The preparation is now flooded with the picric acid solution (Esbach's reagent, 50 c.c.; absolute alcohol, 50 c.c.) for a few seconds, to fix the fuchsine in the bacilli. It is then flooded two or three times with 60 per cent. nitric acid solution until the film is of a very pale yellow colour. Flooding with the picric acid solution and immediately after washing in distilled water completes the process. The film is now dried, mounted in cedar oil, and examined in the usual way.

It is claimed that this method stains and reveals those tubercle bacilli which have had their sheaths dissolved by the action of lysins, and which are not stained by the Ziehl-Neelsen method.



These special methods were applied over a period of fifteen months to all specimens which gave negative results with the ordinary Ziehl-Neelsen method. The first special method tried was auto-digestion, then picric acid, and latterly antiformin. At times all three methods were applied to the same specimens, and these amounted to 1,455. Of that number 221 were examined by auto-digestion alone, 9 with auto-digestion and picric acid, 598 by auto-digestion, picric acid, and antiformin, and 627 by picric acid and antiformin. The number examined thus amounted to 3,287, as shown in the following table:—

## SPECIAL METHODS EMPLOYED.

Specimens Examined.	Auto-digestion.	Picric Acid.	Antiformin.
598	598	598	598
627	—	627	627
9	9	9	—
221	221	—	—
1,455	828	1,234	1,225
3,287			

By these special methods 6 specimens were found to give positive results which had been negative by the ordinary Ziehl-Neelsen method, and further examinations made are given in the following tabular statement:—

		Auto-digestion.	Picric Acid.	Anti-formin.	Ziehl-Neelsen.
<b>W.H.</b>					
October, 1912,	...	Very few	—	—	0
January, 1913,	...	0	0	0	0
<b>M.A.</b>					
December, 1912,	...	Very few	Very few	—	0
January, 1913,	...	—	—	—	Few
February, 1913,	...	—	—	—	Many
March, 1913,	...	—	—	—	Very few
April, 1913,...	..	—	—	—	Few
<b>M.R.</b>					
December, 1912,	...	Very few	Very few	—	0
January, 1913,	...	—	Very few	Very few	0
March, 1913,	...	—	—	—	Many
May, 1913, ....	...	—	—	—	Many
July, 1913, ...	...	—	—	—	Very few
<b>F.C.</b>					
December, 1912,	...	Very few	Very few	—	0
February, 1913,	...	—	—	—	Very few
April, 1913,	...	—	—	—	Very few
June, 1913....	...	—	—	—	Very few
<b>T.K.</b>					
November, 1912,	....	0	Very few	—	0
January, 1913,	....	—	—	—	Very few
January, 1913,	...	—	—	—	Very few
<b>R.</b>					
October, 1912,	...	Very few	—	—	0
(Patient cannot be traced further.)					



In five of the cases found positive by one or other of the three special methods, it will be seen that four of them showed tubercle bacilli by the Ziehl-Neelsen method on several subsequent occasions. The fifth case was only re-examined once, and on that occasion gave negative results with all the methods.

No specimen was received from the sixth case for further examination.

In the results obtained it will be observed that out of a very large number of specimens examined only 6 cases were found positive by the special methods, and 5 of these on subsequent occasions gave positive results with the Ziehl-Neelsen method, so that 4 of these cases would have been detected on the examination of the second specimen, and 1 on receipt of the third.

After careful consideration of the above results the special methods were discarded at the end of the year 1913, as they did not justify a departure from the ordinary Ziehl-Neelsen method, should care be taken in preparation and time be spent in examination.

This statement is supported by the animal inoculation test, for of 63 specimens inoculated by request only 4 proved positive.

*Animal Inoculation.*—With regard to animal inoculation with sputum, there is always the uncertainty that the animal may die in a few days from septic infection bacteria other than those of the tubercle type, too early to show evidence of tubercle. To obviate this, previous treatment with the antiformin method, already described, was employed, using a 10 per cent. solution and varying the times of exposure. At the same time control experiments were made with specimens of sputum known to contain tubercle bacilli.

