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COUNTY COUNCIL OF THE COUNTY OF LANARK.

ANNUAL REPORTS

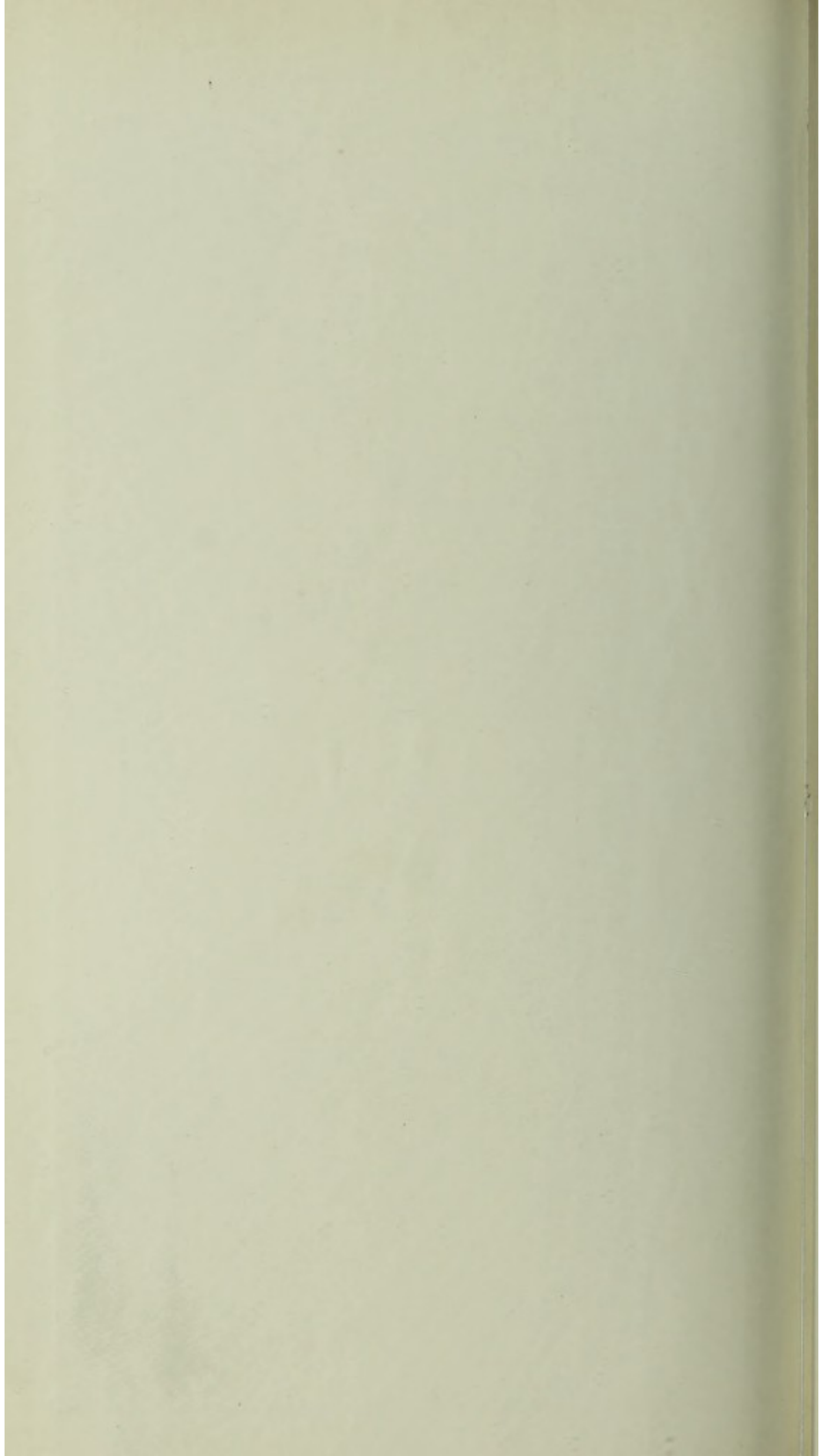
OF THE

COUNTY MEDICAL OFFICER OF HEALTH

AND THE

COUNTY SANITARY INSPECTOR

FOR THE YEAR 1931.





COUNTY COUNCIL OF THE COUNTY OF LANARK.

ANNUAL REPORTS

OF THE

COUNTY MEDICAL OFFICER OF HEALTH

AND THE

COUNTY SANITARY INSPECTOR

FOR THE YEAR 1931.

GLASGOW :

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MCMXXXII

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WILLIAM MARTIN.

Meat Inspector.

ALEX. CAMERON.

Senior Food and Drugs Inspector.

CHARLES MACARA.

Senior Rivers Inspector.

FRANK M'ARTHUR.

Supervisor of Nurses.

MARGARET L. WINCHESTER.

COUNTY COUNCIL OF THE COUNTY OF LANARK.

REPORT
OF THE
COUNTY MEDICAL OFFICER OF HEALTH.
YEAR 1931.

LOCAL GOVERNMENT (SCOTLAND) ACT, 1929.

The abolition of the three former District Committees and the transfer of all Public Health functions to the County Council has proved advantageous in many matters. Prior to the Act coming into operation the interpretation of many statutes differed in the three Districts and the methods of administration varied. The co-ordination of all Public Health functions under the County Council has, therefore, led to unification, especially in connection with the utilisation of hospital and sanatorium beds, the Tuberculosis and Maternity and Child Welfare Schemes, Housing, and Meat Inspection. It is regrettable that little progress has been made with regard to the provision of additional hospital accommodation, the medical care and nursing of the sick poor, and the co-ordination of the School Health Service with the Public Health Service.

Hospital Services.

The hospital services remain as reported in the Annual Report for the year 1930, and may be briefly summarised as follows:—

| | |
|--|-----------------------|
| Infectious Disease, County Hospital, Mother- | 232 nominal beds. |
| well. | |
| Lightburn Joint Hospital, | 60 nominal beds, one- |
| Shettleston. | eighth of which are |
| | owned by the Cor- |
| | poration of Glasgow. |
| District Hospital, Road- | 48 nominal beds. |
| meetings, Carluke. | |

| | | |
|---|--|--|
| Sanatoria, &c., | Hairmyres Farm Colony, | 250 beds. |
| | County Orthopædic Hospital, Stonehouse. | 82 beds and cots. |
| | County Hospital, Dalserf. | 16 „ „ |
| | County Sanatorium, Uppertown, Longriggend. | 55 „ „ |
| | County Sanatorium, Shotts. | 54 „ „ |
| | District Hospital, Roadmeetings, Carluke. | 20 „ „ |
| Maternity Hospital, County Maternity Hospital, Bellshill. | | 33 beds. |
| Convalescent Homes for Mothers and Children. | Calderbank House, Baillieston. | 35 beds and cots. |
| | County Hospital, Lanark, | 33 „ „ |
| Encephalitis Lethargica. | Omoa House, Cleland, | 29 beds. |
| Poor Law Hospitals, | Omoa House, Cleland, | 66 hospital beds. |
| | Crosslaw Home, Lanark, | 17 „ „ |
| | Hamilton Home, Hamilton, | 54 total „ „ 37 County proportion. |
| | 69 Hospital Street, Coatbridge. | 66 total hospital beds. 20 County proportion. |
| | Thrashbush Home, Airdrie, | 40 total hospital beds. 14 County proportion. |

During the year the question of additional hospital facilities was under review by the County Council, and was the subject of negotiation between the Department of Health, the Local Authorities of the large burghs situated in the County, and the County Council. So far little progress has been made with the question owing to the difficulty of the various Local Authorities concerned coming to an agreement, and with so many varied interests concerned any progress made will be of a very protracted nature. It may, therefore, be

necessary for the County Council to consider what provision should be made for the additional hospital accommodation required for ratepayers in the County area as a matter of urgency.

Particulars of the work carried out at the various institutions are given in separate reports by the Physician-Superintendents.

County Maternity Hospital.—The question of the provision of additional hospital accommodation for maternity cases became acute during the year, and many cases were refused admission to the County Maternity Hospital, Bellshill. Owing to the difficulty in obtaining a site for the erection of the proposed new institution of 100 beds, the County Council decided to make a temporary extension, consisting of 33 beds, to the present institution at Bellshill, thus providing 66 total beds. The work on this extension was commenced during the year and will be completed during the current year.

Medical Care and Nursing of the Sick Poor.

There is still no alteration in the arrangements for the Medical Care and Nursing of the Sick Poor since the transfer of functions under the Local Government Act. A report was prepared and submitted to the County Council, pointing out the inadequacy of the present system and also the lack of uniformity in the different areas of the County. Three different systems were suggested for the improvement of the Poor Law Medical and Nursing Service, viz. :—

- (1) The employment of whole-time medical officers ;
- (2) A panel of general practitioners ;
- (3) An extension of the present service.

The report recommended that the panel system should be adopted in preference to the employment of whole-time medical officers or the extension of the present service. The matter is still under consideration, but the advantages of the panel system may be summarised thus :—

- (1) Removal of stigma of Poor Law ;
- (2) Choice of doctor ;
- (3) Competition would encourage attention ;
- (4) Better service, as there would be a greater number and a wider distribution of medical practitioners employed ;
- (5) Medical attendant would be the family doctor in most cases ;

- (6) The dependants of destitute unemployed insured persons would participate;
- (7) Payment would fluctuate according to the number of persons on the Poor Law Roll.

School Health Administration.

As a separate report was published giving the statistics with regard to School Health Administration for the period ended 31st July, it is unnecessary to give further figures here. The School Health Service is conducted as an entirely separate unit, and is administered by a Sub-Committee of the Education Committee and has no relationship to the Public Health Service. The Medical, Dental, Specialist, and Nursing Staffs are entirely separate from the Public Health Staff.

Ambulance Facilities.

The ambulance facilities remain as stated in the Annual Report for 1930, pages 16-17.

STATISTICS.

The **Area** of the County, inclusive of Small Burghs, was 533,156 acres, made up as follows:—Landward portion of County, 532,587 acres; Burgh of Biggar, 62 acres; Burgh of Lanark, 507 acres.

Details of the acreage and population will be found in Table B.

The *density of population* was 0·56 person to the acre.

The preliminary Census **population**, 1931, inclusive of Small Burghs, was 302,495. The population as ascertained at the Decennial Censuses, 1891, 1901, 1911, 1921, and 1931 was as follows:—

(Census Population.)

| Year. | | County Landward. | Burgh of Biggar. | Burgh of Lanark. |
|-------|--------|---------------------|---------------------|---------------------|
| 1891, | ... .. | 209,814 | 1,356 | 4,579 |
| 1901, | ... .. | 261,314 | 1,326 | 5,359 |
| 1911, | ... .. | 302,615 | 1,366 | 5,900 |
| 1921, | ... .. | 295,451 | 1,489 | 6,268 |
| 1931, | ... .. | 294,994 | 1,323 | 6,178 |

The reduction in the area and population through extension of Burgh Boundaries since the year 1891 was as follows:—

| | | | Acreage. | Estimated Population. |
|----------------------------------|-----|-----|----------|--------------------------|
| 1896—City of Glasgow, | ... | ... | 450 | 632 |
| Burgh of Wishaw, | ... | ... | 465 | 1,100 |
| 1899—City of Glasgow, | ... | ... | 370 | 399 |
| 1901—Burgh of Govan, | ... | ... | 209 | 5,642 |
| Do. Hamilton, | ... | ... | 67 | — |
| 1906— Do. Rutherglen, | ... | ... | 469 | 3,000 |
| 1908— Do. Motherwell, | ... | ... | 438 | 3,600 |
| Do. Lanark, | ... | ... | 214 | 260 |
| 1912—City of Glasgow, | ... | ... | 1,706 | 28,490 |
| 1913—Burgh of Renfrew, | ... | ... | 216 | 18 |
| 1914— Do. Coatbridge, | ... | ... | 32 | 4 |
| 1920— Do. Motherwell and Wishaw, | ... | ... | 296 | 500 |
| 1924— Do. Coatbridge, | ... | ... | 202 | 10 |
| 1925— Do. Hamilton, | ... | ... | 898 | 84 |
| 1926—City of Glasgow, | ... | ... | 3,542 | 4,350 |
| 1927—Burgh of Airdrie, | ... | ... | 335 | 405 |

The number of **Occupied** and **Unoccupied** Houses as given in the Valuation Roll was 65,782 and 690 respectively, inclusive of Small Burghs, made up as follows:—

| | | | Occupied Houses. | Unoccupied Houses. |
|------------------------------|-----|-----|---------------------|-----------------------|
| County of Lanark (Landward), | ... | ... | 63,843 | 680 |
| Burgh of Biggar, | ... | ... | 403 | 4 |
| Burgh of Lanark, | ... | ... | 1,536 | 6 |

Statistical Tables.—Table A shows the birth-rate and death-rate per thousand of the population and the infantile deaths per thousand births.

Table B shows the acreage, births, and deaths for the year in each of the District Council Areas and the Burghs of Biggar and Lanark, with the deaths classified according to cause, and Table C shows the deaths classified according to cause and age periods.

The **Births** registered numbered **6,350**—males, 3,173; females, 3,177; 374, or 5·8 per cent., were illegitimate. The birth-rate per 1,000 of the population was 20·9.

Deaths during 1931 numbered **3,423**, as compared with 3,591 in 1930, and gave a death-rate of 11·3 per 1,000. The deaths from measles fell from 55 to 26, but the deaths from whooping-cough rose from 36 to 87. Deaths from respiratory diseases decreased from 626 to 557, pneumonia being responsible for 99 deaths fewer than in the previous year, bronchitis 13 more and influenza 16 more.

The deaths of infants under one year numbered 510, which is equivalent to 80·35 deaths per 1,000 births as compared with 78·57 recorded last year. The deaths are referred to in detail in the portion of the Report dealing with Maternity and Child Welfare.

The number of births exceeded the deaths by 2,927, which constitutes the **natural increase** in population.

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

| Year. | Births. | Birth-rate. | Net Deaths. | Death-rate. | INFANTS UNDER 1 YEAR. | |
|-------|---------|-------------|-------------|-------------|-----------------------|-------------|
| | | | | | Deaths. | Death-rate. |
| 1930 | 6,669 | 22·1 | 3,591 | 11·1 | 524 | 78·5 |
| 1931 | 6,350 | 20·9 | 3,423 | 11·3 | 510 | 80·3 |

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

| Institution | Parish where situated | Population. Police Census, 1931 | DEATHS. | |
|--|-----------------------|---------------------------------|-------------------|----------------------|
| | | | Total during 1931 | Allocated to County. |
| Kello Hospital, Biggar, - | Biggar, | 7 | 4 | 3 |
| Douglas Cottage Hospital, | Douglas, | 9 | 6 | 5 |
| Birkwood Home, - - | Lesmahagow, | 156 | 1 | 1 |
| Parochial Lodging House, Lesmahagow, . - | Lesmahagow, | 15 | — | — |
| Roadmeetings Hospital, . | Carluke, | 58 | 27 | 27 |
| C.S. House, Carluke, - | Carluke, | 4 | — | — |
| St. Charles, - - - | Carstairs, | 124 | 2 | 2 |
| County Hospital, Lanark, | Lanark, | 32 | 1 | 1 |
| Crosslaw Home, - - | Lanark, | 69 | 17 | 16 |

| Institution | Parish wheresituated | Population. Police Census, 1931 | DEATHS. | |
|---|-------------------------|--|-------------------------|---------------------------|
| | | | Total during 1931 | Allocated to County |
| Lady Hozier Home, - | Lanark, | 31 | 1 | — |
| Smyllum Orphanage, - | Lanark, | 466 | 1 | 1 |
| Fairhaven Home, - - | Lanark, | 26 | 6 | 5 |
| Baronald Mental Home, | Lanark, | 29 | 6 | 1 |
| Bellefield Sanatorium, - | Lanark, | 158 | 4 | — |
| Collisdene Home, - - | Avondale, | 29 | 12 | 3 |
| County Hospital, Dalserf, | Dalserf, | 22 | — | — |
| County Orthopædic Hos- pital, - - - - | Stonehouse, | 121 | 5 | 5 |
| Cottage Hospital, Blantyre, | Blantyre, | 4 | 2 | 2 |
| Limekilns, East Kilbride, | East Kilbride, | 23 | 8 | 2 |
| Hairmyres Colony, - - | East Kilbride, | 378 | 2 | 2 |
| Victoria Hospital | | | | |
| Auxiliary, Philipshill, | East Kilbride, | 79 | 6 | — |
| Kirklands Asylum, - | Bothwell, | 287 | 26 | 10 |
| County Hospital, Bellshill, | Bothwell, | 83 | 50 | 47 |
| Elmwood Convent, - | Bothwell, | 37 | — | — |
| County Hospital, Mother- well, - - - - | Dalziel, | 272 | 172 | 162 |
| Airbles House, - - | Dalziel, | 127 | 5 | 4 |
| County Sanatorium, | | | | |
| Shotts, - - - - | Shotts, | 73 | 25 | 25 |
| Hartwood Asylum, - | Shotts, | 1,521 | 72 | 32 |
| Omoa House, - - - | Shotts, | 231 | 51 | 44 |
| Gartloch Asylum, - - | Cadder, | 972 | 52 | 1 |
| Stoneyetts Institution, - | Cadder, | 482 | 8 | 1 |
| Lenzie Convalescent Home, | Cadder, | 96 | 1 | — |
| St. Mary's Industrial School, - - - - | Cadder, | 147 | — | — |
| St. Mary's Girls' Convent, | Cadder, | 32 | — | — |
| West Muckcroft Asylum, | Cadder, | 45 | — | — |
| East Muckcroft Asylum, | Cadder, | 19 | — | — |
| Epileptic Colony, | | | | |
| Bridgend, - - - - | Cadder, | 383 | — | — |
| Holiday School, Spring- boig, - - - - | Cadder, | 145 | — | — |
| Old People's Home, | | | | |
| Shettleston, - - - | Glasgow, * | 72 | — | — |
| Lightburn Joint Hospital, | Glasgow, | 182 | 62 | 56 |
| County Sanatorium, | | | | |
| Uppertown, - - - | New Monkland, | 64 | 24 | 24 |

| Institution | Parish where situated | Population. Police Census, 1931 | DEATHS | |
|---|--------------------------|--|-------------------------|---------------------------|
| | | | Total during 1931 | Allocated to County |
| Thrashbush Home, - | New Monkland, | 87 | 19 | 3 |
| Calderbank House, - | Old Monkland, | 68 | 23 | 23 |
| St. Vincent School, Toll- cross, - - - | Old Monkland, | 202 | — | — |
| Mt. Vernon Homœopathic Hospital, - - - | Old Monkland, | 28 | 10 | 2 |
| St. Mary's Hospital, - | Burgh of Lanark, | 99 | 19 | 9 |
| Lockhart Hospital, - | Burgh of Lanark, | 18 | 4 | 4 |
| Total, - | | 7,612 | 734 | 523 |

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

| <i>General Hospitals.</i> | | <i>Poor Law Institutions.</i> | |
|--|-----|-----------------------------------|-----|
| Glasgow Royal Infirmary, - | 197 | 41 Bothwell Road, Hamilton, - | 9 |
| Glasgow Western Infirmary, - | 25 | 69 Hospital Street, Coatbridge, - | 6 |
| Glasgow Victoria Infirmary, - | 35 | Others, - - - - | 4 |
| Edinburgh Royal Infirmary, - | 20 | | |
| Glasgow Sick Children's Hos- pital, - - - - | 55 | Nursing Home, - - - | 32 |
| <i>Infectious Diseases Hospitals.</i> | | | |
| Ruchill Hospital, Glasgow, - | 4 | All other Institutions, - - | 61 |
| Belvidere Hospital, Glasgow, - | 1 | | |
| | 337 | | 112 |
| | | TOTAL, 449 | |

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

| | | |
|----------------------|----------------------------|------------------------------|
| Infant period, | under 1 year, | 510 deaths or 14·9 per cent. |
| Under school age, | 1-5 years, - | 230 „ 6·7 „ |
| School age, | 5-15 „ - | 147 „ 4·2 „ |
| Adolescent, | 15-25 „ - | 169 „ 4·9 „ |
| Early mature period, | 25-45 „ - | 334 „ 9·7 „ |
| Late „ „ | 45-65 „ - | 831 „ 24·2 „ |
| Post „ „ | 65 years and upwards, - | 1,202 „ 35·1 „ |

INFECTIOUS DISEASES.—The number of deaths due to infectious diseases which are compulsorily notifiable was 554, made up thus:—

| | | | |
|-------------------------|----|--------------------------|-----|
| Diphtheria, - - - | 29 | Pulmonary Tuberculosis, | 152 |
| Erysipelas, - - - | 8 | Tuberculosis (all other | |
| Scarlet Fever, - - - | 9 | forms), - - - | 85 |
| Typhoid Fever, - - - | 3 | Pneumonia, - - - | 232 |
| Puerperal Sepsis, - - - | 17 | Encephalitis Lethargica, | 9 |
| Cerebro-spinal Fever, | 10 | | |

The deaths from infectious diseases not compulsorily notifiable amounted to 172:—Measles, 26; whooping-cough, 87; diarrhoea, 59. In 54 per cent. of the whooping-cough deaths, the disease was complicated with pneumonia, while no fewer than 77 per cent. of the measles deaths were complicated with the same condition. The prevalence of the various infectious diseases is further referred to in the appropriate section of the Report.

RESPIRATORY DISEASES.—The deaths during the year numbered 557, and the following statistics show the deaths and death-rates of the various forms:—

| PNEUMONIA. | | BRONCHITIS. | | INFLUENZA. | | OTHER RESPIRATORY DISEASES. | | Total Deaths. |
|------------|---------|-------------|---------|-------------|---------|-----------------------------|---------|---------------|
| Year. | Deaths. | Death-rate. | Deaths. | Death-rate. | Deaths. | Death-rate. | Deaths. | |
| 1931 | 232 | 0·76 | 193 | 0·63 | 89 | 0·29 | 43 | 0·14 |

With regard to the 89 deaths from influenza, the disease was complicated with other conditions in 80 of the cases, as follows:—Bronchitis, 14; pneumonia, 38; other respiratory diseases, 1; heart disease, 11; other complications, 16.

MALIGNANT DISEASES.—The deaths falling under this heading numbered 330, as compared with 350 in the previous year. In 245 cases carcinoma was stated as the cause of death, in 13 cases sarcoma, in 14 cases epithelioma, and in 58 the nature of the malignant disease was not defined. The following table shows the distribution of the disease according to age and sex, and according to the organs and parts of the body affected:—

TABLE B.—Year 1981.—Population, Acreage, Births, and Deaths in each Registration District, with Deaths classified according to cause

TABLE C.—Year 1931.—Deaths classified according to cause and age periods, and corrected for Institutions, &c.

Population, 302,495; Acreage, 533,156; Registered Births, (Legitimate, M., 2,996; F., 2,980; Deaths under 1 year, (Legitimate, 489. (Illegitimate, M., 177; F., 197; Total, 6,350. (Illegitimate, 21.

| 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- | 3- | Total -4 | 1- | 3- | 6- | 9- | Total -12 | 1- | 5- | 10- | 15- | 25- | 35- | 45- | 55- | 65- | 75 and over. | | |
| All Causes (Certified, - (Uncertified, - | 3,219 5 | 475 ... | 276 ... | 3,418 5 | 174 1 | 18 1 | 16 ... | 16 ... | 224 2 | 62 ... | 92 1 | 57 ... | 72 ... | 507 3 | 230 ... | 90 ... | 57 ... | 169 ... | 165 ... | 168 ... | 310 1 | 520 ... | 654 ... | 548 ... | 11-2991 -0165 | 734 ... |
| Typhoid Fever, - | 3 | ... | ... | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 2 | ... | ... | ... | ... | -0099 | 3 |
| Smallpox, - | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | -0859 | 10 |
| Measles, - | 27 | ... | 1 | 26 | ... | ... | ... | ... | ... | ... | ... | 3 | 3 | 6 | 17 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | -0297 | 7 |
| Scarlet Fever, - | 9 | ... | ... | 9 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | -2876 | 14 |
| Whooping Cough, - | 85 | 2 | ... | 87 | ... | ... | ... | 1 | 1 | 4 | 13 | 9 | 20 | 47 | 38 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | -0958 | 29 |
| Diphtheria, - | 29 | ... | ... | 29 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 15 | 9 | 4 | ... | ... | ... | ... | ... | ... | ... | -2942 | 5 |
| Influenza, - | 89 | 1 | 1 | 89 | ... | ... | ... | ... | ... | 1 | ... | 1 | 1 | 3 | 6 | 1 | 2 | 7 | 6 | 3 | 8 | 11 | 23 | 19 | -0330 | 5 |
| Cerebro-Spinal Fever, - | 7 | 4 | 1 | 10 | ... | ... | ... | ... | ... | 1 | ... | 2 | 1 | 4 | 4 | ... | 1 | 1 | ... | ... | 1 | 1 | 3 | ... | -0264 | 6 |
| Erysipelas, - | 9 | ... | 1 | 8 | ... | ... | ... | ... | ... | 2 | ... | ... | ... | 2 | ... | ... | 1 | ... | ... | ... | 1 | 1 | 3 | ... | -0297 | 6 |
| Encephalitis Lethargica, - | 11 | ... | 2 | 9 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 2 | 1 | 2 | 1 | 2 | ... | ... | ... | ... | ... |
| Tetanus, - | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Dysentery, - | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Acute Infective Jaundice, - | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Mumps, - | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Acute Anterior Poliomyelitis, - | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Pulmonary Tuberculosis, - | 167 | 4 | 19 | 152 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 3 | 1 | 49 | 43 | 21 | 15 | 12 | 6 | 1 | -5024 | 78 |
| Meningeal Tuberculosis, - | 40 | 3 | 1 | 42 | ... | ... | ... | ... | ... | 1 | 3 | 2 | 3 | 9 | 20 | 7 | 2 | 3 | ... | 1 | ... | ... | ... | ... | -1388 | 17 |
| Abdominal Tuberculosis, - | 22 | 6 | 1 | 27 | ... | ... | ... | ... | ... | ... | 1 | 2 | 3 | 4 | 5 | 4 | 5 | ... | 4 | 1 | 1 | ... | ... | ... | -0892 | 8 |
| Other Tuberculosis, - | 16 | 3 | 3 | 16 | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | 4 | ... | 1 | 3 | 2 | 4 | ... | ... | 1 | ... | -0525 | 7 |
| Septicæmia and Pyæmia, - | 13 | 6 | ... | 19 | ... | ... | ... | 1 | 1 | 1 | ... | ... | ... | 2 | ... | 1 | 1 | 2 | 4 | 4 | 1 | 1 | 2 | ... | -0628 | 5 |
| Rheumatic Fever, - | 27 | 1 | 5 | 23 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 5 | 2 | 1 | 2 | 5 | 3 | 1 | 1 | ... | -0760 | 6 |
| Malignant Disease, - | 277 | 69 | 16 | 330 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | 5 | 5 | 13 | 60 | 98 | 95 | 52 | 1-0909 | 28 |
| Meningitis (Simple), - | 19 | 4 | 1 | 22 | ... | ... | ... | ... | ... | 1 | 4 | 3 | 2 | 10 | 7 | ... | 1 | 3 | ... | 1 | ... | ... | ... | ... | -0727 | 4 |
| Cerebral Hemorrhage, - | 212 | 15 | 8 | 219 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 | 19 | 47 | 91 | 56 | ... | -7239 | 18 |
| Other Nervous Diseases, - | 106 | 21 | 32 | 95 | ... | ... | ... | 1 | 1 | 1 | ... | 1 | 1 | 4 | 7 | 3 | 4 | 9 | 8 | 8 | 14 | 16 | 15 | 7 | -3143 | 56 |
| Organic Heart Disease, - | 439 | 31 | 28 | 442 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 | 3 | 12 | 11 | 21 | 44 | 101 | 145 | 100 | 1-4612 | 59 |
| Other Circulatory Diseases, - | 116 | 10 | 17 | 109 | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 1 | 1 | ... | ... | ... | 1 | 10 | 27 | 33 | 36 | ... | -3775 | 25 |
| Bronchitis, - | 195 | 7 | 9 | 193 | ... | ... | 1 | 2 | 3 | 6 | 10 | 3 | 2 | 24 | 5 | ... | ... | ... | 7 | 18 | 35 | 61 | 43 | ... | -6379 | 11 |
| Pneumonia (All Forms), - | 253 | 4 | 25 | 232 | 1 | ... | ... | 1 | 2 | 8 | 18 | 14 | 17 | 59 | 45 | 7 | 5 | 11 | 15 | 10 | 19 | 24 | 21 | 16 | -7669 | 114 |
| Other Respiratory Diseases, - | 47 | 1 | 5 | 43 | ... | ... | ... | 1 | 1 | 1 | 1 | 1 | 1 | 5 | 1 | 2 | ... | 3 | 2 | 5 | 5 | 7 | 8 | 5 | -1421 | 10 |
| Diabetes, - | 35 | 12 | 3 | 44 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 4 | 2 | 3 | 16 | 13 | 4 | -1454 | 3 |
| Pernicious Anæmia, - | 22 | 2 | ... | 24 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 3 | 3 | 9 | 7 | 1 | -0793 | 3 |
| Diseases of Ductless Glands, - | 12 | 10 | 2 | 20 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | 1 | 3 | 2 | 2 | 8 | 1 | 1 | ... | -0661 | 4 |
| Appendicitis, Typhlitis, - | 6 | 23 | 1 | 28 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 6 | 10 | 2 | 1 | 3 | 3 | 2 | ... | -0925 | 4 |
| Liver Diseases (not malignant), - | 17 | 9 | ... | 26 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 3 | 2 | 8 | 6 | 5 | ... | -0859 | 1 |
| Other Digestive Diseases, - | 50 | 51 | ... | 101 | ... | ... | ... | ... | ... | ... | 4 | 3 | 2 | 9 | 7 | 6 | 1 | 1 | 7 | 5 | 16 | 22 | 16 | 11 | -3338 | 11 |
| Nephritis, Bright's Disease, - | 70 | 24 | 5 | 89 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 3 | 4 | 8 | 5 | 17 | 25 | 16 | 8 | -2942 | 7 |
| Dis. of Genito-Urinary System, - | 24 | 16 | 3 | 37 | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | 1 | 3 | 8 | 12 | 12 | -1223 | 3 |
| Dis. of Female Genital Organs, - | 3 | 6 | 1 | 8 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 | 2 | 2 | ... | ... | -0264 | 1 |
| Puerperal Sepsis, - | 22 | ... | 5 | 17 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 | 9 | 4 | ... | ... | ... | ... | -0562 | 21 |
| Diseases and Accidents of Pregnancy, &c., - | 19 | 6 | 1 | 24 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 | 10 | 9 | ... | ... | ... | ... | -0793 | 11 |
| Congenital Hydrocephalus, - | 7 | ... | ... | 7 | 3 | ... | ... | ... | 3 | ... | 2 | ... | ... | 5 | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | -0231 | 2 |
| Congenital Heart Disease, - | 11 | 1 | 1 | 11 | 6 | 1 | ... | ... | 7 | 3 | ... | ... | ... | 10 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | -0363 | 1 |
| Other Congenital Malformations, - | 10 | 9 | ... | 19 | 8 | 2 | 1 | ... | 11 | 2 | 4 | ... | 2 | 19 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | -0628 | 2 |
| Infantile Convulsions, - | 25 | ... | 1 | 24 | 6 | ... | 1 | 1 | 8 | 5 | 5 | 2 | 1 | 21 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | -0793 | 2 |
| Diarrhoea (under 2 years), - | 51 | 9 | 1 | 59 | ... | ... | 2 | 1 | 3 | 8 | 12 | 10 | 9 | 42 | 17 | ... | ... | ... | ... | ... | ... | ... | ... | ... | -1951 | 8 |
| Premature Birth, - | 123 | 7 | 2 | 128 | 103 | 11 | 1 | 4 | 119 | 8 | 1 | ... | ... | 128 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | -4231 | 37 |
| Injury at Birth, - | 9 | 2 | ... | 11 | 9 | 1 | ... | ... | 10 | 1 | ... | ... | ... | 11 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | -0363 | ... |
| Atrophy, D. and M., - | 53 | 2 | 1 | 54 | 23 | 3 | 4 | 2 | 32 | 5 | 12 | 2 | 3 | 54 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | -1785 | 15 |
| Atelectasis, - | 7 | ... | ... | 7 | 6 | ... | 1 | ... | 7 | ... | ... | ... | ... | 7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | -0231 | ... |
| Suffocation, Overlying, - | 2 | ... | ... | 2 | ... | ... | ... | 1 | 1 | ... | 1 | ... | ... | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | -0066 | ... |
| Rickets, - | 2 | ... | ... | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | -0066 | 2 |
| Other Dis. of Early Infancy, - | 10 | 1 | ... | 11 | 9 | ... | 2 | ... | 11 | ... | ... | ... | ... | 11 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | -0363 | 2 |
| Syphilis, - | 4 | 1 | 1 | 4 | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | 1 | -0132 | 4 |
| Violence, - | 104 | 62 | 29 | 137 | 1 | ... | ... | ... | 1 | 1 | ... | ... | ... | 2 | 17 | 21 | 8 | 16 | 16 | 13 | 12 | 12 | 11 | 9 | -4529 | 8 |
| Suicide, - | 20 | 3 | 2 | 21 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 4 | 3 | 3 | 7 | 2 | ... | -0694 | ... |
| Other Defined Diseases, - | 231 | 24 | 34 | 221 | ... | ... | 2 | ... | 2 | 1 | ... | ... | ... | 2 | 5 | ... | 2 | 1 | 4 | 1 | 1 | 1 | 7 | 47 | -7306 | 50 |
| Ill-defined Diseases, - | 57 | 3 | 7 | 53 | ... | 1 | ... | ... | 1 | ... | 1 | ... | ... | 2 | ... | ... | ... | ... | 1 | 1 | 11 | 15 | 16 | 7 | -1752 | 1 |
| Total, - | 3,224 | 475 | 276 | 3,423 | 175 | 19 | 16 | 16 | 226 | 62 | 93 | 57 | 72 | 510 | 230 | 90 | 57 | 169 | 165 | 169 | 311 | 520 | 654 | 548 | 11-3157 | 734 |

1. The first step in the treatment of diabetes is to control the diet.

2. The second step is to control the exercise.

3. The third step is to control the insulin.

4. The fourth step is to control the blood sugar.

5. The fifth step is to control the weight.

6. The sixth step is to control the blood pressure.

7. The seventh step is to control the cholesterol.

8. The eighth step is to control the triglycerides.

9. The ninth step is to control the hemoglobin A1c.

10. The tenth step is to control the overall health.

11. The eleventh step is to control the mental health.

12. The twelfth step is to control the social health.

13. The thirteenth step is to control the spiritual health.

Diabetes.

Deaths from diabetes numbered 44.

The following table classifies the deaths according to age and sex groups :—

| 1-5 | 5-10 | 10-15 | 15-25 | 25-35 | 35-45 | 45-55 | 55-65 | 65-75 | 75 | Total. |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| M. F. | M. F. | M. F. | M. F. | M. F. | M. F. | M. F. | M. F. | M. F. | M. F. | M. F. |
| — — | — — | — — | 1 1 | 2 2 | — 2 | — 3 | 3 15 | 5 8 | 2 2 | 13 31 |
| GRAND TOTAL, | | | | | | | | | | 44 |

In two cases which died during the year, insulin was being supplied by the Local Authority, but, so far as the other fatal cases are concerned, it is not known whether this form of treatment was being carried out by private arrangement or with assistance from the Insurance Committee.

Supply of Insulin.—Insured persons are entitled to a supply of insulin from the Insurance Committees, whilst those who do not come within the purview of this Authority are dealt with by the County Council, under the Public Health (Amendment) Act, 1925.

The County Scheme is limited to the supply of insulin to persons suffering from diabetes who are deemed to be in necessitous circumstances, and whose treatment is being supervised by a medical practitioner.

The following particulars relate to cases supplied with insulin during the year :—

| Sex | Age | Date of first supply | Daily dose | Total amount supplied during 1931 | Result of Insulin treatment |
|-----|-----|----------------------|------------|-----------------------------------|--------------------------------|
| F. | 64 | 15-2-26 | 7 units. | 2,100 units. | Improved. |
| F. | 46 | 7-3-28 | 10 „ | 2,000 „ | I.S.Q. Treatment discontinued. |
| F. | 71 | 24-11-28 | 20 „ | 3,200 „ | Improved. Fit. |
| M. | 12 | 7-12-28 | 11 „ | 8,000 „ | Improved |
| M. | 53 | 13-8-29 | 20 „ | 9,600 „ | Improved. Not fit. |
| F. | 55 | 12-9-29 | 30 „ | 5,500 „ | Fairly well. |
| F. | 55 | 23-4-30 | 20 „ | 1,800 „ | Well. |
| F. | 59 | 3-7-30 | 20 „ | 8,200 „ | I.S.Q. |
| F. | 18 | 12-7-30 | 40 „ | 7,200 „ | I.S.Q. |
| F. | 45 | 14-11-30 | 30 „ | 11,000 „ | Improved. |
| F. | 54 | 22-11-30 | 10 „ | 7,800 „ | Improved. |
| F. | 49 | 22-11-30 | 20 „ | 13,400 „ | I.S.Q. |

| Sex | Age | Date of first supply | Daily dose | Total amount supplied during 1931 | Result of Insulin treatment |
|-----|-----|----------------------|------------|-----------------------------------|--|
| M. | 10 | 5-1-31 | 30 „ | 10,300 „ | Improved. |
| F. | 62 | 5-1-31 | 30 „ | 10,300 „ | Improved. |
| F. | 63 | 8-1-31 | 20 „ | 900 „ | Well. Treatment discontinued. |
| F. | 65 | 14-1-31 | 15 „ | 3,600 „ | I.S.Q. |
| F. | 29 | 14-1-31 | 20 „ | 6,900 „ | Improved. |
| F. | 51 | 25-4-31 | 10 „ | 300 „ | Patient refused further supplies. |
| F. | 42 | 1-5-31 | 20 „ | 2,500 „ | Well. Treatment discontinued. |
| F. | 55 | 11-5-31 | 10 „ | 3,000 „ | Improved. |
| F. | 56 | 26-5-31 | 20 „ | 3,000 „ | Fairly well. |
| M. | 40 | 27-5-31 | 40 „ | 4,000 „ | Died. Pulmonary Tuberculosis. |
| F. | 10 | 4-6-31 | 45 „ | 8,800 „ | Improved. |
| F. | 60 | 4-8-31 | 20 „ | 1,100 „ | Patent admitted to Omoa House. |
| F. | 40 | 3-9-31 | 20 „ | 600 „ | Treatment discontinued by general practitioner. |
| F. | 50 | 15-9-31 | 20 „ | 300 „ | Treatment discontinued temporarily during patients' residence in General Hospital. |
| F. | 30 | 6-10-31 | 60 „ | 4,000 „ | I.S.Q. |
| F. | 12 | 16-11-31 | 68 „ | 6,000 „ | Improved. |
| F. | 58 | 21-11-31 | 45 „ | 2,000 „ | I.S.Q. |
| F. | 51 | 4-12-31 | 20 „ | 300 „ | — |
| F. | 65 | 23-12-31 | 10 „ | 300 „ | — |

In addition to the above initial supplies were granted to two patients who proved to be insured persons. They were accordingly referred to the County Insurance Committee.

Diabetes and the Supply of Insulin.

Public Health Authorities are interested in the mortality and morbidity due to diabetes apart from its influence on the general health of the people. They administer schemes for the treatment of the disease by supplying insulin free of charge to certain classes of the population. The cost is not great, however—less than £50 a year—and the main interest in the statistics is to observe the trend of the death-rate since insulin was issued by the Local Authority in 1926.

The outstanding feature that emerges is a very considerable increase in the number of deaths from diabetes. The average annual number in the Middle Ward of Lanarkshire for the five years from 1921-1925 was 18·2, and for the following five years 28·4. The increase is in itself anomalous, in view of the success attending insulin treatment of individual cases. It shows a further peculiarity in that the additional deaths are entirely amongst women, and only amongst women who have attained the age of 45 years and over.

The increased death-rate is difficult to explain. It cannot be ascribed to a better standard of diagnosis as this factor would not discriminate between men and women. Insulin, however, is not a cure for diabetes, but is a form of treatment, and what is to be expected from its use is not a lessened death-rate but a postponement of the age at death. In spite of the increased number of deaths there are actually fewer amongst persons under 45 years, and if the deaths that occurred in the insulin period had been distributed in the same proportion as those in the pre-insulin years the improvement amounts to 40 per cent. at ages under 45.

Relatively few of those who died received insulin from the Public Health Department, but it is not known whether the others received this form of treatment by private arrangement or with the assistance of the Insurance Committee. This aspect of the question will be investigated with the object of reminding doctors of the facilities provided by the Local Authority for the treatment of diabetes. In necessitous cases insulin is supplied free of charge. Syringes are provided and patients are instructed in the methods of hypodermic injection.

Applications for additional diet are now dealt with by the Public Health Department and not by the Public Assistance Committee as formerly. Some enquiries are being made on this subject relative to suitable forms of diet, their cost compared to that of ordinary maintenance diet, and the likelihood of patients adhering to a specified regimen.

It could be assumed that many patients would fail to carry out insulin treatment regularly and continuously, and this is verified by the information in our possession. Almost half of the cases receiving free insulin default in the treatment to the extent of 25 per cent. and upwards.

A fully developed scheme for the treatment of diabetes would require a well-conducted clinic at which cases would be reviewed from time to time and a close follow-up by a nurse with a special knowledge of the disease and especially of the practical dietetics of treatment.

PREVALENCE OF INFECTIOUS DISEASE.

The diseases included under this heading are classified in relation to notification, and are divided into two groups. Group I includes diseases which are compulsorily notifiable (a) under the Notification Act, (b) by adoption under the Notification Act, and (c) by order of the Department of Health for Scotland; and Group II, diseases not compulsorily notifiable. 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 Tuberculosis. |
| Scarlet Fever. | <i>24th October, 1912.</i> | <i>1st July, 1914.</i> |
| Typhus Fever. | Tetanus. | All forms of Tuberculosis. |
| Typhoid Fever. | Anthrax. | <i>1st November, 1918.</i> |
| Puerperal Fever. | Glanders. | Ophthalmia Neonatorum. |
| Erysipelas. | Actinomycosis. | <i>1st August, 1919, and</i> |
| Continued Fever. | | <i>21st November, 1927.</i> |
| Cholera. | | Malaria. |
| Relapsing Fever. | | Dysentery. |
| | | Acute Primary Pneumonia. |
| | | Acute Influenzal- Pneumonia. |
| | | <i>21st December, 1925.</i> |
| | | Infective Jaundice. |
| | | Infantile Paralysis. |
| | | Polio-Encephalitis. |
| | | Encephalitis Lethargica. |
| | | <i>25th March, 1927.</i> |
| | | *Chickenpox. |
| | | <i>1st October, 1929.</i> |
| | | Puerperal Pyrexia. |

GROUP II.

| | | | |
|-----------------|-----------|-----------------|---------|
| Measles. | Ringworm. | German Measles. | Itch. |
| Mumps. | Scabies. | Whooping-Cough. | Eczema. |
| Conjunctivitis. | Impetigo. | | |

* Now made compulsorily notifiable until 31st December, 1932, vide the Public Health (Chickenpox) Amendment Regulations, dated 4th December, 1931.

TABLE E—NUMBER OF CASES OF INFECTIOUS SICKNESS RECOGNISED IN EACH DISTRICT COUNCIL AREA DURING 1931.

| District Council Area, &c. | Smallpox. | Diphtheria. | Erysipelas. | Scarlet Fever. | Typhus Fever. | Typhoid Fever. | Continued Fever. | Puerperal Fever. | Puerperal Pyrexia. | Cerebro-Spinal Fever. | Infantile Paralysis. | Ophthalmia Neonatorum. | Pulmonary Tuberculosis. | Non-Pulmonary Tuberculosis. | Malaria. | Dysentery. | Primary Pneumonia. | Influenza- Pneumonia. | Tetanus. | Encephalitis Lethargica. | Acute Infective Jaundice. | Chickenpox. | Total. | |
|-------------------------------|-----------|-------------|-------------|----------------|---------------|----------------|---------------------|---------------------|-----------------------|--------------------------|-------------------------|---------------------------|----------------------------|--------------------------------|----------|------------|-----------------------|--------------------------|----------|-----------------------------|------------------------------|-------------|--------|-------|
| No. I. | - | 31 | 4 | 25 | - | - | - | 1 | 2 | - | - | 1 | 3 | 2 | - | - | 1 | 1 | 1 | - | - | - | 14 | 85 |
| " II. | - | 18 | 5 | 47 | - | - | - | 2 | 3 | 1 | - | 1 | 12 | 16 | - | - | 36 | 2 | 2 | - | 1 | - | 75 | 219 |
| " III. | - | 106 | 13 | 148 | - | 5 | - | 3 | 9 | - | - | 1 | 26 | 19 | 1 | - | 25 | 4 | 4 | 1 | 2 | - | 158 | 521 |
| " IV. | - | 70 | 33 | 197 | - | 4 | 2 | 7 | 14 | 2 | - | 5 | 53 | 43 | - | - | 88 | 11 | 11 | - | 1 | - | 236 | 766 |
| " V. | - | 78 | 16 | 123 | - | - | - | 3 | 9 | 1 | 1 | 13 | 26 | 24 | - | - | 87 | 7 | 7 | - | - | - | 112 | 500 |
| " VI. | - | 214 | 43 | 357 | - | 9 | 1 | 14 | 17 | 4 | 5 | 11 | 103 | 90 | - | - | 430 | 11 | 11 | - | 2 | - | 450 | 1,761 |
| " VII. | - | 117 | 42 | 150 | - | - | - | 8 | 13 | 2 | - | 30 | 70 | 58 | - | - | 103 | 11 | 11 | - | 2 | - | 331 | 937 |
| " VIII. | - | 105 | 22 | 227 | - | 2 | 1 | 10 | 11 | 1 | - | 11 | 44 | 34 | - | - | 135 | 17 | 17 | - | 2 | - | 248 | 870 |
| " IX. | - | 172 | 44 | 315 | - | 1 | - | 16 | 15 | 10 | - | 14 | 82 | 65 | - | 1 | 183 | 28 | 28 | - | 3 | - | 381 | 1,330 |
| Burgh of Biggar. | - | 5 | - | 11 | - | - | - | - | - | - | - | - | 2 | - | - | - | 1 | - | - | - | - | 1 | 20 | |
| " Lanark. | - | 35 | 3 | 7 | - | - | - | - | - | - | - | 1 | 6 | 9 | - | - | 15 | 1 | 1 | - | - | 16 | 93 | |
| Institutional Cases. | - | - | 2 | - | - | - | - | - | - | - | - | - | 12 | 2 | - | - | 5 | - | - | - | - | - | 6 | 27 |
| Total. | - | 951 | 227 | 1,607 | - | 21 | 4 | *64 | *93 | 21 | 6 | 88 | 439 | 362 | 1 | 1 | 1,109 | 93 | 93 | 1 | 13 | - | 2,028 | 7,129 |

* Includes 3 cases originally notified as Puerperal Pyrexia, and subsequently as Puerperal Fever.

Smallpox, Typhus Fever, Relapsing Fever, Anthrax, Glanders, Actinomycosis, Polio Encephalitis, Cholera, and Acute Infective Jaundice.

No notification was received in respect of any of these diseases.

Diphtheria and Membranous Croup.

Table D1 shows the cases notified and deaths registered during the year, with relative rates.

TABLE D1.

| Year. | Cases | Deaths | Deaths per | Cases per | Deaths per |
|-------|-----------|-------------|------------|-------------------|--------------------|
| | Notified. | Registered. | 100 Cases. | 1,000 Population. | 10,000 Population. |
| 1931 | 951 | 29 | 3.0 | 3.14 | 0.9 |

The number of cases of diphtheria is 82 fewer than were notified in the previous year.

After admission to hospital the diagnosis was revised in 211 cases, as follows:—Positive swab, 55; sore throat, 81; scarlet fever, 31; naso-pharyngitis, 4; measles, 6; tonsillitis, 11; whooping-cough, 3; pneumonia, 4; otitis media, 2; diarrhoea, 1; tonsillar abscess, 4; other complications, 9. In addition, in 83 cases no evidence of diphtheria could be detected; in 6 cases the diphtheria was complicated with scarlet fever; in 1 with whooping-cough; and in 2 with chickenpox.

The cases and deaths during each month and at certain age-periods are shown below:—

| | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|---------|------|------|------|-------|-------|-------|-------|------|-----------|------|------|------|-------|
| Cases, | 95 | 90 | 107 | 78 | 96 | 65 | 71 | 36 | 50 | 85 | 77 | 101 | 951 |
| Deaths, | 3 | 2 | 2 | — | 1 | 2 | 3 | 2 | 1 | 5 | 6 | 2 | 29 |
| Ages, | | -1 | 1-5 | 5-15 | 15-25 | 25-45 | 45-65 | 65+ | All ages. | | | | |
| Cases, | | 13 | 196 | 539 | 114 | 73 | 14 | 2 | 951 | | | | |
| Deaths, | | — | 16 | 13 | — | — | — | — | 29 | | | | |

The number of cases removed to hospital was 866, or 91 per cent. of the total.

Antitoxin was administered by private practitioners to 61 cases prior to their admission to hospital, and to 47 cases which were treated at home. 38 cases which were not removed to hospital received no serum, nor was it given to 805 cases before their admission.

During the year 384,000 units of antitoxin were supplied through police stations to medical practitioners. In addition to this, practitioners were supplied with 504,000 direct from the Public Health Department or through local dispensaries.

Contact Carriers.—Systematic swabbing of household contacts was carried out as in former years, and 132 carriers were discovered. A modified form of isolation was enforced, and carriers were kept under observation until two successive negative results were obtained. In the absence of signs or symptoms of recent sore throat, they were not removed to hospital unless some pathological condition of the throat or nose suggested that they might become chronic carriers, in which event they were admitted to hospital for suitable treatment and operation if necessary. The temporary nature of the carrier state is shown in the following statement, which sets forth the interval in days that elapsed between the first positive swab and the second negative result in 124 cases:—

| 0-7 | 8-14 | 15-21 | 22-28 | 29-35 | 36-42 | 43-49 | Over 49 |
|-----|------|-------|-------|-------|-------|-------|---------|
| 80 | 26 | 12 | 5 | 1 | — | — | — |

In 4 cases a persistently positive swab was tested for virulence and the organism found to be avirulent.

The distribution of cases and deaths throughout the district is shown in Tables E and B respectively.

Scarlet Fever.

Table D2 shows the prevalence of scarlet fever during the year, with relative rates.

TABLE D2.

| Year. | Cases | Deaths | Deaths per 100 | Cases per 1,000 | Deaths per 10,000 |
|-------|-----------|-------------|-------------------|--------------------|----------------------|
| | Notified. | Registered. | Cases. | Population. | Population. |
| 1931 | 1,607 | 9 | 0.56 | 5.31 | 0.29 |

The number of cases notified still shows an increased incidence, but the mortality rate is not exceptionally high. The notifications received each month averaged approximately 134, the actual number being below the average for the first eight months of the year.

The predominating type of disease was mild, and many cases were so mild as to escape recognition at first. No common source of infection was discovered in any particular series of cases, infection being apparently conveyed by personal contact.

The number of cases removed to hospital was 1,473 or 91·6 per cent. of all the cases notified. 2 secondary cases occurred in families where patients were isolated at home, and 52 in families where the first case was removed to hospital.

The age incidence of cases and deaths for the whole County was :—

| | | | | | | | | |
|-----------|----|-----|------|-------|-------|-------|-----|-----------|
| Ages, | -1 | 1-5 | 5-15 | 15-25 | 25-45 | 45-65 | 65+ | All ages. |
| Cases, - | 15 | 516 | 929 | 75 | 65 | 7 | — | 1,607 |
| Deaths, - | — | 5 | 4 | — | — | — | — | 9 |

“ *Return* ” Cases.—68 of the cases discharged from hospital during the year were apparently still capable of carrying infection, and may have given rise to 77 “ *return* ” cases. Of the infecting cases, it was found that in 46 no departure from apparently normal health could be found, 11 had developed a nasal discharge, 3 excoriation of nose, 2 a discharging ear, 2 swollen glands, 2 otorrhœa, 1 rhinitis, and 1 herpes on lip.

The interval which elapsed between the dismissal from hospital of the infecting cases and the onset of illness in the “ *return* ” cases was as follows :—

| | | | |
|---------------|------------|------------|------------|
| Under 1 week. | 1-2 weeks. | 2-3 weeks. | 3-4 weeks. |
| 25 | 30 | 14 | 8 |

Altered Diagnosis.—Of the 1,473 cases admitted to hospital, the diagnosis of scarlet fever was regarded as doubtful in 40 cases, while in 19 no evidence of the presence of scarlet fever could be detected. The diagnosis was revised in 55 other cases, as follows :—Measles, 8; sore throat, 10; erythema, 3; mumps, 1; whooping-cough, 1; puerperal fever, 2; enteritis, 1; pneumonia, 3; nephritis of pregnancy, 11; bronchitis, 3; tonsillitis, 2; impetigo, 1; dermatitis, 1; septic rash, 2; mastitis, 1; otorrhœa, 1; teething, 1; chickenpox, 3; diphtheria, 4; burns, 2; cellulitis, 1; tuberculous meningitis, 1; erysipelas, 1; rheumatism, 1. In 8 cases the scarlet fever was complicated with measles, in 2 with chickenpox, in 2 with whooping-cough, and in 1 with impetigo.

The distribution of cases and deaths is shown in Tables E and B respectively.

Typhoid Fever.

Table D3 shows the prevalence of typhoid fever during the year, with relative rates.

TABLE D3

| Year. | Cases Notified. | Deaths Registered. | Deaths per 100 Cases. | Cases per 1,000 Population. | Deaths per 10,000 Population. |
|-------|--------------------|-----------------------|-----------------------------|-----------------------------------|-------------------------------------|
| 1931 | 21 | 3 | 14.28 | 0.07 | 0.09 |

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

| Month— | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total. |
|-----------|------|------|------|------|------|-------|-------|-------|-----------|------|------|------|--------|
| Cases, - | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 3 | 1 | 1 | — | 3 | 21 |
| Deaths, - | — | — | — | 2 | — | — | — | — | — | — | — | 1 | 3 |
| Ages. | | | | | | | | | | | | | |
| | | | - 1 | 1-5 | 5-15 | 15-25 | 25-45 | 45-65 | All ages. | | | | |
| Cases, | - | — | — | 1 | 4 | 4 | 9 | 3 | 21 | | | | |
| Deaths, | - | — | — | — | — | 1 | 2 | — | 3 | | | | |

20 cases were removed to hospital (including one admitted as pneumonia), and in 5 cases the diagnosis of typhoid fever was found to require revision. The altered diagnoses were as follows:—Positive Widal, 2; influenza, 1; colitis, 1; negative, 1. The distribution of cases and deaths is shown in Tables E and B respectively.

Cerebro-Spinal Meningitis.

21 cases; 10 deaths. 19 cases were treated in hospital, and 2 died at home. One of the latter deaths was transferred out of the County. 12 patients died in hospital, the certified cause in one case being pneumococcal meningitis, in another tuberculous meningitis, and in the third cavernous sinus thrombosis. Of the seven patients who survived the diagnosis was revised in 4 cases, as follows:—Simple meningitis, 1; influenza, 1; encephalitis, 1; intestinal colic, 1.

Puerperal Fever.

The number of cases notified was 64, and the number of deaths 17.

The incidence of this disease is dealt with more fully in the Maternity and Child Welfare Section of the Report.

Puerperal Pyrexia.

The number of cases notified was 93. The disease is dealt with in detail in the Maternity and Child Welfare Section of the Report.

Erysipelas.

227 cases were notified, and 8 deaths registered. 70 cases were removed to hospital.

Ophthalmia Neonatorum.

88 cases were notified. The disease is dealt with in the Maternity and Child Welfare Section of the Report.

Pneumonia.

1,202 cases of pneumonia were brought to the notice of the Department, 1,157 cases being notified, and 45 discovered from the Registrars' returns of deaths.

485 cases were removed to hospital.

Mortality.—The deaths due to pneumonia numbered *232, giving a fatality-rate of 19·3 per cent., and a death-rate of 0·77 per 1,000 of the population.

The distribution of cases and deaths throughout the year is shown below :—

| Month— | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total. |
|-----------|------|------|------|------|-----|------|------|------|-------|------|------|------|--------|
| Cases, - | 152 | 126 | 196 | 131 | 100 | 60 | 47 | 46 | 78 | 80 | 84 | 102 | 1,202 |
| Deaths, - | 26 | 28 | 43 | 25 | 20 | 13 | 6 | 10 | 13 | 14 | 18 | 8 | 232 |

The age-distribution of cases and deaths, together with the fatality-rate in each group, are given in the following table :—

| | | | | | | | | | | 65 and over. | |
|----------------|---------------|-----------|-----|-------|------|-------|-------|-------|------|--------------|------|
| | | All ages. | - 1 | 1-5 | 5-15 | 15-25 | 25-45 | 45-65 | | | |
| Cases | { Primary, | - | - | 1,109 | 144 | 318 | 240 | 122 | 129 | 101 | 55 |
| | { Influenzal, | - | - | 93 | 4 | 7 | 11 | 13 | 23 | 22 | 13 |
| Total, | | - | - | 1,202 | 148 | 325 | 251 | 135 | 152 | 123 | 68 |
| Deaths, | | - | - | 232 | 59 | 45 | 12 | 11 | 25 | 43 | 37 |
| Fatality-rate, | | - | - | 19·3 | 39·8 | 13·8 | 4·7 | 8·1 | 16·4 | 34·9 | 54·4 |

*This figure does not include 38 deaths from Influenzal Pneumonia, such deaths, in accordance with the instructions of the Registrar-General, being included in the Influenza Group.

Of the 232 deaths from pneumonia, 45 had taken place before notification was received, 45 occurred in cases which were not notified at all, 12 were secondary pneumonias, and of the remaining 130 the following tabular statement shows the day of illness on which notification was obtained :—

| Day of Illness, | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Over 12 | Not stated. | Total. |
|--------------------|----|----|----|----|----|---|---|---|---|----|----|----|------------|----------------|--------|
| Fatal Cases | | | | | | | | | | | | | | | |
| Notified, | 13 | 14 | 13 | 16 | 20 | 9 | 6 | 8 | 3 | 2 | 1 | 2 | 13 | 10 | 130 |

Information with reference to the day of illness on which each case was notified was recorded in 1,123 cases, as follows :—

| Day of Illness, | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Over 12 | Died before Notifica- tion. |
|--------------------|----|-----|-----|-----|-----|-----|----|----|----|----|----|----|------------|--------------------------------------|
| Cases | | | | | | | | | | | | | | |
| Notified, | 57 | 106 | 141 | 152 | 144 | 122 | 90 | 68 | 47 | 36 | 23 | 17 | 75 | 45 |

Facilities for the Treatment of Pneumonia, 1931.

Cases treated at home, 679; 139 deaths.

Cases treated in hospital, 523; 93 deaths.

Total cases, 1,202; 232 deaths.

AGE DISTRIBUTION.

| | -1 | 1-5 | 5-15 | 15-25 | 25-45 | 45-65 | over 65 | Total. |
|-------------|----|-----|------|-------|-------|-------|---------|--------|
| Home, | - | 99 | 195 | 151 | 51 | 60 | 69 | 679 |
| Hospital, - | - | 49 | 130 | 100 | 84 | 92 | 54 | 523 |
| TOTAL, - | - | 148 | 325 | 251 | 135 | 152 | 123 | 1,202 |

HOUSING CONDITIONS.

Number of Apartments.

| | 1 | 2 | 3 | 4 | 5 | over 5 | Total. |
|-------------|-------|-----|-----|----|----|--------|--------|
| Home, - | - 128 | 318 | 133 | 43 | 18 | 39 | 679 |
| Hospital, - | - 107 | 266 | 95 | 16 | 5 | 34 | 523 |
| TOTAL, - | - 235 | 584 | 228 | 59 | 23 | 73 | 1,202 |

NURSING ATTENDANT OF CASES TREATED AT HOME.

| | |
|-------------------------|-------|
| Mother, | 433 |
| Other Relatives, | 169 |
| District Nurse, | 49 |
| Private Nurse, | 13 |
| Others, | 15 |
| | <hr/> |
| | 679 |
| | <hr/> |

Continued Fever.

Four cases were notified during the year and in each case patient was removed to hospital. In 3 cases the illness had a fatal termination, the respective causes of death being:—Tuberculous meningitis, 1; pernicious anæmia, 1; and marasmus, 1. The fourth case was found to be suffering from fibroid uterus, and was transferred to the County Maternity Hospital, Bellshill.

Acute Anterior Poliomyelitis.

2 cases were notified; 1 case admitted to hospital as tuberculosis proved to be suffering from acute anterior poliomyelitis; and 3 cases were diagnosed at the Child Welfare Clinics.

Encephalitis Lethargica.

13 new cases were notified during the year. In 4 of these, death had occurred prior to the receipt of the notification. 2 cases were admitted to the County Hospital, Motherwell, and 5 to Omoa House, Cleland. In addition, 5 cases notified prior to 1931 were admitted to Omoa House. 9 deaths were recorded during the year. At the end of the year 64 cases were on record, of which 23 were receiving institutional treatment.

Diarrhœal Diseases.

The number of deaths and the death-rate per 1,000 of the population for the year were:—

| | |
|---------------------------------|-------|
| | 1931. |
| Deaths, - - - - - | 59 |
| Death-rate per 1,000, - - - - - | 0·19 |

All the deaths were of children under 2 years of age, 42 being of infants under 1 year and 17 of children from 1 to 2 years.

Measles.

The deaths from measles numbered 26, and the death-rate, 0·08.

Whooping-cough.

The number of deaths recorded during the year was 87, and the death-rate, 0·28.

47 per cent. of the deaths from measles and whooping-cough were of infants under 1 year of age, and 95 per cent. were of children under 5 years.

Ringworm.

42 cases of ringworm were brought under the notice of the Department, and 2 were treated at the County Hospital, Motherwell.

Scabies.

During the year 217 cases were reported. 35 cases were treated in the County Hospital, Motherwell.

Infectious and Contagious Diseases among School Children.

During the year 2,785 cases of non-notifiable infectious diseases were notified by the Executive School Medical Officer and Headmasters, as follows:—

| | | | | | | | |
|-----------------|---|-----|-----------------|---|---|---|-----|
| Measles, | - | 812 | Mumps, | - | - | - | 500 |
| Whooping Cough, | - | 515 | Ringworm, | - | - | - | 42 |
| Scabies, | - | - | Itch, | - | - | - | 16 |
| Conjunctivitis, | - | - | Impetigo, | - | - | - | 463 |
| Eczema, | - | - | German Measles, | - | - | - | 9 |
| | | 217 | | | | | |
| | | 201 | | | | | |
| | | 10 | | | | | |

In all, 7,997 exclusion notices and clearance certificates were issued by the Department. It was not found necessary to recommend the closure of any school or department on account of infectious disease.

Venereal Diseases.

The following statistical statement shows the numbers of fresh County cases dealt with at the various outdoor clinics. Information with regard to in-patient treatment will be found in the report for the County Hospital, Motherwell :—

| Centre. | Syphilis. | Fresh Cases Gonorrhœa. | Others. | Total Attendances of all cases. |
|-----------------------------------|-----------|---------------------------|---------|------------------------------------|
| County Hospital, Motherwell, - | 34 | 78 | 57 | 2,525 |
| Coathill, - - | 3 | 8 | 3 | 246 |
| Wishaw. - - | 13 | 23 | 26 | 848 |
| Hamilton, - - | 1 | 17 | 12 | 973 |
| Total, - | 51 | 126 | 98 | 4,592 |

Anthrax.

Under the Anthrax Order, 1928, 20 outbreaks of anthrax were reported by the Inspector under the Anthrax Order. The outbreaks were distributed as follows :—No. I District, 1; No. II District, 3; No. IV District, 7; No. V District, 4; No. VI District, 3; No. VII District, 1; No. IX District, 1.

Institutions.

During the year 7,171 County patients and 129 patients from areas outwith the County were admitted to the various institutions, making a total of 7,300 admissions. The reports of the respective institutions are printed separately in another section of this Report.

The following statistical tables, F (a) and (b), give detailed information with regard to the admissions :—

TABLE F.—HOSPITALS AND SANATORIA. (a) PATIENTS ADMITTED FROM COUNTY AREA.
(Admissions as notified.)

| HOSPITALS AND SANATORIA. | Cases in Hospital at the beginning of year. | Admitted during year. | Discharged. | Died. | Cases remaining in Hospital at the close of year. | Diphtheria. | Scarlet Fever. | Typhoid Fever. | Cerebro-Spinal Fever. | Puerperal Fever. | Puerperal Pyrexia. | Erysipelas. | Pneumonia. | Tetanus. | Pulmonary Tuberculosis. | Tuberculosis, All other forms. | Venereal Diseases. | Ophthalmia Neonatorum. | Encephalitis Lethargica. | Measles. | Whooping-cough. | Continued Fever. | Chickenpox. | Other Diseases. | Mothers. | Children. | Total. |
|--------------------------------|---|--------------------------|-------------|-------|---|-------------|----------------|----------------|--------------------------|------------------|--------------------|-------------|------------|----------|----------------------------|-----------------------------------|-----------------------|---------------------------|-----------------------------|----------|-----------------|------------------|-------------|-----------------|----------|-----------|--------|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Motherwell, - | 148 | 2,308 | 2,076 | 167 | 213 | 558 | 818 | 12 | 6 | 51 | 47 | 56 | 347 | 1 | 48 | 34 | 59 | 11 | 2 | 34 | 30 | 4 | 11 | 179 | — | — | 2,308 |
| Lightburn, - | 80 | 704 | 616 | 56 | 112 | 150 | 395 | 2 | 7 | — | — | 10 | 117 | — | 1 | 2 | — | — | — | 4 | 9 | — | — | 7 | — | — | 704 |
| Roadmeetings, - | 76 | 495 | 474 | 25 | 72 | 156 | 257 | 5 | — | — | — | 4 | 16 | — | 35 | 9 | — | — | — | — | 7 | — | 2 | 4 | — | — | 495 |
| Shotts, - | 51 | 116 | 89 | 25 | 53 | — | — | — | — | — | — | — | — | — | 104 | 12 | — | — | — | — | — | — | — | — | — | — | 116 |
| Stonehouse, - | 75 | 100 | 93 | 4 | 78 | — | — | — | — | — | — | — | — | — | — | 86 | — | — | — | — | — | — | — | 14 | — | — | 100 |
| Longriggend, - | 41 | 141 | 114 | 24 | 44 | — | — | — | — | — | — | — | — | — | 105 | 36 | — | — | — | — | — | — | — | — | — | — | 141 |
| Hairmyres, - | 188 | 182 | 190 | 2 | 178 | — | — | — | — | — | — | — | — | — | 114 | 67 | — | — | — | — | — | — | — | 1 | — | — | 182 |
| Dalserf, - | 13 | 19 | 17 | — | 15 | — | — | — | — | — | — | — | — | — | — | 17 | — | — | — | — | — | — | — | 2 | — | — | 19 |
| Bellshill, - | 47 | 2,050 | 1,985 | 50 | 62 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1,306 | 744 | 2,050 |
| Calderbank House, - | 41 | 735 | 712 | 23 | 41 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 318 | 417 | 735 |
| Lanark, - | 11 | 321 | 305 | 1 | 26 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 173 | 148 | 321 |
| TOTALS, - | 771 | 7,171 | 6,671 | 377 | 894 | 864 | 1,470 | 19 | 13 | 51 | 47 | 70 | 480 | 1 | 407 | 263 | 59 | 11 | 2 | 38 | 46 | 4 | 13 | 207 | 1,797 | 1,309 | 7,171 |

TABLE F.—HOSPITALS AND SANATORIA. (b) PATIENTS ADMITTED FROM AREAS OUTWITH THE COUNTY.

| AUTHORITY. | COUNTY HOSPITAL, MOTHERWELL. | | | | | COUNTY SANATORIA. | | | | | | BELLSHILL HOSPITAL. | | CALDERBANK HOUSE. | | LANARK HOSPITAL. | | | |
|----------------------------------|------------------------------|----------------|----------------|------------------------------|------------|--------------------------|-------------------|-------------------|--------|-------------|------------|---------------------|----------|-------------------|-----------|------------------|-----------|----------|-----------|
| | Diphtheria. | Scarlet Fever. | Enteric Fever. | Puerperal Fever and Pyrexia. | Pneumonia. | Tuberculosis. All forms. | Veneral Diseases. | Other Conditions. | Shots. | Stonehouse. | Uppertown. | Hairmyres. | Dalsert. | Mothers. | Children. | Mothers. | Children. | Mothers. | Children. |
| Airdrie, | — | — | — | 3 | — | — | 4 | 1 | — | — | — | — | — | — | — | — | — | — | — |
| Coatbridge, | — | — | — | 13 | — | — | 4 | 1 | — | — | — | — | — | — | — | — | — | — | — |
| Hamilton, | — | — | — | — | 1 | — | 6 | 3 | — | 2 | — | 17 | 1 | — | — | — | — | — | — |
| Motherwell and Wishaw, | — | — | — | — | — | — | 8 | 1 | — | — | — | 1 | — | — | — | — | — | — | — |
| Rutherglen, | — | — | — | — | — | — | — | — | — | — | — | 1 | — | — | — | — | — | — | — |
| Clydebank, | — | — | — | — | — | — | — | — | — | — | — | 2 | — | — | — | — | — | — | — |
| Ayrshire, | — | — | — | — | — | — | — | — | — | — | — | 3 | — | — | — | — | — | — | — |
| Berwick, | — | — | — | — | — | — | — | — | — | — | — | 3 | — | — | — | — | — | — | — |
| Dunbartonshire, | — | — | — | 17 | — | — | 2 | 5 | — | — | — | 1 | — | — | — | — | — | — | — |
| Glasgow, | — | — | — | — | — | — | — | — | — | — | — | 6 | — | 1 | — | — | — | — | — |
| Private, | — | — | 1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Renfrewshire, | — | — | — | — | — | — | — | — | — | — | — | 10 | — | — | — | — | — | — | — |
| Stirlingshire, | — | — | — | — | — | — | — | 1 | — | — | — | 1 | — | — | — | — | — | — | — |
| Military, | — | 3 | — | — | 4 | — | — | 2 | — | — | — | — | — | — | — | — | — | — | — |
| Totals, | — | 3 | 1 | 33 | 5 | — | 24 | 14 | — | 2 | — | 45 | 1 | 1 | — | — | — | — | — |

TUBERCULOSIS.

Deaths.—The deaths from all forms of tuberculosis numbered 237, viz.:—Pulmonary, 152; meningeal, 42; abdominal, 27; and other forms, 16.

The deaths are classified according to District Council Area in Table B, and according to age in Table C.

The following table shows the number of persons who died from tuberculosis, with particulars as to the period elapsing between notification and death, and the number of tuberculous cases who died from other causes than tuberculosis:—

| | Pulmonary. | Non-Pulmonary. |
|--|------------|----------------|
| Not notified or notified only at or after death, - - - - - | 22 | 37 |
| Notified less than 1 month before death, | 13 | 19 |
| „ from 1-3 months „ „ | 31 | 12 |
| „ „ 3-6 „ „ | 13 | 6 |
| „ „ 6-12 „ „ | 16 | 4 |
| „ „ 1-2 years, „ „ | 14 | 2 |
| „ over 2 „ „ | 43 | 5 |
| Number of persons who died from Tuberculosis. | 152 | 85 |
| Number of persons suffering from Tuberculosis, who died from other causes, - | 35 | 18 |
| Total deaths of Tuberculous cases, | 187 | 103 |

Seven pulmonary cases and 4 non-pulmonary cases died within 28 days of discharge from sanatorium, and 36 pulmonary and 5 non-pulmonary cases died more than 28 days after discharge from sanatorium.

New Cases.—The following shows the new cases brought to notice during the year:—

| | Pulmonary. | Non-Pulmonary. |
|-------------------------------|------------|----------------|
| New cases notified, - - - - - | 304 | 273 |
| „ „ not notified, - - - - - | 135 | 89 |
| | 439 | 362 |

The new cases *not notified* were brought to the notice of the Department through the Registrars' Death Returns, Dispensaries, or the Tuberculosis Officers.

The new cases were dealt with as follows:—

| | Pulmonary. | Non-Pulmonary. |
|--|------------|----------------|
| Admitted to Sanatorium, - - - | 232 | 158 |
| Refused to go to Sanatorium, - - | 56 | 41 |
| Died before or soon after notification, - | 60 | 56 |
| Inmates of Asylums, &c., - - - | 11 | 1 |
| Visitors or left district, - - - | 8 | 2 |
| Unsuitable for institutional treatment, - | 10 | 22 |
| Waiting treatment towards end of year, | 23 | 16 |
| Out-patient treatment at dispensaries and other institutions, - - - | 39 | 66 |
| | <hr/> 439 | <hr/> 362 |

Where a patient receives both sanatorium and out-patient treatment during the year, the sanatorium treatment is shown in the foregoing table in preference to the out-patient treatment.

The *distribution* of cases according to District Council Area is given in Table E.

The *age incidence* of new cases was as follows:—

| | | Pulmonary. | | | | | | | | Total. |
|----------------|----------|----------------|------|-------|-------|-------|-------|-------|--------------|--------|
| | | 0-5 | 5-10 | 10-15 | 15-25 | 25-35 | 35-45 | 45-65 | 65 and over. | |
| Non-Pulmonary. | Males, - | 8 | 19 | 19 | 49 | 44 | 36 | 38 | 4 | 217 |
| | Females, | 10 | 33 | 36 | 70 | 38 | 17 | 15 | 3 | 222 |
| | | | | | | | | | | 439 |
| | | Non-Pulmonary. | | | | | | | | Total. |
| | | 0-5 | 5-10 | 10-15 | 15-25 | 25-35 | 35-45 | 45-65 | 65 and over. | |
| Pulmonary. | Males, - | 52 | 40 | 31 | 37 | 14 | 7 | 9 | 3 | 193 |
| | Females, | 46 | 27 | 21 | 39 | 18 | 8 | 9 | 1 | 169 |
| | | | | | | | | | | 362 |

The *types* of the 362 new cases of *non-pulmonary tuberculosis* are classified in the following statement according to the localisation of the principal lesion present at the time of notification:—

| | | | |
|--------------------------|-----|-------------------------|-----------------|
| Cervical glands, - - - | 122 | † Special organs, - - - | 12 |
| Abdomen, - - - | 79 | Skin and sub-cutaneous | |
| *Bones and joints, - - - | 86 | tissue, - - - | 4 |
| Meninges, - - - | 49 | Lupus, - - - | 6 |
| General, - - - | 4 | | |
| | | | <hr/> 362 <hr/> |

* *Bones and Joints*—Detailed.—Spine, 22; Hip Joint, 17; Knee Joint, 18; Ankle Joint, 3; Elbow Joint, 2; Tibia, 6; Dactylitis, 5; Fibula, 1; Metatarsus, 1; Femur, 2. Ilium, 2; Ribs, 2; Tarsus, 1; Sacro-iliac, 2; Shoulder Joint, 2.

† Epididymus, 2; Urinary tract, 8; Ischio-Rectal, 1; Nasal Septum, 1.

The *established diagnosis* of new cases is shown in the following tabular statement:—

| | Pulmonary. | Per Cent. | Non-Pulmonary. | Per Cent. |
|---|-----------------|-----------|-----------------|-----------|
| Diagnosis of Tuberculosis confirmed, - | 267 | 61 | 280 | 77 |
| Diagnosis altered—Tuberculised, but retained on list for further observation, - - - - | 67 | 15 | 14 | 4 |
| Altered Diagnosis, - - - - | 98 | 22 | 66 | 18 |
| Diagnosis not confirmed, - - - - | 7 | 1 | 2 | 0.5 |
| | <hr/> 439 <hr/> | | <hr/> 362 <hr/> | |

Of the 267 pulmonary cases in which diagnosis was confirmed, 16 were under 15 years and 251 were over 15 years.

Of the 280 non-pulmonary cases in which diagnosis was confirmed, 153 were under 15 years and 127 were over 15 years.

The *confirmatory signs* in the 267 cases of verified pulmonary tuberculosis were as follows:—

| | |
|---|-----------------|
| Spit positive, | 154 |
| Spit negative with— | |
| X-ray positive and other confirmatory signs, | 43 |
| Tuberculous pleurisy, | 11 |
| Clinical examination positive, | 14 |
| Death Certificates, | 45 |
| | <hr/> 267 <hr/> |

Sputum examinations were made in 266 cases, or 60 per cent., of the new cases, with positive results in 154 cases and negative results in 112 cases.

No examination of the spit was made in 173 cases, or 40 per cent., of the new cases for the following reasons:—No spit, 110; died before or soon after notification, 41; specimen refused, 3; left the district, 5; other reasons, 14.

The *housing conditions* of confirmed new cases of pulmonary tuberculosis were as follows:—

| | 1 Apt. | 2 Apts. | 3 Apts. | 4 Apts. | Over 4 Apts. |
|--|--------|---------|---------|---------|-----------------|
| Total Cases, - - - - - | 43 | 99 | 58 | 22 | 24 |
| Bed to Self, - - - - - | 8 | 23 | 9 | 1 | 2 |
| Room to Self, - - - - - | 6 | 24 | 25 | 17 | 20 |
| Total number of Contacts, - - - | 156 | 496 | 292 | 46 | 134 |
| Number of Contacts under 5 years of age, - - - - - | 37 | 64 | 26 | 5 | 5 |
| Number who received In-patient treatment, - - - - - | 25 | 66 | 38 | 11 | 7 |
| Number who died, - - - - - | 11 | 36 | 19 | 3 | 7 |

The number of cases confirmed for pulmonary tuberculosis was 267; the above table only shows 246, the remaining cases being 19 institutional and 2 others, the 2 being cases where the family had removed from the area before information could be obtained.

Revision of Tuberculosis Register.

Unless subjected to regular revision the Tuberculosis Register becomes overburdened. It contains the names of persons who have recovered from the disease, especially those who had non-pulmonary lesions, and it contains the names of persons who were notified as suspects for observation and diagnosis. This second category is considerable in those areas that are not provided with dispensaries, and it is particularly important in Lanarkshire where generous institutional provision has been made for the so-called pre-tuberculous child.

There are many disadvantages attendant on an over-burdened register. Hardships to the patients are apparent. If they have recovered from the disease it is unfair to remind them constantly of their disability. They must be relied upon to take an interest in their own health and to consult their doctor should symptoms recur

years after the initial illness was arrested. If a person is not tuberculous he should be told so as soon as a thorough examination has been completed. He should not be retained under indefinite observation merely because he has been notified or because he might contract the disease at some later date. These suspects should not be oppressed by the fear of tuberculosis for any longer than is absolutely necessary, nor should they be permitted to develop a morbid interest in their own ill-health. They should not have their prospects of employment jeopardised, nor should they and their families be exposed to the reproach of being "consumptive."

An overloaded register has serious administrative drawbacks, apart from disadvantages to patients. Nurses visit all cases and give advice for the prevention and treatment of tuberculosis. They will waste valuable time if their lists have not been regularly supervised and kept up to date. Moreover, their visits will not bring credit to the scheme. They will be giving advice to people who do not need it, and nurses and patients will soon suspect this. Because they do not know which are or are not genuine cases, nurses will modify or omit their instructions. Their visits will tend to become perfunctory and their advice half-hearted. At the same time, the patients who did not require the advice will discredit it and those who gave it.

An inaccurate register also leads to overcrowding at the dispensaries. Patients with chronic non-tuberculous ailments present themselves for re-examination and persist in trying to get "nourishment" or institutional treatment. Some of them are so tenacious in their demands that they succeed.

There are several reasons why the lists become overcrowded. Cases are entered in the register on receipt of a notification. Changes in the personnel of the medical staff are fairly common. A new Tuberculosis Officer does not know the doubts that existed in the mind of his predecessor, nor at first has he the confidence to alter the diagnosis of a general medical practitioner. For some time he accepts every case that is notified and reviews old cases with great reservation. If he leaves the staff in a year or so, his list will have grown, and his successor will repeat the process.

Another explanation is that X-ray examination has become a routine procedure only during the last few years. Cases were formerly diagnosed on clinical grounds, and the bias was always in favour of tuberculosis even when physical signs of the disease were absent.

And again, it has become apparent with the passing of time that the doctrine "Once tuberculous always tuberculous" cannot be accepted for administrative purposes. The accumulated notifications of the first few years could be dealt with, but the ever increasing total cannot be handled in any scheme of practical administration.

In spite of routine reviews by the Tuberculosis Officers, it was apparent that the lists were not up to date, and that the only way to make a satisfactory revision of the register was by means of a systematic survey. Every case notified prior to 1927 has been re-examined. Pulmonary cases have been accepted only if they conform to the Trudeau standard of diagnosis. Non-pulmonary cases with no symptoms for three years have been removed from the register. 562 cases have been dealt with, and of these 141 were retained on the register and 421 removed from it. It is proposed to make an annual systematic review of all pulmonary cases of more than five years' duration, and all non-pulmonary of more than three years' standing.

The dispensary lists are also being scrutinised, and an established diagnosis is being called for three months after the first attendance of each case. If the patient is not tuberculous he will cease to come to the dispensary, and will be referred, if necessary, to the family doctor, to the School Medical Service, or to the Child Welfare Centre.

These surveys and critical examinations have emphasised how difficult is the problem of diagnosis amongst children. The lists contained the names of hundreds of children who were labelled pulmonary tuberculosis during a period of diagnostic enthusiasm. Many of them have received long periods of indoor treatment, and they have done just as well and no better than those who did not receive treatment. The original diagnosis was based on general symptoms of debility and on vague clinical minutiae. Some of them did not react to tuberculin, and few of them had radiographic abnormalities of diagnostic significance. It has not yet been decided how to dispose of them, but in the meantime they have been removed from the register, and under the classification "Tuberculised" will be dealt with at a later date.

Since 1928 a more definite standard for the diagnosis of pulmonary tuberculosis has been in use based on clinical, X-ray, and bacteriological evidence. It was also arranged that the diagnosis of every

notified case should be verified. When the present review is brought up to that date the register will be a much more accurate record of tuberculosis as it exists in the County than it has been in the past.

Cases on Record.—There were on record at the beginning of the year 1,340 cases of pulmonary and 1,470 cases of non-pulmonary forms of the disease, and during the year 439 new cases of the former type and 362 new cases of the latter were brought to notice, giving a total of 1,779 and 1,832 cases respectively.

Of the total number of 1,779 pulmonary and 1,832 non-pulmonary cases dealt with throughout the year, the following table shows the changes which took place:—

| | Pulmonary. | Non-Pulmonary. |
|------------------------------------|------------|----------------|
| Cases in District on 1/1/31, - - - | 1,340 | 1,470 |
| New Cases, - - - - - | 439 | 362 |
| Total, - - - - - | 1,779 | 1,832 |
| Cases removed from Register— | | |
| Died. - - - - - | 187 | 103 |
| Disease arrested, - - - | 45 | 109 |
| Diagnosis revised, - - - | 81 | 74 |
| Left District, - - - - - | 58 | 61 |
| | 371 | 347 |
| Cases in District on 31/12/31, - | 1,408 | 1,485 |

The following table shows the pulmonary and non-pulmonary cases remaining on the register at the end of each year, the number of cases notified, and the deaths registered in each year since 1921:—

| Year. | Notified. | | Remaining on Register. | | Deaths. | |
|-------|-----------|-----------|------------------------|-----------|---------|-----------|
| | Pulm. | Non-Pulm. | Pulm. | Non-Pulm. | Pulm. | Non-Pulm. |
| 1921, | 462 | 542 | 1,102 | 1,221 | 172 | 127 |
| 1922, | 462 | 562 | 1,175 | 1,408 | 174 | 138 |
| 1923, | 519 | 546 | 1,276 | 1,513 | 206 | 142 |
| 1924, | 514 | 553 | 1,462 | 1,680 | 167 | 139 |
| 1925, | 466 | 527 | 1,570 | 1,848 | 112 | 122 |
| 1926, | 489 | 538 | 1,693 | 1,988 | 167 | 111 |
| 1927, | 413 | 442 | 1,534 | 1,809 | 157 | 90 |
| 1928, | 415 | 442 | 1,496 | 1,789 | 161 | 95 |
| 1929, | 402 | 365 | 1,326 | 1,487 | 171 | 77 |
| 1930, | 429 | 383 | 1,340 | 1,470 | 172 | 77 |
| 1931, | 439 | 362 | 1,408 | 1,485 | 152 | 85 |

As already explained, a continual revision of the register is constantly taking place, and, while the above table shows the total number of cases on record, the following tabular statement shows the number of cases on the register in which a diagnosis of tuberculosis has been established as at 31st December, 1931. The difference between the two figures is accounted for by a number of children remaining on the register who are classified as "Tuberculised" and cases notified in the later part of the year in which the diagnosis has not yet been confirmed.

| | | NUMBER OF CASES Age Groups | | | | | | | | Total |
|---|----------|-------------------------------|----------|-----------|-----------|-----------|-----------|-----------|----------------|-------|
| | | Under 5 | 5 and 10 | 10 and 15 | 15 and 25 | 25 and 35 | 35 and 45 | 45 and 65 | 65 and upwards | |
| PULMONARY.* | | | | | | | | | | |
| A. Sputum not examined, ... | Males, | — | 6 | 12 | 17 | 5 | 5 | 6 | — | 51 |
| | Females, | — | 6 | 12 | 24 | 11 | 4 | 9 | 1 | 67 |
| B. Sputum examined— | | | | | | | | | | |
| 1. Tubercle Bacilli found, ... | Males, | — | 1 | 2 | 51 | 88 | 62 | 43 | 2 | 249 |
| | Females, | — | 1 | 7 | 66 | 38 | 24 | 19 | 1 | 156 |
| 2. Tubercle Bacilli never found, ... | Males, | — | 5 | 15 | 43 | 36 | 95 | 64 | 4 | 262 |
| | Females, | 1 | 3 | 18 | 36 | 29 | 26 | 14 | 1 | 128 |
| Pulmonary Total, ... | | 1 | 22 | 66 | 237 | 207 | 216 | 155 | 9 | 913 |
| NON-PULMONARY.† | | | | | | | | | | |
| 1. Abdominal, ... | Males, | 12 | 30 | 22 | 21 | 2 | 1 | — | — | 88 |
| | Females, | 6 | 21 | 17 | 20 | 8 | 3 | 1 | — | 76 |
| 2. Spine, ... | Males, | 8 | 13 | 8 | 12 | 5 | 2 | 3 | 1 | 52 |
| | Females, | 2 | 8 | 7 | 6 | 9 | 5 | 3 | 1 | 41 |
| 3. Bones and Joints (exclusive of Spine), ... | Males, | 17 | 32 | 28 | 42 | 18 | 6 | 13 | 1 | 157 |
| | Females, | 10 | 19 | 17 | 26 | 13 | 7 | 6 | 1 | 99 |
| 4. Superficial Glands, ... | Males, | 23 | 85 | 67 | 54 | 16 | 8 | 5 | 1 | 259 |
| | Females, | 25 | 91 | 75 | 80 | 20 | 13 | 9 | — | 314 |
| 5. Lupus, ... | Males, | — | 3 | 4 | 5 | 5 | 3 | — | — | 20 |
| | Females, | — | 1 | 4 | 7 | 6 | 3 | 2 | 1 | 24 |
| 6. Other parts or Organs, ... | Males, | 2 | 9 | 6 | 13 | 2 | 3 | 2 | — | 37 |
| | Females, | 2 | 15 | 8 | 9 | 5 | 5 | 3 | — | 47 |
| Non-pulmonary Total, ... | | 107 | 327 | 263 | 295 | 110 | 59 | 47 | 6 | 1,214 |
| PULMONARY AND NON-PULMONARY TOTAL, ... | | | | | | | | | | |
| | | 108 | 349 | 329 | 532 | 317 | 275 | 202 | 15 | 2,127 |

* Persons suffering from both pulmonary and non-pulmonary tuberculosis included under "Pulmonary" only.