The results were as follows:—

Guinea Pig.	Smear Examination.	Time of exposure.	Result.
71.	Many T.B.	2 min.	Marked tuberculosis.
72.	Few T.B.	5 "	Normal.
73.	Negative (Mrs. K.)	2 "	"
81.	" (R.S.)	1½ "	"
82.	" (A.W.B.)	1½ "	"
85.	Very few T.B. Some in clumps.	2 "	"
86.	Many T.B. Some in clumps.	2 "	"
87.	"	3 "	"
88.	"	5 "	"

A specimen of faeces which, after exposure for 60 minutes, showed numerous tubercle bacilli on the smear examination was inoculated, and the animal on being examined *post-mortem* four weeks later was found to be normal.



It will be seen from these results that, although none of the animals died from septic infection, the method is very unreliable as far as the diagnosis of tubercle is concerned, for out of seven animals inoculated with sputa containing tubercle bacilli 6 were normal on *post-mortem* examination three weeks later. Only 1 showed tuberculosis.

The routine employed in the various sanatoria throughout the County with regard to the examination of sputa is as follows:—When a 24 hours' specimen is sent and proves negative by the ordinary method, a similar one is sent later for examination by the special methods. Should this one turn out negative, a seven days' collection of the sputum is sent, and if this gives a negative result the physician can request a guinea-pig inoculation. If the guinea-pig proves non-tuberculous and the patient be still retained in hospital, the sputum is sent once a month until discharge. All positive sputa are examined once a month.

Of 85 seven-days' collection specimens examined only 2 proved positive; and it is interesting to note that in both cases it was by the ordinary method.

*Urine.*—19 specimens were examined, with positive results in 2.

Two of the negative specimens were subjected to the animal inoculation test. One of these proved negative, and in the other case the animal died next day from *B. Coli* infection.

*Miscellaneous.*—These comprise 1 spinal fluid, 1 pleuritic fluid, and 1 specimen of pus which gave positive results; while 1 specimen of gland, 1 synovial fluid, 1 pleuritic fluid, 1 fæces, 2 spinal fluids, and 4 of pus gave negative results.

All the negative specimens, with the exception of the fæces and pus, were subjected to animal inoculation, with negative results

A large number of specimens are received from veterinary surgeons in connection with the annual inspection of dairy herds under the Dairies, &c., Order, and now also under the Tuberculosis Order. A number are also received from slaughter-house superintendents in connection with the inspection of meat. The number of specimens thus obtained are shown in the following Table B, which gives the results of examination since the year 1905:—

TABLE B.—SPECIMENS OBTAINED FROM THE BOVINE ANIMAL AND EXAMINED FOR THE TUBERCLE BACILLUS.

Year.	County.		Burghs and Others																			
			Hamilton.		Airdrie.		Coatbridge.		Rutherglen.		Kirkintilloch.		Wishaw.		Motherwell.		Lanark.		Biggar.		Others.	
	+	o	+	o	+	o	+	o	+	o	+	o	+	o	+	o	+	o	+	o	+	o
1905	3	29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1906	2	24	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1907	27	91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1908	23	159	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	12	11	9	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1909	49	217	—	11	—	3	—	—	—	—	—	—	—	—	—	3	—	—	—	—	—	—
	14	8	8	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1910	52	161	—	3	—	4	—	—	1	6	—	—	—	—	—	—	—	—	—	—	—	—
	10	3	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1911	46	90	1	8	—	2	—	16	1	4	—	—	—	—	—	2	—	—	—	—	—	—
	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1912	33	44	1	3	—	1	—	5	—	3	—	2	—	—	—	1	—	—	—	—	—	—
	8	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1913	38	120	3	5	—	3	—	9	—	—	—	1	—	—	—	2	—	—	—	—	—	—
	26	21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ordinary type—Milks.																						

Ordinary type—Milks.

Italic type—Saliva, &amp;c.

The specimens in italics may be further detailed as follows:—

Year.		Pus.		Udders.		Other Organs.		Saliva.	
		+	o	+	o	+	o	+	o
1905,	...	—	—	—	—	—	2	—	—
1906,	...	—	—	—	—	—	—	—	—
1907,	...	—	—	—	—	1	6	—	—
1908,	...	—	—	13	6	8	8	—	—
1909,	...	—	—	18	7	4	3	—	—
1910,	...	1	—	9	—	9	3	—	—
1911,	...	—	1	—	—	5	4	—	—
1912,	...	—	1	—	—	8	3	—	—
1913,	...	—	—	—	—	5	3	21	18



Tables giving the results of the veterinary inspection of dairy herds since 1904 will be found in the Veterinary Surgeon's Report, which follows.

The specimens dealt with in 1913 may be enumerated thus:—

	SANITARY DISTRICTS.	PUBLIC HEALTH				EXECUTIVE COMMITTEE					
		Milk.		Others.		Milk.		Saliva.		Others.	
		+	0	+	0	+	0	+	0	+	0
Veterinary Surgeons.	Upper Ward,	8	21	—	—	5	18	2	3	1	—
	Middle „	15	31	4*	—	5	37	13	13	—	3
	Lower „	4	6	—	—	1	7	6	2	—	—
	Burghs, ...	3	20	—	—	—	—	—	—	—	—
		30	78	4	—	11	62	21	18	1	3

\* These were received from Slaughter-house Staff.

*Milk.*—In connection with the annual inspection of dairy herds, 108 samples of milk were examined with positive results in 30 of these, while under the Tuberculosis Order, 1913, 73 samples were examined with positive results in 11. Of the 41 positive samples, 37 were reported direct from the smear preparation, enabling the milk from these cows to be stopped within, at most, two days of receipt of the sample, and in many instances on the same day. Of 86 negative samples subjected to animal inoculation only 4 proved positive. The 54 remaining negative samples were not inoculated, as the Veterinary Surgeon was satisfied in each case that the lesion of the udder, if any, was not tubercular. Twenty-eight of the negative samples were from cows with apparently normal udders, but having marked lung affections. Twelve of these samples were inoculated, with negative results.

With regard to the detection of tubercular milks, special attention has been given since the beginning of 1910 to the examination of smear preparations. During that year two methods were employed, and the deposit in each case was from about 7 ozs. of milk centrifuged for 15 minutes.

*Method A.*—The deposit was spread on a slide and fixed by heat, stained with warm carbol-fuchsine for a few minutes, and washed in water.

Decolorised in 25 per cent. sulphuric acid. Washed in water.

Washed *well* in absolute alcohol for 5 minutes. Counter-stained with methylene blue. By this method the alcohol clears up the film, and the acid fast bacilli are readily detected by careful examination.

*Method B* (as recommended by Delépine).—The deposit was smeared on the slide and fixed by heat.

The smear was then immersed in equal parts of absolute alcohol and ether for two hours. The vessel containing the slides was then placed in boiling water for 15 minutes, during which time the ether boiled. The slides were then taken out, washed in alcohol, and stained by Ziehl-Neelsen's carbol-fuchsine method.



From each sample of milk two films were made, and one stained by each of the above methods.

In one case Method A failed to show acid fast bacilli when Method B did, and in two cases B Method failed to show them when A did. The failure in each case may have been due to the one slide containing fewer bacilli than the other.

It will thus be seen that similar results were obtained by both methods, but as Method A takes about 15 minutes, and Method B takes fully 2½ hours, the former is the one adopted for quick results.

The milks showing acid fast bacilli were all subjected to animal inoculation, and not one failed to set up tuberculosis.