† Persons suffering from multiple lesions classified according to the site of the principal lesion. No case included more than once in the return.

Note.—A patient is retained on the Register in the case of pulmonary tuberculosis for at least five years, and in the case of non-pulmonary for at least three years after complete freedom from symptoms and absence of signs of tuberculosis, except such as are compatible with a healed lesion or lesions.

X-ray Examinations.

This type of examination has become part of the routine investigation of all cases of doubtful tuberculosis, and the extent to which the facilities at the County Hospital, Motherwell, are used by the various dispensaries and by Shotts, Longriggend, and Roadmeetings Sanatoria is shown in the following statement:—

| Year. | Examinations. | Year. | Examinations. |
|-----------|---------------|-----------|---------------|
| 1921, .. | ... 40 | 1927, ... | ... 450 |
| 1922, ... | ... 110 | 1928, ... | ... 537 |
| 1923, ... | ... 147 | 1929, ... | ... 550 |
| 1924, ... | ... 165 | 1930, ... | ... 682 |
| 1925, ... | ... 180 | 1931, ... | ... 861 |
| 1926, ... | ... 256 | | |

Supervision of Contacts.

During the year a list of 100 scholars living in direct contact with cases of pulmonary tuberculosis (sputum positive) were submitted to the School Medical Inspection Department. The list showed the names and addresses, the school attended, and the relationship of the contact to the case in each instance.

Discharged Tuberculous Soldiers.

Among the cases notified for the first time during 1931 were 8 discharged soldiers, 6 pulmonary and 2 non-pulmonary. The relationship of the disease to military service according to the Ministry of Pensions was—accepted, 3; and undecided, 5.

Institutional treatment in sanatorium or farm colony was given to 4 cases; 2 cases refused in-patient treatment, 1 died and 1 left district.

The total number of ex-service men dealt with throughout the year as suffering from tuberculosis was 58. In addition to domiciliary visits made to those cases by the Tuberculosis Officers and attendances made by the men at the dispensaries, 350 home visits were made by Nurses.

Treatment.

Institutional Treatment.—The cases admitted and re-admitted to tuberculosis institutions are shown in the following table. No patient was sent to any institution outwith the County:—

| | | Actual Accommo- dation. | Pulmonary. First Admissions. | Re-admis- sions. | Non-pulmonary. First Admissions. | Re-admis- sions. |
|---|---------------|-------------------------------|------------------------------------|---------------------|--|---------------------|
| Sanatoria, | Shotts, | 54 | 76 | 28 | 9 | 3 |
| | Uppertown, | 55 | 78 | 27 | 28 | 8 |
| Orthopædic, | *Stonehouse, | 82 | — | — | 58 | 28 |
| | Dalserf, | 16 | — | — | 12 | 5 |
| Colony, | Hairmyres, | 250 | 60 | 54 | 44 | 23 |
| (Treatment and training) | | | | | | |
| Hospital, | Motherwell, | 20 | 11 | 41 | 30 | 4 |
| (Operative treatment and Artificial Pneumothorax) | | | | | | |
| — | Lightburn, | — | 3 | — | 2 | — |
| — | Roadmeetings, | 25 | 26 | 6 | 6 | 4 |

* Total admissions 100—14 being Orthopædic cases (non-tuberculous).

The work at the various institutions dealing with cases of tuberculosis is described by the respective Physician-Superintendents in the institutional reports.

Domiciliary Treatment.—Cases suitable for treatment at home, or who could not for some reason receive institutional treatment, were kept under observation by the Tuberculosis Officers and Nurses, the latter of whom paid 17,758 visits during the course of the year.

During the year 131 cases received additional nourishment in the form of milk, eggs, butcher meat, and butter, at a total estimated cost of £726. In addition, supplies of malt and cod-liver oil were provided for these and other cases.

6 patients were supplied with a single bedstead, mattress and cover, pillows, and blankets. These articles are supplied to patients where proper nursing and care can be carried out at home, and where the patients or relatives are unable to afford the necessary articles. All cases are under strict supervision by the Tuberculosis Officers and Nurses, who ensure that patient has "bed to self." At the end of the year 22 cases had bedsteads and bedding in use. Two water beds and 5 air cushions were also supplied.

Out-Patient Clinics.—Table showing the work done at the clinics :—

| | New Cases. | Re-attendances. |
|--|------------|-----------------|
| COUNTY ORTHOPÆDIC HOSPITAL, STONEHOUSE— | | |
| Minor operations, - - - | 207 | 30 |
| X-ray examinations, - - - | 286 | 69 |
| Consultations, - - - | 463 | 266 |
| Artificial sunlight treatment, - | 43 | 4,751 |
| Electric treatment, - - - | 6 | 17 |
| Miscellaneous cases, - - - | 34 | 472 |
| HEALTH INSTITUTE, CAMBUSLANG— | | |
| Artificial sunlight treatment, - | 32 | 1,805 |
| HEALTH INSTITUTE, SHOTTS— | | |
| Dressings, - - - - - | 34 | 310 |
| Artificial sunlight treatment, - | 33 | 1,000 |
| HEALTH INSTITUTE, BLANTYRE— | | |
| Dressings, - - - - - | 74 | 248 |
| Artificial sunlight treatment, - | 58 | 1,413 |

Dispensary Treatment.—Five dispensaries—situated at Bellshill, Blantyre, Cambuslang, Larkhall, and Shotts—were in use, and the following table shows the record of work done :—

| | New Cases. | Minor Operations. | Re-attendances. |
|-------------------|------------|-------------------|-----------------|
| Bellshill, - - - | 307 | — | 3,462 |
| Blantyre, - - - | 103 | 3 | 1,595 |
| Cambuslang, - - - | 165 | 21 | 3,217 |
| Larkhall, - - - | 120 | — | 1,074 |
| Shotts, - - - | 295 | 27 | 2,516 |
| | <u>990</u> | <u>51</u> | <u>11,864</u> |

Many cases not notified as tuberculous were sent to the dispensaries, and the following table shows the source from which they came :—

| By whom Sent | Bellshill | Blantyre | Cambuslang | Larkhall | Shotts | Total | Total |
|--|-----------|----------|------------|----------|--------|-------|-------|
| Sent by Doctors, - - - | 97 | 46 | 47 | 91 | 109 | 390 | 833 |
| Sent by Public Health Staff, | 104 | 9 | 25 | 13 | 62 | 213 | |
| Sent by School Medical Department, - - - | 3 | 12 | 6 | 4 | 11 | 36 | |
| Came of own accord, - - - | 43 | 8 | 55 | — | 88 | 194 | |

Dental Treatment.—Table showing the number of notified cases who were recommended for treatment at Out-patient Clinics:—

| | | | | |
|----------------------------|---|---|---|----|
| Bellshill Dispensary, - | - | - | - | 1 |
| Blantyre Health Institute, | - | - | - | — |
| Cambuslang do. | - | - | - | 11 |
| Larkhall Dispensary, - | - | - | - | 1 |
| Shotts Health Institute, - | - | - | - | 9 |

Ear, Nose, and Throat Clinic.—At the 23 sessions held during the year, the first visits paid numbered 28, and the re-visits, 23. 12 operations were recommended, of which 11 were performed, as follows:—Tonsils and adenoids, 8; adenoids, 2; tonsils, 1; refused operation, 1.

Attendances at the Clinic were recommended from the following sources:—Bellshill Dispensary, 4; Blantyre Dispensary, 6; Cambuslang Dispensary, 1; Larkhall Dispensary, 2; Shotts Dispensary, 4; Shotts Sanatorium, 4; Longriggend Sanatorium, 4; Public Health Staff, 3.

Silicosis and Asbestosis (Medical Arrangements)

Scheme 1931.

A circular, dated 6th July, 1931, was received from the Home Office, stating that they had been directed by the Secretary of State to refer to the arrangements under which the Tuberculosis Officers of the County Council undertook the initial examinations required under the Refractories (Silicosis) Scheme, 1925, or the Sandstone Industries (Silicosis) Scheme, 1929. The Home Office stated that the Secretary of State had now made a General Medical Scheme, which came into force on 1st July, 1931, for the purpose of co-ordinating the medical arrangements under the different workmen's compensation schemes for silicosis and asbestosis. The Secretary of State requested that the County Council should continue the arrangement under which their Tuberculosis Officers make initial examinations of workmen newly engaged at works in the refractories and sandstone industries, and to extend it to any such examinations required in connection with any pottery or asbestosis works within their area. This was agreed to.

Refractories Industries (Silicosis) Scheme.—No examinations were carried out during the year under this scheme.

The Sandstone Industry (Silicosis) Scheme.—Eight initial examinations were carried out at the Auchenlea Sandstone Quarries, Cleland. 7 workmen were found to conform to the physique required. The other case was accordingly reported to the Medical Board for the Northern Area for their consideration.

Four initial examinations were also carried out at the Earnock Quarry, Auchentibber. All workmen were found to conform to the physique required.

MATERNITY AND CHILD WELFARE.

The following scheme dealing with the Maternity and Child Welfare arrangements for the whole of the administrative area of the County of Lanark has received the approval of the Department of Health :—

MATERNITY AND CHILD WELFARE SCHEME.

The Scheme applies to the whole of the administrative area of the County of Lanark, and supersedes the arrangement previously made by the three District Committees and the Town Councils of Lanark and Biggar.

STAFF.

Medical—

Administrative Medical Officer—

County Medical Officer of Health.

Executive Medical Officers—

Chief Assistant Medical Officer of Health (P.H.).

Six Assistant Medical Officers (P.H.).

The Assistant Medical Officers are allocated to certain areas of the County and carry out work in connection with Infectious Diseases, Tuberculosis, and the Maternity and Child Welfare Schemes. They have control of the Health Visitors appointed to these districts and supervise the midwives resident therein.

NURSES.

The Outdoor Nursing Staff employed under the Scheme is as follows :—

One Supervisor of Nurses.

Three nurses—1 fully employed at each of the Health Institutes at Cambuslang, Blantyre, and Shotts.

Eighteen nurses who perform combined duties (Maternity and Child Welfare, Tuberculosis, and Infectious Diseases) in the areas allocated to them.

Six nurses who do Maternity and Child Welfare work alone.

Thirteen District Nursing Associations give part-time assistance.

The principal functions of the Public Health Nurse is the health supervision of mothers and of children under five years of age. The standard number of visits for a normal case has been fixed at four in the first year, two in the second, and one in the third, fourth, and fifth years.

The whole-time nurses attend at Child Welfare Centres, and most of them are so occupied at two sessions per week.

Special enquiries are made in connection with the following:—Maternal deaths, infant deaths, puerperal fever and pyrexia, ophthalmia neonatorum, still-births, adopted babies, emergency cases under the Midwives Acts, albuminuria of pregnancy.

The whole-time nurses also hold the appointment of Assistant Inspectors of Midwives and Infant Protection Visitors under Part I of the Children Act, 1908.

INSTITUTIONS.

County Maternity Hospital, Bellshill—33 beds. For complicated cases of pregnancy or confinement and for women whose home conditions are not suitable for confinement. The accommodation is at present being extended by 26 beds.

Calderbank House, Baillieston—19 beds, 16 cots. For cases of post-natal debility requiring rest in bed or nursing attention; for ante-natal cases requiring rest or general medical treatment; for infants suffering from marasmus; for ear, nose, and throat operations in children under five years; for cases of phimosis requiring operation.

County Convalescent Home, Lanark—16 beds, 20 cots. For cases of post-natal debility who are not confined to bed; for debilitated—but not marasmic infants and children under five years; for the temporary care of healthy children under five, e.g., where a mother has been removed to hospital.

In addition, the County Infectious Diseases Hospitals at Motherwell, Lightburn, and Roadmeetings deal with the following ailments in children under five:—Pneumonia, bronchitis, measles, whooping-cough, and gastro-enteritis.

All cases of *ophthalmia neonatorum* and *discharging eyes* requiring institutional treatment are admitted to the County Hospital, Motherwell.

Children requiring *orthopædic treatment* will be dealt with at the County Hospital, Stonehouse, so far as accommodation permits.

No arrangements have been made for dealing with cases of rheumatism, but it is hoped to make some provision in any scheme of hospital reorganisation which is adopted by the Local Authority.

CENTRES.

There are three fully-equipped Centres situated at Cambuslang, Blantyre, and Shotts, and conducted in premises owned by the Local Authority. In addition, there are two Centres held in premises owned by the Local Authority at Lanark and Chryston; and 16 Centres held in hired premises at the following places:—Airdrie, Baillieston, Bellshill, Bishopbriggs, Cadzow, Carlisle, Chapelhall, Coalburn, Douglas Water, Larkhall, Newarthill, Newmains, New Stevenston, Strathaven, Tannochside, and Uddingston.

The work of the Centres embraces routine baby weighing, demonstrations in cooking, dressmaking, and sick nursing, lectures on maternal and child welfare, medical consultations for sick and healthy babies and their mothers.

Treatment clinics for mothers and children have been established at Cambuslang, Blantyre, and Shotts. Sessions for artificial light treatment are held at these Centres and also at the Lanark Centre and Calderbank House.

SPECIALISTS' SERVICE (PART-TIME).

1 consultant for diseases of the ear, nose, and throat.

2 consultants for the treatment of squint (also available for other diseases of the eye).

6 dentists who carry out the work in their own surgeries.

A clinic for disease of the ear, nose, and throat is held at the County Hospital, Motherwell, twice monthly.

Clinics for the examination of eye cases are held as required at Cambuslang, Blantyre, Shotts, and Bellshill. Glasses are provided free or at a reduced cost in necessitous cases.

Dental treatment is provided for mothers and children, and includes extractions, fillings, scalings, &c., but does not include the supply of dentures.

ANTE-NATAL AND POST-NATAL SUPERVISION.

Special clinics are held at Bellshill Hospital and the Health Institutes at Cambuslang, Blantyre, and Shotts, and are conducted by the Physician-Superintendent of the County Maternity Hospital.

At the remaining 18 Centres general medical supervision is provided, and cases requiring obstetrical examination are sent to the special clinics.

Ante-natal supervision by medical practitioners is not provided by the Local Authority, except in cases of abnormality dealt with under the Midwives Acts, e.g., for illness connected with pregnancy where a midwife is in attendance. This service, however, has been secured for normal cases to some extent by the recent amendment of the Rules of the Central Midwives Board, whereby a midwife must advise her patient to seek medical advice.

Supervision during the pre-natal period is also encouraged by means of grants of additional nourishment to expectant mothers. Assistance is given only if the applicant has engaged a midwife or doctor.

All mothers booking a bed for confinement in the County Maternity Hospital must undergo ante-natal examination.

PROVISION OF CONFINEMENT OUTFITS.

Sterilised outfits for use at confinements are provided at a charge of 4s. 6d. for mothers who are unable to purchase them through the ordinary channels. In cases of special necessity the rate is reduced.

PROVISION OF MEDICAL AND NURSING ASSISTANCE FOR COMPLICATIONS OF PREGNANCY AND CONFINEMENT.

Where a patient is suffering from a complication of pregnancy or confinement and is certified by the medical attendant to be too ill for removal to hospital, the family doctors may call in the Superintendent of the Maternity Hospital in consultation, and, if he desires it, a trained nurse will attend to carry out emergency treatment at home under his direction and supervision.

PROVISION OF A MIDWIFE OR A DOCTOR IN CASES OF NECESSITY.

Any pregnant woman may apply to the Local Authority during the course of her pregnancy for the services of a qualified midwife at her confinement. If the Medical Officer of Health is satisfied that the applicant is in necessitous circumstances and that the case is one which can be safely conducted at home he will authorise a midwife to attend, and the Local Authority will pay the fee of 25s., provided the attendance has been of a satisfactory nature.

In districts where a midwife is not available and the above conditions hold good, the Medical Officer of Health may authorise a medical practitioner to attend, and the Local Authority will pay a fee in accordance with the scale laid down for services rendered under the Midwives Act.

COMPENSATORY FEE OF 10s. PAID TO MIDWIVES FOR LOSS OF A PATIENT.

Where a midwife refers a patient to an ante-natal clinic for advice and the case is sent to hospital for confinement by the Medical Officer of the Clinic, the midwife is entitled to a compensatory fee of 10s. She must have complied with the Rules of the Central Midwives Board in all respects. The midwife is responsible for the supervision of the patient during the period intervening between the visit to the Clinic and the date of admission.

Where a doctor is called in emergency under the Midwives Acts and orders the patient to be removed to hospital, the midwife is entitled to a compensatory fee of 10s. The Local Authority reserve the right to recover the fee from the patient or guardian.

PUERPERAL FEVER AND PUERPERAL PYREXIA.

Institutional treatment is provided at the County Hospital, Motherwell, where there is a consulting obstetrician on the staff.

The Superintendent of the County Hospital, Motherwell, is the consultant appointed under the Puerperal Pyrexia Regulations, and his services are available to general medical practitioners throughout the County.

Home nursing is provided by the District Nursing Associations in cases where the circumstances are approved by the Medical Officer of Health.

Special outfits and facilities are provided for bacteriological examination of doubtful febrile illnesses following confinement.

PROVISION OF FOOD, INCLUDING MILK, IN NECESSITOUS CASES.

A scheme for providing milk and meal is in operation throughout the County. Applicants must satisfy the Medical Officer that they are in necessitous circumstances and in need of assistance on medical grounds.

BOARDING-OUT.

In the temporary absence or incapacity through ill-health of the mother, arrangements may be made by the Local Authority for boarding-out children under five years. Such arrangements will only be for a limited period, and, so far as possible, will be made locally.

HOME HELPS—CRÈCHES, DAY NURSERIES, PLAY CENTRES,

There is no scheme in operation for providing these services in Lanarkshire.

RECORDS.

Adequate records are kept of all work done.

J. HUME PATTERSON,
County Medical Officer.

County Public Health Department,
Beckford Street,
Hamilton, 23rd November, 1931.

Births Registered.—There were registered the births of 6,350 infants—3,173 males and 3,177 females—which is equivalent to a birth-rate of 20·9 per 1,000 of the population. The illegitimate births numbered 374—177 males and 197 females—which is equal to 5·8 per cent. of the total births.

Births Notified.—The number of statutory notifications received was 6,316, and of these 6,089 were notifications of live-born children and 227 were notifications of still-born children. In addition, 158 notifications were received as a result of letters addressed to parents and 114 births were brought to the notice of the Department by the Nurse Health Visitors, giving a gross total of 6,588.

The sources of notifications were as follows:—

| Doctors. | Midwives. | Handy- women. | Parents. | Institutions. | Other Sources. | Health Visitors. | Total. |
|----------|-----------|------------------|----------|---------------|-------------------|---------------------|--------|
| 1,826 | 2,899 | 19 | 389 | 900 | 441 | 114 | 6,588 |

To the number of births notified there falls to be added the births of 23 infants which occurred in County Institutions, but whose parents resided in outside areas.

Table M I shows the births registered, births notified, visits made by the Nurse Health Visitors, the attendant at confinement as ascertained at the first visit, deaths registered, and the infantile death-rate, the information being tabulated according to District Council Areas.

TABLE M I.

BIRTHS REGISTERED AND NOTIFIED.

VISITS MADE BY NURSE HEALTH VISITORS AND INFANTILE MORTALITY RATES FOR 1931.

| DISTRICT COUNCIL AREA. | BIRTHS. | | | NUMBER OF VISITS. | | | | ATTENDANT AT CONFINEMENT. | | | | | | INFANT DEATHS. | | | |
|------------------------|---------------------------------|-----------------------------------|-------------------------------------|-------------------|-------------|----------|----------|---------------------------|--|--------------------------|---------|----------------|--------|-------------------|------------------|-----------------------------|------|
| | Registered. Legiti- mate. | Registered. Illegiti- mate. | Notified. Alive. Still- born. | First. | Subsequent. | | Special. | Total. | Doctor alone or with Handy- woman. | Doctor and Midwife | Midwife | Handy woman | B.B.A. | Insti- tution. | Regis- tered. | Rate per 1000 Births. | |
| | | | | | Infants. | Mothers. | | | | | | | | | | | |
| No. I, | 94 | 8 | 107 | 3 | 86 | 509 | — | — | 595 | 28 | 36 | 8 | 1 | 2 | 11 | 7 | 68·6 |
| No. II, | 273 | 22 | 294 | 12 | 280 | 1,509 | 271 | 256 | 2,316 | 183 | 31 | 34 | 5 | 2 | 25 | 17 | 57·6 |
| No. III, | 381 | 27 | 411 | 9 | 346 | 725 | 110 | 47 | 1,228 | 127 | 166 | 7 | 5 | 4 | 37 | 27 | 66·1 |
| No. IV, | 679 | 39 | 718 | 21 | 739 | 5,441 | 87 | 739 | 7,006 | 124 | 206 | 262 | 10 | 11 | 126 | 66 | 91·9 |
| No. V, | 492 | 27 | 517 | 19 | 515 | 3,600 | 178 | 1,532 | 5,825 | 57 | 148 | 212 | — | 9 | 89 | 47 | 90·5 |
| No. VI, | 1,317 | 100 | 1,405 | 61 | 1,460 | 7,979 | 550 | 1,691 | 11,680 | 71 | 498 | 590 | 20 | 23 | 258 | 110 | 77·6 |
| No. VII, | 833 | 55 | 890 | 25 | 890 | 5,625 | 196 | 809 | 7,520 | 554 | 154 | 82 | 14 | 11 | 75 | 75 | 84·4 |
| No. VIII, | 717 | 25 | 745 | 28 | 639 | 4,115 | 167 | 1,032 | 5,953 | 198 | 52 | 299 | 1 | 6 | 83 | 59 | 79·5 |
| No. IX, | 1,088 | 59 | 1,163 | 47 | 1,135 | 6,946 | 499 | 1,026 | 9,606 | 253 | 316 | 367 | 9 | 19 | 171 | 97 | 84·5 |
| Biggar Burgh, | 12 | 1 | 14 | 2 | 14 | 126 | — | — | 140 | 4 | 10 | — | — | — | — | — | — |
| Lanark Burgh, | 90 | 11 | 97 | — | 72 | 231 | 34 | 31 | 368 | 32 | 11 | 11 | 4 | 2 | 12 | 5 | 49·5 |
| TOTAL, | 5,976 | 374 | 6,361 | 227 | 6,176 | 36,806 | 2,092 | 7,163 | 52,237 | 1,631 | 1,628 | 1,872 | 69 | 89 | 887 | 510 | 80·3 |
| | 6,350 | | 6,588 | | | | | | | | | | | | | | |

Reference to the table shows that 52,237 domiciliary visits were made by the staff during the year. The special visits referred to numbered 7,163 and were made in connection with the following conditions:—Ante-natal cases, 3,741; maternal and infant death enquiries, 196; ophthalmia neonatorum and discharging eyes, 709; squint, 573; puerperal fever and pyrexia, 81; whooping-cough, 13; adopted babies (first and revisits), 450; ear, nose, and throat, 156; enquiries regarding accounts under the Midwives Acts, 494; hospital admissions, 488; and others, 262.

Attendance at Confinement.—Particulars connected with 5,995 live infants have been recorded. Of this number, it has been found that 1,584 (26·4 per cent.) were attended by medical practitioners alone or assisted by neighbours or relatives; 1,554 (25·9 per cent.) by doctors assisted by certified midwives; 1,847 (30·8 per cent.) by certified midwives; 69 (1·1 per cent.) by women not on the Midwives Roll; 824 (13·7 per cent.) occurred in Institutions; and in the case of 77 (1·2 per cent.) the births took place before the arrival of an attendant.

Of the 227 still-births notified, particulars of 221 have been recorded and the attendants at birth in these were as follows:—47 (21·2 per cent.) by doctors alone or assisted by an unqualified person; 74 (33·4 per cent.) by doctors and midwives; 25 (11·3 per cent.) by midwives alone; 63 (28·5 per cent.) in Institutions; and 12 (5·4 per cent.) were born before the arrival of an attendant.

The classification of the attendants at birth is as follows:—

| | | | | |
|-----------------------------|-----|-----|------|-----------|
| Cases attended by Midwives, | ... | ... | 30·3 | per cent. |
| Do. Doctors and Midwives, | ... | ... | 26·3 | „ |
| Do. Doctors, | ... | ... | 26·4 | „ |
| Do. Handywomen, | ... | ... | 1·1 | „ |
| Do. Institutions, | ... | ... | 14·3 | „ |
| B.B.A., | ... | ... | 1·4 | „ |

Infantile Mortality.

The deaths of infants under the age of one year numbered 510, which is equivalent to 80·3 per 1,000 births. The infantile mortality

rate in each of the District Council Areas is set forth in Table M 1.

Table M II shows the deaths arranged according to group causes and age periods :—

TABLE M II.

| CAUSE OF DEATH. | AGE PERIODS. | | | | | | | | | | Rate per 1,000 Births. |
|--|--------------|------|------|------|--------|---------|-------|------|-------|--------|------------------------------|
| | WEEKS. | | | | Total. | MONTHS. | | | | Total. | |
| | - 1 | 1-2 | 2-3 | 3-4 | | - 4 | 1-3 | 3-6 | 6-9 |  |  | 9-12 | - 12 |
| 1. Prematurity, - - | 103 | 11 | 1 | 4 | 119 | 8 | 1 | — | — | 128 | 20·15 |
| Congenital Malfor- mation, - - | 8 | 2 | 1 | — | 11 | 2 | 4 | — | 2 | 19 | 2·99 |
| Congenital Heart, Atelectasis, - - | 6 | 1 | — | — | 7 | 3 | — | — | — | 10 | 1·57 |
| Injury at Birth, - | 6 | — | 1 | — | 7 | — | — | — | — | 7 | 1·10 |
| | 9 | 1 | — | — | 10 | 1 | — | — | — | 11 | 1·73 |
| 2. Atrophy, Debility, and Marasmus, - | 23 | 3 | 4 | 2 | 32 | 5 | 12 | 2 | 3 | 54 | 8·50 |
| 3. Diarrhœa, - - | — | — | 2 | 1 | 3 | 8 | 12 | 10 | 9 | 42 | 6·61 |
| 4. Pneumonia, - - | 1 | — | — | 1 | 2 | 8 | 18 | 14 | 17 | 59 | 9·29 |
| Bronchitis, - - | — | — | 1 | 2 | 3 | 6 | 10 | 3 | 2 | 24 | 3·77 |
| Other Respiratory Diseases, - - | — | — | — | 1 | 1 | 1 | 1 | 1 | 1 | 5 | 0·78 |
| 5. Tuberculosis— Meningeal, - - | — | — | — | — | — | 1 | 3 | 2 | 3 | 9 | 1·41 |
| Abdominal, - | — | — | — | — | — | — | — | 1 | 2 | 3 | 0·47 |
| 6. Convulsions, - - | 6 | — | 1 | 1 | 8 | 5 | 5 | 2 | 1 | 21 | 3·30 |
| Meningitis, - - | — | — | — | — | — | 1 | 4 | 3 | 2 | 10 | 1·57 |
| 7. Measles, - - - | — | — | — | — | — | — | — | 3 | 3 | 6 | 0·94 |
| Whooping-cough, - | — | — | — | 1 | 1 | 4 | 13 | 9 | 20 | 47 | 7·40 |
| Diphtheria, - - | — | — | — | — | — | — | — | — | — | — | — |
| Erysipelas, - - | — | — | — | — | — | 2 | — | — | — | 2 | 0·31 |
| 8. Syphilis, - - - | — | — | 1 | — | 1 | — | — | — | — | 1 | 0·15 |
| 9. All Other Causes, - | 13 | 1 | 4 | 3 | 21 | 7 | 10 | 7 | 7 | 52 | 8·19 |
| | 175 | 19 | 16 | 16 | 226 | 62 | 93 | 57 | 72 | 510 | 80·31 |
| Rate per 1,000 births, | 27·55 | 2·99 | 2·51 | 2·51 | 35·5 | 9·76 | 14·64 | 8·97 | 11·33 | 80·31 | |

Investigation of Maternal Deaths.

Special investigations relating to 52 maternal deaths were made by the medical staff and reports on the prescribed forms sent to the Department of Health.

TABLE M III.—MATERNAL DEATHS ARRANGED ACCORDING TO GROUP CAUSES; NUMBER OF BIRTHS, BIRTH-RATES, AND MATERNAL DEATH-RATES EXPRESSED PER 1,000 BIRTHS.

| Registered Cause. | | | | | |
|---|-----|-----|-----|-----|-------|
| Puerperal Sepsis, | ... | ... | ... | ... | 18† |
| Albuminuria of Pregnancy and Eclampsia, | ... | ... | ... | ... | 7 |
| Hæmorrhage, | ... | ... | ... | ... | 3 |
| Cardiac Failure and Shock, | .. | ... | ... | ... | 6 |
| Toxæmia of Pregnancy, | ... | ... | ... | ... | 4 |
| Other Diseases and Accidents of Pregnancy, | ... | ... | ... | ... | 3* |
| | | | | | — |
| | | | | | 41 |
| | | | | | == |
| Registered Births, | ... | ... | ... | .. | 6,350 |
| Birth-rate, | ... | ... | ... | ... | 20·9 |
| Death rate per 1,000 births (Puerperal Sepsis), | ... | ... | ... | ... | 2·83 |
| Death-rate per 1,000 births (excluding Puerperal Sepsis), | ... | ... | ... | ... | 3·62 |
| Death-rate per 1,000 births, | ... | ... | ... | ... | 6·45 |

†(1) Post Abortal Septicæmia.

*(2) Rupture of Ectopic Pregnancy, 1; Pulmonary Embolism, 1; Acute myocarditis 6 hrs. Acute Gastritis due to pregnant condition, 1:

Hospital Treatment and Maternal Mortality.

Table M IV gives the total number of births notified, the number of institutional births and maternal deaths, and the institutional confinements and maternal mortality rates per 1,000 births:—

TABLE M IV.

| Total Births Notified. | Institution Births. | Maternal Deaths. | Institution Confinements per 1,000 Births. | Maternal Mortality per 1,000 Births. |
|---------------------------|------------------------|---------------------|--|--|
| 6,588 | 900 | 41 | 136·61 | 6·22 |

Puerperal Fever and Puerperal Pyrexia.

Puerperal Fever.—The number of notifications of puerperal fever was 64. The exact incidence of the disease may be obtained by adding to this figure 41 cases of puerperal pyrexia finally diagnosed as

puerperal fever. The total number, 105, represents a rate of 16·5 per 1,000 births. The deaths numbered 17, giving a fatality-rate of 16·1 and a death-rate of 2·5 per 1,000 births.

The following table shows the incidence and death-rates according to the attendance at confinement:—

| Attendant at Birth. | Births Notified. | Total Cases of Puerperal Fever. | Rate per 1,000 Births. | No. of Deaths. | Fatality Rate. | Death- Rate per 1,000 Births. |
|---------------------|---------------------|--|---------------------------------|-------------------|-------------------|---|
| Doctor, - - - | 2,053 | 24 | 11·6 | 4 | 16·6 | 1·9 |
| Doctor and Midwife, | 1,349 | 34 | 25·2 | 7 | 20·5 | 5·1 |
| Midwife, - - - | 2,066 | 20 | 9·6 | 3 | 15·0 | 1·4 |
| Institution, - - - | 994 | 17 | 17·1 | 1 | 5·8 | 1·0 |
| Handywoman, - - - | 55 | 5 | 90·9 | 1 | 20·0 | 18·1 |
| B.B.A., - - - | 71 | 5 | 70·4 | 1 | 20·0 | 14·0 |
| Totals, - - - | 6,588 | 105 | 15·9 | 17 | 16·1 | 2·5 |

AGE DISTRIBUTION.

| | -20 | 20-25 | 25-30 | 30-35 | 35-40 | 40-45 | Over 45 | Total. |
|-----------|-----|-------|-------|-------|-------|-------|------------|--------|
| Cases, - | 9 | 24 | 29 | 22 | 17 | 4 | — | 105 |
| Deaths, - | 1 | 3 | 4 | 4 | 3 | 2 | — | 17 |

NUMBER OF PREGNANCY.

| | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | 10th | 11th | 12th | Over 12 | Not Stated. | Total. |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------------|----------------|--------|
| Cases, - | 44 | 18 | 9 | 6 | 2 | 5 | 6 | 8 | 3 | 2 | 1 | — | 1 | — | 105 |
| Deaths, - | 7 | 2 | 2 | — | 1 | — | 2 | 1 | 1 | — | — | — | 1 | — | 17 |

DURATION OF PREGNANCY.

| | Full Term. | Premature. | Miscarriage. | Abortion. | Not Stated. | Total. |
|-----------|------------|------------|--------------|-----------|----------------|--------|
| Cases, - | 92 | 6 | 3 | 4 | — | 105 |
| Deaths, - | 15 | 1 | 1 | — | — | 17 |

Hospital Treatment.—95 or 90·4 per cent. of all cases received hospital treatment. All were admitted to the County Fever Hospital, Motherwell, with the exception of one case which was treated in the City of Glasgow.

Puerperal Pyrexia.—The number of cases notified was 91. Of this number, 60 notifications were received from medical practitioners; 26 from the County Maternity Hospital, Bellshill; and 5 from other Institutions. 41 cases were subsequently diagnosed as puerperal fever and are included in the previous section of the report.

Requests for Medical Consultation.—In 8 instances medical practitioners utilised the services of the Consultant appointed by the Local Authority under the Regulations. 6 of the patients were admitted to the County Hospital, Motherwell, for further observation and treatment. The diagnosis in each case was puerperal fever—1 patient died.

Skilled Nursing at Home.—A case of puerperal pyrexia was nursed at home by the Nurse of the Dalserf District Nursing Association, and in all 56 visits were made. The maximum fee of £3 3s. was paid for the services rendered.

Throat Swabs from Midwives.—Arrangements were made to examine swabs from the throats of midwives who had cases of puerperal fever or puerperal pyrexia in their practices. 44 midwives were thus examined, and in 6 instances (14 per cent.) hæmolytic streptococci were found. 5 of the patients proved to have puerperal fever. In only 1 case were streptococci recovered from the blood or cervix of the patient and from the throat of the midwife. The organisms were not examined for serological identity. In 1 case the midwife's throat was positive for streptococci, but the patient did not have puerperal fever. She had been notified as suffering from puerperal pyrexia and proved to have chronic pulmonary tuberculosis. Such a result was not unexpected, as positive throats—2 per cent. to 15 per cent.—may be obtained in a random sample of the population. In addition to the usual precautions of disinfection of person, clothing, and appliances, midwives with positive swabs were required to wear masks at all their cases. No secondary cases of puerperal fever or puerperal pyrexia were recorded. The carrier state of these 6 midwives was evidently of short duration, as negative results were obtained from all within a week. Nothing conclusive was expected from this investigation, but it has impressed midwives with the danger of spray infection and with the need for a high standard of aseptic technique.

Still-births.

The total number of notifications of still-births received was 227, and the Nurse Health Visitors enquired into 221 of these. The attendant at confinement was as follows:—Doctor alone, or with an unqualified woman, 47; doctor and midwife, 74; midwife, 25; B.B.A., 12; and Institution cases, 63.

The confinement was ascertained to have been normal in 149 cases and abnormal in 72, instrumental delivery taking place in 57 of the latter.

In 144 instances the probable causes of still-birth are given below, but in the remaining 77 cases no definite reasons were ascertained:—Prematurity, 10; injury at birth, 2; abnormalities of the cord, 5; mal-development of foetus, 9; large child, 7; contracted pelvis, 2; difficult labour, 28; abnormal presentation, 14; albuminuria and eclampsia, 15; hydramnios, 9; accident during pregnancy, 7; ante-partum hæmorrhage, 13; placenta prævia, 2; disease of uterus, 1; shock, 3; ill-health of mother, 17.

Ophthalmia Neonatorum and Discharging Eyes.

Notified Cases of Ophthalmia Neonatorum.—Cases, 88; rate per 1,000 births, 13·8; admissions to hospital, 11.

Of the total cases reported, 47 (53 per cent.) were notified by doctors; 18 (20 per cent.) by certified midwives; 9 (10 per cent.) by both doctors and midwives; 3 were notified from the County Maternity Hospital, Bellshill; 3 by the Medical Officer of Health, Glasgow; 1 by the Medical Officer of Health, Airdrie; and 1 from the Baird Street Dispensary, Glasgow; 6 cases were not notified.

In 34 instances the doctor alone or with the assistance of a neighbour was in attendance at the confinement, i.e., the disease developed in connection with 2·0 per cent. of the total number of confinements conducted by doctors. Doctors and midwives were present at the birth in 11 cases, representing 0·6 per cent. of the total cases attended by doctors and midwives. A certified midwife alone was present at the birth in 28 cases, which is 1·4 per cent. of the total midwives' cases. 9 cases occurred in Institutions; in 4, the confinements took place before the arrival of an attendant; and in 2, where the confinements occurred outside the area, no information is available as to the attendant.

In the following table the 88 cases are classified according to the severity of the disease and to the bacteriological findings:—

| | Slight. | Moderate. | Severe. | Total. |
|----------------------------|---------|-----------|---------|--------|
| Gonococcal, - - - - | 2 | 3 | — | 5 |
| Other organisms, - - - | 9 | 2 | — | 11 |
| Pus, but no organisms, - - | 20 | 9 | — | 29 |
| No pus, no bacteria, - - | 13 | 1 | — | 14 |
| No swab, - - - - | 29 | — | — | 29 |
| | 73 | 15 | — | 88 |

Discharging Eyes.—The number of cases of discharging eyes discovered was 84. 6 cases were admitted to the County Hospital, Motherwell. The attendant at birth was as follows:—Doctor alone or with the assistance of a neighbour, 14; doctor and midwife, 14; midwife alone, 39; and born before the arrival of an attendant, 2. In 15 cases the births occurred in Institutions.

The severity of the condition and the bacteriological findings are shown below:—

| | Slight. | Moderate. | Severe. | Total. |
|---------------------------|---------|-----------|---------|--------|
| Gonococcal, - - - - | 1 | — | — | 1 |
| Other organisms, - - - | 34 | — | — | 34 |
| Pus but no organisms, - - | 34 | — | — | 34 |
| No pus no bacteria, - - | 14 | — | — | 14 |
| No swab, - - - - | 1 | — | — | 1 |
| | 84 | — | — | 84 |

The following table shows the total number of cases of ophthalmia neonatorum and discharging eyes according to districts:—

| *District Council Area. | Ophth. Neon. | Disc. Eyes. |
|-------------------------|--------------|-------------|
| No. I, - - - | 1 | — |
| No. II, - - - | 1 | 2 |
| No. III, - - - | 1 | 2 |
| No. IV, - - - | 5 | 14 |
| No. V, - - - | 13 | 28 |
| No. VI, - - - | 11 | 14 |
| No. VII, - - - | 30 | 8 |
| No. VIII, - - - | 11 | 7 |
| No. IX, - - - | 14 | 9 |
| Biggar Burgh, - - | — | — |
| Lanark Burgh, - - | 1 | — |
| | 88 | 84 |

* See Appendix.

Ante-Natal Supervision.

The Nurse Health Visitors made 3,741 domiciliary visits to expectant mothers during the year. At the Child Welfare Centres, 1,073 patients attended for the first time, and the total visits numbered 2,114.

Special ante-natal clinics were conducted by the Physician-Superintendent of the County Maternity Hospital at the undernoted Institutions, and the following table indicates the attendances and the conditions dealt with:—

| | | New Cases. | Re-attendances. | TOTAL. |
|------------------------------|--------|------------|-----------------|--------|
| Bellshill Hospital— | | | | |
| Ante-natal, | ... .. | 650 | 1,115 | 1,765 |
| Post-natal, | ... .. | 3 | 10 | 13 |
| Gynæcological, | ... .. | 166 | 402 | 568 |
| | | 819 | 1,527 | 2,346 |
| Blantyre Health Institute— | | | | |
| Ante-natal, | ... .. | 148 | 212 | 360 |
| Post-natal, | ... .. | 11 | 8 | 19 |
| Gynæcological, | ... .. | 24 | 28 | 52 |
| | | 183 | 248 | 431 |
| Cambuslang Health Institute— | | | | |
| Ante-natal, | ... .. | 158 | 402 | 560 |
| Post-natal, | ... .. | 9 | 4 | 13 |
| Gynæcological, | ... .. | 21 | 27 | 48 |
| | | 188 | 433 | 621 |
| Shotis Health Institute— | | | | |
| Ante-natal, | ... .. | 113 | 211 | 324 |
| Post-natal, | ... .. | 9 | 2 | 11 |
| Gynæcological, | .. .. | 24 | 49 | 73 |
| | | 146 | 262 | 408 |

Ante-natal cases were admitted to the various Institutions as follows:—County Hospital, Bellshill, 298; Calderbank Convalescent Home, 92; and Lanark Hospital, 7.

Ante-Natal Albuminuria.

An average of 7 women die each year in the County from conditions which are likely to be recognised at an early stage by the presence of albumen in the urine. The steps to be taken to prevent these deaths illustrate very well that there is no short cut in the way that leads to a reduced maternal mortality rate. Over 3,000 specimens of urine were examined at the Child Welfare Centres and Ante-Natal Clinics, and 241 women were kept under special supervision because they suffered from albuminuria.

There are two aspects to the work of the Public Health Department in this connection. The more important one is to regard the effort principally as an educational one. Hundreds of mothers—many of them having their first baby—now look on urinary examination as something which will be carried out by every competent doctor and midwife. There has been no great difficulty in “educating mothers up” to this view, and they in turn will play their part in educating those who attend them in the future.

In addition to being told that women would not bring specimens, it was said the effort would fail because only a small proportion came under supervision before confinement. The fact is that 85 per cent. of pregnant mothers receive attention during pregnancy.

The aim of the Public Health Department is to get the work established. It cannot hope to perform for every expectant mother a service which rightly falls to the doctor or midwife. The final object rather is to direct this routine work to the patients' usual attendant and hope it will be the beginning of a more elaborate ante-natal examination.

The other aspect of the work is that it has to be done on behalf of 58 per cent. of all the midwives in the area. That is the proportion of untrained women and they are not capable of doing the examination themselves.

Of the 241 cases of albuminuria that were recognised and kept under supervision 87 were confined in hospital. This proportion may be regarded as an indication of how difficult it is to deal with such cases at home. It does not exaggerate the need for institutional treatment. In many instances home treatment is quite impossible.

It is doubtful, however, if treatment at a Clinic is any better. These patients should have someone engaged who can be called upon at any time of the day or night. They should not have to wait until the next Clinic day comes round if any untoward symptoms appear, and that is what they will do if they have received medicine and a false sense of security at the Clinic. By all means let them have out-patient treatment, provided they have a doctor or midwife engaged to whom they can apply immediately in emergency. They should receive treatment at a Clinic only with the knowledge of their own attendant.

The Ante-Natal Clinics should be used chiefly as consultative centres once a diagnosis of albuminuria has been made. They can be of assistance to doctors by assessing the significance of albumen in the urine and by making regular observations on the blood pressure. They are in close touch with the Maternity Hospital and can readily arrange institutional treatment.

Of the 241 women known to be suffering from albuminuria only one developed eclampsia. She came under supervision in the 7th month of pregnancy and was kept under observation at the Centre and in her home. A midwife was also in attendance and in the later months a doctor was called. She was confined without incident, but three days later took eclamptic seizures and was removed to hospital. She made a good recovery, but albuminuria persisted.

The still-birth rate was high amongst these cases—54 per 1,000 births: the deaths of infants under 10 days was not excessive.

An attempt was made to determine whether these patients ultimately suffer from chronic disease of the kidneys, but it is not easy to get specimens from them months after the confinement is over, especially if they have no symptoms. Seven women are known to have chronic albuminuria and this is certainly an under-estimate.

Confinement Outfits.—325 special outfits prepared at the County Maternity Hospital, Bellshill, were supplied through the various Child Welfare Centres to mothers in necessitous circumstances. The cost of these outfits is 4s. 6d. each, but this charge may be modified in very exceptional circumstances.