The results up till the end of 1913 may be tabulated thus :—

		Total No. of Samples Examined.		Positive Smears.		Positive—Animal Inoculations.
1910,	...	160	...	31	...	5
1911,	...	170	...	43	...	5
1912,	...	93	...	27	...	7
1913,	...	181	...	37	...	4

The results clearly demonstrate the value of the smear preparation examination, and it might be mentioned that an elaborate and complicated method of staining is not necessary, as the result depends more on the time spent in the examination of the film. The method now adopted is the ordinary Ziehl-Neelsen, the film, after decolorisation, being well washed in absolute alcohol to clear it up. It has not yet been my experience to find acid fast bacilli in smear preparations of milk deposits which did not cause tuberculosis when subjected to the animal test.

The milks giving negative results in the smears are further tested by animal inoculation.

#### DIFFERENTIATION OF THE HUMAN AND BOVINE TYPES OF TUBERCLE BACILLI.

As it was considered of interest that in certain specimens received an effort should be made to distinguish between the human and bovine types of bacilli, this work was commenced about the middle of 1913. The routine employed was similar to that recommended by the Royal Commissioners on Tuberculosis, viz.:—A guinea-pig is first inoculated with a small quantity of the tubercular material. On post-mortem examination at about the end of three weeks, tubes of Dorset's egg medium (plain and glycerinated) are inoculated with small quantities of an emulsion in sterile water of part of a lesion. The tubes are capped by being slightly warmed at the tops and covered with gutta percha tissue, which is found as efficient, if not more so, and much cleaner, than paraffin wax, which is generally recommended. The tubes are incubated at 37° centigrade, and growth in most cases



shows in about nine days. When the growth is sufficient, usually in about six weeks, 1 mg. is weighed out in a sterile watch glass, and thoroughly emulsified in 10 c.c. of sterile water. A rabbit is then inoculated intravenously with 0.1 c.c. of the emulsion, giving a dose of 0.01 mg., as suggested by Dr. A. Stanley Griffith in appendix, vol. 1, page 38. The rabbit is weighed once a week, and a record of the weight kept.

Generally speaking, if the organism be of the bovine type, the rabbit in about three weeks commences to lose weight. This continues and the animal dies of generalised tuberculosis in an emaciated condition in about six weeks from the time of the inoculation. If the same quantity of the human type of bacillus be injected intravenously into a rabbit the animal will survive for months and gain weight. If this animal should die or be killed months later the post-mortem examination will only reveal a localised lesion. The cultural characteristics on plain and glycerinated media must also be taken into account, the bovine bacillus generally growing with difficulty on the latter, whereas the human bacillus grows luxuriantly on both. As the Royal Commission points out, however, in its Final Report, Part I., page 35, "the gap which separates those of the bovine type, which grow most abundantly, from bacilli of the human type is not a wide one," differentiation cannot be made by cultures alone. Morphologically, the two types are indistinguishable, and identity or non-identity depends upon culture and pathogenic difference.

It is interesting to note that a bacillus obtained from a tuberculous abscess in the human subject (patient D.M.) proved to be bovine in type.

Specimen.	Rabbit. Date Inoculated.	No.	Weight. lbs. ozs.	Age of Culture.	Result.	No. of days.	Weight. lbs. ozs.
Ox Gland, ...	21/10/13	144	4 1½	45 days	Died	9/12/13 49	3 5½
Sputum, ...	21/10/13	145	4 15	43 "	Alive	—	5 13
" ...	24/12/13	182	3 3¼	44 "	"	—	2 12¾
Ox Gland, ...	"	183	2 1¼	27 "	Died	22/1/14 29	2 11
" ...	25/3/14	63	3 0¾	60 "	Died	22/4/14 28	1 11¾
Milk, ...	26/12/13	185	3 2¼	46 "	Died	20/2/14 56	2 13¾
Pus Patient, D.M., ...	"	186	2 9¾	36 "	Died	6/2/14 42	2 1¼
Spinal Fluid, Patient E.H.,	10/6/14	151	3 12½	89 "	Not Com- pleted	—	—
Gland, Patient E.H., ...	"	152	4 12¾	72 "	"	—	—
Spinal Fluid, Patient R.A.,	"	153	3 15¾	51 "	"	—	—
Urine, Patient C.S., ...	11/6/14	154	2 12¾	48 "	"	—	—
Gland (Horse), ...	"	155	3 7½	163 "	"	—	—
Gland, Patient J.M., ...	25/6/14	163	4 9¾	62 "	"	—	—
Pus, Patient M.C., ...	"	164	4 4¾	58 "	"	—	—
Sputum, Patient A.C., ...	"	165	5 5	56 "	"	—	—