Hospital Treatment.

Patients are admitted to the County Maternity Hospital, Bellshill, either on account of unsuitable home conditions or because of any abnormality of pregnancy or labour. An analysis of 876 admissions shows that 401 (45·8 per cent.) were dealt with on account of housing conditions; 230 (26·3 per cent.) were primiparæ; and 245 (27·9 per cent.) had some abnormality of the present or previous pregnancy.

Child Welfare Centres.

Table M V shows the attendances of mothers, infants, and children at the Child Welfare Centres during 1931.

TABLE M V.

TOTAL ATTENDANCES OF MOTHERS, INFANTS, AND CHILDREN AT THE
CHILD WELFARE CENTRES FOR 1931.

| Centres. | No. of Sessions. | Mothers. | Total Attendances. | |
|-----------------------|---------------------|----------|----------------------------|-------------|
| | | | Children. Under 1 year. | Over 1 year |
| Airdrie, - - - | 23 | 573 | 268 | 95 |
| Baillieston, - - - | 46 | 2,717 | 1,372 | 1,379 |
| Bellshill, - - - | 49 | 4,066 | 2,576 | 1,273 |
| Bishopbriggs, - - - | 49 | 1,470 | 622 | 649 |
| Blantyre, - - - | 46 | 2,924 | 2,087 | 1,635 |
| Cadzow, - - - | 16 | 205 | 189 | 109 |
| Cambuslang, - - - | 49 | 2,512 | 1,292 | 1,248 |
| Carluke, - - - | 24 | 1,072 | 828 | 289 |
| Chapelhall, - - - | 24 | 938 | 539 | 301 |
| Chryston, - - - | 46 | 1,779 | 746 | 813 |
| Coalburn, - - - | 12 | 408 | 307 | 116 |
| Douglas Water, - - - | 12 | 148 | 136 | 59 |
| Lanark, - - - | 23 | 751 | 577 | 211 |
| Larkhall, - - - | 46 | 2,714 | 1,355 | 1,311 |
| Newarthill, - - - | 49 | 2,253 | 1,747 | 1,333 |
| Newmains, - - - | 49 | 2,882 | 1,563 | 1,386 |
| New Stevenston, - - - | 49 | 2,380 | 1,111 | 1,297 |
| Shotts, - - - | 48 | 2,424 | 1,191 | 1,271 |
| Strathaven, - - - | 17 | 158 | 164 | 125 |
| Tannochside, - - - | 46 | 2,281 | 1,733 | 1,341 |
| Uddingston, - - - | 49 | 2,346 | 1,194 | 1,226 |
| | | 37,001 | 21,597 | 17,467 |

Medical Consultations.

Table M VI shows the number of sessions held, and the number of first visits and re-visits made by mothers, infants, and children.

TABLE M VI.

| Centre. | MOTHERS. | | | | CHILDREN. | | | | |
|-------------------|------------------|-------------|--------|------------------------|-----------|---------------|--------|--------------|--------|
| | No. of Sessions. | Ante-natal. | | Post-natal and others. | | Under 1 year. | | Over 1 year. | |
| | | 1st Visit. | Total. | 1st Visit. | Total. | 1st Visit. | Total. | 1st Visit. | Total. |
| Airdrie, - | 23 | 17 | 23 | 18 | 26 | 30 | 44 | 14 | 22 |
| Baillieston, - | 46 | 47 | 87 | 75 | 122 | 140 | 380 | 78 | 168 |
| Bellshill, - | 48 | 188 | 353 | 179 | 340 | 180 | 470 | 219 | 416 |
| Bishopbriggs, - | 49 | 21 | 41 | 27 | 71 | 59 | 152 | 46 | 84 |
| Blantyre, - | 46 | 142 | 204 | 174 | 334 | 186 | 461 | 229 | 397 |
| Cadzow, - | 16 | 14 | 25 | 23 | 48 | 47 | 123 | 37 | 64 |
| Cambuslang, - | 49 | 67 | 97 | 280 | 418 | 284 | 459 | 282 | 403 |
| Carluke, - | 24 | 15 | 28 | 29 | 75 | 65 | 120 | 54 | 112 |
| Chapelhall, - | 24 | 28 | 44 | 59 | 78 | 51 | 103 | 46 | 92 |
| Chryston, - | 48 | 12 | 20 | 15 | 32 | 42 | 77 | 26 | 51 |
| Coalburn, - | 12 | 14 | 24 | 16 | 27 | 13 | 29 | 19 | 30 |
| Douglas Water, - | 12 | — | — | 1 | 2 | 11 | 26 | 4 | 8 |
| Lanark, - | 23 | 21 | 37 | 21 | 45 | 34 | 69 | 41 | 100 |
| Larkhall, - | 46 | 99 | 215 | 137 | 323 | 211 | 665 | 165 | 363 |
| Newarthill, - | 48 | 56 | 92 | 70 | 120 | 90 | 229 | 91 | 190 |
| Newmains, - | 49 | 72 | 146 | 136 | 235 | 122 | 295 | 142 | 256 |
| New Stevenston, - | 49 | 61 | 183 | 75 | 182 | 117 | 395 | 95 | 265 |
| Shotts, - | 48 | 68 | 97 | 176 | 207 | 157 | 337 | 180 | 349 |
| Strathaven, - | 17 | 4 | 9 | 3 | 5 | 36 | 125 | 26 | 62 |
| Tannochside, - | 45 | 52 | 144 | 73 | 225 | 79 | 320 | 68 | 153 |
| Uddingston, - | 48 | 75 | 245 | 83 | 224 | 133 | 405 | 108 | 282 |
| | | 1,073 | 2,114 | 1,670 | 3,139 | 2,087 | 5,284 | 1,970 | 3,867 |

Infants and Children.—Table M VII shows the illnesses recorded among infants and children, and it should be noted that the figures refer to the number of cases of each disease for which the patient thought it necessary to consult the doctor. These figures do not correspond with the total attendances, since repeated consultations for the same disease represent only one illness, nor, on the other hand, do they correspond with the first attendances, as a child may have had a revisit for a new ailment, in which event both illnesses were recorded.

TABLE M VII.
ILLNESSES OF INFANTS AND CHILDREN ATTENDING CENTRES.

| Centre. | Gastro- Intestinal. | Intestinal Worms. | Respiratory. | Tuberculosis. | Skin. | Ear, Nose, and Throat. | Eyes. | Teeth. | Rickets. | Hernia. | Phthisis. | Anal. Protruse. | Club-foot. | Infantile Paresis. | Injury to Limb. | Cleft Palate. | Others. | Total. |
|-------------------|------------------------|----------------------|--------------|---------------|-------|---------------------------|-------|--------|----------|---------|-----------|-----------------|------------|-----------------------|-----------------|---------------|---------|--------|
| Airdrie, . | 18 | — | 7 | — | 3 | 1 | 1 | 2 | 3 | 1 | 2 | — | — | — | — | — | 7 | 45 |
| Baillieston, . | 97 | 1 | 55 | 2 | 55 | 13 | 18 | — | 6 | 5 | 14 | — | — | — | 3 | — | 12 | 281 |
| Bellshill, . | 99 | 4 | 93 | — | 71 | 45 | 30 | 9 | 32 | 16 | 15 | — | — | 3 | 4 | 1 | 60 | 482 |
| Bishopbriggs, . | 36 | — | 22 | — | 20 | 6 | 6 | — | 4 | 2 | 10 | — | — | 1 | 2 | — | 11 | 120 |
| Blantyre, . | 138 | 21 | 62 | 4 | 40 | 28 | 23 | 21 | 41 | 17 | 7 | — | — | — | 1 | — | 69 | 472 |
| Cadzow, . | 40 | 1 | 9 | — | 3 | 7 | 6 | — | 9 | 1 | 1 | — | — | — | — | — | 15 | 92 |
| Cambuslang, . | 113 | 8 | 114 | 2 | 105 | 54 | 50 | 27 | 39 | 22 | 17 | — | 2 | 2 | 1 | 1 | 78 | 635 |
| Carlisle, . | 51 | 3 | 19 | 7 | 16 | 9 | 5 | — | 7 | 3 | 4 | — | — | 2 | 1 | 1 | 9 | 137 |
| Chapelhall, . | 34 | — | 20 | — | 18 | 5 | 4 | 2 | 1 | 1 | 2 | — | — | 2 | — | 1 | 15 | 105 |
| Chryston, . | 39 | — | 9 | 1 | 12 | 3 | 1 | 3 | — | 1 | 3 | — | — | — | — | 1 | 9 | 82 |
| Coalburn, . | 11 | — | 11 | 2 | 1 | 2 | — | — | 2 | 6 | — | — | — | — | — | — | 1 | 36 |
| Douglas Water, . | 8 | — | 2 | — | 1 | — | — | — | 1 | 2 | — | — | — | 1 | — | — | — | 15 |
| Lanark, . | 5 | — | 14 | 3 | 9 | 9 | 5 | 2 | 7 | 3 | 1 | — | 1 | — | — | — | 10 | 69 |
| Larkhall, . | 180 | 14 | 41 | 5 | 37 | 23 | 30 | 5 | 22 | 16 | 15 | — | — | — | 4 | 1 | 58 | 451 |
| Newarthill, . | 81 | 2 | 34 | 2 | 13 | 7 | 7 | 3 | 6 | 1 | 6 | — | 1 | — | — | — | 19 | 182 |
| Newmains, . | 131 | 5 | 20 | 2 | 17 | 28 | 7 | 14 | 15 | 3 | 1 | — | 1 | 1 | 2 | — | 23 | 270 |
| New Stevenston, . | 70 | 7 | 79 | — | 36 | 42 | 24 | 6 | 9 | 5 | 8 | — | — | 2 | 1 | — | 15 | 304 |
| Shotts, . | 131 | 6 | 18 | 1 | 40 | 44 | 12 | 13 | 27 | 9 | 5 | — | 5 | — | 4 | 1 | 37 | 353 |
| Strathaven, . | 30 | 1 | 12 | 2 | 11 | 5 | 6 | 1 | 8 | — | 1 | — | — | — | — | — | 18 | 95 |
| Tannochside, . | 62 | 1 | 52 | — | 41 | 12 | 13 | 7 | 10 | 2 | 4 | — | — | 2 | — | — | 16 | 222 |
| Uddingston, . | 86 | 1 | 73 | 1 | 40 | 40 | 21 | 3 | 16 | 13 | 13 | — | — | 3 | 1 | — | 36 | 347 |
| | 1,460 | 75 | 766 | 34 | 589 | 383 | 269 | 118 | 265 | 129 | 129 | — | 10 | 19 | 24 | 7 | 518 | 4,795 |

Ante-natal Cases.—During the year 1,073 ante-natal cases (representing 1,364 conditions) were seen at the Child Welfare Centres. These are shown in the following table according to Centres and the conditions found.

Of the above cases, 421 were referred for treatment to the ante-natal wards, 149 were referred to the family doctors, and the remaining 503 received treatment at the Clinics.

TABLE M VIII.
ANTE-NATAL CASES.

| Centre. | Normal. | Contracted Pelvis. | Albuminuria. | Hyperemesis. | Hæmorrhage and Threatened Abortion. | Hydræmia. | Leucorrhæa. | Varicose Veins and Hemorrhoids. | Respiratory. | Cardiac. | Gastro-Intestinal. | Dental Caries. | Abdominal Pain. | Previous Abnormality. | Debility. | Others. | Abnormal Presentation. | Total. |
|---------------------------|---------|--------------------|--------------|--------------|-------------------------------------|-----------|-------------|---------------------------------|--------------|----------|--------------------|----------------|-----------------|-----------------------|-----------|---------|------------------------|--------|
| Airdrie, | 9 | — | — | 1 | — | — | — | — | — | — | 1 | — | — | — | 1 | — | — | 15 |
| Baillieston, | 16 | — | 3 | — | 1 | — | 1 | — | 2 | — | 3 | 5 | 2 | 7 | 1 | 7 | — | 48 |
| Bellshill, | 85 | — | 10 | 2 | 5 | — | 5 | 9 | 6 | — | 47 | 3 | 10 | 6 | 7 | 13 | — | 208 |
| Bishopbriggs, | 4 | — | — | 2 | — | — | — | 1 | 1 | 2 | 1 | 1 | 1 | 5 | — | 3 | — | 21 |
| Blantyre, | 44 | — | 9 | 2 | 6 | — | 6 | 21 | 8 | 1 | 28 | 8 | 9 | 14 | 8 | 6 | 1 | 171 |
| Cadzow, | 6 | — | — | — | — | — | 1 | 2 | — | — | 5 | 2 | 1 | 3 | — | — | — | 20 |
| Cambuslang, | 17 | — | 7 | 2 | 3 | — | 3 | 10 | 5 | 2 | 15 | 7 | 4 | 3 | 8 | 7 | 1 | 94 |
| Carlisle, | 4 | — | 1 | — | — | — | — | 3 | — | — | 3 | — | 1 | — | 3 | 2 | — | 17 |
| Chapelhall, | 13 | — | 3 | — | 1 | — | — | 4 | 1 | — | 1 | 2 | 2 | — | — | 1 | — | 28 |
| Chryston, | 4 | — | — | — | — | — | — | 2 | — | 2 | 2 | — | 1 | 1 | — | — | — | 12 |
| Coalburn, | 4 | — | 1 | — | — | — | 2 | 1 | 1 | — | 2 | — | 1 | — | 3 | — | — | 15 |
| Douglas Water, | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Lanark, | 7 | — | 2 | — | — | — | 1 | 3 | 2 | — | 1 | 1 | 1 | 2 | 3 | 1 | — | 24 |
| Larkhall, | 30 | 1 | 5 | 4 | 5 | — | 15 | 9 | 5 | 1 | 22 | 7 | 9 | 12 | 7 | 9 | 1 | 142 |
| Newarthill, | 25 | — | 3 | 1 | 3 | — | 3 | 6 | 2 | 1 | 8 | 4 | 1 | 7 | 5 | 1 | — | 70 |
| Newnains, | 25 | — | 3 | 4 | 4 | — | 4 | 11 | 4 | — | 12 | 9 | 2 | 16 | 11 | 3 | 1 | 109 |
| New Stevenston, | 23 | — | 3 | 2 | 1 | — | 2 | 4 | 9 | 1 | 11 | 4 | 5 | 8 | 6 | 7 | — | 86 |
| Shotts, | 39 | — | 3 | — | — | — | — | 7 | — | — | — | 10 | 1 | — | 6 | 7 | — | 73 |
| Strathaven, | 2 | — | 1 | 1 | — | — | 1 | — | — | — | 1 | 2 | — | — | — | — | — | 8 |
| Tannochside, | 14 | — | 7 | — | 5 | — | 1 | 3 | 6 | 2 | 15 | 3 | 6 | 8 | 11 | 7 | — | 88 |
| Uddingston, | 23 | — | 8 | 1 | 4 | — | 4 | 8 | 10 | 1 | 17 | 5 | 6 | 9 | 10 | 9 | — | 115 |
| | 394 | 1 | 69 | 22 | 38 | — | 49 | 104 | 62 | 13 | 195 | 73 | 63 | 102 | 90 | 85 | 4 | 1,364 |

Post-natal and other Consultations.—Table M IX shows the post-natal, gynæcological, and other consultations which were made at the various Centres.

POST-NATAL AND OTHER CONSULTATIONS.

| CENTRE. | POST-NATAL. | | | | | | | | | | GYNAECOLOGICAL. | | | | | | | OTHERS. | | | | | | | | |
|-------------------|-----------------------|----------------|--------------|------------------------|-----------------|--------------|--------------------|--------------|---------|----------------------|-----------------|--------|-----------------------|----------------|---------------|----------------------------|---------------|---------|--------|--------------|--------------------|-------------------------|---------|----------------------|---------|--------|
| | Uterine Displacement. | Cervical Tear. | Leucorrhoea. | Disease of the Breast. | Varicose Veins. | Albuminuria. | Gastro-Intestinal. | Respiratory. | Dental. | Anæmia and Debility. | Others. | Total. | Uterine Displacement. | Cervical Tear. | Endometritis. | Disorders of Menstruation. | Ovarian Pain. | Others. | Total. | Respiratory. | Gastro-Intestinal. | Cystitis and Nephritis. | Dental. | Anæmia and Debility. | Others. | Total. |
| Airdrie, . | - | - | - | - | - | 3 | - | - | 3 | 4 | 2 | 12 | - | - | - | - | - | - | - | - | - | - | 4 | 2 | - | 6 |
| Baillieston, . | - | 1 | 1 | 4 | 1 | - | 3 | 1 | 23 | 13 | 4 | 51 | 3 | - | - | 4 | - | - | - | 7 | 2 | 2 | 5 | 3 | 5 | 17 |
| Bellshill, . | - | - | 5 | 5 | 6 | 5 | 19 | 8 | 23 | 26 | 30 | 127 | 1 | - | 3 | 8 | 3 | 7 | - | 22 | 4 | 4 | 20 | 2 | 10 | 40 |
| Bishopbriggs, . | - | - | - | 2 | - | 1 | 2 | 1 | - | 10 | 2 | 18 | - | - | - | 3 | - | - | - | 3 | 1 | 1 | - | 1 | 3 | 6 |
| Blantyre, . | 1 | 1 | 24 | 6 | 9 | 9 | 11 | 6 | 26 | 50 | 33 | 176 | 3 | - | - | 7 | 2 | 2 | - | 30 | 1 | 8 | 34 | 6 | 10 | 63 |
| Cadzow, . | - | - | 1 | - | - | - | 1 | 2 | 5 | 6 | 7 | 22 | - | 1 | 1 | - | - | - | - | 2 | - | - | 2 | 10 | - | 14 |
| Cambuslang, . | - | - | 7 | 17 | 5 | 17 | 23 | 4 | 73 | 71 | 33 | 250 | 3 | 1 | - | 10 | - | 2 | - | 16 | 2 | 8 | 32 | 15 | 26 | 86 |
| Carlisle, . | 1 | - | - | - | - | - | 1 | 1 | 1 | 12 | 3 | 19 | - | - | - | 2 | 1 | - | - | 3 | 1 | - | 10 | 1 | 1 | 13 |
| Chapelhall, . | - | - | - | 1 | - | - | 1 | 1 | 11 | 7 | 1 | 22 | - | - | - | 1 | - | - | - | 1 | 3 | 1 | 26 | 2 | 3 | 36 |
| Chryston, . | - | - | 2 | 2 | - | - | 1 | 1 | - | 2 | 2 | 10 | 1 | - | - | 1 | - | 1 | - | 3 | - | - | 1 | - | - | 1 |
| Coalburn, . | 1 | - | 1 | - | 1 | - | 1 | - | 1 | 11 | 2 | 18 | - | - | - | 1 | 1 | - | - | 2 | - | - | - | - | - | - |
| Douglas Water, . | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Lanark, . | - | - | 1 | - | - | - | 3 | 1 | 1 | 14 | - | 20 | 1 | - | - | 1 | - | - | - | 2 | 1 | - | - | 1 | - | 2 |
| Larkhall, . | 1 | 5 | 19 | 7 | 6 | 4 | 14 | 4 | 22 | 22 | 20 | 124 | 4 | 2 | 3 | 9 | 5 | 2 | 25 | 3 | 10 | 3 | 35 | 7 | 15 | 73 |
| Newarthill, . | - | 1 | 1 | 2 | 2 | 3 | 4 | 4 | 4 | 25 | 12 | 58 | - | 1 | 2 | - | 1 | 1 | 5 | 2 | 2 | 3 | 5 | 3 | 3 | 17 |
| Newnains, . | - | 1 | 1 | 2 | 3 | 2 | 9 | 3 | 19 | 24 | 15 | 79 | 3 | 4 | 5 | 5 | 1 | 1 | 19 | 3 | 1 | - | 35 | 6 | 3 | 48 |
| New Stevenston, . | - | - | - | - | 3 | 1 | 10 | 3 | 6 | 26 | 11 | 60 | 2 | - | 3 | 9 | 1 | - | 15 | - | 1 | - | 4 | 4 | 7 | 16 |
| Shotts, . | 2 | 1 | 2 | - | - | 1 | 3 | - | 25 | 32 | 17 | 83 | 1 | 1 | - | 6 | 3 | 2 | 13 | 1 | - | 1 | 74 | 11 | 21 | 108 |
| Strathaven, . | 1 | - | 1 | - | - | - | 1 | 1 | - | 1 | - | 5 | - | - | 1 | - | - | - | 1 | 1 | - | 1 | - | - | - | 2 |
| Tannochside, . | - | - | 4 | - | - | - | - | - | - | - | - | 4 | - | - | - | 5 | 1 | 7 | 13 | - | 5 | - | 13 | 1 | 8 | 27 |
| Uddingston, . | 1 | - | 2 | 3 | 1 | 1 | 10 | 5 | 13 | 38 | 11 | 85 | 2 | 1 | 5 | 5 | - | 8 | 21 | 2 | 4 | 1 | 10 | 1 | 7 | 25 |
| | 8 | 10 | 72 | 51 | 37 | 47 | 117 | 46 | 256 | 395 | 205 | 1244 | 24 | 11 | 30 | 86 | 19 | 33 | 203 | 27 | 48 | 17 | 318 | 66 | 124 | 600 |

Treatment at Child Welfare Centres.

The following statements give a record of the work carried out at Cambuslang, Blantyre, and Shotts, and also at the Out-patient Department at Calderbank House:—

MINOR AILMENTS.

MOTHERS.

| | Blantyre. | Cambuslang. | Shotts. |
|-----------------------|-----------|-------------|-----------|
| Anæmia, - - - | 15 | 44 | 14 |
| Skin Disease, - - - | 6 | 2 | 2 |
| *Others, - - - | 62 | 22 | 1 |
| | <u>83</u> | <u>68</u> | <u>17</u> |
| Re-attendances, - - - | 365 | 545 | 275 |

* This group includes dressings, douchings, eye diseases, &c.

CHILDREN.

| | Blantyre. | Cambuslang. | Shotts. |
|-----------------------|------------|-------------|-----------|
| Skin, - - - | 71 | 71 | 15 |
| Eyes, - - - | 66 | 24 | 6 |
| Ears, - - - | 29 | 17 | 8 |
| *Others, - - - | 84 | 47 | 9 |
| | <u>250</u> | <u>159</u> | <u>38</u> |
| Re-attendances, - - - | 601 | 360 | 217 |

*This group includes dressings, threadworms, umbilica hernia, &c.

Artificial Sunlight Treatment.

| | MOTHERS. | | CHILDREN. | |
|-------------------------|------------|-----------------|------------|-----------------|
| | New Cases. | Re-attendances. | New Cases. | Re-attendances. |
| Blantyre, - - - | 4 | 136 | 50 | 513 |
| Cambuslang, - - - | 22 | 213 | 35 | 380 |
| Lanark, - - - | — | — | 17 | 306 |
| Shotts, - - - | 6 | 46 | 40 | 619 |
| Calderbank House, - - - | 5 | 240 | 11 | 482 |
| | <u>37</u> | <u>635</u> | <u>153</u> | <u>2,300</u> |

Treatment of Squint.

The work in connection with the treatment of squint cases is summarised in the following statement:—

| Cases Examined at | First Cases. | Spectacles Prescribed. | Re-examined. |
|-------------------|--------------|------------------------|--------------|
| Bellshill, - - - | 23 | 22 | 16 |
| Blantyre, - - - | 15 | 13 | 7 |
| Cambuslang, - - - | 10 | 7 | 9 |
| Shotts, - - - | 28 | 25 | 11 |
| | 76 | 67 | 43 |

Dental Treatment—Mothers and Children.

During the year 1,099 mothers and 116 children were recommended for dental treatment, and of these 647 mothers and 93 children attended the dental surgeons appointed by the Local Authority:—

| | MOTHERS. | | CHILDREN. | |
|---------------------------|----------------------------|-------------------|----------------------------|-------------------|
| | Recommended for Treatment. | Attended Dentist. | Recommended for Treatment. | Attended Dentist. |
| CENTRE— | | | | |
| Airdrie, - - - | 9 | 4 | 3 | 3 |
| Baillieston, - - - | 34 | 22 | — | — |
| Bellshill, - - - | 49 | 37 | 8 | 6 |
| Blantyre, - - - | 71 | 52 | 26 | 20 |
| Cadzow, - - - | 17 | 16 | — | — |
| Cambuslang, - - - | 140 | 127 | 12 | 11 |
| Carluke, - - - | 15 | 15 | — | — |
| Chapelhall, - - - | 43 | 31 | — | — |
| Lanark, - - - | 3 | 3 | 1 | 1 |
| Larkhall, - - - | 68 | 52 | 10 | 7 |
| Newarthill, - - - | 11 | 10 | 4 | 1 |
| Newmains, - - - | 62 | 58 | 20 | 18 |
| New Stevenston, - - - | 16 | 14 | 4 | 3 |
| Shotts, - - - | 128 | 113 | 18 | 16 |
| Strathaven, - - - | 3 | 2 | 1 | 1 |
| Tannochside, - - - | 27 | 18 | 4 | 3 |
| Uddingston, - - - | 32 | 24 | 5 | 3 |
| ANTE-NATAL CLINIC— | | | | |
| Bellshill, - - - | 176 | 39 | — | — |
| Blantyre, - - - | 96 | 5 | — | — |
| Cambuslang, - - - | 49 | 3 | — | — |
| Shotts, - - - | 50 | 2 | — | — |
| | 1,099 | 647 | 116 | 93 |

Ear, Nose, and Throat Ailments.

| No. of Sessions. | No. of 1st Visits. | No. of Re-visits. | Operations recommended. | Operations performed. |
|------------------|--------------------|-------------------|-------------------------|-----------------------|
| 23 | 129 | 108 | 78 | 64 |

The operations performed were as follows:—

| | |
|--|-------|
| Tonsils and Adenoids, | 59 |
| Adenoids and Mastoid operation, | 1 |
| Resection of Septum, | 1 |
| Incision of Membrana Tympani, | 1 |
| Mastoid operation, | 2 |
| | <hr/> |
| | 64 |
| | <hr/> |

The difference between the number of operations recommended and operations performed is accounted for as follows:—

| | |
|----------------------------|-------|
| Operation refused, | 4 |
| Awaiting operation, | 7 |
| Left district, | 3 |
| | <hr/> |
| | 14 |
| | <hr/> |

In addition, 1 patient received a special chloroform examination.

Two patients receiving in-patient treatment in Calderbank House also had operation:—Tonsils and adenoids, 1; mastoid, 1.

Attendances at the Clinic were recommended from the following sources:—

| | |
|--|-------|
| Baillieston Child Welfare Centre, | 2 |
| Bellshill do. | 12 |
| Bishopbriggs do. | 1 |
| Blantyre do. | 13 |
| Cadzow do. | 3 |
| Cambuslang do. | 14 |
| Carluke do. | 5 |
| Chryston do. | 1 |
| Coalburn do. | 2 |
| Lanark do. | 5 |
| Larkhall do. | 9 |
| Newarthill do. | 6 |
| Newmains do. | 16 |
| New Stevenston do. | 10 |
| Shotts do. | 18 |
| Uddingston do. | 8 |
| Calderbank House, | 1 |
| Roadmeetings Hospital, | 3 |
| | <hr/> |

129

Educational Work.

The following table shows the demonstrations and lectures which were given at the various Centres during the year :—

| CENTRES. | DEMONSTRATIONS. | | LECTURES. |
|-----------------|-----------------|---------------|--|
| | Cookery. | Dress-making. | |
| Baillieston, - | 8 | 12 | — |
| Bellshill, - | 11 | 23 | — |
| Bishopbriggs, | 7 | 10 | General care of children. Precaution against the spread of infection. Isolation in infectious diseases. |
| Blantyre, - | 11 | 11 | Maternity outfits. Breast and artificial feeding. |
| Cambuslang, - | 10 | 18 | Infant feeding. Infant clothing. |
| Carluke, - | 8 | 10 | — |
| Chapelhall, - | 10 | 8 | — |
| Chryston, - | 12 | 9 | Ante-natal and post-natal anæmia. |
| Coalburn, - | 4 | 3 | — |
| Lanark, - | — | 10 | — |
| Larkhall, - | 11 | 11 | — |
| Newarthill, - | 11 | 12 | Ante-natal care. The purposes of a Maternity and Child Welfare Centre. |
| Newmains, - | 10 | 10 | Bronchitis. |
| New Stevenston, | 11 | 11 | Introductory lecture. Ante-natal care. The expectant mother. |
| Shotts, - - | 10 | 12 | Overclothing. Bathing baby. Cod-liver oil and its uses. Treatment of impetigo. Ante-natal care. Common errors in artificial feeding. |
| Tannochside, - | 10 | 11 | — |
| Uddingston, - | 12 | 12 | Introductory lecture. The expectant mother. Bathing baby. |

Necessitous Cases.

The number dealt with monthly and the annual figures and estimated expenditure for each Centre are shown below :—

| Jan. | Feb. | Mar. | April. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. | Total. |
|------|------|------|--------|------|-------|-------|------|-------|------|------|------|--------|
| 490 | 481 | 421 | 402 | 438 | 459 | 455 | 472 | 469 | 507 | 534 | 587 | 5,715 |

| | No. of Cases. | Amount. | | No. of Cases. | Amount. |
|-------------------|------------------|--------------------|---------------------|------------------|-----------------|
| Airdrie, ... | 354 | £154 2 10 | Douglas Water, ... | 5 | £1 19 0 |
| Baillieston, ... | 318 | 126 14 1 | Lanark, ... | 116 | 51 4 5 |
| Bellshill, ... | 702 | 331 10 8 | Larkhall, ... | 414 | 179 19 4 |
| Bishopbriggs, ... | 49 | 17 8 5 | Newarthill, ... | 259 | 115 0 11 |
| Blantyre, ... | 710 | 294 6 10 | Newmains, ... | 390 | 128 4 2 |
| Cadzow, ... | 81 | 36 7 6 | New Stevenston, ... | 282 | 129 8 6 |
| Cambuslang, ... | 565 | 222 19 11 | Shotts, ... | 212 | 103 19 9 |
| Carluke, ... | 202 | 80 15 6 | Strathaven, ... | 46 | 18 5 10 |
| Chapelhall, ... | 230 | 91 8 0 | Tannochside, ... | 280 | 118 18 11 |
| Chryston, ... | 45 | 18 8 10 | Uddingston, ... | 270 | 126 8 9 |
| Coalburn, ... | 185 | 92 8 5 | | | |
| | <u>3,441</u> | <u>£1,466 11 0</u> | | <u>2,274</u> | <u>£973 9 7</u> |

Total Cases, ... 5,715

Total Expenditure, ... £2,440 0s. 7d.

Children Act, 1908.

The following information regarding the work performed in terms of the Children Act, 1908, has been extracted from the annual reports sent to the Department of Health for Scotland, and relates to the years ending 15th May, 1930 and 1931 :—

| | Year ending 15th May, | |
|---|-----------------------|------------|
| | 1930. | 1931 |
| Children on Register reported under the Children Act, - - - - - | 100 | 121 |
| Notices received from persons undertaking the care of Children for reward (Section (1) and (2)), - - - - - | 51 | 52 |
| Notices received from guardians on removal to the area of the Council from the area of another Authority, - - - - - | 3 | 2 |
| Total, - - - | <u>154</u> | <u>175</u> |

Notices received under Section 1 (5):—

| | | |
|---|-----------|-----------|
| Of Deaths of Children, - - - - | 1 | 5 |
| Of Removals of Children, <i>i.e.</i> , Children removed from care of guardian otherwise than under Section 5 (1), | 17 | 26 |
| Removed from Register on attaining age of 7 years, - - - - | 12 | 9 |
| Removed for other reasons, - - - | 3 | 4 |
| Children on Register at 15th May, - | 121 | 131 |
| | <hr/> 154 | <hr/> 175 |

The Nurse Health Visitors, who are also designated Infant Protection Visitors, made 168 visits in 1930 (nine months) and 389 visits during the year 1931. The reports indicate that all the children have received good homes and are well cared for. A few notices under Section 1 (7) were not timeously received, obviously due to ignorance on the part of the persons concerned, but no prosecutions were considered necessary.

District Nursing Associations.

The District Nursing Associations engaged in the Maternity and Child Welfare Work are given in the following statement, which also shows the remuneration paid by the Local Authority and the number of visits for the year 1931:—

| ASSOCIATION. | Fee Paid. | Number of Births. | Number of First Visits. | Number of Re-visits. | Total Visits. |
|---|-----------|-------------------------------------|-------------------------|----------------------|---------------|
| Motherwell and District, - | £25 | 22 | 17 | 262 | 279 |
| Glenboig, - - - | 25 | 85 | 85 | 756 | 841 |
| Caldercruix, - - - | 20 | 86 | 73 | 315 | 388 |
| Stonehouse, - - - | 15 | 76 | 72 | 696 | 768 |
| Quarter, - - - - | 25 | 22 | 21 | 377 | 398 |
| Bothwell, - - - - | 20 | 64 | 46 | 415 | 461* |
| Glasford. Visitation, - | 20 | 23 | 21 | 174 | 195† |
| Maternity work, less fees paid by patients. | 15 | | | | |
| Biggar, - - - - | 20 | 48 | 33 | 333 | 366 |
| Forth and District, - - | 25 | 88 | 68 | 21 | 89 |
| Crawford, - - - - | 26 | 21 | 16 | 69 | 85 |
| Lesmahagow, - - - - | 25 | 33 | 29 | 160 | 189 |
| Carmichael: Anstruther, | 15 | 18 | 14 | 181 | 195 |
| Blantyre, - - - - | 10 10/- | Assistance at Child Welfare Centre. | | | |

* No Nurse for two months.

† In addition, about 30·36 T.B. visits made yearly.

**Midwives and Maternity Homes (Scotland) Acts,
1915 and 1927.**

Practising Midwives.—During the year 193 certified midwives (131 resident within and 62 resident outwith the County) notified their intention to practise. A list of these midwives was forwarded to the Central Midwives Board on 5th February, 1932.

The qualifications of these midwives are as follows:—

| | | | | | | |
|---|-----|-----|-----|-----|-----|-----|
| Certificate of the Central Midwives Board (Scotland), | ... | ... | ... | ... | ... | 66 |
| Certificate of the Central Midwives Board (England), | ... | ... | ... | ... | ... | 5 |
| Certificate of the Central Midwives Board (Ireland), | ... | ... | ... | ... | ... | 1 |
| Trained and Certified by the Royal Maternity Hospital (Glasgow), | ... | ... | ... | ... | ... | 7 |
| Trained and Certified by the Royal Maternity Hospital (Edinburgh), | ... | ... | ... | ... | ... | 1 |
| Trained and Certified by the Rotunda Hospital (Dublin), | ... | ... | ... | ... | ... | 1 |
| In <i>bona-fide</i> practice and certified under the Act, | ... | ... | ... | ... | ... | 112 |
| | | | | | | 193 |
| | | | | | | 193 |

The above indicates that 81 (42 per cent.) of the midwives are trained and 112 (58 per cent.) untrained.

The distribution of the practising midwives according to District Council Areas is as follows:—

| District Council Area. | | | Number of Midwives. | District Council Area. | | | Number of Midwives. |
|---------------------------|-----|-----|---------------------------|---------------------------|-----|-----|---------------------------|
| No. I, | ... | ... | 2 | No. VI, | ... | ... | 17 |
| No. II, | ... | ... | 2 | No. VIII, | ... | ... | 11 |
| No. III, | ... | ... | 1 | No. IX, | ... | ... | 26 |
| No. IV, | ... | ... | 26 | Lanark Burgh, | ... | ... | 1 |
| No. V, | ... | ... | 10 | Resident outwith County, | ... | ... | 62 |
| No. VI, | ... | ... | 35 | | | | |
| | | | <u>Total, 193</u> | | | | |

Change of Address.—The changes of address of 17 midwives were reported to the Board.

Resignations.—Two midwives intimated their resignations from practice.

Change of Name.—Owing to marriage, 1 midwife intimated change of name.

Deaths.—Two midwives died during the year, the numbers on the Roll being 1,391 and 1,222.

Inspection of Midwives.—The routine inspection of midwives resident in the County numbered 379. In addition, 108 special inspections were made on account of non-compliance with the rules. It was found that 7 midwives did not possess bags or linings, 2 had no scissors, and 6 had not supplied themselves with thermometers. The Inspectors reported that 22 midwives did not keep their charts correctly.

Disciplinary Cases.—A report in the following terms was submitted to the Central Midwives Board in the case of a midwife for breach of the rules in connection with two of her cases:—

“(1) *Attendance by Mrs. S. on Mrs. R.*—The midwife was aware that this woman was in ill-health prior to her confinement and that a doctor had been in attendance. She was called to the case about 4 a.m. on 6/10/31, and instructed the relatives to telephone for the doctor. She did not send for the doctor by means of the emergency form. She agreed to cancel the message shortly thereafter as the labour had terminated rapidly and apparently normally. She states that she sent an emergency form to the house of Dr. F. about 5 p.m. on 6/10/31, because the patient looked pale, weak, and not well. She did not return to her patient on 6/10/31, and took no steps to discover what instructions had been given by the doctor.

Dr. F. states that he received a message from the midwife about this case in the early morning of 6/10/31, and shortly afterwards a further message cancelling the original one. He heard nothing more about the case until the following morning, 7/10/31, when he met the midwife during the course of his morning round of visits. She then asked him to see Mrs. R. He found the patient unexpectedly weak, ‘deathly pale, and with a rapid pulse.’ After enquiry, he concluded that she had had a severe post-partum hæmorrhage. He attended her thereafter until she died on 12/10/31.

The maid employed by Dr. F. denies having received any message about this case.

The Public Health Department received a duplicate emergency form from the midwife relating to this case on 9/10/31. The time of sending the message is stated thereon as '10.50—6/10/31.' This entry is in ordinary pencil and the other entries are in carbon copy. The midwife was asked to explain the form and meaning of the entry, and stated that it was 'my mistake.'

- "(2) *Attendance by Mrs. S. in the Case of Mrs. G.*—The midwife was engaged in September to attend the confinement of this woman. She states that she advised the patient to consult her own doctor or go to the nearest Child Welfare Centre. The midwife took no steps to ascertain if her advice had been followed, and was therefore not in a position to observe Rule E (1) D.

Mrs. G. states that the midwife did not advise her to get medical advice, but told her not to bother about a doctor.

It is evident from an examination of her register that the midwife is not entering her cases at the date of booking."

The Board severely censured and admonished the midwife to adhere strictly to the rules in future.

Attendance at Confinement.—The number of births notified as having been attended by certified midwives was 2,066, which represents 31.3 per cent.

Attendance by Unqualified Persons.—In 55 instances an unqualified person conducted the confinement. In 40 of the cases it was found that the attendance had been given in emergency and no further action was necessary. There was apparent irregularity in 15 cases, and the women concerned were interviewed by the Medical Officer of Health.

Court proceedings were instituted against Mrs. K. for attending a confinement and failing to take immediate steps to summon qualified assistance in accordance with the requirements of the statute. This woman had received repeated warnings from the Local Authority, and on two previous occasions was reported to the Procurator-Fiscal.

After a somewhat lengthy trial the Sheriff found the accused "not guilty," stating that, in his opinion, the handywoman attended in a case of sudden necessity.

Infantile Deaths.—The total number of infantile deaths was 510. In 182 instances the deaths occurred in infants during the first ten days, and 23 of these were in the practice of certified midwives. The causes of death were as follows:—Premature births, 107; injury at birth, 9; debility, 23; congenital heart, 6; congenital malformation, 10; atelectasis, 6; hydrocephalus, 3; infantile convulsions, 6; pneumonia, 1; violence, 1; and others, 10.

Ophthalmia Neonatorum.—There were 88 notified cases of ophthalmia, 28 of these occurring in the practice of certified midwives. In addition, 84 cases of discharging eyes were detected by the Health Visiting Staff, and 39 of these occurred among midwives' cases.

Puerperal Fever and Pyrexia.—The total number of cases notified was 154, and 25 of these occurred in the practice of midwives. There were 19 deaths, 3 of which related to midwives' cases.

Still-births.—The total number of still-births was 227, 25 of these being midwives' cases.

Examination of Urine.—226 specimens of urine were sent to the County Laboratory by 12 certified midwives, 104 giving a positive result. At the Child Welfare Centres 485 specimens were submitted by certified midwives, and of these 121 proved positive.

Liability to be a Source of Infection.—41 notifications were received from midwives as follows:—Puerperal fever, 12; puerperal pyrexia, 10; sore ear, 1; diphtheria, 2; temperature, 5; sepsis, 1; paratyphoid, 1; scarlet fever, 2; ophthalmia neonatorum, 1; measles, 3; erysipelas, 1; parametritis, 1; and pneumonia, 1.

Form of having laid out a Dead Body.—7 notifications were received, 6 for infants and 1 for a mother.

Notification of Patients' failure to follow Advice.—30 notifications were received regarding patients who failed either to seek medical advice or avail themselves of the pre-natal services provided by the Local Authority.

Provision of Certified Midwives in Necessitous Cases.—The Local Authority authorised the attendance of certified midwives at 12 confinements of women in necessitous circumstances, and fees of £1 5s. each were paid for the services rendered.

Compensatory Fees.—In 35 instances where certified midwives either called in doctors or referred their patients to a Child Welfare Centre, and the patients were subsequently removed to the County Maternity Hospital for confinement, a fee of 10s. each was paid.

Compensation.—Two certified midwives who had been suspended from practice in order to prevent the spread of infection, received compensation amounting to £2 10s. and £1 15s. respectively for the loss of their cases.

Medical Assistance.—Medical aid was sought by midwives in 866 instances, representing 46·2 per cent. of the births attended by certified midwives. The conditions for which assistance was obtained are detailed in Table M XI.

Payment of Doctors' Claims.—The claims sent in by medical practitioners under Section 22 of the 1915 Act, as amended by Section 4 of the 1927 Act, numbered 630, representing 72·7 per cent. of the cases to which they had been called, and amounted to £944 6s., £34 10s., or 3·6 per cent. of the total expenditure was recovered.

TABLE M X.

| Year | Births attended by Midwives | Medical Assistance Forms received | Percentage of Midwives' cases requiring Medical Assistance | Doctors' Claims | | Amount of Account | | | Recovery recommended | | | Amount recovered | | | Per cent. |
|------|-----------------------------|-----------------------------------|--|-----------------|-----------|-------------------|----|----|----------------------|----|----|------------------|----|----|-----------|
| | | | | No. | per cent. | £ | s. | d. | £ | s. | d. | £ | s. | d. | |
| 1931 | 1,872 | 866 | 46·2 | 630 | 72·7 | 944 | 6 | 0 | 82 | 18 | 0 | 34 | 10 | 0 | 3·6 |

TABLE M XI.

Records of sending for medical assistance classified according to District Council Areas and the conditions requiring medical aid:—

DISTRICT COUNCIL DISTRICTS.

| Reasons for Medical Assistance. | No. II | No. IV | No. V | No. VI | No. VII | No. VIII | No. IX | Total. |
|--|-----------|-----------|----------|-----------|------------|-------------|-----------|--------|
| <i>Mother:—</i> | | | | | | | | |
| Prolonged Labour, . . . | 2 | 33 | 74 | 76 | 5 | 15 | 61 | 266 |
| Contracted Pelvis, . . . | — | — | — | 14 | — | 1 | 4 | 19 |
| Uterine Inertia, . . . | — | — | 2 | 52 | 1 | — | 12 | 67 |
| Abnormal Presentation, . . . | — | 4 | 15 | 32 | 2 | 4 | 16 | 73 |
| Prolapse Cord, . . . | — | — | — | 2 | — | — | 2 | 4 |
| Placenta Prævia, . . . | — | — | — | 3 | 1 | 1 | — | 5 |
| Ante-Partum Hæmorrhage, . . . | — | 1 | 11 | 11 | — | — | 2 | 25 |
| Post-Partum Hæmorrhage, . . . | — | — | 5 | 6 | — | 5 | — | 16 |
| Hæmorrhage (unqualified), . . . | — | 1 | 4 | 8 | — | 1 | — | 14 |
| Retained Placenta, . . . | 1 | — | 3 | 15 | — | 4 | 8 | 31 |
| Hydræmnios, . . . | — | — | — | 3 | — | — | — | 3 |
| Eclampsia and Convulsions, . . . | — | — | — | 1 | — | 1 | — | 2 |
| Albuminuria, . . . | — | 1 | 5 | 1 | 1 | 20 | 1 | 29 |
| Torn Perineum, . . . | — | 3 | 19 | 29 | 5 | 19 | 21 | 96 |
| Abortion (actual or threatened), . . . | — | — | 8 | — | — | 4 | 3 | 15 |
| Pyrexia, . . . | — | 2 | 6 | 5 | — | 11 | 5 | 29 |
| Phlebitis, . . . | — | — | 2 | — | — | — | 1 | 3 |
| Influenza, . . . | — | — | — | — | — | 1 | — | 1 |
| Debility and extreme weakness, . . . | — | 6 | 3 | 14 | 1 | 5 | 5 | 34 |
| Varicose Veins, . . . | — | — | — | 1 | — | — | — | 1 |
| Mastitis, . . . | — | — | 1 | — | — | 1 | — | 2 |
| Oedema, . . . | — | — | 4 | 1 | — | — | — | 5 |
| Other defined causes, . . . | — | 1 | 2 | 7 | 1 | 3 | 2 | 16 |
| Ill-defined causes, . . . | — | 1 | 3 | 4 | 1 | 4 | — | 13 |
| <i>Child:—</i> | | | | | | | | |
| Still-Birth, . . . | — | — | 3 | 8 | — | 6 | 2 | 19 |
| Premature Child, . . . | — | — | 3 | 1 | — | 4 | 1 | 9 |
| Ophthalmia Neonatorum, . . . | — | — | 1 | 1 | — | — | — | 2 |
| Discharging Eyes, . . . | — | 1 | 3 | 7 | — | 3 | 2 | 16 |
| Congenital Malformation, . . . | — | — | 2 | 1 | — | 3 | — | 6 |
| Spina Bifida, . . . | — | — | 1 | — | — | — | — | 1 |
| Hare Lip, . . . | — | 1 | — | — | — | 1 | — | 2 |
| Convulsions, . . . | — | — | — | — | — | 1 | — | 1 |
| Debility and extreme weakness, . . . | — | — | 1 | — | 2 | — | — | 3 |
| Skin Condition, . . . | — | 1 | — | 2 | — | 2 | — | 5 |
| Death of Infant, . . . | — | 2 | — | — | — | — | — | 2 |
| | 3 | 58 | 181 | 305 | 20 | 120 | 148 | 835 |

Registration of Maternity Homes.

There are four registered Maternity Homes in the County as follows :—

| Person Registered. | Address. | Date of Registration. |
|-----------------------------------|---|-----------------------|
| Nurse Agnes Haddow, | - 9 Langshaw Crescent, Carluke. | 21/5/28 |
| Mrs. Janetta Munro, - | - Fairhaven, Loch Road, Lanark. | 17/12/28 |
| Dr. Barbara A. Cameron, - | - Limekiln, East Kil- bride. | 13/2/29 |
| Nurse A. B. M ^c Kay, - | - 35 St. Blane's Drive, Bankhead, Ruther- glen. | 15/10/30 |

In the Fairhaven Home 73 confinements took place, there being 1 still-birth. Three cases of puerperal fever were removed to the County Hospital, Motherwell. There was 1 maternal death.

No confinement occurred in any of the other Maternity Homes.

Report of the Sanitary Inspector.

HOUSING.

The administrative procedure during the year 1931, which was summarised in the information supplied to the Department of Health for Scotland, in terms of their Regulations under the Housing Acts, is given in the following tabular statement and subsequent paragraphs:—

| | |
|--|-----|
| Number of dwellings inspected, | 333 |
| Number of houses found unfit for human habitation, | 89 |
| Representations to Local Authority, | 85 |
| Demolition Orders made, | 28 |
| Number of dwellings dealt with by Demolition Orders, | 67 |
| Defects remedied without making Closing Orders, | — |
| Number of dwellings rendered fit for human habitation after Closing Orders, | — |

The general character of the defects usually found to exist was principally dampness, due to various defects in construction and the want of proper domestic and sanitary conveniences.

Overcrowding is still prevalent in certain parts of the County, and the Local Authority have taken steps for the provision of further housing accommodation, in addition to the 554 houses in Improvement Schemes and 252 dwellings in Subsidy Schemes in various stages of construction at the close of the year. The localities in which these 806 houses are being erected is as follows:—

Improvement Schemes.—

| | |
|------------------------------|----------------------------|
| Baillieston, - - - 68 houses | Eddlewood, - - - 32 houses |
| Bargeddie, - - - 52 „ | Greengairs, - - - 28 „ |
| Cambuslang, - - - 112 „ | Newarthill, - - - 10 „ |
| Carfin, - - - 30 „ | Netherton, - - - 32 „ |
| Carmyle, - - - 32 „ | Newmains, - - - 48 „ |
| Chapelhall, - - - 10 „ | Salsburgh, - - - 24 „ |
| East Kilbride, - - - 20 „ | Uddingston, - - - 56 „ |

Subsidy Schemes.—

| | | | |
|------------------|-----------|--------------------|-----------|
| Cambuslang, - - | 36 houses | Kirkfieldbank, - - | 12 houses |
| Carluke, - - | 16 „ | Netherton, - - | 40 „ |
| Carnwath, - - | 12 „ | Newmains, - - | 52 „ |
| East Kilbride, - | 12 „ | Strathaven, - - | 16 „ |
| Forth, - - | 48 „ | Symington, - - | 8 „ |

Although no action was taken by the Local Authority under Section 20 (1) of the Housing (Scotland) Act, 1925, and Section 40 (1) of the Housing Town Planning, &c. (Scotland) Act, 1919, it should be explained that the Local Authority have taken action for the introduction of—

sinks, water supply, and water-closets at 100 dwellings;

sinks and water supply at 46 dwellings; and

water-closets at 96 dwellings;

all in terms of Section 246 of the Burgh Police (Scotland) Act, 1892, as applied to the County of Lanark by Section 68 (1) of the Lanarkshire County Council (Water, &c.) Order Confirmation Act, 1917.

Sanction was given by the Local Authority in terms of Section 111 of the Housing (Scotland) Act, 1925, to the erection of 4 one-apartment and 4 two-apartment dwellings by private builders and 88 two-apartment houses by the Local Authority. The one-apartment dwellings referred to are additional to the existing seven blocks of similar houses built by the Incorporated Glasgow Old Man's Friend Society at Milncroft, near Shettleston, and comprise a block of four dwellings, each with scullery, tub, sink, and water-closet. For light washings there is a communal wash-house, and heavy washings are removed by the Society to their headquarters in Glasgow. Each tenant has his own garden plot, and, altogether, the arrangements at these homes for old married couples are admirable and a credit to all concerned.

No schemes under Part I of the Housing (Scotland) Act, 1930, relating to clearance or improvement of unhealthy areas, were in contemplation.

Slum Clearance.

Housing (Scotland) Act, 1930.—Further progress was made during the year towards the removal of insanitary houses by the making of Demolition Orders in respect of 67 dwellings. The Department, however, during the same period, submitted 85 representations under Section 16 (1) of the Act, involving 636 houses, but, owing to difficulties experienced in obtaining suitable sites for alternative housing accommodation and other matters, the Committee were able only to deal with the 67 houses already referred to.

In a statement prepared by the Department and submitted to the committee in December, 1930, it was shown that 2,440 houses within the County were considered to be unfit for human habitation and might be dealt with during the next three years by Demolition or Closing Orders; 1,534 houses were shown to be sub-let or occupied by members of more than one family; and there were noted 5,621 persons in lodgings. At that time the committee decided to make provision for the erection of 1,250 houses in respect of slum clearance and 800 subsidy houses for sub-lets and others, a total of 2,050 houses. As an instalment, we had under construction at the close of the period under review the 806 houses enumerated in a preceding paragraph.

The following is a note of the properties dealt with by Demolition Orders under Section 16 (3) of the Housing (Scotland) Act, 1930, during the year:—

| Locality. | APARTMENTS. | | | Total. |
|--|-------------|----|---|--------|
| | 1 | 2 | 3 | |
| Gibson's Land, Waterloo, | 5 | 1 | — | 6 |
| 191 Main Street, Holytown. | — | 3 | — | 3 |
| 45-53, Carfin Street, New Stevenston, | 1 | 6 | — | 7 |
| 18-19 Old Coalburn, Coalburn, | — | 2 | — | 2 |
| 1-18 Old Bellfield Rows, Coalburn, | 6 | 12 | — | 18 |
| Hunter's Land, &c., Kirkfieldbank, | 6 | 2 | — | 8 |
| New Row, Forth, | 6 | 3 | — | 9 |
| Red Row, Wilsontown, | 1 | 2 | 2 | 5 |
| Ravenstruther (Mather), | — | 3 | — | 3 |
| Liddle's Buildings, Carnwath, | — | 3 | — | 3 |
| Townhead, Douglas, | — | 3 | — | 3 |
| Totals, | 25 | 40 | 2 | 67 |

Of the above 67 dwellings dealt with, 21 were vacated, the occupants having been accommodated in Improvement Scheme houses of the Local Authority, and elsewhere. At Coalburn the majority of the tenants refused alternative accommodation offered by the Local Authority, and action against them is pending.

Insanitary Dwellings.

The Department has continued to press for the introduction of modern domestic and sanitary conveniences, and, during the year, numerous inspections were made and meetings held with the owners of properties. Difficulties are still being experienced in view of industrial depression and the continued high cost of carrying out improvements, but further progress has been made. The properties dealt with are briefly referred to as under :—

5-7 *John Street, Blantyre*.—12 one-apartment and 4 two-apartment dwellings. An inside sink and water supply was introduced to the eight upstairs dwellings (the eight ground-floor houses already having inside sinks) and six additional water-closets were provided, giving one closet to each two dwellings.

Seamore Place, Bellshill.—A two-storey tenement, comprising 5 two-apartment dwellings, with only one water-closet for the five occupancies. An additional water-closet was provided.

Plantation Cottage, 120 Jerviston Street, New Stevenston.—An inside sink was provided for this three-apartment dwelling.

1-7A *Park Street, New Stevenston*.—An additional water-closet was provided at this property.

122-126 *Carfin Road, Newarthill*.—1 one-apartment and 2 two-apartment dwellings. Two new water-closets approved of by the Committee were satisfactorily completed.

101-115 *High Street, Newarthill*.—2 one-apartment and 5 two-apartment dwellings without inside sinks and water supply and water-closet accommodation. During the year two new sculleries, &c., and one water-closet inside existing scullery were provided, and the rest of the work is in progress.

117-129 *High Street, Newarthill*.—5 two-apartment and 1 three-apartment dwellings. The four water-closets approved of by the Committee were satisfactorily completed.

182-232 *High Street and 1-11 Mosshall Street, Newarthill*.—14 one-apartment, 11 two-apartment, 2 three-apartment, and 1 four-apartment dwellings. After negotiations, the owner submitted a plan showing the proposed provision of sixteen water-closets. These proposals were approved by the Committee, and the work has now been completed.

3 *Church Street, Cambuslang*.—A four-storey tenement, comprising 11 one-apartment and 3 two-apartment dwellings. Six additional water-closets were erected during the year.

31 *Colebrooke Street, Cambuslang*.—A three-storey tenement comprising 7 one-apartment and 7 two-apartment dwellings. The three additional water-closets agreed to be provided were satisfactorily completed.

60 *Glasgow Road, Cambuslang*.—A four-storey tenement, comprising 5 one-apartment and 8 two-apartment dwellings and 2 ground-floor shops. The three new water-closets proposed to be erected were satisfactorily completed.

103 *Main Street, Cambuslang*.—A three-storey tenement, comprising 1 two-apartment and 4 three-apartment dwellings and 3 shops. The erection of the two additional water-closets, as agreed upon by the Committee, was satisfactorily completed.

Railway Cottage, Morningside.—An inside sink and water supply was introduced to this two-apartment dwelling.

10-20 *Railway Row, Morningside*.—During the year each of these 10 two-apartment dwellings was provided with an inside sink and water supply.

Hogg's Cottage, Morningside.—The existing water-closet at this three-apartment dwelling was demolished and a new bathroom was erected. A scullery, with inside sink and water supply, was also provided.

178 *Main Street, Stane*.—A bathroom, with water-closet, and sink and water supply, was provided at this four-apartment dwelling.

Gladstone Place, Overtown.—The one-apartment house referred to in last Annual Report was taken into the five-apartment house, and a box-room on the upper floor of the latter house was converted into a bathroom, with water-closet and wash-hand basin.

Smithy Row, Overtown.—Each of the 8 two-apartment dwellings at this property was provided with an inside sink and water supply.

Wheatpark, Overtown.—The water-closet proposed to be provided for these 2 two-apartment dwellings was satisfactorily completed.

The Blairs Orchard, Overtown.—A bed-recess was converted into a bathroom, with water-closet and wash-hand basin, at this three-apartment dwelling.

Wellside, Overtown. — 3 one-apartment and 1 two-apartment dwellings. An inside sink and water supply was introduced to these four dwellings.

Cross Cottage, Overtown.—A bathroom, with water-closet and wash-hand basin, and a wash-house have been provided at this three-apartment dwelling.

10-16 *Strutherhill, Larkhall.*—4 two-apartment dwellings. The four water-closets agreed to be provided at this property have now been completed satisfactorily.

29-47 *Strutherhill, Larkhall.*—10 two-apartment dwellings. The five proposed water-closets approved of by the Committee were satisfactorily completed.

3-11 *Millar Street, Glasford.*—10 two-apartment and 1 three-apartment dwellings. After negotiations, the owner submitted a plan showing the proposed provision of 7 water-closets and an additional wash-house. The Committee approved of these proposals, and the work has now been completed.

Eddlewood Rows, Hamilton.—Progress towards the completion of the sanitary improvements at this property is still proceeding slowly, and of the 28 ground floor houses in the back row, 20 have now been provided with water-closet accommodation.

21 *The Faulds, Baillieston.*—This three-apartment dwelling was provided with a scullery, sink and water supply, and water-closet.

17 *River Road, Carmyle.*—A bathroom, with water-closet, was provided at this four-apartment dwelling.

Braeside Cottage, Eastfield, Harthill. — The 2 two-apartment dwellings at this property were each provided with a water-closet.

Knowenoble Cottage, Cleland.—A bathroom and water-closet were provided for this four-apartment dwelling.

Calder Cottage, Cleland.—The owner provided a water-closet for this four-apartment dwelling.

Parkview Cottage, Newhouse.—1 three-apartment and 1 one-apartment dwellings. A new water-closet was provided in the existing sculleries of each of these dwellings.

1-15 Gray Street, Shotts.—3 two-apartment and 12 three-apartment dwellings. Thirteen of the dwellings were provided with an inside sink and water supply, water-closet, and wash-boiler in the existing scullery annexe. An inside sink and water supply and a conveniently situated water-closet were provided for each of the two remaining dwellings, and the work has now been satisfactorily completed.

Baton Cottage, Shotts.—After negotiations with the owners, it was agreed to provide a bathroom and water-closet for this four-apartment dwelling, and the work has now been completed.

Bessielea Cottage, Benhar Road, Shotts.—This three-apartment dwelling was provided with a bathroom and water-closet.

2-40 High Street, Shotts.—20 two-apartment dwellings. After negotiations, the owners submitted plans showing the proposed provision of a scullery, sink and water supply, and water-closet accommodation for each dwelling, and the improvements at 12 of the houses have now been satisfactorily completed.

East and West Lodges, Hartwoodhill.—The 2 dwellings at this property were each provided with a bathroom and water-closet.

151-155 Main Street, Salsburgh.—2 two-apartment dwellings. A scullery, sink and water supply, and a water-closet were provided for each dwelling, and the work has now been satisfactorily completed.

Fossil Villa, Springfield, Salsburgh.—This four-apartment dwelling was provided with a bathroom and water-closet.

Stonehouse.—A water-closet has been provided at 67-68 *King Street*, and also at *Hill House*; two water-closets have been provided at 58-62 *New Street*, and a new scullery and water-closet have been provided at 20 *Townhead Street*.

Lanark Road Café, Braidwood.—2 two-apartment dwellings. After negotiations with the owner, he agreed to provide a water-closet and a wash-hand basin for one of the dwellings. The other house will be provided with a water-closet at a later date.

14 Rankin Street, Carluke.—An outside water-closet and an inside sink and water supply were provided at this two-apartment dwelling.

80 *Chapel Street, Carlisle*.—This two-apartment dwelling was provided with a water-closet.

19 *Carnwath Road, Carlisle*.—A water-closet was provided for this two-apartment dwelling.

31 *Kirk Road, Carlisle*.—The wash-house at this three-apartment dwelling was converted into a scullery. An inside sink and water supply and a water-closet were provided in the scullery, and the work has now been satisfactorily completed.

Nansloe, Abington.—The owner of this four-apartment dwelling provided a water-closet and an inside sink and water supply.

Carsphairns Cottage, Leadhills.—A water-closet was provided at this four-apartment dwelling.

Mathieson's Buildings, Kirkfieldbank.—4 two-apartment and 2 one-apartment dwellings, with only one water-closet. After negotiations, the owner agreed to provide an inside sink and water supply for each dwelling, and three additional water-closets. These proposals were approved of by the Committee, and the work has now been satisfactorily completed.

135 *Auchinairn Road, Auchinairn*.—2 two-apartment dwellings. After negotiations with the owner, an inside sink and water supply was provided for each dwelling.

Whitehill Cottages, Gartcosh.—A water-closet was erected at this property for the use of the two tenants.

Dinardo's Property, Brown's Land, Gartcosh.—A water-closet was provided for the use of the shop and dwelling-house here.

Water-closets were also provided at *The Loan, Chryston*, *Armstrong's House, Mollinsburn*, and *Blairbeth Lodge, Burnside*.

WATER SUPPLY, CLOSET ACCOMMODATION, &c.—The following table, prepared in connection with the Department of Health's circular requesting the information, shows the number of closets on the conservancy system converted to the water-carriage system, as well as the number of privies, &c., remaining at the end of the year; also the number of houses without water supply, &c. It should be noted, however, that many of the dwellings shown in the table as still having inadequate sanitary conveniences are on the list for closure under the Local Authority's Scheme for the Improvement of Insanitary Areas, and will be swept away in due course:—

TABLE SHOWING NUMBER OF OCCUPIED HOUSES IN POPULOUS PLACES WITHIN THE COUNTY, AND THE NUMBER OF COMMON WATER-CLOSETS, DRY CLOSETS, PRIVY-MIDDENS, AND ASHPITS, SERVING 2, 3, 4, AND 5 OR MORE TENANTS, RESPECTIVELY, ALSO THE NUMBER OF HOUSES WITHOUT WATER SUPPLY AND SINK INSIDE THE HOUSE.

| Locality. | Number of Occupied Houses. | Water-Closets. | | | | Dry Closets. | | | | Privy-middens. | | | | Ashpits. | | | | Houses without water and sink inside house. |
|--------------------|----------------------------|----------------|-----|-----|----|--------------|----|----|----|----------------|----|----|----|----------|---|----|----|---|
| | | 2 | 3 | 4 | 5 | 2 | 3 | 4 | 5 | 2 | 3 | 4 | 5 | 2 | 3 | 4 | 5 | |
| Aitkenhead, &c., | 1,316 | 172 | 9 | 28 | — | — | — | — | — | — | 2 | — | — | — | — | — | — | 30 |
| Baillieston, . | 1,241 | 99 | 40 | 53 | 13 | — | — | — | — | 1 | 2 | 6 | 8 | — | — | — | — | 99 |
| Bellshill, &c., | 3,734 | 296 | 175 | 115 | 6 | — | — | — | — | — | — | — | — | — | — | — | — | 117 |
| Bishopbriggs, &c., | 1,219 | 15 | 38 | 6 | — | 2 | 1 | 2 | — | — | — | — | 1 | — | — | — | 8 | 23 |
| Blackwood, &c., | 331 | 22 | 24 | — | — | — | — | — | — | 6 | 4 | 2 | 1 | — | — | — | — | 120 |
| Blantyre, . | 3,239 | 313 | 219 | 159 | 24 | — | — | — | — | 2 | — | — | — | — | — | — | — | 73 |
| Bothwell, . | 893 | 68 | 31 | 3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 2 |
| Busby, . | 175 | 28 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Calderbank, . | 465 | 2 | — | 1 | 2 | 1 | — | — | — | 15 | 2 | 3 | 36 | 3 | — | — | 1 | 180 |
| Cambuslang, . | 5,730 | 357 | 468 | 214 | 4 | — | — | — | — | — | — | — | — | — | — | — | — | 1 |
| Carmunnock, . | 267 | 13 | 9 | 2 | 1 | — | 1 | — | — | — | 1 | — | — | — | — | — | — | 10 |
| Carmyle, &c., | 877 | 44 | 27 | 21 | — | 3 | — | — | — | — | — | — | — | — | — | 1 | — | 41 |
| Carluke, . | 1,484 | 164 | 39 | 23 | 3 | — | — | — | — | 29 | 3 | 5 | 6 | 23 | 4 | 6 | 3 | 447 |
| Carstairs, . | 408 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Carnwath, . | 231 | 2 | 7 | — | — | — | — | — | — | 2 | 4 | — | — | — | — | — | — | 53 |
| Chryston, &c., | 959 | 12 | 16 | 25 | — | 1 | — | — | — | 1 | — | — | — | — | 1 | — | 1 | 2 |
| Cleland, &c., | 676 | 38 | 22 | 22 | 5 | — | — | — | — | 17 | 20 | 10 | 2 | 8 | 7 | 2 | — | 39 |
| Coalburn, . | 400 | 17 | 9 | 2 | 1 | — | — | — | — | 28 | 2 | — | — | — | — | — | — | 112 |
| Crossford, &c., | 143 | 39 | — | — | — | — | — | — | — | — | — | 1 | 1 | — | — | — | — | 9 |
| Dalziel, &c., | 324 | 33 | — | — | — | 2 | — | — | — | — | — | — | — | — | — | — | — | 5 |
| Douglas, . | 242 | 22 | 10 | 7 | 2 | — | — | — | — | 12 | 3 | — | — | — | — | — | — | 43 |
| East Kilbride, . | 643 | 65 | 30 | 12 | — | — | — | — | — | — | — | — | — | — | — | — | — | 40 |
| Forth, &c., | 419 | 3 | 4 | 1 | — | — | — | — | — | 29 | 11 | 8 | — | — | — | — | — | 145 |
| Gartcosh, . | 523 | 20 | — | 5 | — | — | 12 | — | — | — | — | — | 3 | — | — | — | — | 25 |
| Glenboig, . | 421 | 4 | — | — | — | 14 | 10 | 28 | 11 | 2 | 1 | — | 20 | 1 | — | — | 1 | 195 |
| Glengowan, &c., | 438 | 15 | 3 | — | — | 18 | 10 | 22 | 12 | 11 | 2 | 5 | 19 | — | — | 2 | 1 | 19 |
| Hamilton Road, . | 104 | 12 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Harthill, . | 714 | 251 | 2 | — | — | 3 | 1 | — | — | 5 | 1 | 1 | — | 18 | 4 | 2 | — | 38 |
| Heathfield, . | 56 | — | — | — | — | — | — | 14 | — | — | — | — | 4 | — | — | — | — | 56 |
| Holytown, &c., | 2,403 | 261 | 90 | 72 | 7 | — | — | — | — | 4 | 10 | 4 | 5 | 3 | 1 | 2 | 7 | 146 |
| Kirkfieldbank, . | 210 | 10 | 2 | 8 | 1 | — | — | — | — | 3 | 6 | 2 | 1 | — | — | — | — | 102 |
| Larkhall, . | 2,783 | 414 | 76 | 65 | — | — | — | — | — | 4 | 2 | — | — | 1 | — | 1 | 1 | 71 |
| Law, . | 393 | 12 | 3 | — | — | — | — | — | — | 7 | 3 | 15 | 4 | 9 | 1 | 9 | 8 | 125 |
| Lesmahagow, . | 643 | 48 | 36 | 10 | 4 | — | — | — | — | 4 | — | — | — | — | — | — | — | 143 |
| Mavis Valley, &c., | 226 | 8 | — | — | — | 10 | 27 | — | — | — | — | — | 3 | — | — | — | — | 93 |
| Mollinsburn, . | 56 | — | — | — | — | 10 | 3 | 1 | — | — | 2 | — | 4 | — | — | — | — | 5 |
| Newarthill, . | 553 | 57 | 8 | 5 | 1 | — | — | — | — | 19 | 13 | 13 | 13 | 11 | 9 | 16 | 14 | 126 |
| Newmains, . | 901 | 114 | 15 | 3 | — | 1 | — | — | — | — | — | — | — | — | — | — | — | 70 |
| Ponfeigh, . | 258 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Rutherglen, . | 2,443 | 11 | 169 | 8 | 4 | — | — | — | — | — | — | — | — | — | — | — | — | 18 |
| Salsburgh, . | 181 | 10 | — | — | — | — | — | — | — | 9 | 12 | — | — | 12 | 4 | 3 | — | 47 |
| Shettleston, . | 1,184 | 2 | 32 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Shotts, &c., | 2,070 | 185 | 78 | 24 | 13 | — | — | — | — | 5 | 8 | — | — | 6 | 4 | 8 | 2 | 204 |
| South Lenzie, . | 484 | 4 | 5 | — | — | — | — | — | — | — | — | — | — | — | — | 1 | 5 | — |
| Stepps, . | 791 | — | 2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Stonehouse, . | 823 | 143 | 23 | 5 | — | — | — | — | — | 3 | — | — | — | — | — | — | — | 45 |
| Strathaven, . | 1,200 | 102 | 81 | 29 | 1 | — | — | — | — | — | — | — | — | — | — | — | — | 60 |
| Uddingston, . | 1,882 | 172 | 58 | 25 | 6 | — | — | — | — | — | — | — | — | — | — | — | — | 15 |
| Waterloo, &c., | 783 | 56 | 4 | 3 | — | 2 | — | — | — | 30 | 6 | 5 | 7 | 6 | 2 | 1 | 12 | 142 |

Accommodation for Seasonal Workers.

The total intimations received from employers as to the number of workers proposed to be employed was 51, and 18 applications by farmers for the approval of the Local Authority with regard to accommodation were also received during the year.

Numerous visits were made to seasonal workers' accommodation and visits of inspection were also made, accompanied by Miss M'Michael, of the Department of Health.

The housing of seasonal workers, particularly in the former Upper Ward area, generally requires careful consideration, in view of the extensive employment of workers during the potato lifting season. In most cases, the workers are housed in barns and granaries, where the lighting and ventilation are poor. In the Carmichael district the farmers have joined together in providing accommodation, which is kept solely for seasonal workers. This is a very satisfactory way of dealing with the situation, as the accommodation is always available.

It would appear that the farmer, in most cases, does not know the time of arrival of the workers, and these arrive without warning. In one case the farmer was advised that 12 workers were being sent to his farm and he prepared accommodation for this number, but when the workers arrived there were 30, and he had to improvise accommodation, with the result that 2 men were found sleeping in a loft over the stable.

During the year the Department of Health for Scotland made certain regulations extending the subjects in respect of which seasonal workers' accommodation by-laws might be made, and, as soon as the by-laws are revised, action will be taken with a view to having all registered accommodation brought into conformity with such by-laws.

Housing (Rural Workers) Act, 1926.

During the year 68 applications were received for assistance in aid of the reconstruction and improvement of 103 dwellings for the accommodation of agricultural workers and other persons whose economic condition is substantially the same as such workers, and a grant was sanctioned by the Local Authority in each case.

Rent and Mortgage Interest (Restrictions) Acts, 1920 to 1925.

The number of applications by tenants for a certificate of the Local Authority as to the insanitary state of repair of their dwellings was 80. In every instance a careful inspection of the premises was made, and a report submitted for the consideration of the Committee. Certificates were granted by the Local Authority in 73 cases, 2 were refused, and 5 cases were continued.

Intimation was sent to the owner of each dwelling giving details of the defects found, and in most cases repairs were immediately carried out.

Applications by Landlords.—No applications were received from owners of houses, in respect of which certificates had previously been granted to the tenants, requesting reports of the Local Authority to the effect that the houses were now in a reasonable state of repair.

Ruinous Buildings.

The following ruinous or dangerous buildings were dealt with during the period under review, in terms of Section 191 of the Burgh Police (Scotland) Act, 1892, as applied to the County by Section 10 (2) of the Local Government (Scotland) Act, 1908 :—

The Limes, Thankerton.—Empty house—demolished.

Townhead, Kirkmuirhill.—Five empty houses—demolished.

5 Hunter Street, East Kilbride.—Wash-house—demolished.

New Street, Stonehouse.—Empty picture house—converted into garage.

127 Bothwellpark Rows, Bellshill.—Two-apartment house—boarded up.

3 Comet Street, Mossend.—Chimney-stalk—repaired.

31 Greenrigg Street, Uddingston.—Stable—demolished by Local Authority.

Viewpark Cottages, Uddingston.—Gable wall of dwelling dilapidated; tenant removed and building demolished.

113 Main Street, Holytown.—One-storey property, with attics—demolished by Local Authority.

269-271 High Street, Newarthill.—Two empty houses—boarded up.

273-283 *High Street, Newarthill*.—Six empty houses—demolished.

319-331 *High Street, Newarthill*. — Seven empty houses—demolished.

548-552 *Hamilton Road, Broomhouse*.—Gable wall—repaired.

104 *Stane Place, Shotts*.—One house—tenant removed and building demolished.

Steppshill Farm, Stepps.—Disused shed—demolished.

77 *Springfield Road, Auchinairn*.—Water-closet on stair landing—repaired.

Drainage.

There are 55 Special Drainage Districts within the County, and no new districts were formed during the year. The boundaries of the Holytown and New Stevenston Special District and Busby Special District were extended on 3rd June.

New Sewers.—The following information was supplied by the County Drainage, &c., Engineer as to sewers constructed during the year :—

| | LINEAL YARDS. | | | | | | | |
|--|---------------|-------|--------|--------|--------|--------|--------|--------|
| | 6 In. | 9 In. | 12 In. | 15 In. | 18 In. | 21 In. | 24 In. | 27 In. |
| <i>Special Drainage Districts.</i> | | | | | | | | |
| Burnhead, &c., Ashgillhead, ... | — | 283 | 409 | 228 | — | — | — | — |
| Storm-water Sewer at Christie's Burn, Blantyre, ... | — | — | — | — | 12 | — | 80 | — |
| Fallside Road, Bothwell, ... | — | 44 | 235 | — | — | — | — | — |
| Intercepting and Outfall Sewer from Burnside to Duke's Road, Cambuslang, ... | — | 176 | — | 381 | 108 | 530 | — | 245 |
| East Kilbride Road, Burnside, Cambuslang, ... | — | 142 | 315 | — | — | — | — | — |
| Storm-water Sewer through Golf Course, Cambuslang, ... | — | — | — | — | 469 | — | — | — |
| Sewerage Scheme, Glenboig, ... | — | 1,528 | 597 | 370 | — | 893 | — | — |
| Sewerage Scheme, Glasford, ... | 52 | 1,602 | 5 | — | — | — | — | — |
| Edinburgh Road, Harthill, ... | — | 509 | 349 | — | — | — | — | — |
| Carlisle Road, Larkhall, ... | — | 439 | — | — | — | — | — | — |
| Edinburgh Road, Salsburgh, ... | — | 405 | 367 | — | — | — | — | — |
| Ironworks Road, Shotts, ... | — | 21 | 240 | 88 | — | — | — | — |
| <i>General Public Health.</i> | | | | | | | | |
| Cleland Road, Newarthill, ... | — | 49 | — | — | — | — | — | — |
| Totals, ... | 52 | 5,198 | 2,517 | 1,067 | 589 | 1,423 | 80 | 245 |

| | LINEAL YARDS. | | | | | | |
|-------------------------------------|---------------|-------|--------|--------|--------|--------|--------|
| | 6 In. | 9 In. | 12 In. | 15 In. | 18 In. | 21 In. | 24 In. |
| <i>Housing Schemes.</i> | | | | | | | |
| Ballgreen No. (3) Site, Strathaven, | — | 70 | — | — | — | — | — |
| Tannochside (No. 2) Site, Viewpark, | — | 294 | — | — | — | — | — |
| Castlechimmings Site, Cambuslang, | — | 130 | — | — | — | — | — |
| West Crindledyke Site, Newmains, | — | 417 | 154 | — | — | — | — |
| Forth (No. 2) Site, Forth, ... | — | 451 | — | 117 | 272 | — | — |
| Carstairs Site, Carstairs, ... | — | 184 | — | — | — | — | — |
| Maxwell Street Site, East Kilbride, | — | 152 | — | — | — | — | — |
| Rhinsdale Site, Baillieston, ... | — | 191 | — | — | — | — | — |
| Langmuir (No. 3) Site, Bargeddie, | — | 323 | — | — | — | — | — |
| Shottsburn Site, Salsburgh, ... | — | 393 | 319 | — | — | — | — |
| Totals, ... | — | 2,605 | 473 | 117 | 272 | — | — |

The number of connections made to the sewers during the year was 132.

Sewage Purification Works.—Complete installations of sewage purification works, consisting of sewage tanks and percolating filters with rotary distributors, have been constructed at Harthill and Glasford.

Extensions and alterations to the existing sewage purification works have been carried out at Bishopbriggs, Ashgillhead, and Carmunnock.

Douglas.—Complaint was made regarding the condition of the burn flowing through the village of Douglas, and, on inspection, it was found that two wash-houses at Springhill Cottage and Marshall's Buildings were discharging effluent into the burn. The matter was taken up with the respective owners, who had the drain in each case connected to the property drains which discharge into a sewer. No further complaints have been received.

Covington.—With regard to a complaint as to nuisance conditions arising from a drain leading from Hope Cottage on the north avenue to Covington Church, it was found that this referred to a ditch commencing at, and close to, the south side of the south avenue to the church, which received the discharge from the cesspool at Hope Cottage. The ditch has been piped for a further distance of 12 yards from the south avenue, and this has removed any cause for complaint meantime.

Forth.—Complaint was received regarding the condition of the ditch which receives the sewage from the lower part of the village of Forth. The ditch was found in a filthy condition, and arrangements were made to have it thoroughly cleaned out. The work was done in a very satisfactory manner.

Strathaven.—Complaint was again received as to flooding from the ditch at 16 Commercial Road, Strathaven, caused through silting. The ditch was cleaned out at the expense of the proprietors of the lands through which the ditch passes, and the cause of the complaint has been removed.

Rutherglen.—The floodings from the sewers at Burnside and Farme were still in evidence at various times during the year, although not to the same extent as in former years. The completion of the 15-inch outlet sewer in Blairbeth Road, Burnside, and Mill Street, Rutherglen, improved the conditions, but it was evident, shortly after completion, that this would only partially reduce the flooding at Springfield Park. It was agreed that the only remedy for the flooding at Burnside was to reverse the Southhill Avenue sewer and discharge it to Cambuslang Road main sewer, but the work has not yet been carried out.

Crosshill Burn, which has been a source of complaint for a considerable period, owing to pollution by the cesspool effluent discharges from the houses erected east of Burnside Road, has now been freed from such discharges by the construction of a sewer from Duke's Road to Blairbeth Road, which now takes all the drainage from houses formerly discharging to the Crosshill Burn outlet.

Bishopbriggs.—Complaint was made during the year as to the pollution of a burn flowing through the golf course. This burn received the drainage of St. Mary's School, Bishopbriggs, and the complaint was the result of inattention to a septic tank and filter. After some delay the matter was attended to and the complaint forwarded to the County Drainage, &c., Engineer to be dealt with in view of the possibility of the extension of the sewer to take the drainage from the school without pre-treatment.

Carmyle Sewage Outfalls.—Complaints were received from the Department of Health for Scotland as to alleged nuisance conditions from an outfall sewer at Carmyle. Accompanied by Dr. Dittmar of the Department of Health and the County Medical Officer, inspected the 24-inch main outfall sewer which carries about three-fourths of the sewage from the Special District. The River Clyde was exceptionally low, with the result that the open concrete channel from the mouth of the sewer into the river was exposed for a distance of about 10 yards. There was a strong flow of sewage and a distinct odour was observed. The sewage was eddying downstream towards some bushes, and the bank and bushes were hanging with rags, pieces of paper, &c., which had been deposited there when the river was in flood. Next inspected the 12-inch outfall sewer from the Gardenside Housing Scheme, which was discharging from the bank about a foot above water level. Between the pipe and the river there was a deposit of sludge.

In connection with the matter it was proposed to construct complete sewage purification works at Carmyle to deal with the sewage there, but it had not been found possible to obtain a suitable site in the vicinity owing to the mineral workings. The only remedial measure which could be taken to deal temporarily with the conditions now existing would be the extension of the outfall sewer for a short distance into the river. The Committee were of opinion that the construction of sewage purification works should be proceeded with as soon as practicable, and it was remitted to the County Drainage Engineer to report on the matter.

Foul Ditches.—Ditches throughout the County, other than those referred to above, into which sewage is discharged were cleaned out at the expense of the Local Authority during the year.

Water Supply.

The water supply from the various reservoirs belonging to the Local Authority was more than sufficient to meet all demands. Complaints were received as to local deficiencies, but these were mostly found to be due to deficient service pipes, and, on being brought to the notice of the respective owners, were remedied in every instance.

Extensions of Water Pipes.—The following is a note prepared by the County Water Engineer showing the extensions of water pipes carried out during the year:—

| | Diameter of Pipe. | Yards. |
|--|----------------------|--------|
| <i>Avondale Parish.</i> | | |
| Ballgreen Housing, | 3" | 105 |
| <i>Blantyre Parish.</i> | | |
| Auchinraith Housing, | 4" | 45 |
| <i>Bothwell Parish.</i> | | |
| Newarthill Housing, | 2" | 180 |
| Salsburgh Housing, | 3" | 350 |
| Viewpark No. 2, Tannochside Area, ... | 3" | 300 |
| Cleland Housing, | 3" | 120 |
| Carfin Housing, | 3" | 140 |
| Do. | 2" | 200 |
| Fallside Housing, | 4" | 240 |
| Bellshill Hospital Extension, | 3" | 200 |
| <i>Cambuslang Parish.</i> | | |
| Fishescoates Housing, | 4" | 180 |
| Overton Road Housing, | 4" | 100 |
| Castlechimmins Housing, | 3" | 140 |
| Westburn Housing, | 3" | 300 |
| Howieshill Housing, | 3" | 410 |
| <i>Cambusnethan Parish.</i> | | |
| Netherton Housing, | 3" | 90 |
| West Crindledyke Housing, | 4" | 618 |
| Waterloo Housing, | 4" | 100 |
| <i>Cumbernauld Parish.</i> | | |
| Croy Housing, | 3" | 270 |
| Cumbernauld to Castlecary, Work No. 5 (Water Order, 1917), | 3" | 1,630 |
| Dunbartonshire Area, | 4" | 450 |
| <i>Dalserf Parish.</i> | | |
| Ashgillhead Housing, | 2" | 300 |
| Netherburn to Threepwoodbank, | 3" | 3,700 |
| <i>East Kilbride Parish.</i> | | |
| Busby Housing, | 3" | 100 |
| East Kilbride Housing, | 3" | 200 |
| Extension—Nerston, | 1½" | 180 |
| <i>Stonehouse Parish.</i> | | |
| Manse Road, Stonehouse, | 2" | 750 |

| | | | | | Diameter of Pipe. | Yards. |
|--|-----|-----|-----|-----|----------------------|--------|
| <i>Blackwood Special District.</i> | | | | | | |
| Blackwood Water, | ... | ... | ... | ... | 2" | 160 |
| <i>Braidwood Special District.</i> | | | | | | |
| Howgate to Orchardknowe, | ... | ... | ... | ... | 3" | 490 |
| <i>Cadder Special District (Northern).</i> | | | | | | |
| Balmuildy Road, Bishopbriggs, | ... | ... | ... | ... | 3" | 70 |
| <i>Cadder Special District (Southern).</i> | | | | | | |
| New School, Muirhead, | ... | ... | ... | ... | 3" | 110 |
| Forth Avenue, Stepps, | ... | ... | ... | ... | 3" | 100 |
| <i>Carlisle Special District.</i> | | | | | | |
| Carlisle Housing—Hozier Street, | ... | ... | ... | ... | 4" | 60 |
| <i>Forth Special District.</i> | | | | | | |
| Forth Housing, | ... | ... | ... | ... | 3" | 300 |
| <i>Lesmahagow Special District.</i> | | | | | | |
| Lesmahagow Water, | ... | ... | ... | ... | 3" | 200 |

WATER SAMPLES.—In view of complaints having been received regarding the quality of water supplies from private sources, samples were obtained from the following places and submitted for chemical analyses :—

West Quarter Farm, Carlisle.—A sample of spring water was taken from the collecting tank at the farm. The analysis showed that the water was sufficiently pure for domestic purposes.

Westmains Farm, Braehead, Carnwath.—Complaint was received that the sewage from Braehead Village was contaminating the water supply of this farm, and samples were taken in conjunction with the County Chemist. Sample No. 1 was taken from an inundation at Braehead, and proved to be unfit for domestic use; sample No. 2, taken from an inundation, showed no evidence of sewage pollution; sample No. 3, obtained from a tap in the scullery at Westmains Farm, proved on analysis to be sufficiently pure for domestic use; and sample No. 4, also taken from a tap in the scullery at East Shields Cottage, was found on analysis to be suitable for domestic purposes.

Fairyknowe Cottage, Biggar.—A sample of water obtained at this cottage on analysis showed no evidence of nitrogenous organic pollution, but, as the method of obtaining the water was not satisfactory, the matter was taken up with the owner.

Bellcraig Farm, Carmunnock.—Complaint was received from the tenant of this farm that roof and surface water was finding its way into the well. A sample of water was taken and showed on analysis that it was receiving pollution, but there was no evidence that it was due to flood water. The surface water, however, has now been carried in a pipe below the well, and there has since been no complaint as to quality.

Drumclog School.—A sample of water taken from the pump at this school gave results on analysis to show that there was not the slightest evidence of sewage pollution.

Scavenging.

There are now 50 Special Scavenging Districts in operation within the County, a new district to include the village of Harthill having been formed during the year. The boundaries of the Gartlea Special Scavenging District were extended on 3rd June.

The following is a summary of the work of scavenging carried out in each Special District during the year :—

AITKENHEAD, TANNOCHSIDE, AND BOTHWELLPARK.—The work of collection and disposal of refuse three times weekly was carried out by a contractor in a satisfactory manner, all refuse being deposited in Fallside Quarry. Only two privies now remain in this district.

BAILLIESTON.—The daily collection and removal of refuse was undertaken satisfactorily by a staff in the direct employment of the Ninth District Council. During the summer months the refuse was deposited in Braehead Quarry, and in Swinton Sandpit during winter. The removal of the contents of ashpits in West Marystone once a week was also carried out in a satisfactory manner by a local contractor, who used the refuse on his farm lands.

A complaint as to rat infestation in the coup at Swinton was investigated and proved to be groundless, as no evidence of rats was found.

BELLSHILL AND MOSSEND.—The refuse was collected daily and deposited on waste ground at Boggsbrae by a staff under the control of the Sixth District Council, who employ a superintendent to direct the work. No complaint was received by this Department during the year in connection with the work.

Common Stairs, &c.—Twenty-two notices, in terms of Section 117 of the Burgh Police (Scotland) Act, 1892, were served on property owners requiring them to whitewash or, at their option, to paint the walls and roofs of common passages and staircases at their respective properties, and in every instance the necessary work was executed.

BISHOPBRIGGS AND AUCHINAIRN.—The daily collection and disposal of refuse was carried out by a contractor, and two men employed direct by the Ninth District Council, in a satisfactory manner, all refuse being deposited in a coup at Springfield.

Common Stairs, &c.—A notice was served on a property owner requiring the whitewashing of a common passage and staircase, and the work was duly carried out.