## VETERINARY INSPECTION OF DAIRY HERDS.

---

County and District Veterinary Inspector—  
HUGH BEGG, F.R.C.V.S.

Assistant Veterinary Inspector—  
JAMES F. TAYLOR, M.R.C.V.S.

It will be remembered, and if reference be made to the statements appended hereto, it will be evident that at a comparatively early period those entrusted with the care of the public health in this County realised the pressing need for the detection of such animals as were suffering from tuberculosis of the udder, so that their milk (containing tubercle bacilli) might be put off the market as an article of human diet.

The work was begun as early as 1904, and was carried out under the "Dairies, Cowsheds, and Milkshops Order of 1885," and the amending Order of 1899, and the regulations made thereunder.

Article 15 of the 1885 Order provides that "If at any time disease exists among the cattle in a dairy or cowshed, or other building or place, the milk of a diseased cow therein—

- "(a) shall not be mixed with other milk, and
- "(b) shall not be sold or used for human food, and
- "(c) shall not be sold or used for food of swine or other animals unless and until it has been boiled."

The term "disease" did not include tuberculosis, but the Order issued in 1895 amended Article 15 "so that the expressions in the said article which refer to disease shall include, in the case of a cow, such disease of the udder as shall be certified by a veterinary surgeon to be tubercular."

Prior to 1904 the County Sanitary Authorities endeavoured to bring home to the owners of dairy herds the importance of having their stock examined for the detection of cases of tuberculosis of the udder, but it was not until that year that definite steps were taken by the Sanitary Authorities for the veterinary inspection of dairy herds. At this time the Executive Committee of the County Council, who are charged with the local administration of the "Diseases of Animals Acts," had the part-time services of an experienced veterinary surgeon, and for a time he was employed by the Sanitary Authorities in the work of dairy herd inspection. Other veterinary surgeons were also employed in the work for a time in their respective areas.



As dairy herd inspection could only be carried out satisfactorily during winter months when the animals were indoors, there was a difficulty in making a permanent appointment for veterinary inspection of dairy herds alone. In the earlier years the progress and results of the work done were both encouraging and satisfactory, and during the years 1907 to 1910 the work was considerably expanded, and somewhat complete inspection was made of all herds in the three districts of the County.

The great importance of the results obtained from this extended inspection of dairy herds suggested to the County Council and District Committees the desirability of making a combined appointment of a whole-time veterinary officer as County and District Veterinary Inspector. This was carried out in the year 1910, when the writer was appointed, and he has since then carried out the work of dairy herd inspection with the aid of a qualified assistant.

Until the year 1910 it was customary for a Sanitary Inspector to accompany the Veterinary Inspector on his visits, and take notes and give advice regarding sanitary defects that existed in the dairy.

Since then the Veterinary Inspectors have not been so accompanied, and they themselves make a special note of such defects in the cowsheds as require the attention of the Public Health Department, and a copy of these notes is sent from the Public Health Offices to the Sanitary Officer of the district in which the cowshed is located. This procedure seems to work very satisfactorily—the same results are obtained and the time of the Sanitary Inspector is saved for other work. Moreover, the saving in expense which accrues to the County Council and District Committees through the dual appointment of Veterinary Inspectors must be considerable, for it is a daily experience that they can conveniently and with good results accomplish on the same journey the work of both appointments.