BLACKWOOD.—The refuse in this Special District, which includes Blackwood, Kirkmuirhill, and Auchenheath, was collected twice weekly by contractors and deposited in coups and on farm lands. The work was done satisfactorily.

Common Stairs, &c.—Notices were served on two owners of property requiring them to whitewash the common passages and staircases of their premises, and in one instance the work was immediately executed. In the remaining case, Court proceedings were instituted against the owner of Westburn Terrace, Kirkmuirhill, and, after the necessary work had been done, he was fined 30s. expenses.

BLANTYRE.—The work of scavenging was carried out by a contractor under the control of the Fifth District Council, and supervised by their superintendent, the refuse being collected and removed daily to a coup in the public park, where it was used for levelling purposes.

Common Stairs, &c.—Five notices were served on property owners in connection with the whitewashing of common passages and staircases, and the work in each case was duly carried out.

BOTHWELL.—The daily collection and removal of refuse was carried out satisfactorily by a staff in the direct employment of the Sixth District Council. The contractor engaged during the winter months to collect and remove the contents of the ashbins thrice weekly from the Housing Schemes also being satisfactory. All refuse matter was deposited in Fallside Coup.

Common Stairs, &c.—In thirteen instances notices were served on owners requiring the limewashing of common passages and staircases, and the work was carried out.

BUSBY.—The refuse was collected and removed twice weekly to a coup in Busby Glen by a contractor. The service generally was carried out in a satisfactory manner, and the coup was kept in a tidy condition.

CALDERBANK.—The collection and removal of refuse twice weekly was carried out satisfactorily by a contractor, who removed the refuse to farm lands.

CAMBUSLANG.—The daily collection and removal of refuse was carried out satisfactorily by a contractor, all refuse being disposed of at Cambuslang Destructor. In May, a change was made in the method of collection from self-contained and Housing Scheme dwellings, the ashbins being carried by the contractor from the rear of the dwellings to the dustcart and returned when empty to their original position. The extra cost of this arrangement was about £750 per annum.

Destructor.—Complaint was again made by the engineer in charge as to the inability of the destructor to deal with the refuse, owing to the increased quantity coming from the Rutherglen (Landward) District, and it was found necessary at intervals to exclude this refuse. The matter is receiving the attention of the Eighth District Council.

Common Stairs, &c.—Twenty-nine notices were served on owners of property requiring the whitewashing of common passages and staircases, and in each case the work was done. Nine notices, in terms of Section 115 of the Burgh Police (Scotland) Act, 1892, were served on occupiers who had failed to sweep and wash regularly the

common passages and stairs giving access to their premises, as required by the by-laws in operation within this Special District. Sweeping and washing have since been regularly carried out.

CARLUKE.—The refuse from dustbins was removed thrice weekly to coups, and the contents of ashpits removed to farm lands every second week by a staff in the direct employment of the Third District Council. Four ashpits were abolished during the year.

Complaints as to rat infestation of the coups at Moor Quarry and Station Road were investigated, and action was taken for the extermination of the vermin, with good results.

CARMUNNOCK.—The refuse was removed once a week by a contractor and deposited in a coup. Several complaints were made against the contractor, who had not before operated in this district, and, after directing his attention to the penalties for failing to implement the conditions of contract, no further cause for complaint was found.

CARMYLE AND MOUNT VERNON.—The daily collection and removal of refuse was undertaken satisfactorily by a contractor, all refuse being deposited in Kenmuir Sandpit.

CARNWATH.—The collection and removal of refuse three times weekly was carried out satisfactorily by a contractor, all refuse being deposited in a coup on the moorland.

CARSTAIRS.—Three times a week the refuse was collected and removed satisfactorily by a contractor and deposited in a sandpit.

CARSTAIRS JUNCTION.—The refuse was removed daily by a contractor and deposited in a sandpit. The work was done in a satisfactory manner.

CHRYSTON AND MUIRHEAD.—The collection and removal of refuse was carried out in an efficient manner twice weekly by a contractor, all refuse being deposited in a coup.

Common Stairs, &c.—After service of a notice on a property owner requiring the whitewashing of a common passage and staircase, the necessary work was carried out.

CLELAND AND OMOA.—Three times weekly the refuse was collected and removed to farm lands by a contractor, who carried out the work in a satisfactory manner.

COALBURN.—The collection and removal of refuse twice weekly was carried out in a satisfactory manner by a contractor, the refuse being deposited in a coup.

CROSSFORD AND HAZELBANK.—The refuse was collected twice weekly by a staff in the direct employment of the Second District Council and deposited in a coup and on farm lands.

CROSSLAW.—The refuse was collected and removed to a coup twice weekly by a contractor, who carried out the duties in a satisfactory manner.

DALZELL AND NETHERTON.—The scavenging was done satisfactorily by a staff in the direct employment of the Seventh District Council, all refuse being collected and removed daily to coups. Part of the time of the staff was devoted to the Hamilton Road Special Scavenging District.

DOUGLAS.—The daily collection and removal of refuse was carried out by a scavenger in the direct employment of the Second District Council, all refuse being deposited in a coup situated at the west end of the village, adjacent to the Douglas Water. Conditions there were for some time unsatisfactory, practically the whole area being rat-infested, while a large portion of the tipping face was on fire. Remedial measures were adopted and conditions were improved.

EAST KILBRIDE.—The collection and removal of refuse three times weekly was undertaken satisfactorily by a contractor, all refuse being deposited in a coup provided by the Fifth District Council.

Common Stairs, &c.—A notice was served on a property owner requiring the whitewashing of a common passage, and the work was duly carried out.

FORTH.—The daily collection and removal of refuse was performed in an efficient manner by a staff in the direct employment of the Third District Council, all refuse being deposited in a coup on the moorland.

GARTLEA.—The weekly collection of refuse was done by a contractor in a satisfactory manner. The material was disposed of at a coup.

Extension of Boundaries. — The boundaries of the Special Scavenging District were enlarged to include an area embracing the portion of Lady Wilson Street and ground on each side thereof to the west of the existing Special Scavenging District.

GARTCOSH.—The collection and disposal of refuse twice weekly was carried out satisfactorily by a contractor. The refuse was disposed of in a market garden, and gave rise to no complaint.

GLENGOWAN AND CALDERCRUIX.—The refuse from ashbins was collected and removed by a contractor twice weekly, and the contents of ashpits removed at least once a month, all refuse being disposed of on farm lands. The work was carried out satisfactorily.

HAMILTON ROAD.—The daily collection and removal of refuse was carried out in an efficient manner by the staff employed in the Dalzell and Netherton Special Scavenging District. The refuse was deposited in coups.

HARTHILL.—This new Special Scavenging District was formed on 7th January, and the work of collection and removal of refuse was commenced on 16th May by a contractor. The refuse from ashbins was removed twice weekly and the contents of ashpits removed at least once a month and deposited on farm lands. The work was carried out in a satisfactory manner.

HAYWOOD.—The refuse from the ashpits is removed fortnightly by a staff in the direct employment of the Third District Council and deposited in a coup on the moorland.

HOLYTOWN, NEW STEVENSTON, AND CARFIN.—The daily collection and removal of refuse was carried out by a staff in the direct employment of the Sixth District Council in a satisfactory manner, the refuse being disposed of at New Stevenston Destructor and partly in coups. The ashpits at Legbrannock were emptied weekly and the refuse deposited on farm lands by a contractor.

Common Stairs, &c.—Two notices were served on owners of property requiring the whitewashing, or painting, of common passages and staircases. In one instance the work was immediately executed, and in the other case Court proceedings had to be resorted to, namely, the owner of houses at 101 to 115 Newarthill Road, Carfin, who was fined 20s. or 5 days' imprisonment for failing to implement the terms of the Local Authority's notice. Whitewashing was duly carried out by the owner. For failing to keep clean the common passage and stairs giving access to their premises, notices, in terms of Section 115 of the Burgh Police Act, 1892, were served on four occupiers. Sweeping and washing have since been regularly attended to.

KIRKFIELD BANK.—The refuse was collected twice weekly by a staff in the direct employment of the Second District Council and deposited in a coup and on farm lands.

LARKHALL.—The daily collection and removal of refuse was satisfactorily carried out by a staff in the direct employment of the Fourth District Council and deposited in a coup.

Common Stairs, &c.—Notices were served on two owners of property requiring the whitewashing of common passages and staircases, and the necessary work was duly carried out.

LAW.—The refuse from the ashbins was removed three times weekly and the contents of the ashpits removed at least once a month by a contractor, the refuse being deposited in coups and on farm lands.

LEADHILLS.—The refuse was collected weekly by a contractor and deposited in two coups. The work was done satisfactorily.

LESMAHAGOW.—The daily collection and removal of refuse was carried out satisfactorily by a staff in the direct employment of the Second District Council. The refuse was used for making up ground near the railway viaduct.

NEWARTHILL.—The collection and removal of refuse to farm lands was satisfactorily undertaken by a contractor, the contents of ashbins being removed twice weekly and the ashpits emptied at least once a month.

Common Stairs, &c.—Whitewashing of a common passage and staircase was duly carried out after service of a notice on a property owner.

NEWMAINS.—The daily collection and removal of refuse was carried out satisfactorily by a contractor, the material being disposed of in a coup.

NORTH SHETTLESTON.—The collection and disposal of refuse was carried out satisfactorily by a contractor. A daily service was maintained for tenement properties and a twice-weekly service for the National Housing Scheme and Springboig. All refuse was disposed of at Cranhill Coup, which was kept in good order.

Common Stairs, &c.—Three notices to whitewash or paint common passages and staircases were served on owners of property, and in every case the work was duly carried out. Three occupiers were also dealt with for failing to keep clean the common passage giving access to their premises, and sweeping and washing have since been regularly attended to.

OVERTOWN AND WATERLOO.—The scavenging was carried out by a contractor, all refuse from ashbins and earth-closets being collected and removed twice weekly and the contents of ashpits removed at least once a month. The refuse collected was deposited in coups and on farm lands. During the year seven privies were abolished.

PONFEIGH.—The collection and removal of refuse four times weekly was carried out in a satisfactory manner by a contractor, the refuse being deposited in a coup.

RUTHERGLEN.—The collection and removal of refuse was carried out by a contractor three times weekly from Farme and Eastfield and twice a week from the Housing Scheme at Eastfield, Burnside, and King's Park. The refuse was disposed of at Cambuslang Destructor and on several occasions in Cunigar Coup.

Common Stairs, &c.—Notices were served on five owners of property requiring the whitewashing or painting of common passages and staircases, and in every instance the necessary work was executed. Notice was also served on an occupier for failing to keep clean the common passage giving access to his premises, and sweeping and washing have since been regularly carried out.

SALSBURGH.—The refuse was collected and removed twice weekly to farm lands by a contractor. Three privies and ashpits were abolished during the year.

SHOTTS AND DYKEHEAD.—The daily work of collection and removal of refuse was carried out in an efficient manner by a staff in the direct employment of the Seventh District Council, the refuse being deposited in coups, which were always kept in a satisfactory condition.

SOUTH LENZIE.—The twice-weekly collection and removal of refuse was carried out satisfactorily by a contractor, who deposited the refuse in an old quarry at Boghead.

STEPS.—The refuse was collected and removed twice weekly by a contractor and deposited on low-lying ground on the west side of Magazine Road. Owing to the close proximity of the public highway and dwelling-houses, complaint was made regarding the burning of papers, &c., at the coup. Whilst no serious nuisance arose out of this practice, it was arranged that in future all papers should be buried. No further complaints have been received.

STONEHOUSE.—The work of refuse collection and removal twice weekly was carried out by a contractor, all refuse being deposited in a coup rented by the Local Authority. Complaints were received as to papers from the coup blowing over adjoining lands, and the Estate Agents requested the erection of a six-feet fence of wire netting to prevent papers being blown about. The matter was referred to the Fourth District Council, together with an estimate of the cost of fencing, amounting to £16. Instead of adopting the suggestion, however, the District Council employed workmen to burn papers and clean up the coup generally.

Further complaints were received, and, as anticipated, the Agents for the Superior intimated that the nuisance would not be tolerated further, and gave formal notice of termination of the Council's occupancy of the subjects. The District Council then agreed to the former suggestion that a wire netting fence be erected round the coup, and the notice to quit was withdrawn. Had the fencing been erected when first suggested a considerable saving of money would have been effected.

STRATHAVEN.—The daily collection and removal of refuse was undertaken by a contractor, who disposed of the material on a coup provided by the Fourth District Council. Complaints were received during the year as to papers from the coup blowing on to adjoining lands, and a man was thereafter employed by the District Council to burn all paper and keep the coup in a tidy condition.

UDDINGSTON.—The refuse was collected and removed daily by a contractor to the coup at Fallside. The work was carried out in a satisfactory manner.

Common Stairs, &c.—Notices were served on twenty-one owners of property requiring the whitewashing or painting of common passages and staircases, and in every instance the work was duly carried out.

HOUSING SCHEMES OUTWITH SCAVENGING DISTRICTS.—The collection and removal of refuse twice weekly from the dwellings at the following Housing Schemes still outwith Special Scavenging Districts was carried out by contractors under the supervision of the local Sanitary Officers, viz.:—Ashgillhead, Broomhouse, Carnbroe, Chapelhall, Drum-park, Ferniegair, Greengairs, Glenboig, Glenmavis, Kingshill, Meikle Earnock, Moodiesburn, and Symington, (once weekly).

PROVISION OF DUSTBINS.—During the year 107 notices, in terms of Section 23 of the Burgh Police (Scotland) Act, 1903, were served on owners of tenement houses within the Special Scavenging Districts requiring them to provide proper covered galvanised-iron ashbins. In most cases suitable ashbins were provided after service of the notice, and the remainder were reported to the Committee with a view to proceedings, in terms of Section 24 of the Act, being instituted. It was not found necessary, however, to take legal action, as the necessary ashbins were duly supplied.

Private Streets.

BLANTYRE.—The portion of Calder Street from Craig Street to Victoria Street, referred to in last Annual Report, was made up to highway standard, the work being carried out, as arranged, by the Highways Department. Although further meetings were held with the various parties interested, nothing has been done to the second portion from Calder Street to Dixon's Rows.

The work of repairing the private streets at Dixon's Rows is almost completed, only a portion of Calder Street having still to be done.

Rosebank Avenue.—A complaint was received as to the unsatisfactory condition of Rosebank Avenue. A meeting was held with the various parties interested, when it was agreed by those present to remit their proportions of the estimated cost of making up this private street to the highway standard. The work has not yet been started.

CAMBUSLANG.—Nothing has yet been done to put North Avenue and Grenville Drive, referred to in last Annual Report, into a satisfactory condition. Negotiations with the various owners are still proceeding.

Overton, Bothwell, and Silverbanks Streets and Hunterfield Drive, referred to in last Annual Report, have all been made up to highway standard and taken over by the Local Authority.

The necessary work for the repair of Pretoria Street, also referred to in last Annual Report, has not yet been started.

Somervell Street was repaired and put into a satisfactory condition.

CARMYLE.—A complaint was received as to the alleged insanitary condition of the private street known as Buckinghame Drive. An inspection revealed that there was no ground for action under the Public Health Act, but the Ninth District Council was requested to have the channel opposite the playground freed of grass, and this was done.

LARKHALL.—As the result of complaints regarding the unsatisfactory condition of the private streets at Cherryhill View, Croft Place, Croft Road, and The Croft, an inspection was made and a report submitted. Estimates of cost of repair and making up the roads were prepared by the County Drainage &c. Engineer and the County Road Surveyor and submitted for the consideration of the Committee. It was agreed to remit the matter to the Chairman and the local representatives to endeavour to come to an arrangement with the various parties interested, with a view to the roads being made up and taken over as public highways.

SHOTTS.—Owing to the unsatisfactory condition of King Street, Easter Road, Clive Street, Dyfrig Street, Greenwood Street, and Kirk Road, a report was submitted to the Committee to the effect that these streets required to be dealt with in terms of Section 39 of the Public Health (Scotland) Act, 1897. The County Drainage &c. Engineer and the County Road Surveyor have been instructed by the Committee to prepare the necessary estimates of cost of (a) repairing and (b) making-up the above roads.

UDDINGSTON.—The soft and miry condition of Kirk Lane, which connected Main Street with Kirk Street, was the subject of negotiations with the only feuwar's agents. The surface was made good and the lane closed to the public.

Kirk Street was found to be in an unsatisfactory condition, and intimations were served on the owners of property fronting or abutting thereon. A meeting was held on the ground and the matter is still under consideration.

Nuisances.

During the year 73,532 inspections were made for the detection of nuisances, and the number of nuisances recorded was 2,477, comprised chiefly of choked drains, sinks, and water-closets. A number of such chokages was caused through carelessness on the part of occupiers of dwellings, and warnings were given to those concerned, with satisfactory results.

Intimations under Section 19 of the Public Health (Scotland) Act, 1897, were issued to authors of nuisances in 1,537 cases, and in many instances the cause of complaint was immediately removed. Where the intimations had no attention, Statutory Notices under Section 20 of the Act were served, and these numbered 209.

Legal proceedings were found necessary in only one case, namely, the keeping of a number of dogs in a dwelling at 13 Victoria Buildings, Lenzie. At the first diet the defender was admonished and given a period in which to dispose of the animals. The decree not having been complied with, the Court, at a subsequent hearing, granted warrant to the Local Authority to remove the nuisance complained of and found the defender liable in £2 2s. modified expenses.

Unfenced Mine Shafts.—Intimations were received in the course of the year from H.M. Inspector of Mines of the abandonment of thirty-three mines, and calling the attention of the Local Authority to the provision of Section 26 of the Coal Mines Act, 1911, requiring every shaft and outlet to be kept surrounded by a structure of a permanent character sufficient to prevent accidents, and making failure to comply with that requirement a nuisance within the meaning of Section 16 of the Public Health (Scotland) Act, 1897. The mine shafts were situated as follows:—Auchinraith, Blantyre; Haughhead, Uddingston; Greenside No. 2, Holytown; Nos. 3 and 4, Forth; Over Dalserf, Dalserf; North Motherwell, Motherwell; Nos. 3 and 4, Shettleston; Garthamlock, Shettleston; Brownieside, Airdrie; Clarkston, Airdrie; Gartness No. 2, Airdrie; Learigg, by Airdrie; Stanrigg No. 1, Airdrie; Crossrigg, Greengairs; Welfare, Greengairs; Northrigg No. 2, Greengairs; Hill of Drumgray, Greengairs; Lochs, Coatbridge; Calderbank, Baillieston; Clydeside, Baillieston; Ellis-muir, Baillieston; Broomhouse; Kenmuir, Carmyle; South Kenmuir, Carmyle; Kenmuirhill Nos. 1, 2, and 4, Mount Vernon; Burniebrae, Gartness; Greenhill, Cleland; Westrigg, Blackridge; and Farme, Rutherglen. The matter was taken up with the various owners, with a view to the requirements of the statute being complied with, and in most of the cases the necessary work has been carried out. Negotiations are proceeding in the remaining cases.

Exhaust Gases from Motor Buses.—A complaint was received from residents in Parkhall Street, East Kilbride, as to exhaust gases from motor buses at a large garage entering their dwellings and causing discomfort to the occupants. It was found that the engines of buses which were being washed or waiting to be washed were allowed to run, with the result that the air became laden with exhaust gases and was passing into the houses opposite. It was arranged with the bus owners that, in future, engines would be stopped while the buses were being washed. No further complaints have since been received.

Smoke Nuisance.—Complaint was made by the Department against the emission of dense volumes of smoke from the boiler chimneys of two factories in Rutherglen and Stepps. In the Rutherglen case, after an observation of 30 minutes, it was found that dense volumes of smoke were emitted for a period of 13 minutes. Careless and wasteful stoking was obviously the cause, and the firm was notified, since when conditions have greatly improved.

In the Stepps case a small upright boiler was in use, and, on the advice of the Department, the owner heightened the chimney of the furnace and commenced to use a mixture of coal and coke. A satisfactory improvement has resulted.

Foul Gas Escape.—An alleged escape of foul gas from the hot-plate of a bakery establishment in Shettleston, penetrating upwards and undermining the health of the complainant, an old man occupying the dwelling above the bakery, was investigated. No evidence of nuisance could be found, and, whilst the Gas Department was informed and the hot-plate examined, it was decided that the complainant was under a delusion.

Esparto Grass Fire.—A serious fire at Clyde Paper Works, Rutherglen, during the year and the dumping of a huge accumulation of esparto grass on an adjoining coup gave rise to several complaints. Dense volumes of smoke were caused and carried over the houses as far as Rutherglen, to the great discomfort of the tenants. After negotiations with the Company the burning operations were stopped.

Storing of Bones.—Complaints were received during the year as to the storage of bones at certain butchers' premises in unsuitable receptacles prior to removal, and creating nuisance conditions to adjoining occupiers by obnoxious smells. On the matter being brought to the notice of the parties concerned, suitable air-tight receptacles were provided and more regular removal arranged for.

Foul Smells from Sewage Works.—Complaints were received from residents in Hilton Terrace, Jellyhill, Bishopbriggs, as to foul smells arising from the sewage works near by. An inspection was made when it was found that activated sludge from the deposit beds and detritus sludge was being removed and deposited on adjoining fields. Whilst no nuisance was created by the removal of activated sludge, a foul smell was undoubtedly arising from the disturbance of the detritus sludge. The sewage works are now in course of reconstruction and additional sludge beds are being provided. When the detritus sludge is removed in future the material will be deposited in fields as far as possible from the proximity of dwelling-houses.

Garden Refuse.—A number of complaints were received from various parts of the County as to the dumping of garden refuse in open spaces and lanes adjoining houses. The owners of the ground on which the dumping was taking place were requested to erect notice boards prohibiting the practice, and this resulted in improved conditions.

Burning Bings.—No further complaints were received regarding the burning mineral refuse bing at Broomhouse, referred to in last Annual Report. The colliery has now been abandoned.

At Clydeside Colliery, Uddingston, a refuse bing was found to be on fire, and, although no nuisance conditions were found, the matter was brought to the notice of the Colliery Company. The colliery has now been abandoned.

Complaints were received during the year from residents in Chryston, Stepps, and Lenzie as to objectionable smells pervading the districts. Investigations were made when it was found that the burning bing at Auchengeich Colliery was the cause of the complaints. The bing, which covers a large area, was emitting smoky vapours continuously, and the Colliery Company have been requested to take the necessary remedial measures with a view to mitigating the conditions.

Mill Lade, Carmyle.—A complaint was received from Carmyle Ratepayers' Association as to nuisance conditions caused by unknown persons dumping refuse into the mill lade at River Road, Carmyle. The lade was cleaned out at the instance of the Department and warning notices posted. No further complaints have been received.

Myres Burn, Uddingston.—This streamlet, referred to in last Annual Report as being the subject of complaints, was regularly inspected during the year and no offensive conditions were found. Towards the end of the year the practice of discharging spent liquor from the gas-works into the burn was discontinued.

Gair Water-works—Complaint as to Offal.—A complaint was received from the Burgh of Motherwell and Wishaw Authority with regard to offal being carried by seagulls from a midden of slaughter-house manure situated on the lands of Hyndshaw Farm, Carluke, about a mile from the reservoirs, and also as to rat infestation at

the house of the reservoir keeper. On inspection of the reservoir surroundings no pieces of offal were found, nor could any deposits of the birds be seen on the cement beaching of the reservoirs or on the wall surrounding the filters. Some rat holes were seen in the drystone dyke surrounding a keeper's house adjoining, and numerous rat runs were found leading into field drains at Hyndshaw Farm, but the farmer had already commenced the work of exterminating the rodents. The manure heap at the farm was covered over with straw. Numerous seagulls were seen in the vicinity and some on top of the midden, and it was evident that they had been digging into the heap as many holes were observed. The attention of the farmer was directed to the by-laws of the Local Authority for regulating the application of animal matter to land as a fertilising agent, particularly to the fencing-in and covering of any deposit, and the necessary action was taken by him. No further complaints have since been received.

Offal Nuisance—Dovesdale Farm, Dalserf.—Further complaints were received during the year as to foul smells from a manure heap on the lands of Dovesdale Farm, Dalserf, referred to in last Annual Report, and a visit of inspection was made. It was found that slaughterhouse manure containing flesh and offal was used as a top dressing on a field immediately adjoining the west side of the Glasgow-Carlisle Highway, giving rise to most obnoxious smells which were a nuisance to the residents in the neighbourhood and to persons using the public highway. The matter was reported to the Local Authority, who instructed legal proceedings against the tenants of the farm. They admitted the offence, and were ordered by the Court to pay 20s., being the costs of the prosecution.

Asphalt Plant, Baillieston.—Further complaints were received during the early part of the year from residents near the Swinton Sandpit, referred to in last Annual Report, as to fumes, dust, and smoke being emitted from the asphalt plant situated in the sandpit, to the annoyance of residents in the neighbourhood. The matter was taken up with the Company, who were asked to have the plant removed, failing which proceedings might be taken. The road work is now completed, and the asphalt plant has been removed from the sandpit.

Corporation Coups.—The refuse coups owned by Glasgow Corporation and situated at Penwinnie and Maryburgh, referred to in last Annual Report, gave rise to many complaints during the year, the chief causes of objection being smoke nuisance and rat infestation. Frequent inspections were made, and a meeting was held on the ground of representatives of the Corporation and the County Council, which brought about a much-desired improvement in the conditions. The rats at Maryburgh were exterminated by a rat-catcher employed by the Corporation over a period of some months, and the burning refuse was abated by the introduction of more dense material in place of the light shop refuse. A new extension of the Penwinnie Coup has been made, whereby it is now getting near New Monkland Church, and this will entail more careful handling and dressing of the coup. The County Authority recommended the abandonment of this extension, but the City Authority did not acquiesce in the matter. Observations are still being maintained at both coups.

Airdrie Burgh Coup.—The coup belonging to the Airdrie Burgh Authority and situated at Carlisle Road, Airdrie, was found during the year to be always kept in a satisfactory condition.

Branchock Quarry, Cambuslang.—Complaint was made as to the dangerous state of the Branchock Quarry, Cambuslang, due to the insecure fencing, and the attention of the owner was drawn to the matter. The fencing has now been made good.

Tomato Houses, Lanark—Smoke Complaint.—A complaint was received regarding the emission of smoke from the vertical boilers of sterilizing plant at tomato houses in Hyndford Road, Crosslaw, Lanark. Observations were made and the boiler attendants warned, but in no instance were conditions noted that would warrant action being taken by the Department against the owner of the plant.

Boghall Square, Broomhouse.—A complaint received by the Department of Health for Scotland as to insanitary conditions at this property was inquired into. The complaint referred to a choked drain and full ashpit. As the result of a representation to the Company's liquidator, the drain was cleared, the ashpit emptied, and a contract entered into by the liquidator to have the ashpit emptied weekly.

Kenmuir Rows, Mount Vernon.—This two-storey tenement, comprising twenty dwellings, was the subject of a complaint to the Department of Health, it being alleged that nuisance conditions existed. A meeting was held with the local colliery manager on the ground, and, afterwards, considerable repairs to the property were executed and the matters complained of rectified.

Verminous Houses.—A number of houses were dealt with during the year and sprayed with vermicide, carbolic acid, &c., owing to the presence of various insect pests, particularly bugs. The spraying of the affected parts and removal of wood facings generally exterminated the vermin.

RATS AND MICE (DESTRUCTION) ACT, 1919.—Numerous premises were inspected during the year in connection with infestations by rats. Occupiers of premises affected were made aware of their obligations under the Act, and advice was given and virus supplied where necessary. On revisiting the premises, it was generally found that abatement or considerable progress had been made in the destruction of the vermin.

A complaint was received from the Department of Agriculture for Scotland with regard to rat infestation at a butcher's premises in Abington, and also at the village refuse coup, about a mile distant. In the first instance, it was found that a dilapidated dungstead into which slaughterhouse offal was dumped was the main source of trouble. The matter was taken up with the owner, and a new concrete ratproof dungstead erected. The rat-holes in the surrounding field and plantation were treated with Cyanogas, which gave splendid results. The refuse coup, situated on the bank of the Clyde, off the Lanark Road, receives the refuse from the village of Abington, the scavenging of which is conducted by a village committee, as there is no special scavenging district here, and was found to be infested by rats. Steps were at once taken to clear out the vermin by the use of poison, virus, and Cyanogas, and the village committee undertook to dig out the rats in the surrounding moorland. The conditions at both places are much improved, and the matter is still receiving the attention of this Department.

Cinemas.

All the cinemas within the County were regularly inspected during the year, and a good standard of cleanliness continues to be maintained in the halls and conveniences. Defects of a minor character were found in several premises, but these were immediately attended to on being brought to the notice of the managers concerned.

Public Conveyances.

During the year many inspections of public conveyances were made, and the general cleanliness of the vehicles was found to be good. With the introduction of a more modern type of vehicle the means of ventilation show improvement.

Workshops.

The number of workshops on the register at the close of the year was 527. In the tailoring and dressmaking trades there is a continued decline in the number of employees in such workshops, trade depression and the demand for ready-made garments being chiefly responsible.

During the year two notices were received from H.M. Inspector of Factories of persons beginning to occupy workshops. The premises were duly inspected, measured, and the occupiers supplied with cards showing the capacity of each room and the number of employees permissible.

The inspections numbered 533, including 130 of factory bakehouses. Three notices were received from H.M. Inspector of Factories under the Sanitary Accommodation Order, 1903, and one notice was subsequently withdrawn by him on the representation of the occupiers that suitable water-closet accommodation for their employees had already been provided. Additional water-closet accommodation in the other two instances has been arranged for. We also dealt with the following cases found in the course of our routine inspections:— Three dirty bakehouses; insufficient ventilation in a bakehouse; insufficient water-closet accommodation; broken rooflight; defective rain conductor; and a choked drain.

A list, containing one outworker, under Section 107 of the Factory and Workshop Act was received from the City of Glasgow Authority, and an inspection was made of the premises, which were found in a satisfactory condition.

The following table gives the handicrafts carried on in the various workshops :—

| HANDICRAFTS. | | | | | | |
|---------------------|---|---|-----|--------------------|---|------------|
| Dressmaker, . | - | - | 19 | Watchmaker, - | - | 8 |
| Tailor, - | - | - | 73 | Plumber, - | - | 27 |
| Milliner, - | - | - | 7 | Cartwright, - | - | 1 |
| Baker, - | - | - | 131 | Motor Repairer, - | - | 28 |
| Shoemaker, - | - | - | 82 | Hosier, - | - | 5 |
| Saddler, - | - | - | 9 | Coachbuilder, - | - | 4 |
| Blacksmith, - | - | - | 50 | Painter, - | - | 6 |
| Joiner, - | - | - | 58 | French Polisher, - | - | 3 |
| Cabinetmaker, - | - | - | 5 | Confectioner, - | - | 3 |
| Moss Litter Work, - | - | - | 1 | Ham Curer, - | - | 2 |
| Cooper, - | - | - | 1 | Tinsmith, - | - | 1 |
| Upholsterer, - | - | - | 1 | Photographer, - | - | 1 |
| Laundryworker, - | - | - | 1 | | | |
| | | | | Total, - | - | <u>527</u> |

Fire Escape.—In connection with a notice received from H.M. Inspector of Factories regarding the lack of provision in a large factory in Cambuslang of means of escape in case of fire, an inspection of the premises was made and a report submitted to the Local Authority. The matter is still *sub judice*.

Public Schools.

The various public schools within the County were visited during the year, and several matters requiring attention were brought to the notice of those responsible. The general cleanliness of the schools and lavatories was found to be satisfactory.

Auchinloch.—The new school at Auchinloch was completed during the year and the use of the old school discontinued.

Chryston.—The Primary School was thoroughly disinfected after an outbreak of diphtheria. Alterations are contemplated to the old portion of this school owing to the inadequacy of the existing accommodation.

Carlisle.—At Market Place School ten trough-closets were converted to the pedestal type.

Newarthill.—A plan was submitted showing the provision of a new roof, rooflight, &c., over the existing trough-closets. The work has not yet been completed.

Tents and Vans.

In the course of the year 663 inspections of tents and vans were made, and, with several exceptions, all the premises were found in a satisfactory condition. A number of cases were dealt with under the Local Authority's By-laws, and it has been found necessary to institute proceedings against the occupiers of vans on ground at *Crowhill Road, Bishopbriggs*. The premises in question are let to showmen and itinerant caravan dwellers, and some of these have become more or less permanent dwellers. No provisions are made for water supply and suitable means for disposal of liquid refuse and excremental filth, and certain of the caravans were overcrowded.

Cawdercuilt Road, Maryhill.—Complaint was made regarding squatters who had taken up residence in the old pit refuse bings on the north side of Cawdercuilt Road. For some time this has been a place favoured by tinkers, being off the main highway and sheltered on two sides by mineral refuse bings. Generally, the tinkers squat here during winter months, have their children sent to Lochfaulds School, and take to the road again during summer. On the last occasion there were on the ground two caravans and three erections composed of branches of trees covered with sacks. By arrangement with the estate factor, the tinkers were cleared off the ground and the place fenced to prevent further access.

Tollcross.—A complaint was received regarding the use of a piece of ground at the rear of a tenement property in Causewayside Street by a caravan dweller and his family. A threat of legal proceedings caused the offender to remove.

Summer Camps.—The summer camp at Lickprivick Farm, East Kilbride, was again run on very satisfactory lines, and no cause for complaint could be found. There were 200 persons in residence.

At a Scout camp near Symington Station the arrangements were also found to be satisfactory.

General.—Apropos the paragraph in last Annual Report as to the need for powers to deal with owners who let their ground without providing proper conveniences for the use of the van-dwellers, the matter was taken up with the Department of Health. The Department stated that it would be competent under Section 73 (2) of the Public Health (Scotland) Act, 1897, to make by-laws placing the obligation to provide a water supply and sanitary conveniences on the person allowing any site to be occupied by a tent, van, shed, or similar structure used for human habitation. The Department further stated that, subject to the consideration of any objections lodged thereto, they would be prepared to confirm a set of by-laws incorporating the following:—

“Notwithstanding anything in the foregoing by-laws, where any land is to be occupied by a tent, van, shed, or similar structure to be used for human habitation for longer than a total of 72 hours within any period of 7 days, the person by agreement with whom, or by authority from whom, such tent, van, shed, or similar structure shall be erected, placed, or used on such land shall provide and maintain* within 300 feet of such tent, van, shed, or similar structure, if the same are not otherwise so provided or available—

“(a) a stand-well, water-tap, or other means affording a sufficient supply of wholesome water;

“(b) sufficient water-closet or earth-closet accommodation or other sanitary convenience approved by the Sanitary Inspector; and

“(c) a sufficient covered receptacle for refuse.”

When the question of the preparation of a new set of by-laws regulating the use of tents, vans, &c., is dealt with by the Local Authority the above clause will be kept in view.

Interments.

The interments carried out at the expense of the Local Authority under Section 69 (1) of the Public Health Act numbered 28—10 adults and 18 infants—the deaths being due to various causes. Fourteen of the bodies were claimed, but no “sufficient person” undertook the burial. The total cost to the Local Authority amounted to £59 5s. Three adult bodies were also buried under warrant, but

the accounts for interment were paid direct by the Ministry of Pensions, Dunbarton County Council, and Lanark Public Assistance Committee respectively.

In every case where application is made to the Local Authority for the interment of a dead body by relatives or others who allege that they are unable to bear the expense of the burial on account of poverty, it has been the practice of the Department to make careful inquiry into all the circumstances, particularly to ascertain whether the deceased person was insured in any benefit society, and, as a result, sums were afterwards recovered amounting in the aggregate to £3 1s. 6d.

Common Lodging-houses.

There are only two common lodging-houses within the County area, the keepers of which applied for, and were granted, renewal of registration. The premises were regularly inspected and found in a satisfactory condition.

Dairies.

During the year 2,149 visits of inspection were made by the Sanitary Staff to dairy premises, and in several instances structural defects were reported and dealt with under the Local Authority's By-laws under the Milk and Dairies (Scotland) Act, 1914.

A number of cowkeepers were dealt with for failing to keep clean byres and dairy animals, but in no case was it found necessary to take proceedings.

As a result of complaints regarding dirty milk supplies, numerous special visits were made at milking time to dairy farms, and, where methods of milking were found to be unsatisfactory, instructions were given to the dairymen, with good results.

Improvement in the conduct of dairying continues, and producers and retailers alike are realizing the need for care and attention in the production and handling of milk as an article of food. There are, of course, many producers who fail to adopt proper methods and are careless in the supervision of the necessary labour, particularly where such is hired. The type of vans and milk utensils used by retailers has improved greatly during the year.

New Byres, &c.—Further progress was made during the year in the provision of new byres and improvements to dairy premises generally, and the following plans were submitted to and approved of by the Local Authority:—

| | |
|--------------------------------------|--------------------|
| Wintermuir, Biggar, | Byre addition, &c. |
| Strathbogie, Biggar, | New byre. |
| Old Town, Carnwath, | Do. |
| Silvermuir No. 7 Holding, Carstairs, | Do. |
| Meadowfield, Braidwood, | Do. |
| Bogside, Lesmahagow, | Do. |
| Southfield, Kirkmuirhill, | Do. |
| East Machan, Larkhall, | Do. |
| Heatheryknowe, Bargeddie, | Do. |
| Glebe, Salsburgh, | Do. |

Registration.—During the year 103 certificates of registration were granted by the Local Authority. The number of businesses discontinued was 35, leaving a total of 1,749 registered dairies—1,447 producers and 302 retailers only—at the close of the year. Included in the foregoing total are 76 retailers by vans from outwith the County area. The approximate number of dairy animals found in registered byres was 29,000.

The general conditions and cleanliness in the exempted premises were found to be good.

Burgh of Biggar.—There is only one registered retail milkshop within the burgh, and, when inspected, it was found to be kept in a clean condition.

Burgh of Lanark.—There are two registered producers and retailers of milk and four registered retailers only of milk within the burgh. On inspection the premises were all found to be kept in a satisfactory condition.

Milk and Dairies (Scotland) Order, 1925.—Several dairymen were dealt with during the year for failing to carry out the requirements of Articles 5 to 16 of the Milk and Dairies Order, and in every instance the warning given had the desired effect.

Cleanliness of Milk Supplies.—The informal sampling of ordinary milk supplies within the County was continued during the year, when 589 samples were obtained by the Sanitary Staff during early morning and afternoon milking at dairy farms and from milkshops and retail vehicles. The samples were submitted for bacteriological examination, which showed that 66 per cent. were found to conform to the standard required for graded milk. Whilst the result was gratifying and indicates a slight improvement on the previous year, it was disappointing to find that several producers who previously had shown clean records had become careless in their methods and required the attention of the Department. Fortunately the majority of producers are alive to the needs of a pure milk supply, and it is anticipated that, as a result of action taken by the Department in the other cases, their number will be augmented next year.

Houses Let in Lodgings.

The registration of houses let in lodgings is still in abeyance owing to the scarcity of suitable housing accommodation in certain districts of the County. Numerous inspections, however, were made of houses where single lodgers were kept or apartments sublet to families, and action was taken where gross overcrowding was found.

Offensive Trades.

There are within the County eighteen offensive trades, and these are situated as follows:—Abington; Carnwath; Crawford; Carstairs Junction; Lanark; Ponfeigh; Symington (sheep only); Hareshawhead, Strathaven (sheep only); Newarthill; Omoa; Chapelhall; Caldercruix; Greengairs; Longriggend; Cleland (3); and Harthill. In the course of the year regular visits of inspection were made, and, although the structural conditions are not quite satisfactory in most cases, the premises were found in a clean condition.

Public Abattoirs.—There are eleven abattoirs in operation belonging to the Local Authority, and these are situated at Carluke, Douglas, Forth, Lesmahagow, Baillieston, Blantyre, Bellshill, Larkhall, Shotts, Stonehouse, and Strathaven.

Other Offensive Businesses.—The operations at the Knackery at Omoa, where the manufacture of manure is also engaged in, continue to be conducted in a satisfactory manner.

The gut-cleaning business at Clark Street, Blantyre, was also carried on during the year without complaint.

At Braidwood, the bone and manure work was conducted satisfactorily, but a complaint was received as to an offensive smell arising from the open ditch carrying waste water from the works. This was found to be due to overgrowing grass and weeds, which were afterwards cleared away and the nuisance abated.

A soap work at Bishopbriggs, and a blood work and tallow, &c., work at Carntyne, Shettleston, were carried on free from complaint during the year.

Fish Meal and Manure Works, Rutherglen.—It was expected that this business would be wholly transferred to new premises at Falkirk during the year, but, owing to certain reasons, the owner found it inconvenient to make the transfer. Later, he made a request to recommence the business at Downiebrae Road, Rutherglen, and, as the works at Rutherglen had not been discontinued for a period of 12 months, it was pointed out that there was no need to ask permission to resume operations. By arrangement with the owner special inspections were carried out at the Falkirk premises and also at Downiebrae Road to ascertain the new methods of manufacture and machinery involved, and these were favourably commented upon. The owner was requested, however, to give effect to the following requirements at Downiebrae Road works, viz. :—(1) Complete removal of herring oil tanks; (2) suitable reconstruction of drainage settling tanks; (3) relaying of floor of receiving flat; and (4) erection of additional treatment tower to deal with vapours from the factory itself, apart from machine vapours.

The work was not in operation at the end of the year, as the erection of certain new plant had not been completed.

Unsound Food.

During the year 775 inspections were made of shops and other premises, and two seizures, comprising an 11-lb. tin of eggs and two 3-lb. tins of chicken roll, were made by the Sanitary Staff. Particulars as to the inspection of meat are given in the County Meat Inspector's Report.

Food Inspection.

Numerous inspections were made of shops, hawkers' carts, and other places where foodstuffs were stocked. Whilst the quality of the food was generally found to be good, the condition of some of the places where fruit, &c., was stored left much to be desired, and in such cases the vendors were warned.

The sale of foodstuffs from dwelling-houses continues, and, until the practice is made illegal, little can be done to prevent it.

Complaints are still made by occupiers of dwellings situated above fried fish shops as to odours entering their houses, but the matter is one which, with existing legislation, it is difficult to deal with satisfactorily. Nevertheless, one has only to visit a house situated above such premises to realise the inconvenience to the occupier, the familiar odours being found on curtains, furniture, and even personal clothing—a most annoying condition in any well-cared-for home.

Meat Regulations.

Storage of Meat.—The premises at Caerlaverock, Foxley, Tollcross, in respect of which a certificate was granted by the Local Authority for the storage of meat, are not now used for the purpose, the owner having acquired premises within the City of Glasgow.

At Kingshill, Gartcosh, premises used for the storage of meat food products were inspected and a certificate was granted by the Local Authority, in terms of the Public Health (Meat) Regulations (Scotland), 1930.

Pigstyes.

During the year the number of inspections of pigstyes was 362, and, with a few exceptions, the premises were all found to be kept in good order and free from nuisance conditions.

Five applications for sanction to erect pigstyes were granted by the Local Authority, the new premises being situated at 61 Main Street, Holytown; Kilncadzow, Carluke; Wellshot, Cambuslang; Muirhead, Chryston (extension); and Little Coalburn, Coalburn.

In connection with the conversion of old stable buildings at Eastfield, Rutherglen, into a piggery, approval was granted subject to the satisfactory disposal of drainage, as no suitable outlet drain was available.

At The Common, Kilneadzow, two empty dwelling-houses were converted into a piggery, and a drain therefrom was led into an open ditch near by. This gave rise to nuisance conditions, but the owner has now diverted the drain and removed the dungstead to the rear of the piggery.

A further complaint was received as to smells from the piggery at Mossvale, Chryston, referred to in last Annual Report. The premises were inspected by the County Medical Officer and myself, but no nuisance conditions were then found to exist. The piggery has since been considerably extended.

Serious complaints were made as to offensive smells arising from a burn near Queenslie Colliery, Shettleston, due to the discharge into the burn of liquid from a large piggery in the neighbourhood. The tanks into which the liquid discharges were insufficient to retain all the offensive matter, and, as the flow of water in the burn had practically ceased owing to the stoppage of pumping operations at the colliery, offensive smells were experienced. The owner of the piggery was notified as to the nuisance being created and urged to provide satisfactory means for the disposal of the liquid other than by direct discharge into the burn. Negotiations were proceeding at the close of the year between the owner of the piggery and the proprietor of the adjoining ground, with a view to a drain being laid to connect with a sewer at Bertrohill.

Burial Grounds.

The various burial grounds throughout the County continue to be kept in good order, and interments were carried out in a satisfactory manner.

Churchyards, &c.—A number of interments were carried out in the old churchyards at East Kilbride and Stonehouse, and in all but two cases the conditions were satisfactory. The exceptions were at East Kilbride, where sufficient depth for the burials could not be obtained without disturbing remains, and the interments took place in the new cemetery.

At Carmunnock Churchyard an inspection of this old burial ground was made and the whole area utilised was pierced. As a result, the District Council were advised that the churchyard should

be closed to further interments owing to the congested condition of the ground and to its close proximity to dwelling-houses. Negotiations are proceeding for the acquirement of other ground as a cemetery for the Parish of Carmunnoch.

The other old churchyards and burial grounds throughout the County continue to be kept in a satisfactory condition.

JOHN MILLAR,
County Sanitary Inspector.

County Public Health Department,
Beckford Street,
Hamilton, 15th August, 1932.

BUILDING BY-LAWS.

The total number of plans lodged for approval amounted to 176. As in former years a very considerable proportion of these had not been prepared in accordance with the By-laws, especially those from some of the outlying districts. It was found necessary in a great many cases to have meetings on the site with the owners and architects before matters could be properly adjusted. All disconformities were reported to and dealt with by the Committee. Four sets of plans were withdrawn and one (a sanitary improvement) handed to the Sanitary Inspector for attention.

The nature of the buildings, as indicated by the plans lodged, were as follows:—

NEW BUILDINGS UNDER BY-LAW No. 41.—Houses and shops, 106; workshops, 10; public buildings, 7; and other buildings, 4; total plans, 127.

ALTERATIONS IN THE MODE OF OCCUPANCY, UNDER BY-LAW No. 51.—Houses and shops, 28; workshops, 7; public buildings, 12; and other buildings, 2; total plans, 49.

4,756 inspections were made during the course of construction of the buildings. 6 contraventions of the Building By-laws were discovered, and these were reported to and dealt with by the Committee.

1,576 applications of the smoke test were made to the drains and plumber work in connection with the sanitary fittings of new properties. In several cases the work was found defective and re-tests had to be made, but on the whole the work done by the contractors was of a very good standard.

In addition to the plans lodged under the Building By-laws, 216 plans were received, and approval granted for various erections of a minor character.

HOUSING, &c., ACT, 1923.—42 applications, comprising 313 houses, for subsidy under this Act were dealt with, and Certificate "A" issued to the owners. A number of the plans and specifications required adjustment, but all were made to conform to the Regulations issued by the Department of Health for Scotland.

106 houses were completed, and Certificate " B " for payment of subsidy granted to each owner in respect of same, viz. :—

Middle Ward Scheme (£52).

- (185) Four-apartment bungalow at Central Avenue, Mount Vernon.
- (187) Three-apartment bungalow at Townhead Farm, Coatbridge.

Upper Ward Scheme (£60).

- (67) Three-apartment bungalow at Carlisle Road, Lanark.
- (68) Four-apartment bungalow at Mount Stewart Street, Carlisle.
- (70) Four-apartment bungalow at Clannochdyke Road, Lesmahagow.
- (71) Two-apartment bungalow at Boghall Farm, Carnwath.

Lower Ward Scheme (£54, unless otherwise stated).

- (103) 2 double bungalows, comprising 4 four-apartment houses at New Street, off Bocclair Road, Bishopbriggs (£80).
- (105) Double bungalow, comprising 2 four-apartment houses at New Street, off Bocclair Road, Bishopbriggs (£80).
- (114) 4 four-apartment flatted houses at Greystone Avenue, Burnside.
- (116) Double bungalow, comprising 2 four-apartment houses at New Street to north of Allan Glen's Recreation Ground, Bishopbriggs.
- (119) Four-apartment bungalow at Busby Road, Carmunnock.
- (121) Four-apartment bungalow at Bocclair Crescent, Bishopbriggs.
- (122) 11 double bungalows, comprising 22 three-apartment houses at Woodside Avenue, Eastfield, Rutherglen.
- (123) 2 double and 2 single bungalows, comprising 6 four-apartment houses at New Street, off Blairbeth Road, Burnside.
- (124) 8 four-apartment bungalows at Calderwood Road, Burnside.
- (125) 6 four-apartment bungalows at New Street, off Busby Road, Carmunnock.
- (127) 16 four-apartment bungalows at Craigwell Avenue and Calderwood Road, Burnside.
- (128) Double cottage (two-storey), comprising 2 five-apartment houses at Chryston Road, Lenzie.

County Scheme (£52).

- (2) Four-apartment flatted house at Main Street, Bellshill.

(3) 3 four-apartment bungalows at Kenmure Crescent, Bishopbriggs.

(4) 2 double bungalows, comprising 4 four-apartment houses at Glenside Drive, Burnside.

(5) Three-apartment bungalow at Woodside Avenue, Eastfield, Rutherglen.

(6) Three-apartment bungalow at South Farm, Cathkin.

(7) Two-apartment bungalow at Cockridge Farm, Carstairs.

(9) Three-apartment bungalow at East Kilbride Road, Busby.

(10) Double bungalow, comprising 2 four-apartment houses at Crosshill Road, Strathaven.

(15) 4 double bungalows, comprising 8 three-apartment houses at Calderwood Road, Burnside.

(16) Four-apartment bungalow at Luggiebank, by Airdrie.

(18) Four-apartment bungalow at Meadow Nursery, Lanark Road, Braidwood.

(20) Double cottage (two-storey), comprising 2 three-apartment houses at road leading off Centenary Avenue, Coatdyke.

HOUSING (FINANCIAL PROVISIONS) ACT, 1924.—Local Authority's Schemes—112 houses were inspected and reported on to the County Clerk as being completed and eligible for grant, their construction complying with the conditions prescribed by the Department of Health for Scotland under the above Act.

HOUSING (FINANCIAL PROVISIONS) ACT, 1924.—Private Enterprise.—Building operations in connection with the Coltness Iron Company's 2 houses at Hassockrigg were completed during the year, and Certificate "B" granted. No new applications received.

HOUSING (SCOTLAND) ACT, 1925.—11 applications (embodying 92 houses of two apartments), under Section 111 of the above Act, were received for the erection or conversion of existing dwellings into two-apartment houses. The plans for these were, in all cases, reported to the Public Health and Housing Committees.

HOUSING (RURAL WORKERS) ACT, 1926.—68 applications were received during the year for assistance to make alterations and improvements to 103 dwellings for the accommodation of agricultural workers and others whose economic condition is substantially the same as such workers, and a grant was sanctioned by the Committee in each case.

A very large number of the plans and specifications submitted only dealt with the provision of a scullery or similar convenience and made no attempt to deal with badly-lit apartments, dampness in walls, defective floors, sub-floor ventilation, &c. In every application for grant submitted during the year the houses detailed therein have been carefully inspected and every effort made to bring them up to a standard in keeping with the modern additions which were being made. In this way a large number have been reslated, damp walls have been rectified by the underpinning and insertion of damp-courses, or where this method was impossible by treating the internal surfaces of the walls with waterproofed cement from foundation level to a height of 3 or 4 feet above floor before strapping and lathing the walls, larger or additional windows provided in badly-lit apartments, sub-floor ventilation introduced, and ground levels adjusted where those existing contributing to dampness in the dwellings. To get a satisfactory understanding on these important matters, it has been necessary to meet owners, architects, and contractors at the properties in a very large proportion of the applications submitted, and I am glad to be able to report that although the suggestions made meant a much larger cost to the owners they agreed to carry out what was required in order to make the houses suitable and satisfactory dwellings for families of the working classes.

In many of the rural houses it has often been very difficult to obtain a suitable water supply for domestic purposes, operation of sanitary fittings, &c. In a large number of cases it has been necessary to form storage tanks at suitable points of the supply in order to get sufficient head to allow the water to gravitate, and in others rotary pumps have been fitted to raise the water to elevated cisterns from which the supply is drawn for the scullery and cisterns of sanitary fittings.

The drainage of these houses also presents difficulty and suitable points have to be selected for septic tanks and filters in addition in certain cases in order to treat the sewage before discharge into chosen outfalls.

The grant given under the Act has certainly been the means of improving the housing conditions of many persons living in isolated houses in the hills and moorland of South Lanarkshire, also of a

large proportion of the farm labourers' cottages throughout the County.

Building operations in connection with 60 applications (121 houses) were completed during the year and Certificate "B" for payment of grant issued to the respective owners. The properties on which improvements were completed are as follows:—

Middle Ward Scheme.

(8) 68-72 Hamilton Road, Broomhouse.—4 two-apartment houses. Two new w.c.'s were provided for the 4 dwellings and the ground at rear of property lowered. The internal surfaces of walls were treated for dampness, after which they were strapped, lathed, and replastered, ceilings refaced, and new wood floors provided, at a cost of £279 10s. 6d.

(10) Dalzell Farm, Motherwell.—2 two-, 4 three-, and 2 four-apartment houses. The houses were re-arranged to give better bedroom accommodation, and each dwelling provided with a scullery (having tub, sink, and washboiler), bathroom, larder, and coal-cellar, at a cost of £1,684 11s. 7d.

(18) Lochend Road Cottages, by Coatbridge.—3 two-apartment houses—

(a) 2 houses were converted into one house, one of the rooms being fitted up as a scullery, having tub, sink, and wash-boiler, and w.c., the remainder of the building being demolished.

(b) A scullery, having tub, sink, washboiler, larder, and w.c. was added to the rear of each house and new floors provided. The existing walls were treated for dampness and new coal-cellars erected. Total cost of improvements, £686 6s. 2d.

(19) Newton Farm Houses, Cambuslang—

(a) Redlawood—2 houses were converted into 1 three-apartment house, with scullery and bathroom.

- (b) Coach Road Houses—2 houses were converted into 1 two-apartment house, with scullery, bathroom, larder, press, and coal accommodation.
- (c) Gardener's Cottage—three-apartment house. A scullery, larder, bathroom, and w.c. were added, also roof overhauled.

Total cost of improvewents, £730 15s. 3d.

(20) Torland, Dalserf.—1 two-apartment house. The outside ground surface was lowered, internal surfaces of walls treated for dampness, thereafter strapped, lathed, and replastered. A new scullery was added, having tub, sink, washboiler, larder, and w.c. accommodation, at a cost of £340.

(22) Westburn Farm, Cambuslang—

- (a) Windmill Cottages.—2 three-apartment houses. A small room in each house was converted into scullery, having wash-boiler, tub, and sink, with hot and cold water, and annexe, containing bathroom and coal-cellar added to rear.
- (b) Farm Cottages.—2 three-apartment houses. The windows of the various apartments were increased in size.

Total cost of improvements, £550 10s. 7d.

(23) Townhead Farm, Coatbridge.—1 two-apartment house. A scullery was extended and fitted with tub and sink, wash-boiler, larder, coals, and inside w.c., also measures taken to deal with dampness in the walls, at a cost of £160 10s. 6d.

(27) Haughhead Farm Cottages, Uddingston.—2 two-apartment houses. A new scullery, having tub and sink, wash-boiler, larder, and w.c., was erected at the rear of each house, at a cost of £299 9s. 8d.

Lower Ward Scheme.

No completion.

Upper Ward Scheme.

(45) Dunside, Lesmahagow.—1 four-apartment dwelling. A wash-house and earth-closet were added to house, chimney-heads rebuilt, two dormer windows provided in attic rooms, and walls lined, also general repairs, at a cost of £122.

(47) Cobblehaugh, Lanark.—2 two-apartment houses. A scullery, containing tub and sink, w.c., and coal-cellar, was added to each house, at a cost of £394.

(48) Robiesland, Lanark.—1 two-apartment house. A new scullery, containing tub, sink, w.c., and larder, was added to the house, beds removed, and new floor laid in kitchen at a cost of £207 7s. 2d.

(55) Rankin's Row, Cleghorn.—2 two-apartment houses.—A scullery, containing wash-boiler, sink, and coal-cellar, was added to each house and general repairs made, at a cost of £297 17s. 9d.

(58) Railway Terrace, Coalburn.—18 two-apartment houses.—A w.c. and coal-cellar were added to each house, and repairs made to the property, at a cost of £745 0s. 2d.

(60) Kennel Cottages, Pettinain.—1 two-apartment house. A bedroom was added to existing one-apartment house and window provided in larder, at a cost of £135 13s.

(64) Townfoot, Symington.—2 two-apartment houses. A scullery, containing tub, sink, and w.c., was added to each house and general repairs to the property, at a cost of £169 18s. 6d.

(66) Muirhouse Farm, Libberton—

(a) Workers' Dwellings.—2 two-apartment houses. A w.c., larder, and sink were provided for each house, and a wash-house erected for the joint-use of the houses, at a cost of £331 11s. 5d.

(b) Dairyman's Dwelling.—1 three-apartment house. A w.c. was introduced into house and general repairs made, at a cost of £77 3s. 8d.

(69) Viaduct Cottage, Carmacoup.—1 two-apartment house. An annexe, containing tub, sink, and wash-boiler, w.c., and coal-cellar, was added to house at a cost of £186 9s.

(70) Carmacoup.—1 two-apartment house. An annexe, containing tub, sink, wash-boiler, and w.c., was added to house, at a cost of £139 6s.

County Council Scheme.

(1) Snabe Farm, Drumclog.—1 two-apartment house. A store was converted into a two-apartment house, with scullery, larder, and w.c., also wash-house in basement, the internal surfaces of walls strapped and covered with plaster plates, together with a general overhaul of the building, at a cost of £316 5s. 3d.

(2) Hallhill Farm, Crossford.—2 two-apartment houses. A bedroom and w.c. were added to existing one-apartment house, and a w.c. added to existing two-apartment house, also general repairs to the property, at a cost of £167 6s. 6d.

(3) Hyndford Bridge, Lanark.—1 three- and 1 four-apartment houses. A bathroom was added to each house and general repairs made to the property at a cost of £252 3s. 7d.

(5) Turnlaw Farm, Cambuslang.—2 two-apartment houses. The existing coal-cellars were converted into water-closets, earth-closets into coal-cellars, new drainage system constructed, and ground lowered, at a cost of £212 7s. 9d.

(6) Fishescoats Farm, Cambuslang.—1 two-apartment house. Part of stable building was converted into room and scullery, complete with washtubs, w.c., and coal-cellar, additional lighting introduced into existing kitchen, and new food larder formed, at a cost of £181 10s.

(7) Heatheryhall, Thankerton.—1 three-apartment house and bothy. A new scullery was added to the house, and general repairs made to same and bothy, at a cost of £153 19s.

(8) Meiklehill Farm, Bishopbriggs.—1 three-apartment house. A five-apartment house was reconstructed to form one of three apartments, provided with scullery, containing tub and sink, wash-boiler, larder, and w.c., walls and the ceilings were replastered, new floors laid, and new drainage system constructed, at a cost of £206 1s. 1d.

(9) Coltness Cottages, Coltness Estate, Wishaw.—2 three-apartment houses. A bathroom was added to each house at a cost of £145 11s. 1d.

(10) Viewpark Farm, Uddingston.—1 two- and 1 three-apartment houses. A scullery, fitted with w.c., larder, and coal-cellar, was added to each house, at a cost of £263 1s. 4d.

(11) Lettrickhills Farm, Cambuslang.—2 three-apartment houses. A new scullery, containing sink, w.c., and larder, was added to each house, and outside wash-house repaired, at a cost of £300.

(12) Millhill Cottages, Pettinain.—2 two-apartment houses. A bathroom and inside sink were added to each house at a cost of £199 5s.

(13) East Cathkin Farm, Rutherglen.—1 two-apartment house. Gravitation water was introduced into the house and inside sink provided, new wash-house and w.c. erected outside, also new drainage system constructed, at a cost of £130 2s. 6d.

(14) Comedie Farm, Millerston.—2 two-apartment houses. An annexe, containing scullery and w.c., was added to each house, inside wash-house repaired, and new drainage system constructed, at a cost of £448 10s.

(17) Clover Lee, Roadmeetings, Carluke.—1 two-apartment house. A new scullery, containing sink and w.c., was added to the house, and general repairs made to same, at a cost of £110 18s. 9d.

(18) Knowetop, East Hallside, Cambuslang.—3 four-apartment houses. A new scullery, containing tub and sink, wash-boiler, larder, and w.c., was added to each house, existing walls treated for dampness, and new drainage system constructed, at a cost of £527 1s. 2½d.

(19) Laigh Kenmure Farm Cottages, Bishopbriggs.—2 two-apartment houses. A kitchen apartment was added to existing one-apartment house, separate annexe, containing scullery and w.c., added to each dwelling, and a new drainage system constructed, at a cost of £192.

(20) Meadowflatt, Thankerton, Biggar.—2 two-apartment houses. A new w.c. and sink were provided in each house and general repairs made to the property, at a cost of £288 14s. 4d.

(21) St. John's Kirk, Symington.—1 three-apartment house. A kitchenette, containing combination tub and sink, wash-boiler, and bathroom, was added to the house, and general repairs made to the property, at a cost of £192.

(22) St. John's Kirk, Symington.—2 three-apartment houses. A kitchenette, containing combination tub and sink, wash-boiler, and bathroom, was added to each house, and general repairs made to the property, at a cost of £360 6s. 10d.

(25) Weston, Dunsyre.—3 two-apartment houses. A new scullery and w.c. were added to each house, water introduced, and a new drainage system constructed, at a cost of £249.

(26) Green's Farm, Kersewell Estate, Carnwath.—1 two-apartment house. A new scullery and w.c. were added to the house, water introduced, and the property repaired, at a cost of £98 12s. 7d.

(27) Flemington Farm Cottages, Hallside.—1 two- and 1 four-apartment houses. A scullery, containing sink, larder, and w.c., was added to each house, at a cost of £120 11s. 4d.

(28) Flemington Farm (Courtyard Houses), Hallside.—2 two-apartment houses. Each house was provided with a sink, w.c., and coal-cellar, and a wash-house for the joint use of the tenants provided, at a cost of £186 14s. 7d.

(29) Main Street, Wattstown, by Airdrie.—1 two-apartment house. Three one-apartment houses were converted into 1 house of two apartments, scullery, larder, and w.c., at a cost of £186 14s. 7d.

(30) Clock Cottage, St. John's Kirk, Symington.—1 two-apartment house. A small room was converted into bathroom, and a scullery, containing sink and larder added to house, with new drainage system, at a cost of £190 4s. 3d.

(31) Little Duncanrigg, East Kilbride.—1 three-apartment house. A new w.c. was erected, bath and sink introduced into house, new floors provided, and walls replastered, together with new drainage system, at a cost of £190 5s. 8d.

(32) Berkleugh, Crawfordjohn. — 1 five-apartment shepherd's house. A w.c. was introduced into house, and slating, plastering, and floors repaired, at a cost of £187 17s. 3d.

(33) Covington Mains, Thankerton.—1 three-apartment house. 2 houses were converted into 1 three-apartment house, and annexe, containing scullery, larder, and w.c. added, at a cost of £174 17s. 5d.

(35) Bowridge, Carlisle.—1 four-apartment house. An annexe, containing bathroom and larder, was added to house, hot-water system installed, and a new drainage system constructed, at a cost of £151 6s. 9d.

(36) Tupehole, near Mashock Mill, Carlisle.—1 two-apartment house. An annexe, containing scullery, with tub and sink, larder, and w.c., was added to house, walls heightened, and new roof provided, at a cost of £262.

(37) Greenshields, Libberton. — 2 two-apartment houses. An annexe, containing scullery, combination tub and sink, wash-boiler, and w.c., was added to each house, at a cost of £316 18s. 2d.

(39) Easterhill, Hill of Murdostoun.—2 two-apartment houses. An annexe, containing scullery, with washtub, wash-boiler, w.c., and larder, was added to each house, gravitation water introduced, and a new drainage system constructed, at a cost of £610 15s. 7d.

(40) Old Mill, Murdostoun.—1 two-apartment house. A store was converted into scullery, sink and w.c. installed, new drainage system constructed, and general repairs to the property, at a cost of £96 4s. 4d.

(42) Wyndales, Symington.—1 two-apartment house. A bathroom, w.c., larder, and coal-cellar were added to house and roof repaired, at a cost of £263 12s. 4d.

(43) Bankend Farm, Avondale.—1 three-apartment house. An annexe, containing scullery, with combination tub and sink, wash-boiler, larder, and w.c., was added to the house, walls treated for dampness, new windows fixed, water supply introduced, and new drainage system constructed, at a cost of £281 7s. 7d.

(52) Greenlees Farm, Cambuslang.—1 two-apartment house. The scullery annexe was extended to provide bathroom, containing bath and w.c., existing earth-closet converted into coal-cellar, lighting of one room improved, and the larder provided in kitchen, at a cost of £150.

(57) Cottage No. 1, Overton Farm, Dalserf.—1 two-apartment house. An annexe, containing scullery, having tub, sink, and wash-boiler, w.c., and larder, was added to the house, walls treated with waterproofed cement, windows increased in size, new drainage system constructed, and general repairs to the property, at a cost of £201 18s. 8d.

(58) Cottage No. 2, Overton Farm, Dalserf.—1 two-apartment house. An annexe, containing scullery, having tub, sink, and wash-boiler, w.c., and larder, was added to the house, walls treated with waterproofed cement, window sashes renewed, roof overhauled, and general repairs, at a cost of £171 13s. 8d.

(59) Greenburn, Douglas.—1 four-apartment house. An existing larder was converted into scullery, having wash-boiler, tub, and sink, and part of byre converted into w.c. and larder, walls treated with waterproofed cement, new drainage system constructed, and general repairs, at a cost of £168 7s. 6d.

(62) Hazelbank, Lanark.—1 three-apartment house. Addition to house to give scullery, with sink and w.c. accommodation, part of basement partitioned off to form wash-house, new window inserted in back wall, walls strapped and patent boarding fixed, and general repairs, at a cost of £174 10s.

(72) Carmichael Boat, Thankerton.—1 two-apartment house. Tub and sink, wash-boiler, larder, and w.c. installed, walls of living-room strapped, lathed, and plastered, roof reslated, and new drainage system constructed, at a cost of £154 5s. 6d.

(73) Carmichael Mill, Thankerton.—1 two-apartment house. A scullery, containing tub and sink and wash-boiler, w.c., and coal-cellar, was erected, gravitation water introduced, and new drainage system constructed, at a cost of £128 12s.

WM. MARTIN,
County Building Inspector.

TABLE I.—NUMBER OF SETS OF PLANS LODGED DURING THE YEAR 1931, IN ACCORDANCE WITH BY-LAWS 41 AND 51, CLASSIFIED ACCORDING TO THE NATURE OF THE BUILDINGS SET FORTH IN PLANS.

| PARISH. | Plans lodged for New Buildings under By-Law 41. | | | | Plans lodged for alterations in mode of occupancy of Existing Buildings under By-Law 51. | | | |
|-----------------------------|---|-------------|------------------------|--------------|--|-------------|------------------------|-------------|
| | Houses and Shops. | Work-shops. | Public Buildings. * | Others. † | Houses and Shops. ‡ | Work-shops. | Public Buildings. § | Others. \|\| |
| Avondale, - - | 3 | — | — | — | — | — | 1 | — |
| Biggar, - - - | 2 | — | — | 1 | — | — | — | — |
| Blantyre, - - | — | — | — | — | 1 | — | 1 | — |
| Bothwell, - - | 8 | 3 | 2 | — | 1 | 1 | 2 | — |
| Cadder, - - - | 11 | 2 | 2 | — | 2 | — | — | — |
| Cambuslang, - | 7 | — | 2 | — | 1 | — | 1 | — |
| Cambusnethan, - | 2 | — | — | — | 2 | — | — | — |
| Carluke, - - - | 4 | — | — | 1 | 3 | 2 | 2 | — |
| Carmichael, - - | — | — | — | — | — | — | — | — |
| Carmunnock, - - | 4 | — | — | — | 1 | — | — | — |
| Carnwath, - - - | 1 | — | — | — | 1 | — | 1 | — |
| Carstairs, - - - | 2 | — | — | — | 1 | — | — | — |
| Coulter, - - - | — | — | — | — | — | — | — | — |
| Covington and Thankerton, - | — | — | — | — | 1 | — | — | — |
| Crawford, - - - | 1 | — | — | — | — | — | — | 1 |
| Crawfordjohn, - | — | 1 | — | — | 2 | — | — | — |
| Dalserf, - - - | 3 | — | — | — | 1 | — | 2 | — |
| Dalziel, - - - | — | — | — | — | — | — | — | — |
| Dolphinton, - - | — | — | — | — | — | — | — | — |
| Douglas, - - - | — | — | — | — | — | — | — | — |
| Dunsyre, - - - | 1 | — | — | — | — | — | — | — |
| East Kilbride, - | 9 | 1 | — | 1 | 7 | 1 | — | — |
| Glasford, - - - | — | — | — | — | — | — | — | — |
| Glasgow, - - - | — | 1 | — | — | — | — | — | — |
| Hamilton, - - - | 1 | — | — | — | 1 | — | — | — |
| Lamington and Wandel, - - | — | — | — | — | — | — | — | — |
| Lanark, - - - | 1 | — | — | — | — | — | — | — |
| Libberton, - - - | — | — | — | — | — | — | — | — |
| Lesmahagow, - - | 5 | — | — | — | 2 | 1 | 1 | — |
| New Monkland, - | 1 | 1 | — | — | 1 | — | — | — |
| Old Monkland, - | 10 | — | 1 | — | — | — | — | 1 |
| Pettinain, - - - | — | — | — | — | — | — | — | — |
| Rutherglen, - - | 21 | — | — | — | — | 1 | — | — |
| Shotts, - - - | 1 | 1 | — | 1 | — | — | 1 | — |
| Stonehouse, - - | 7 | — | — | — | — | — | — | — |
| Symington, - - - | 1 | — | — | — | — | 1 | — | — |
| Walston, - - - | — | — | — | — | — | — | — | — |
| Wiston and Robertson, - | — | — | — | — | — | — | — | — |
| TOTAL, - - - | 106 | 10 | 7 | 4 | 28 | 7 | 12 | 2 |

* Includes 2 New Schools, 3 Boy Scout Halls, 1 Miners' Welfare Institute, and 1 Church Hall.

† Includes 2 Bothies, Canteen, and Stable.

‡ In this column are included plans for additions to existing Dwelling-houses. In this way 33 apartments were added to 20 houses.

§ Includes additions to 2 School Buildings, 4 Miners' Welfare Institutes, 2 Churches, 1 Church Hall, Museum, Hospital, and Nursing Home.

|| Includes additions to 1 Hotel and 1 Masonic Lodge.

TABLE II.—SHOWING NUMBER OF HOUSES AND SHOPS SET FORTH IN PLANS SUBMITTED UNDER BY-LAWS REGULATING THE BUILDING OR RE-BUILDING OF HOUSES OR BUILDINGS DURING 1931.

| PARISH. | NEW BUILDINGS OF | | | | | | TOTAL. |
|-------------------------------|------------------|-----------------|-------------------|------------------|------------------------------|-------|--------|
| | One Apartment. | Two Apartments. | Three Apartments. | Four Apartments. | Five Apartments and upwards. | Shops | |
| Avondale, - - | — | — | — | 2 | 2 | — | 4 |
| Biggar, - - | — | — | — | 2 | 1 | — | 3 |
| Blantyre, - - | — | — | — | — | — | — | — |
| Bothwell, - - | — | 14 | 46 | 30 | 8 | 2 | 100 |
| Cadder, - - | *4 | — | 2 | 14 | 1 | 6 | 27 |
| Cambuslang, - - | — | 12 | 108 | 36 | 9 | — | 165 |
| Cambusnethan, - - | — | 28 | 92 | 12 | — | — | 132 |
| Carlisle, - - | — | — | 18 | 1 | — | — | 19 |
| Carmichael, - - | — | — | — | — | — | — | — |
| Carmunnock, - - | — | — | — | 3 | 2 | — | 5 |
| Carnwath, - - | — | 12 | 36 | — | — | — | 48 |
| Carstairs, - - | — | — | 2 | — | — | — | 2 |
| Coulter, - - | — | — | — | — | — | — | — |
| Covington and Thankerton, - - | — | — | — | — | — | — | — |
| Crawford, - - | — | — | 1 | — | — | — | 1 |
| Crawfordjohn, - - | — | — | — | — | — | 2 | 2 |
| Dalserf, - - | — | — | 2 | 1 | — | — | 3 |
| Dalziel, - - | — | — | — | — | — | — | — |
| Dolphinton, - - | — | — | — | — | — | — | — |
| Douglas, - - | — | — | — | — | — | — | — |
| Dunsyre, - - | — | — | 1 | — | — | — | 1 |
| East Kilbride, - - | — | — | 30 | 10 | 3 | 3 | 46 |
| Glasford, - - | — | — | — | — | — | — | — |
| Glasgow, - - | — | — | — | — | — | — | — |
| Hamilton, - - | — | — | 20 | 12 | — | — | 32 |
| Lamington and Wandel, - - | — | — | — | — | — | — | — |
| Lanark, - - | — | — | — | 1 | — | — | 1 |
| Libberton, - - | — | — | — | — | — | — | — |
| Lesmahagow, - - | — | 1 | 14 | 1 | — | 1 | 17 |
| New Monkland, - - | — | — | 20 | 9 | — | — | 29 |
| Old Monkland, - - | — | 25 | 72 | 56 | 17 | — | 170 |
| Pettinain, - - | — | — | — | — | — | — | — |
| Rutherglen, - - | — | — | 137 | 71 | 1 | 8 | 217 |
| Shotts, - - | — | — | 1 | 1 | — | — | 2 |
| Stonehouse, - - | — | — | — | 7 | — | — | 7 |
| Symington, - - | — | — | 8 | — | — | — | 8 |
| Walston, - - | — | — | — | — | — | — | — |
| Wiston and Robertson, - - | — | — | — | — | — | — | — |
| TOTAL, - - | 4 | 92 | 610 | 269 | 44 | 22 | 1,041 |

* Glasgow Old Married Couples' Homes.

MEAT INSPECTIONS—SLAUGHTERHOUSES, &c.

ALEXANDER CAMERON, M.R.San.I.

As General Superintendent of Abattoirs and County Meat Inspector, I have to submit the following report:—

It will be observed from Table I that the total number of animals slaughtered at the various abattoirs was 28,175, out of which 9,052 animals were found to contain disease in some form.

Of the 9,052, there were 1,510 carcasses totally or partially condemned, and 7,542 carcasses found with local conditions in which organs only were condemned, these combined being 32·12 per cent. of the total animals slaughtered, as compared with 47·58 per cent. the previous year.

Of the 11,137 cattle slaughtered at the various abattoirs, 422 were sent in by the County Veterinary Inspector under the Tuberculosis Order, and of these 358 were totally or partially condemned, and the remainder passed, being cases in which organs only were condemned.

Table II and III show in detail, for each slaughterhouse, the class of animals slaughtered, and the extent to which disease was prevalent, both in abattoirs and private slaughterhouses throughout the district.

Table IV shows the number of organs and the diseases for which they were condemned in those cases where organs only were condemned, in abattoirs and private slaughterhouses.

TABLE I.

| Animals Slaughtered. | | Carcases condemned wholly or partially. Carcases in which the Organs only were condemned. | | | | | | | | | | | | | | | |
|-------------------------|--------------|--|------|---------|-------|-----------------|-------|-----------------|------|-----|------|-----------------|-------|-----|--|---|--|
| | | Tuberculosis. | | | | | | Other Diseases. | | | | | | | | | |
| | | Carcases. | | | | Organs only. | | Carcases. | | | | Organs only. | | | | | |
| Wholly. | | Partially. | | Wholly. | | | | Partially. | | | | | | | | | |
| Class. | Num- ber. | No. | | % | | No. | | % | | No. | | % | | No. | | % | |
| Cows, . | 6,277 | 435 | 6·93 | 796 | 12·68 | 2,907 | 46·31 | 78 | 1·24 | 61 | ·97 | 1,859 | 29·61 | | | | |
| Heifers, . | 2,293 | 10 | ·43 | 23 | 1·00 | 330 | 14·39 | 3 | ·13 | 4 | ·17 | 374 | 16·31 | | | | |
| Bulls, . | 271 | 1 | ·36 | 2 | ·73 | 26 | 9·59 | — | — | 1 | ·36 | 39 | 14·39 | | | | |
| Bullocks, . | 2,296 | 3 | ·13 | 16 | ·69 | 78 | 3·39 | 1 | ·04 | — | — | 164 | 7·14 | | | | |
| Calves, . | 4,143 | 18 | ·43 | — | — | — | — | 16 | ·38 | — | — | 4 | ·09 | | | | |
| Sheep, . | 9,312 | — | — | — | — | 19 | ·20 | 18 | ·19 | 2 | ·02 | 1,694 | 18·19 | | | | |
| Swine, . | 3,580 | 5 | ·13 | 6 | ·16 | 29 | ·81 | 10 | ·27 | 1 | ·02 | 19 | ·53 | | | | |
| Goats, . | 3 | — | — | — | — | — | — | — | — | — | — | — | — | | | | |
| Total, . | 28,175 | 472 | 8·41 | 843 | 15·26 | 3,389 | 74·69 | 126 | 2·25 | 69 | 1·54 | 4,153 | 86·26 | | | | |

Bellshill.—TABLE II.—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, - | 2,451 | 190 | 317 | 1,471 | 36 | 43 | 1,352 |
| Heifers, - | 665 | 5 | 7 | 163 | 1 | 2 | 270 |
| Bulls, - | 88 | — | — | 9 | — | — | 27 |
| Bullocks, - | 205 | 1 | 3 | 13 | — | — | 57 |
| Calves, - | 28 | 1 | — | — | 1 | — | 1 |
| Sheep, - | 2,616 | — | — | — | 3 | — | 955 |
| Swine, - | 122 | — | 3 | 6 | — | 1 | 3 |
| Goats, - | 2 | — | — | — | — | — | — |
| Total, - | 6,177 | 197 | 330 | 1,662 | 41 | 46 | 2,665 |

Bellshill.—TABLE III.—OTHER DISEASES FOR WHICH CARCASSES WERE TOTALLY OR PARTIALLY CONDEMNED.

| DISEASE. | Cows. | Heifers. | Calves. | Sheep. | Swine. | Total |
|------------------------|-------|----------|---------|--------|--------|-------|
| Abscess, - | 5 | 2 | — | — | — | 7 |
| Actinomycosis, - | 2 | — | — | — | — | 2 |
| Dropsy, - | 9 | — | — | — | — | 9 |
| Emaciation, - | 1 | — | — | 2 | — | 3 |
| Injury, - | 22 | — | — | — | 1 | 23 |
| Jaundice, - | 3 | — | — | — | — | 3 |
| Mammitis, - | 1 | — | — | — | — | 1 |
| Pericarditis, - | 3 | — | — | — | — | 3 |
| Peritonitis, - | 6 | — | — | — | — | 6 |
| Pleurisy, - | 3 | 1 | — | — | — | 4 |
| Pneumonia, - | 1 | — | — | 1 | — | 2 |
| Septic Metritis, - | 2 | — | — | — | — | 2 |
| Septic Pericarditis, - | 5 | — | — | — | — | 5 |
| Septic Peritonitis, - | 6 | — | — | — | — | 6 |
| Pyæmia, - | 2 | — | — | — | — | 2 |
| Hydræmia, - | 1 | — | — | — | — | 1 |
| Bruises, - | 2 | — | — | — | — | 2 |
| Anthrax, - | 1 | — | — | — | — | 1 |
| Jhone's Disease, - | 2 | — | — | — | — | 2 |
| Gastritis, - | 1 | — | — | — | — | 1 |
| Immaturity, - | — | — | 1 | — | — | 1 |
| Sarcoma, - | 1 | — | — | — | — | 1 |
| | 79 | 3 | 1 | 3 | 1 | 87 |

Blantyre.—TABLE II.—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, - | 1,189 | 86 | 218 | 407 | 12 | 4 | 134 |
| Heifers, - | 2,451 | 2 | 3 | 27 | 1 | — | 62 |
| Bulls, - | 5 | — | — | — | — | — | 2 |
| Bullocks, - | 263 | — | 9 | 2 | — | — | 49 |
| Calves, - | 647 | 11 | — | — | 3 | — | — |
| Sheep, - | 1,765 | — | — | 13 | 5 | — | 649 |
| Swine, - | 303 | — | — | 8 | 6 | — | 15 |
| Total, - | 4,417 | 99 | 230 | 457 | 27 | 4 | 911 |

Blantyre.—TABLE III.—OTHER DISEASES FOR WHICH ANIMALS WERE TOTALLY OR PARTIALLY CONDEMNED.

| DISEASE. | Cows. | Heifers. | Calves. | Sheep. | Swine. | Total. |
|-----------------------|-------|----------|---------|--------|--------|--------|
| Bruising, - - - | 3 | — | — | — | — | 3 |
| Umbilical Pyæmia, - - | — | — | 1 | — | — | 1 |
| Joint Ill, - - - | — | — | 1 | — | — | 1 |
| Jhone's Disease, - - | 3 | — | — | — | — | 3 |
| Pleuritis, - - - | 1 | — | — | — | 1 | 2 |
| Peritonitis, - - - | 6 | — | — | — | — | 6 |
| Distomatosis, - - - | — | — | — | 5 | — | 5 |
| Pneumonia, - - - | — | 1 | — | — | 1 | 2 |
| Septicæmia - - - | 2 | — | — | — | — | 2 |
| Immaturity, - - - | — | — | 1 | — | — | 1 |
| Uræmia, - - - | 1 | — | — | — | — | 1 |
| Swine Fever, - - - | — | — | — | — | 4 | 4 |
| | 16 | 1 | 3 | 5 | 6 | 31 |

Carlisle.—TABLE II.—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, - | 145 | 70 | — | 37 | 10 | 1 | — |
| Heifers, - | 179 | 1 | — | — | — | — | — |
| Bulls, - | 33 | — | — | — | — | 1 | — |
| Bullocks, - | 387 | 1 | — | — | 1 | — | — |
| Calves, - | 3,306 | 3 | — | — | 5 | — | — |
| Sheep, - | 815 | — | — | — | 2 | — | — |
| Swine, - | 2,530 | 2 | — | — | 3 | — | — |
| Total, - | 7,395 | 77 | — | 37 | 21 | 2 | — |

Carlisle.—TABLE III.—OTHER DISEASES FOR WHICH CARCASSES WERE TOTALLY OR PARTIALLY CONDEMNED.

| DISEASE. | Cows. | Bulls. | Calves. | Sheep. | Swine. | Total. |
|-------------------------|-------|--------|---------|--------|--------|--------|
| Gangrene,, - - - | 2 | — | — | — | — | 2 |
| Jhone's Disease, - - - | 5 | — | — | — | — | 5 |
| Septicæmia, - - - | 1 | — | 4 | — | — | 5 |
| Gastro-Enteritis, - - - | — | — | — | — | 2 | 2 |
| Actinomycosis, - - - | 1 | — | — | — | — | 1 |
| Joint Ill, - - - | — | — | 1 | — | — | 1 |
| Pneumonia, - - - | 1 | — | — | — | — | 1 |
| Jaundice, - - - | — | — | — | — | 1 | 1 |
| Emaciated, - - - | 1 | — | — | 2 | — | 3 |
| Bruised, - - - | — | 2 | — | — | — | 2 |
| | 11 | 2 | 5 | 2 | 3 | 23 |

Douglas.—TABLE II.—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. | | Organ only. | Carcases. | | Organs only. |
| | | Wholly. | Partially. | | Wholly. | Partially. | |
| Cows, - | 3 | — | — | — | — | — | — |
| Heifers, - | 1 | — | — | — | — | — | — |
| Bulls, - | — | — | — | — | — | — | — |
| Bullocks, - | 62 | — | — | — | — | — | — |
| Calves, - | — | — | — | — | — | — | — |
| Sheep, - | 196 | — | — | — | — | — | — |
| Swine, - | 13 | — | — | — | — | — | — |
| Total, - | 275 | — | — | — | — | — | — |

Forth.—TABLE II.—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, - | 1 | — | — | — | — | — | 1 |
| Heifers, - | 67 | — | — | — | — | 1 | — |
| Bulls, - | 1 | — | — | — | — | — | — |
| Bullocks, - | 159 | — | — | — | — | — | — |
| Calves, - | — | — | — | — | — | — | — |
| Sheep, - | 161 | — | — | — | — | — | — |
| Swine, - | 69 | 2 | — | — | — | — | — |
| Total, - | 458 | 2 | — | — | — | 1 | 1 |

One heifer was partially condemned on account of septic mastitis.

Larkhall.—TABLE II.—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, - | 1,195 | 52 | 207 | 539 | 11 | 8 | 91 |
| Heifers, - | 142 | — | 6 | 7 | 1 | — | 3 |
| Bulls, - | 20 | — | 1 | 9 | — | — | 1 |
| Bullocks, - | 160 | 1 | — | 10 | — | — | 2 |
| Calves, - | 131 | — | — | — | 6 | — | 2 |
| Sheep, - | 450 | — | — | — | 7 | 1 | 71 |
| Swine, - | 133 | 1 | 2 | 10 | 1 | — | 1 |
| Total, - | 2,231 | 54 | 216 | 575 | 26 | 9 | 171 |

Larkhall. — TABLE III.—OTHER DISEASES FOR WHICH CARCASSES WERE TOTALLY OR PARTIALLY CONDEMNED.

| DISEASE. | Cows. | Heifers. | Calves. | Sheep | Swine. | Total. |
|-------------------------|-------|----------|---------|-------|--------|--------|
| Injury, - - - | 4 | — | — | — | — | 4 |
| Peritonitis, - - - | — | — | — | 1 | 1 | 2 |
| Pericarditis, - - - | 2 | — | — | — | — | 2 |
| Pyæmia, - - - | 1 | 1 | 2 | — | — | 4 |
| Pneumonia, - - - | — | — | — | 1 | — | 1 |
| Gastro-Enteritis, - - - | — | — | 2 | 2 | — | 4 |
| Septic Metritis. - - - | 2 | — | — | — | — | 2 |
| Immaturity, - - - | — | — | 2 | — | — | 2 |
| Septicæmia, - - - | 7 | — | — | — | — | 7 |
| Sarcoma, - - - | 1 | — | — | — | — | 1 |
| Carcinoma, - - - | 1 | — | — | 1 | — | 2 |
| Pleurisy, - - - | — | — | — | 1 | — | 1 |
| Rickets, - - - | — | — | — | 2 | — | 2 |
| Uræmia, - - - | 1 | — | — | — | — | 1 |
| | 19 | 1 | 6 | 8 | 1 | 35 |

Lesmahagow.—TABLE II.—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, - | 155 | 3 | 9 | 17 | — | — | 6 |
| Heifers, - | 112 | — | — | — | — | — | 3 |
| Bulls, - | 28 | — | — | 1 | — | — | — |
| Bullocks, - | 309 | — | — | 3 | — | — | 9 |
| Calves, - | 2 | — | — | — | — | — | — |
| Sheep, - | 463 | — | — | — | — | — | 1 |
| Swine, - | 41 | — | — | — | — | — | — |
| Total, - | 1,110 | 3 | 9 | 21 | — | — | 19 |

Strathaven.—TABLE II. — 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, - | 624 | 29 | 22 | 262 | 6 | 4 | 97 |
| Heifers, - | 307 | 1 | — | 51 | — | — | 13 |
| Bulls, - | 22 | — | — | 4 | — | — | 1 |
| Bullocks, - | 34 | — | 1 | 3 | — | — | 2 |
| Calves, - | 134 | 2 | — | — | 1 | — | 1 |
| Sheep, - | 1,234 | — | — | — | — | 1 | 1 |
| Swine, - | 231 | — | — | 4 | — | — | — |
| Total, - | 2,586 | 32 | 23 | 324 | 7 | 5 | 115 |

Strathaven.—TABLE III.—OTHER DISEASES FOR WHICH CARCASSES WERE TOTALLY OR PARTIALLY CONDEMNED.

| DISEASE. | Cows. | Sheep. | Calves. | Total. |
|------------------------|-------|--------|---------|--------|
| Foreign Body, - - - | 1 | — | — | 1 |
| Injury, - - - - | 2 | — | — | 2 |
| Septic Mastitis, - - | 2 | — | — | 2 |
| Gangrene, - - - - | 2 | — | — | 2 |
| Peritonitis, - - - | 1 | — | — | 1 |
| Dropsical, - - - - | — | 1 | — | 1 |
| Gastritis, - - - - | 1 | — | — | 1 |
| Navel and Joint Ill, - | — | — | 1 | 1 |
| Septic Metritis, - - | 1 | — | — | 1 |
| | 10 | 1 | 1 | 12 |

Shotts.—TABLE II.—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, - | 37 | — | 3 | 16 | — | — | 7 |
| Heifers, - | 55 | — | — | 3 | — | — | 2 |
| Bulls, - | 5 | — | — | 1 | — | — | — |
| Bullocks, - | 392 | — | 1 | 43 | — | — | 36 |
| Calves, - | 21 | — | — | — | — | — | — |
| Sheep, - | 257 | — | — | — | — | — | — |
| Swine, - | 44 | — | — | — | — | — | — |
| Total, - | 811 | — | 4 | 63 | — | — | 45 |

Baillieston.—TABLE II.—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, - | 30 | 7 | — | 7 | — | — | 2 |
| Heifers, - | 177 | — | 4 | 57 | — | — | 7 |
| Bulls, - | 5 | — | — | 1 | — | — | — |
| Bullocks, - | 28 | — | — | 2 | — | — | — |
| Calves, - | 79 | 1 | — | — | — | — | — |
| Sheep, - | 804 | — | — | 6 | — | — | 13 |
| Swine, - | 20 | — | — | — | — | — | — |
| Goats, - | 1 | — | — | — | — | — | — |
| Total, - | 1,144 | 8 | 4 | 73 | — | — | 22 |

Stonehouse. — TABLE II. — 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, - | 163 | 3 | 3 | 54 | 3 | 1 | 141 |
| Heifers, - | 121 | 2 | — | 5 | — | — | 10 |
| Bulls, - | 19 | — | — | — | — | — | 5 |
| Bullocks, - | 10 | — | — | — | — | — | — |
| Calves, - | 18 | — | — | — | — | — | — |
| Sheep, - | 175 | — | — | — | 1 | — | — |
| Swine, - | 18 | — | — | 1 | — | — | — |
| Total, - | 524 | 5 | 3 | 60 | 4 | 1 | 156 |

Stonehouse.—TABLE III.—OTHER DISEASES FOR WHICH CARCASSES WERE TOTALLY OR PARTIALLY CONDEMNED.

| DISEASE. | Cows. | Sheep- | Total. |
|-----------------------|-------|--------|--------|
| Pneumonia, - - - | 1 | — | 1 |
| Injury, - - - | — | 1 | 1 |
| Stomach Staggers, - - | 1 | — | 1 |
| Metritis, - - - | 1 | — | 1 |
| Toxæmia, - - - | 1 | — | 1 |
| | 4 | 1 | 5 |

Private Slaughterhouses.