The tabular statements appended giving the results of dairy herd inspections for ten years show that in the Middle Ward there are over 18,000 dairy cows, in the Upper Ward over 11,800, and in the Lower Ward over 2,600.

With growing experience the Veterinary Inspectors have become increasingly expert in the detection of tuberculosis of the udder, and when it is stated that the County Bacteriologist by his excellent methods and his skill in the examination of milk samples for tubercle bacilli is able to detect over 90 per cent. of all positive cases by microscopical examination alone (which can be done in a few hours), it will be understood how expeditiously in almost every case the produce of a diseased animal is stopped as an article of human food.

A varying number of our dairy herds are inspected more than once a year, averaging from 5 to 10 per cent. of the whole, and however



desirable it might be to have every herd in the County officially inspected twice a year or oftener, it would scarcely be possible to accomplish more than is done at present without more help.

In recent years the inspection of our 33,000 dairy cows once a year has resulted in the detection of an average of 35 cows suffering from tuberculosis of the udder. It is certain that the number of animals so affected throughout the year is much greater than this, and though the operation of the new Tuberculosis Order during the past year has revealed an additional number of animals suffering from tuberculosis of the udder, the total number of cows condemned would be augmented considerably if increased veterinary inspection were carried out.

But the good effect of veterinary inspection of dairy herds is not limited to the detection of udder tuberculosis. The Veterinary Inspectors' visits, made as they are at irregular periods, have a salutary effect on the dairyman's methods in the byre throughout the year, unless in the case of those who are utterly careless. Further, he has abundant opportunity of showing how dependant the spread of udder affections (apart from tuberculosis of the udder), which are so often responsible for an impure milk supply and a considerable decrease in the value of the stock, is on the slovenly and thoughtless methods of the attendants.

When farmers fully realise that absolute cleanliness is the great safeguard against udder diseases of all kinds, they will carry out themselves or strive till they get those structural repairs in the byre that are so necessary for the keeping of the animals healthy and clean.

Prior to May 1st, 1913, the method of dealing with a cow suffering from tuberculosis of the udder was as follows:—As soon as the Veterinary Inspector's diagnosis was made, he gave a certificate condemning the cow to the Medical Officer of Health, who immediately notified the owner of the fact by a letter which set forth the requirements of Article 15 of the 1885 Dairies, Cowsheds, and Milkshops Order. Having no power to slaughter these dangerous cows, a good deal of policing had to be done by Sanitary Inspectors to make sure that they were put dry or killed. With few exceptions owners of condemned cows dealt with them in a way satisfactory to the Medical Officer of Health as soon as they received notification.

Since May 1st, 1913, when the Board of Agriculture and Fisheries issued (under the Diseases of Animals Acts) the Tuberculosis Order of 1913, the Local Authority have had power thereunder to slaughter and compensate for animals suffering from tuberculosis of the udder, &c.



During the period from May 1st, 1913, to July 1st, 1914, when the Tuberculosis Order of 1913 was in force, the District Sanitary Authorities were notified, in terms of the Order, of 406 suspected cases of tuberculosis having been reported to the Local Authority, and when the Veterinary Inspector's examination of each of these cases was completed, a copy of his preliminary report was sent to the Sanitary Authority concerned. The number of animals killed in this County under the Tuberculosis Order of 1913 is as follows:—

(a) Cases of tuberculosis of the udder, ... ..	59
(b) Cases of tuberculosis with emaciation, ... ..	82
	<hr/>
Total, ... ..	141
	<hr/>

The Tuberculosis Order of 1914, which superseded that of 1913 on July 1st last, gives increased power to the Local Authority, and bovine animals that are suffering from "a chronic cough and showing definite clinical evidence of tuberculosis" are now amenable to the Order as well as those suffering from tuberculosis of the udder, giving tuberculous milk, or that are the subject of tuberculous emaciation.

The procedure has been simplified, and it is now required that a copy of the Veterinary Inspector's Preliminary Report only should be sent to the Sanitary Authority. Financial adjustments have also been made whereby the future relative cost of the operation of the Order to the Local Authority will be much reduced.

When it is considered (1) that of the 141 animals killed during the fourteen months' operation of the Order of 1913, 42 were detected by the Veterinary Inspectors when doing duty under the Public Health Acts, and (2) that when the Veterinary Inspector is called to examine a suspected animal under the Tuberculosis Order he at the same time has the opportunity of making his inspection from the Public Health point of view, the economy and efficiency of his co-related offices are further demonstrated.

The following extracts are from the Tuberculosis Order of 1914:—

Art. 2. (1) Every person having in his possession or under his charge—

- (i.) any cow which is, or appears to be, suffering from tuberculosis of the udder, indurated udder, or other chronic disease of the udder; or
- (ii.) any bovine animal which is, or appears to be, suffering from tuberculous emaciation; or
- (iii.) any bovine animal which is suffering from a chronic cough, and showing definite clinical signs of tuberculosis,

shall, without avoidable delay, give information of the fact to a constable of the police force for the area wherein the animal is, or to an Inspector of the Local Authority, and the constable or Inspector shall transmit the information to the Local Authority.



(2) The person in possession or having charge of the animal shall forthwith take such steps as are necessary to secure compliance with Article 9 (Precautions to be adopted with respect to Milk, &c.) and Article 10 (Detention and Isolation of Suspected Animals).

Art. 3. (1) A veterinary surgeon or veterinary practitioner who in his private practice is employed to examine any bovine animal, and is of opinion that the animal is suffering from tuberculosis of the udder, or tuberculous emaciation, or suffering from a chronic cough and showing definite clinical signs of tuberculosis, shall with all practicable speed give notice of the existence or suspected existence of such disease to an Inspector of the Local Authority.

Art. 4. (1) The Local Authority shall in every case where, by reason of information received under the preceding articles or otherwise, there is reasonable ground for supposing that on any premises in their district there is a cow which is suffering from chronic disease of the udder or giving tuberculous milk, or a bovine animal which is suffering from tuberculous emaciation, or suffering from a chronic cough and showing definite clinical signs of tuberculosis, direct a Veterinary Inspector with all practicable speed to examine the diseased or suspected animal and any other bovine animals on such premises which the Veterinary Inspector considers it is desirable to examine, to ascertain whether any cow on the premises is suffering from tuberculosis of the udder or giving tuberculous milk, or whether any bovine animal thereon is suffering from tuberculous emaciation, or suffering from a chronic cough and showing definite clinical signs of tuberculosis, and the Inspector may, with the previous consent in writing of the owner of the animal or of his agent, but not otherwise, apply the tuberculin test to any cow which the Inspector suspects of suffering from tuberculosis of the udder, or of giving tuberculous milk, or to any bovine animal which the Inspector suspects of suffering from tuberculous emaciation.

(5) The Veterinary Inspector shall as soon as possible send to the Local Authority a report showing the result of his examination and investigation. The Local Authority, if not themselves the Sanitary Authority, shall cause a copy of the report to be sent to that authority if the report shows that any animal is suffering from tuberculosis of the udder or tuberculous emaciation, or giving tuberculous milk, or suffering from a chronic cough and showing definite clinical signs of tuberculosis.

Under these extended powers there is every reason to anticipate that the risk of danger to human health from tuberculous milk will be largely reduced, and given time and a rigorous application of the powers throughout the County it is not beyond reasonable expectation to hope for the ultimate elimination of all danger from milk supply.

H. BEGG.



**SUMMARY STATEMENT, SHOWING RESULTS OF THE VETERINARY INSPECTION  
OF DAIRY HERDS IN THE MIDDLE WARD DISTRICT, 1904-13.**

YEAR.	HERDS.	COWS.	SUSPECTED TUBERCLE.						COWS WITH ABNORMAL CONDITIONS OF UDDER.					
			SAMPLES OF MILK	RESULTS.				TUBERCLE.	MAMMITIS.	ERUPTION ON TEATS.	INDURATION N.T.	INDURATED TEATS.	ATROPHY.	
				SMEAR.		BIOL.								
				+	-	+	-							
1904	92	1,864	4	—	—	1	3	1	6	—	63	—	58	
1905	489	9,425	17	—	—	2	15	2	94	12	212	13	355	
1906	230	4,116	26	—	—	3	23	3	17	1	71	3	132	
1907	934	18,621	84	—	—	19	65	19	77	88	323	27	669	
1908	945	19,023	180	—	—	32	148	32	42	57	432	28	344	
1909	1,000	19,429	94	—	—	30	64	30	23	17	222	31	301	
1910	965	17,459	90	—	—	22	68	23	110	146	363	35	707	
1911	1,004	18,071	61	23	38	—	34	23	138	141	387	—	747	
1912	999	17,956	48	18	30	5	21	23	156	87	368	—	619	
1913	995	18,265	64	21	43	4	36	25	146	86	353	—	626	

**SUMMARY STATEMENT, SHOWING RESULTS OF THE VETERINARY INSPECTION  
OF DAIRY HERDS IN THE UPPER WARD DISTRICT, 1904.**

YEAR.	HERDS.	COWS.	SUSPECTED TUBERCLE.						COWS WITH ABNORMAL CONDITIONS OF UDDER.						
			SAMPLES OF MILK.	RESULTS.						TUBERCLE.	MAMMITIS.	ERUPTION ON TEATS.	INDURATION N.T.	INDURATED TEATS.	ATROPHY.
				SMEAR.		BIOL.									
			+	-	+	-									
1904	14	354	—	—	—	—	—	—	6	—	7	—	5		
1905	60	1,269	4	—	—	—	4	—	8	—	18	—	12		
1906	—	—	—	—	—	—	—	—	—	—	—	—	—		
1907	150	2,735	22	—	—	2	20	2	5	4	4	—	20		
1908	616	10,181	66	—	—	6	60	6	114	17	200	28	312		
1909	—	—	—	—	—	—	—	—	—	—	—	—	—		
1910	762	10,910	32	5	27	2	21	7	115	112	212	34	349		
1911	769	11,480	23	4	19	2	16	6	114	123	213	—	517		
1912	772	11,465	22	8	14	1	13	9	103	62	218	—	392		
1913	769	11,831	30	5	25	—	25	5	114	40	203	—	405		

**SUMMARY STATEMENT, SHOWING RESULTS OF THE VETERINARY INSPECTION  
OF DAIRY HERDS IN THE LOWER WARD DISTRICT, 1904-13.**

YEAR.	HERDS.	COWS.	SUSPECTED TUBERCLE.					COWS WITH ABNORMAL CONDITIONS OF UDDER.					
			SAMPLES OF MILK.	RESULTS.				TUBERCLE.	MAMMITIS.	ERUPTION ON TEATS.	INDURATION N.T.	INDURATED TEATS.	ATROPHY.
				SMEAR.		BIOL.							
				+	-	+	-						
1904	4	267	—	—	—	—	—	—	7	—	8	1	10
1905	13	384	3	—	—	1	2	1	7	—	1	—	8
1906	—	—	—	—	—	—	—	—	—	—	—	—	—
1907	121	2,989	17	—	—	6	11	6	21	7	42	1	74
1908	119	2,859	22	—	—	8	14	8	27	5	55	5	82
1909	118	2,736	33	11	22	12	21	12	45	5	85	11	126
1910	135	2,634	27	5	22	2	18	7	26	13	48	6	99
1911	129	2,754	12	7	5	—	5	7	10	41	106	2	157
1912	127	2,517	8	4	4	—	4	4	35	7	22	53	128
1913	132	2,647	12	2	10	1	8	11	24	16	69	—	121