TABLE II.

| District. | Animals Slaughtered. | | | |
|------------------|----------------------|---------|--------|--------|
| | Cattle. | Calves. | Sheep. | Swine. |
| Greengairs, - - | 140 | 1 | 94 | 23 |
| Longriggend, - - | 122 | 1 | 97 | 18 |
| Chapelhall, - - | 90 | — | 75 | 34 |
| Glengowan, - - | 102 | 1 | 90 | 5 |
| Newarthill, - - | 39 | — | 6 | — |
| Cleland, - - | 218 | 2 | 81 | 6 |
| Harthill, - - | 264 | — | 72 | 5 |
| Total, - - | 975 | 5 | 515 | 91 |

TABLE III.—ANIMALS CONDEMNED—WHOLLY OR PARTIALLY.

| Animals Slaughtered. | Tuberculosis. | | | Other Diseases. | | |
|----------------------|---------------|------------|---------|-----------------|------------|---------|
| | Wholly. | Partially. | Organs. | Wholly. | Partially. | Organs. |
| Cows, - - | 2 | 21 | 87 | — | — | 29 |
| Heifers, - - | — | 3 | 14 | — | — | 2 |
| Bulls, - - | — | 1 | 3 | — | — | 5 |
| Bullocks, - - | — | 2 | 2 | — | — | 2 |
| Calves, - - | — | — | — | — | — | — |
| Sheep, - - | — | — | — | — | — | 4 |
| Swine, - - | — | 1 | — | — | — | — |
| Total, - - | 2 | 28 | 106 | — | — | 42 |

TABLE IV.—RETURN OF DISEASES FOR WHICH ORGANS WERE CONDEMNED.

| DISEASES. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---------------|----------|----------------|---------------|-----------|------------|------------|---------------|-----------|------------|------------------------|----------|---------------|------------|---------------|-----------------|---------------|------------|---------------|-----------|---------|-----------------|------------------|------------------|--------------|--------------------|------------------------|-----------------------------|--------|--|--------|
| Organs Condemned. | Tuberculosis. | Abscess. | Actinomycosis. | Pericarditis. | Pleurisy. | Pneumonia. | Cirrhosis. | Distomatosis. | Mammitis. | Neoplasms. | Bacterial Necrosis. | Sarcoma. | Estrus Larve. | Nephritis. | Strongylosis. | Jones' Disease. | Angiomatosis. | Congested. | Unmarketable. | Injuries. | Cystic. | Hydronophrosis. | Septic Meiritis. | Meiritis, Chron. | Pentatomies. | Cysts. | | | | | Total. |
| | | | | | | | | | | | | | | | | | | | | | | | | | | Echino- coccos. | Cenurus Cerebralis. | Cysticercus Tenuicollis. | | | |
| Heads, | 1,244 | 3 | 44 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1 | — | — | 1,292 | | |
| Tongues, | 92 | 1 | 23 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 116 | | |
| Lungs, | 3,567 | 16 | 2 | 1 | 23 | 21 | — | — | — | — | — | — | 2 | — | 44 | — | — | — | — | — | — | — | — | — | — | 22 | 1 | 1 | 3,700 | | |
| Hearts, | 130 | 1 | — | 13 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 144 | | |
| Livers, | 657 | 392 | 3 | — | — | 1 | 610 | 3,006 | — | 4 | 27 | — | — | — | — | — | 1 | 21 | 5 | — | — | — | — | — | — | 82 | 5 | 197 | 5,011 | | |
| Stomachs, | 269 | 709 | 5 | — | — | — | — | 19 | — | — | — | — | — | — | — | 37 | — | — | 2 | — | — | — | — | — | — | — | — | — | 1,041 | | |
| Bowels, | 1,654 | 52 | 1 | — | — | — | — | — | — | — | — | 1 | — | — | — | 42 | — | — | — | — | — | 1 | — | — | 1 | — | — | — | 1,752 | | |
| Kidneys, | 220 | 2 | — | — | — | — | — | — | — | — | — | — | — | 63 | — | — | — | — | — | — | 1 | 3 | — | — | — | — | — | — | 289 | | |
| Udders, | 158 | 5 | 1 | — | — | — | — | — | 894 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1,058 | | |
| Uteri, | 198 | 2 | — | — | — | — | — | — | — | 2 | 3 | — | — | — | — | — | — | — | — | — | — | — | 2 | 1 | — | — | — | — | 208 | | |
| Feet, | 4 | 3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 4 | — | — | — | — | — | — | — | — | 11 | | |
| Prem. Calves, | 38 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | | |
| Total, | 8,231 | 1,186 | 79 | 14 | 23 | 22 | 610 | 3,025 | 894 | 6 | 30 | 1 | 2 | 63 | 44 | 80 | 21 | 5 | 2 | 4 | 1 | 4 | 2 | 1 | 1 | 104 | 7 | 198 | 14,622 | | |

Note.—This Table does not include the Viscera of Carcases wholly or partially condemned.

DISEASED UDDERS.—It will be observed that the total number of cows slaughtered was 6,277. Of these, 435 were totally condemned on account of generalised tuberculosis, 133 of which showed evidence of tubercle in the udder. There were 796 cows partially condemned on account of various forms of localised tuberculosis, and of these 43 had udders affected. In addition to the foregoing, there were 2,907 cows in which the disease was so localised that organs only were condemned, and in 158 of these the udder was affected. Of the total cows slaughtered, 894 cases of indurated udder or other forms of chronic mammitis were found. Many of these cases might be called doubtful tubercle in the absence of microscopic examination.

Of the 2,293 heifers slaughtered, 10 were totally condemned and 23 partially condemned. In 2 of the cases totally condemned the disease was present in the udder.

In dealing with emergency cases, all animals are prohibited from entering public abattoirs or private slaughterhouses unless accompanied by a veterinary certificate certifying that the animal is not suffering from a contagious disease, as scheduled under the Contagious Diseases (Animals) Act, except in cases of accident or consequent upon calving.

Where slaughtering takes place outside the slaughterhouse (farms, &c.), the requirements of the Meat Regulations (Scotland), 1930, are complied with.

The number of diseased animals found at the different abattoirs varied according to the class or quality of animals slaughtered, *e.g.*, at Bellshill, Blantyre, and to a slight extent at Larkhall, there is a turnover of plain cattle for boning purposes. Disease fluctuates according to quality of these animals. Quality generally varies in accordance with the purchasing power of the people.

The whole system of Meat Inspection is linked up with the County Bacteriological Laboratory, and when necessary histological and bacteriological work is carried out by the Bacteriologist.

BUILDINGS.—The accommodation in the seven abattoirs in the previous Middle Ward area remains the same as last year, and is more than sufficient for the work done.

The four abattoirs in the former Upper Ward also provide sufficient accommodation, but these places were found to be in a bad state of repair. The Slaughterhouse Committee have agreed to put the premises in a satisfactory condition, and the work is proceeding meantime.

Painting and repairs to fences, &c., have been carried out. On account of an order issued by the Local Authority to put all repairs and painter work in the hands of the Works Department, much work previously carried out by the staff has been transferred to that department. I think it was more economical and kept the slaughterhouses in better condition when an allowance was made for the slaughterhouse Superintendents carrying out small repairs to fences, painting iron work inside the abattoir, and doors, rhones, and conductors outside. This work was done when there was time available and the periods varied according to business done by the trade.

PRIVATE SLAUGHTERHOUSES.—Eighteen licences were granted for slaughter of cattle, sheep, and pigs, and two licences where sheep only were slaughtered, and the arrangement for the inspection of meat still continues as previously reported, these private slaughterhouses being organised under the latest meat regulations. The work of inspection has gone smoothly, and the trade has in no way been hampered by the curtailed slaughtering periods.

Vans from adjacent counties and burghs continue to hawk the districts, and these have been inspected regularly with satisfactory results. The regular inspections, both with regard to the local butchers and hawking vans inaugurated under the new Meat Regulations, have positively improved the quality of the meat in these districts. Neighbouring counties, who previously gave little attention to private slaughterhouses, are now evidently giving serious attention to the question of detailed meat inspection.

These inspections were carried out in conjunction with the usual supervision of the public abattoirs and private slaughterhouses, including the inspection of shops, cold stores, &c. The butchers owning the private slaughterhouses in the former Middle Ward district still continue to contribute towards the expense of making the necessary inspections at their premises, and the amount paid to the Local Authority this year was £88 14s. 7d., as compared with £98 for the previous year. This sum was more than sufficient to cover the expense in this area of the County.

A necessary standard of protection with regard to unsound meat in the private slaughterhouse areas has been maintained, and consequently a complete system of inspection exists throughout the whole County.

By-laws for public and private abattoirs throughout the County would be helpful if issued, but no by-laws suitable to present circumstances have been adopted.

The visits to private slaughterhouses and other places, outside abattoirs, were as follows:—

| | |
|------------------------------------|-------|
| Private Slaughterhouses, | 1,226 |
| Butchers' shops, vans, &c., | 3,470 |

PUBLIC HEALTH (MEAT INSPECTION) REGULATIONS (SCOTLAND), 1930, ARTICLE 12.—One permit for a meat store was dealt with during the year.

COLD STORES.—In the previous Middle Ward area there are 100 cold stores, the cooling arrangements of which are—ice, 86; mechanical, 13; not in use, 1. In the former Lower and Upper Ward districts it would appear that Section 13 of the Public Health (Meat) Regulations (Scotland), 1924, were not adopted, consequently the complete arrangement of the County has not yet been carried out.

During the year a large number of inspections were made to cold stores, and, generally speaking, their contents were found sound and the apartments kept in a satisfactory condition.

UN SOUND MEAT.—At abattoirs and private slaughterhouses all condemnations have been carried out with owner's consent. The total weight of meat condemned outside of abattoirs (including private slaughterhouses, fleshers' shops, and at farms where special licences for slaughtering were authorised) amounted to 4,724 lbs.

All condemned meat and residue from the offal business—which is in the hands of the Local Authority—throughout the district, continues to be treated in the digester at Bellshill, producing two products, viz., technical tallow and residue for manure. A quantity of the condemned meat and organs is sold to a knackery in the district, as also is the residue from the Bellshill digester.

Periodic visits were made to the County Hospitals, advice given regarding the butcher-meat supplies, and reports made on inspections.

FOOD AND DRUGS.

Senior Inspector and Sampling Officer, - CHAS. MACARA.

The work under the Food and Drugs (Adulteration) Act and relative Orders was carried out until April by two Inspectors, when the staff was increased to three by the appointment of a Junior Inspector. The following table shows the yearly average number of inspections; administrative samples taken and analysed, with the percentage found deficient; the samples taken for special purposes, for the six quinquennial periods from 1900-1929, and the annual figures for the years 1930 and 1931 :—

Administrative Samples.

| Years. | Inspections. | Procured. | Analysed. | Percentage Deficient. | Special Samples. |
|------------|--------------|-----------|-----------|-----------------------|------------------|
| 1900-04, - | 616 | 338 | 316 | 11·27 | — |
| 1905-09, - | 828 | 487 | 480 | 12·64 | — |
| 1910-14, - | 789 | 574 | 558 | 12·16 | 573 |
| 1915-19, - | 373 | 340 | 326 | 12·96 | 14 |
| 1920-24, - | 804 | 653 | 647 | 8·11 | 107 |
| 1925-29, - | 1,976 | 1,623 | 1,608 | 9·76 | 1,006 |
| 1930, - | 2,253 | 1,984 | 1,967 | 9·90 | 781 |
| 1931, - | 3,297 | 2,774 | 2,766 | 10·38 | 217 |

The following tabular statement shows the work carried out in the County Area and the Burghs of Biggar and Lanark, and the manner in which the samples were procured, &c. :—

| District. | Inspections made. | Samples procured.* | | | | Analysed. | |
|--------------------|-------------------|--------------------|-----------|---------------------|--------|-----------------|----------------------|
| | | Formal. | Informal. | Received Privately. | Total. | Public Analyst. | Chemical Laboratory. |
| County Area, - | 3,158 | 142 | 2,511 | 10 | 2,663 | 142 | 2,513 |
| Burgh of Biggar, - | 30 | — | 24 | — | 24 | — | 24 |
| Burgh of Lanark, - | 109 | 7 | 80 | — | 87 | 7 | 80 |
| Total, - | 3,297 | 149 | 2,615 | 10 | 2,774 | 149 | 2,617 |

8 samples were not analysed.

* In addition 217 special samples were procured for purposes of investigation.

The following table shows the nature and number of samples purchased and received, the number analysed, and the number found deficient :—

| Article. | Procured. | Analysed. | Deficient or Adulterated. |
|-------------------------------|-----------|-----------|------------------------------|
| Sweet Milk, - - - - | 1,677 | 1,677 | 126 |
| Cream, - - - - | 3 | 3 | — |
| Skimmed Milk, - - - | 11 | 11 | 3 |
| Double Cream, - - - | 9 | 9 | — |
| Condensed Milk, - - | 13 | 13 | — |
| Cheese, - - - - | 11 | 11 | — |
| Butter, - - - - | 69 | 69 | — |
| Margarine, - - - - | 1 | 1 | — |
| Lard, - - - - | 1 | 1 | — |
| Whisky, - - - - | 52 | 52 | 6 |
| Rum, - - - - | 1 | 1 | — |
| Port Wine, - - - - | 1 | 1 | — |
| Fruit Cordials, - - - | 2 | 2 | — |
| Mince, - - - - | 625 | 625 | 113 |
| Sausage Meat, - - - | 83 | 83 | 18 |
| Sausage, - - - - | 36 | 36 | 3 |
| Bacon, - - - - | 21 | 21 | — |
| Ham, - - - - | 2 | 2 | — |
| Ham and Mince, - - - | 3 | 3 | 1 |
| Meat Pie, - - - - | 3 | 3 | — |
| Steak, - - - - | 1 | 1 | — |
| Jellied Veal and Pork, - | 12 | 12 | 4 |
| Chicken, Ham, and Tongue, - | 10 | 10 | 2 |
| Brawn, - - - - | 1 | 1 | — |
| Spiced Luncheon Meat, - | 2 | 2 | — |
| Salmon Roll, - - - - | 1 | 1 | — |
| Beef Cubes, - - - - | 2 | 2 | — |
| Rice, - - - - | 15 | 14 | — |
| Barley, - - - - | 5 | 5 | — |
| Flour, - - - - | 2 | 2 | — |
| Sugar, - - - - | 3 | 3 | — |
| Macaroni, - - - - | 1 | 1 | — |
| Tea, - - - - | 1 | 1 | — |
| Coffee, - - - - | 3 | 3 | — |
| Cocoa, - - - - | 5 | 4 | — |
| Coffee and Chicory Extract, - | 1 | 1 | — |
| Dried Fruit, - - - - | 7 | 7 | — |
| Syrup, - - - - | 2 | 2 | — |
| Black Currant Jam, - - - | 1 | — | — |
| Strawberry Jam, - - - | 1 | 1 | — |
| Table Jelly, - - - - | 2 | 2 | — |
| <i>Carry forward,</i> | 2,702 | 2,699 | 276 |

| Article. | Procured. | Analysed. | Deficient or Adulterated. |
|---|-----------|-----------|------------------------------|
| <i>Brought forward,</i> | 2,702 | 2,669 | 276 |
| Sauce, - - - - - | 3 | 3 | — |
| Pickles, - - - - - | 4 | 4 | — |
| Malt Vinegar, - - - - - | 4 | 4 | — |
| Egg, - - - - - | 2 | — | — |
| Haricot Beans, - - - - - | 1 | — | — |
| Ground Ginger, - - - - - | 6 | 6 | — |
| Apples, - - - - - | 3 | 3 | — |
| Tinned Plums, - - - - - | 1 | — | — |
| Glacé Cherries, - - - - - | 2 | 2 | — |
| Clear Mints, - - - - - | 1 | 1 | — |
| Essence of Rennet, - - - - - | 2 | 2 | — |
| Essence of Vanilla, - - - - - | 2 | 2 | 1 |
| Gregory's Mixture, - - - - - | 1 | 1 | — |
| Borax, - - - - - | 1 | 1 | — |
| Fluid Magnesia, - - - - - | 1 | 1 | — |
| Oil of Wintergreen, - - - - - | 13 | 13 | 11 |
| Oil of Wintergreen (Synthetic), - - - - - | 7 | 7 | — |
| Methyl Salicylate, - - - - - | 2 | 2 | — |
| Almond Oil, - - - - - | 13 | 13 | — |
| Peach Kernel Oil, - - - - - | 1 | 1 | — |
| Iodine, - - - - - | 1 | 1 | — |
| Glycerine Thymol, - - - - - | 1 | — | — |
| | 2,774 | 2,766 | 288 |

28 of the deficient samples were taken formally, and 260 informally. With regard to the formal non-genuine samples, informations were lodged with the County Clerk. The vendors from whom the informal samples were procured were kept under observation and formal samples taken.

The following table shows the formal non-genuine samples dealt with during the year, and the action taken in each case:—

| Reg. No. | Article. | Date Procured. | Action Taken. |
|----------|---|------------------|---|
| — | Imported Meat Unlabelled.—Sale of Food Order, | 21st Oct., 1930, | Pled guilty at Hamilton, 6th February, 1931. Fined £5. |
| 208 | Sweet Milk, | 27th Nov., „ | Pled guilty at Hamilton, 9th January, 1931. Fined £10. |
| 218 | Whisky, | 23rd Dec., „ | Pled guilty at Lanark, 3rd February, 1931. Fined £10. |
| 219 | Whisky, | 24th Dec., „ | After proof at Airdrie on 17th February, 1931, found guilty and fined £4. |
| 1 & 2 | Sweet Milk, | 12th Jan., 1931, | As samples taken from the producer were deficient, no action taken. |
| 5 | Sweet Milk, | 13th Jan., „ | Owing to smallness of deficiency written caution sent by County Clerk. |

| Reg. No. | Article. | Date Procured. | Action Taken. |
|----------|---|----------------|--|
| 11 | Minced Steak, | 23rd Jan., , | Pled guilty at Lanark, 3rd March, 1931. Fined £1 10s. |
| 12 | Ham and Mince, | 23rd Jan., , | Pled guilty at Lanark, 3rd March, 1931. Fined £1 10s. |
| 21 | Mince, | 2nd Feb., , | Pled guilty at Lanark, 13th March, 1931. Fined £5. |
| 23 | Mince, | 2nd Feb., , | Pled guilty at Glasgow, 13th March, 1931. Fined £2. |
| 28 | Mince, | 25th Feb., , | No proceedings taken. Cautionary letter sent by County Clerk. |
| 34 | Mince, | 19th Mar., , | Pled guilty at Hamilton, 24th March, 1931. Fined £5. |
| 63 | Sweet Milk, | 5th May, , | Pled guilty at Airdrie, 12th October, 1931. Fined £1. |
| 75 | Mince, | 12th May, , | Pled guilty at Hamilton, 26th June, 1931. Fined £1. |
| 82 | Sweet Milk, | 14th May, , | No proceedings. Written caution sent by County Clerk. |
| 93 | Sweet Milk, | 28th May, , | No proceedings. Written caution sent by County Clerk. |
| 99 | Sweet Milk, | 16th June, , | Pled guilty at Hamilton, 16th October, 1931. Fined £5. |
| 108 | Slicing Sausage, | 2nd July, , | Pled guilty at Hamilton, 28th August, 1931. Fined £3. |
| 116 | Sweet Milk, | 9th July, , | Pled guilty at Lanark, 19th November, 1931. Fined £2. |
| 123 | Mince, | 20th July, , | Pled guilty at Hamilton, 2nd October, 1931. Fined £2. |
| 134 | Mince, | 13th Aug., , | Written caution sent by County Clerk. |
| 144 | Sweet Milk, | 24th Aug., , | Pled guilty at Hamilton, 20th November, 1931. Fined £3. |
| 147 | Jellied Veal, | 5th Sept., , | Written caution sent by County Clerk. |
| 153 | Sausage Meat, | 12th Sept., , | Pled guilty at Airdrie, 23rd October, 1931. Fined £2. |
| 160 | Sausage Meat, | 6th Oct., , | Pled guilty at Hamilton, 6th November, 1931. Fined £2. |
| 162 | Mince, | 9th Oct., , | Pled guilty at Lanark, 19th November, 1931. Fined £1 10s. |
| 179 | Mince, | 30th Oct., , | Pled guilty at Airdrie, 4th December, 1931. Fined £5. |
| 183 | Sausage Meat, | 12th Nov., , | Pled guilty at Hamilton, 18th December, 1931. Fined £2. |
| — | Certified Milk. — Milk (Special Designations) Order (Scotland), 1930, | 15th April, , | After proof at Lanark, 24th August, 1931, a verdict of "Not Proven" given. |
| — | Milk (Special Designations) Order (Scotland), 1930, | 16th Nov., , | Written caution sent by County Clerk. |
| — | Refusal to sell, | 26th Dec., , | Proceedings pending. |

Sweet Milk.—The following tables show the samples of sweet milk analysed during the year, classified according to the percentage of milk fat and of milk solids other than milk fat which they contained, and according to the nature of the business carried on by the vendors, viz., producer-wholesalers, producer-retailers, and retailers:—

SAMPLES CLASSIFIED ACCORDING TO PERCENTAGE OF MILK FAT.
PRESUMPTIVE STANDARD = 3 PER CENT.

| Milk Fat Percentage. | NUMBER OF SAMPLES. | | | |
|-------------------------|---------------------------|-------------------------|------------|--------|
| | Producer- Wholesalers. | Producer- Retailers. | Retailers. | Total. |
| 1.6 | — | 1 | — | 1 |
| 1.7 | — | 2 | — | 2 |
| 1.9 | — | — | 1 | 1 |
| 2.0 | — | 1 | — | 1 |
| 2.2 | — | 1 | — | 1 |
| 2.3 | — | 2 | 2 | 4 |
| 2.4 | — | 1 | 1 | 2 |
| 2.5 | — | 1 | — | 1 |
| 2.6 | — | 2 | 2 | 4 |
| 2.7 | — | 3 | 1 | 4 |
| 2.8 | — | 6 | 5 | 11 |
| 2.9 | — | 7 | 7 | 14 |
| 3.0 | 4 | 20 | 15 | 39 |
| 3.1 | 4 | 20 | 15 | 39 |
| 3.2 | 5 | 43 | 27 | 75 |
| 3.3 | 7 | 44 | 37 | 88 |
| 3.4 | 8 | 51 | 56 | 115 |
| 3.5 | 15 | 74 | 64 | 153 |
| 3.6 | 19 | 76 | 84 | 179 |
| 3.7 | 23 | 78 | 65 | 166 |
| 3.8 | 12 | 87 | 85 | 184 |
| 3.9 | 14 | 71 | 65 | 150 |
| 4.0 | 9 | 68 | 54 | 131 |
| 4.1 | 8 | 49 | 33 | 90 |
| 4.2 | 3 | 35 | 16 | 54 |
| 4.3 | 3 | 33 | 15 | 51 |
| 4.4 | — | 12 | 6 | 18 |
| 4.5 | 7 | 52 | 40 | 99 |
| and over | | | | |
| Total, | 141 | 840 | 696 | 1,677 |

SAMPLES CLASSIFIED ACCORDING TO PERCENTAGE OF MILK SOLIDS OTHER
THAN MILK FAT.

PRESUMPTIVE STANDARD = 8.5 PER CENT.

| Non-fatty Solids Percentage. | NUMBER OF SAMPLES. | | | |
|---------------------------------|---------------------------|-------------------------|------------|--------|
| | Producer- Wholesalers. | Producer- Retailers. | Retailers. | Total. |
| 6.7 | — | — | 1 | 1 |
| 7.4 | 1 | — | 1 | 2 |
| 7.7 | — | 1 | — | 1 |
| 7.8 | 1 | — | 1 | 2 |
| 7.9 | — | 4 | — | 4 |
| 8.0 | 1 | 2 | 4 | 7 |
| 8.1 | — | 1 | 5 | 6 |
| 8.2 | 4 | 2 | 8 | 16 |
| 8.3 | 5 | 12 | 7 | 24 |
| 8.4 | 3 | 18 | 15 | 36 |
| 8.5 | 8 | 47 | 47 | 102 |
| 8.6 | 20 | 88 | 58 | 166 |
| 8.7 | 15 | 126 | 84 | 225 |
| 8.8 | 28 | 152 | 121 | 301 |
| 8.9 | 8 | 127 | 111 | 246 |
| 9.0 | 13 | 114 | 118 | 245 |
| 9.1 | 15 | 73 | 67 | 155 |
| 9.2 | 9 | 45 | 34 | 88 |
| 9.3 | 6 | 18 | 9 | 33 |
| 9.4 | 1 | 6 | 2 | 9 |
| 9.5 | 2 | 4 | 3 | 7 |
| and over | | | | |
| Total, | 140* | 840 | 696 | 1,676 |

*One sample only analysed for milk fat.

Sweet Milk.—1,677 formal and informal samples were procured, and in addition, 217 samples were obtained in connection with special investigations. The procedure adopted is to procure informal samples for analysis in the Chemical Laboratory, and any samples found not genuine are followed up by taking formal samples from the vendors concerned. When formal samples are procured from any vendor, it is the practice to take informal samples immediately afterwards from the same vessel. This is done so that the informal sample can be examined in the Chemical Laboratory and the results of analyses known on the same day. If the sample proves to be deficient this early information is valuable for the purpose of further investigation.

If the vendor is a retailer samples are taken in course of delivery of the milk to him, and if the vendor is a producer-retailer, an "appeal to the cows" is made with the consent of the producer, at the milkings immediately following. Thus, 217 samples were taken from the individual cows of five herds concerned with deficient samples. The herds consisted of 19, 15, 34, 16, and 17 cows respectively. The following tabular statement gives the month of the year when the investigation took place, and the number of individual cows yielding milk under the standard at each of the milkings, viz. :—

| Number of Cows. | Month. | Number of Cows yielding Milk Deficient in Fat. | | Number of Cows yielding Milk under the Standard in Solids not Fat. | |
|--------------------|-----------|--|----------|---|----------|
| | | Morning. | Evening. | Morning. | Evening. |
| 19 | May, - | - | — | 5 | 5 |
| 15 | May, - | - | 2 | 6 | 3 |
| 34 | June, - | - | — | 7 | 5 |
| 16 | July, - | - | 3 | 3 | 5 |
| 17 | August, - | - | — | 7 | 1 |

The cans, of a capacity of 6 to 10 gallons, which were filled up during the above milkings, were sampled as they were filled up, and the results of analyses showed the milk in every case to be well above the standard in both milk fat and non-fatty solids. An expert milker was present with the Inspectors at each milking and tested the cows after milking to make sure that they were properly stripped.

Skimmed Milk.—11 samples of skimmed milk were procured, and 3 were found on analysis to be below the standard. One of the samples showed a high figure for milk fat and in all probability would be sold to the public as sweet milk. 3 cases of failure to label the can "skimmed milk" were detected. The vendors were all cautioned.

Butter.—69 samples were procured and were all found to be genuine. At the routine inspection of shops, strict attention was given to the detection of the fraudulent sale of margarine for butter. Numerous samples were procured by means of agents, but in no case was this practice detected.

Eggs.—2 new laid country eggs were examined by the ultra-violet ray installation at Hairmyres Colony, and were found to be newly laid eggs.

Whisky.—52 samples of whisky were procured, 44 informal and 8 formal. 6 of the informal samples were certified to be not genuine. The formal samples taken from the vendors concerned were all found to be genuine. In one case the vendor refused to supply the Inspector from a bottle standing on the gantry from which he had previously supplied an agent. Legal proceedings followed.

Drugs.—41 samples of drugs as specified in Table of Samples were procured. Of 22 samples of oil of wintergreen, 15 were labelled as such, 5 were labelled "Oil of Wintergreen (Synthetic or Artificial)," and 2 were labelled "Methyl Salicylate." In only a few cases was intimation made at the time of purchase that methyl salicylate was supplied on demand for "Oil of Wintergreen." Of the 15 samples labelled as "Oil of Wintergreen" 11 were certified on analysis to be not genuine, and to consist of methyl salicylate.

13 samples of almond oil were also procured with a view to testing the practice of selling peach kernel oil as a substitute. 13 samples were procured, and 12 were found to be genuine. One was found to be peach kernel oil. In the latter case the word "Persic" was written on the label after "Almond Oil."

As a result of the above sampling, a circular letter was sent in November to all pharmaceutical chemists as follows:—

" County Public Health Department,
" Beckford Street,
" Hamilton, 17th November, 1931.

" DEAR SIR/MADAM,

" FOOD AND DRUGS (ADULTERATION) ACT, 1928.

" The attention of pharmaceutical chemists is drawn to irregularities in connection with the sale of oil of wintergreen and almond oil, which seem to constitute contraventions of the above Act.

" Informal samples have been procured in various localities throughout the County by the Inspectors entrusted with the administration of the above Act, and the results of analyses of these in the Chemical Laboratory show that in some cases methyl salicylate and peach kernel oil have been supplied respectively on demand for oil of wintergreen and almond oil, without notice being given to

the purchaser by label and intimation at the time of purchase. This constitutes an offence under Section 2 (1) of the Statute, as follows:—

“ ‘No person shall sell to the prejudice of the purchaser any article of food or any drug which is not of the nature, or not of the substance, or not of the quality, of the article demanded by the purchaser.’ ”

“ This matter, I am sure, needs only to be conveyed to the chemists concerned to ensure their attention to the requirements of the Act.

“ I am,

“ Yours faithfully,

“ J. HUME PATTERSON,

“ *County Medical Officer.* ”

All the other drugs were certified to be genuine.

MARGARINE CONTRAVENTIONS.

4 contraventions were detected, consisting of 3 cases of want of statutory labels. The offenders were all cautioned.

BACTERIOLOGICAL EXAMINATION OF MILK.

31 of the informal samples of ordinary milk procured by the Food and Drugs Inspector, and 589 procured by the District Sanitary Inspectors were examined in the Bacteriological Laboratory with regard to the cleanliness or otherwise of the milk as supplied to the consumers. About 17 per cent. of the samples were found to be dirty. These unsatisfactory samples were dealt with by the Local Sanitary Inspector visiting the farm of the producer with a view to correcting any faults in the manner of milking and handling the milk.

MILK (SPECIAL DESIGNATIONS) ORDER (SCOTLAND), 1930.

301 inspections were made. The samples of graded milk taken and submitted for bacteriological and chemical examination in the County Laboratories are dealt with on pages 164-165.

The following contraventions of the Milk (Special Designations) Order (Scotland), 1930, were detected, and informations lodged with the County Clerk:—

Two dairymen who were not licensed to sell graded milk were selling milk in bottles stoppered with discs bearing the words “Tuberculin Tested” in one case, and “Milk from cows which have passed

the Tuberculin Test" in another case. The matter was taken up by the County Clerk communicating with the dairymen, and the contraventions were rectified at once.

Another dairyman licensed to sell Grade A Milk was contravening the Act by having printed on the caps "From cows which have passed the Tuberculin Test" without the date of production of the milk printed on the cap, and also with selling some of the bottles of milk without any cap at all. Here again the matter was taken up by the County Clerk communicating with the producer-retail dairyman, and the matter was remedied.

A farmer licensed to produce and sell Certified Milk was found contravening the terms of the Order by selling as "Certified" Milk two pints of ordinary milk as delivered from a Creamery, the bottles being duly capped and labelled "Certified Milk." The Inspectors learned that the ordinary milk was coming from the railway station at a certain time, and were present at the farm when the milk was passed over a cooler and bottled and capped by servants in the absence of the licensee. The servants told the Inspector that this milk went off by train every evening for sale. An information was lodged with the County Clerk, and legal proceedings followed. After Proof, the Sheriff held the case "Not Proven," stating that the contravention was caused by the wrongful action of the defender's servants in selling the milk as "Certified Milk." An appeal against this decision was made, and the case stated by the Sheriff, but on the matter being fully considered it was not deemed advisable to go on with the case as stated. Subsequently another information was lodged with the County Clerk against this same farmer in respect that, through his servant acting on his instructions, he refused entry to his dairy premises. A written caution was sent by the County Clerk that if a repetition of this offence occurred legal proceedings would be instituted.

Slight contraventions of the Order of the nature of omissions to put the date of production on the caps, &c., were dealt with by cautionary letters being sent to the offenders.

PUBLIC HEALTH (CONDENSED MILK) AND (DRIED MILK) REGULATIONS.

13 samples were taken, and on analysis were found to conform to the terms of the Regulations. The labelling requirements of the Regulations were observed in every case.

SALE OF FOOD ORDER.

14 contraventions of the Order were detected, viz., failure to label imported meat for sale in butchers' shops. Verbal cautions were given.

PUBLIC HEALTH (PRESERVATIVES, &c., IN FOOD) REGULATIONS (SCOTLAND), 1925.

All the articles which are affected by the above Regulations were analysed for the presence of preservative. In procuring samples of mince, sausages, sausage meat, &c., the procedure adopted is to procure informal samples for examination in the Chemical Laboratory in the first instance and follow up any non-genuine samples afterwards by the purchase of formal samples for analysis by the Public Analyst. As will be seen from the table of samples purchased and analysed 113 samples of mince, 18 samples of sausage meat, 1 sample of ham and mince, 4 samples of jellied veal and pork, 2 samples of chicken, ham, and tongue, and 1 sample of essence of rennet, were found to be not genuine in respect that they contained preservative prohibited by the Regulations. One of the manufacturers of jellied veal from whom a formal sample had been taken was communicated with, and he replied that the presence of the preservative in jellied veal was due to the gelatine from which the veal was stated to be manufactured, and which is allowed by the Regulations to contain a limited amount of sulphur dioxide. Accordingly, no action was taken.

2 contraventions of failure to exhibit the notices required regarding preservative in sausages and sausage meat under the Regulations were detected. Verbal cautions were given, and the vendors kept under supervision.

EXAMINATION OF FOODSTUFFS AS SUPPLIED TO INSTITUTIONS.

Inspections were made during the period under review at the various Institutions throughout the County, and 83 samples taken of the grocery goods and butchermeat supplied by the various contractors under schedule.

COAL SUPPLIES TO COUNTY INSTITUTIONS.

35 inspections were made to Institutions, and 62 samples of coal supplied to them by various contractors taken for analysis in the Laboratory at Uddingston Gas Works.

FERTILISERS AND FEEDING STUFFS ACT, 1926.

The simplification of the procedure under the above Act in order to encourage farmers to have samples of fertilisers and feeding-stuffs taken by the official samplers for analysis has not resulted in farmers making any more use of the Statute than they formerly did under the old Act with all its restrictive formalities.

7 inspections were made, and 11 samples of fertilisers and 1 of feeding-stuffs procured, 10 on request of a Farmers' Trading Association and 2 from an individual farmer. Sampling under the Act is carried out by the Food and Drugs Inspectors.

The following table shows the number of samples obtained and the number found deficient:—

| Fertilisers. | | | Feeding Stuffs. | | |
|----------------------------------|-----------|------------|-----------------|-----------|------------|
| Name. | Obtained. | Deficient. | Name. | Obtained. | Deficient. |
| Potassic Mineral Phosphates, - - | 1 | — | Fish Meal, - | 1 | — |
| Calcium of Cyanamide, 1 | | — | | | |
| Sulphate of Ammonia, 1 | | — | | | |
| Basic Slag, - - | 1 | — | | | |
| Kainit, - - - | 1 | — | | | |
| Potash Salts, - - | 1 | — | | | |
| Nitro Chalk, - - | 1 | — | | | |
| Concentrated Fertiliser, - | 1 | — | | | |
| Grain Manure, - | 1 | — | | | |
| Superphosphate, - | 1 | — | | | |
| Ground Mineral Phosphate, - | 1 | — | | | |
| Total, | 11 | — | | 1 | — |

The Agricultural Analyst reported that the composition of all the articles agreed with the statement on the invoices. Copies of the certificates were sent by the Agricultural Analyst to the parties concerned.

SHOPS ACTS, 1912-1921.

The work under the above Acts has been carried out by the Food and Drugs Inspectors on the same lines as in previous years, with a view to assisting shopkeepers and their assistants to obtain the benefit of better working conditions conferred on them by the Statute. Legal proceedings against offenders are only instituted as a last resort, where cautions have not been effective in putting a stop to infringements of the terms of the Statute. In the main, offenders are generally small shopkeepers and itinerant hawkers. Table D shows the number of inspections to localities, visits to shops, and contraventions detected under the Act. There were 60 contraventions. These consisted of 10 cases of failure to close at the time fixed on weekly half-holidays and under Closing Orders; 8 sale of non-exempted goods; and 42 failures to exhibit notices in terms of the Act.

The following statutory notices were issued to shopkeepers:—

| | | | |
|---------------------------------------|---|---|----|
| Shop assistants' weekly half-holiday, | - | - | 5 |
| Mixed shops for exempted goods, | - | - | 47 |

The following paragraphs give particulars regarding inspections made in connection with the administration of the Acts and the irregularities detected:—

Shops Weekly Half-Holiday.—The Weekly Half-Holiday Orders operative in the County area apply to (1) the district covered by the Middle Ward area; (2) the Parish of Carluke; (3) the Baillieston and District Butchers' Order; and (4) the district covered by the Lower Ward area applicable to butchers. By these Orders Wednesday is fixed as the day of the weekly half-holiday. In all the other areas of the County the shopkeepers arrange amongst themselves with regard to the day on which they will close their premises in the afternoon, and intimate the day by means of a notice exhibited on their premises. 64 localities were visited on the day fixed for the weekly half-holiday, and, generally speaking, the closing of shops at 1 p.m. was very well observed. 42 contraventions were detected, viz.:—failure to exhibit the statutory notices. Verbal cautions were given.

Early Closing of Shops in the Evening.—The following Early Closing Orders are in operation within the County:—(1) General Closing Orders for all shops in the Parish of Cambuslang; (2) Butchers' and Grocers' Early Closing Order in Blantyre; (3) Butchers' Early Closing Order in Baillieston and District; (4) Butchers' Early Closing Order in the old Lower Ward area; (5)

Butchers' and Hairdressers' Early Closing Order applicable to the Special Lighting Districts of Aitkenhead and Tannochside, Bellshill and Mossend, Blantyre, Bothwell, Cambuslang, and Uddingston.

20 evening inspections were made under Closing Orders and the Acts. 18 contraventions were detected. 12 of these consisted of want of promptness in closing the shop door at the hour fixed and 6 cases of serving of customers after hours. Informations were lodged with the County Clerk in two of the cases. A prosecution followed in one case and a fine of £1 imposed, while with regard to the others, it was deemed sufficient to give a written caution.

Street Trading.—During the routine inspection on the weekly half-holiday, and in the evenings, attention is given to street traders. No contraventions were detected.

Assistants' Weekly Half-Holiday.—At all inspections made, special attention is given to the provisions of the Act with regard to the assistants' half-holiday. No contraventions were detected.

Over-Employment of Young Persons under 18 Years of Age.—Attention is always paid to this provision of the Act, but no contraventions were detected.

Communications.—Many special visits were made as a result of communications received from traders requesting information regarding the provisions of the Act.

TABLE D.—SHOWING INSPECTIONS, VISITS TO SHOPS, &c., AND CONTRAVENTIONS IN THE COUNTY IN 1931.

| | | | | | | | |
|--|---|---|---|---|---|---|-------|
| Inspections to localities, | - | - | - | - | - | - | 98 |
| Visits to shops, &c., | - | - | - | - | - | - | 857 |
| Contraventions— | | | | | | | <hr/> |
| Failure to close: Weekly Half-holiday and under | | | | | | | |
| Closing Orders, | - | - | - | - | - | - | 12 |
| Sale of non exempted goods, | - | - | - | - | - | - | 6 |
| Street trading, | - | - | - | - | - | - | <hr/> |
| Failure to give assistants proper intervals for meals, | | | | | | | <hr/> |
| Employing young persons under 18 years more than | | | | | | | |
| 74 hours per week, | - | - | - | - | - | - | <hr/> |
| Failure to exhibit notices in terms of Act, | - | - | - | - | - | - | 42 |
| | | | | | | | <hr/> |
| | | | | | | | 60 |

By-Laws Regulating Places for Public Refreshment.

10 inspections were made in connection with 7 applications from the occupiers of registered premises for permission to make structural alterations so as to permit of a carrying-out trade after the hours prescribed by the By-laws, viz., 11 p.m. on week-days and 8 p.m. on Sundays. Reports dealing fully with each application were sent to the County Clerk.

MILK (SPECIAL DESIGNATIONS) ORDER (SCOTLAND), 1930.

On 31st December, 1931, the number of licence-holders in the County of Lanark was as follows:—

Producer's Licence—

| | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|----|
| Certified milk, | - | - | - | - | - | - | - | 15 |
| Grade A (T.T.) milk, | - | - | - | - | - | - | - | 30 |
| Grade A milk, | - | - | - | - | - | - | - | 5 |
| Pasteurised milk, | - | - | - | - | - | - | - | 1 |

Dealer's Licence—

| | | | | | | | | |
|--|---|---|---|---|---|---|---|----|
| Certified milk, | - | - | - | - | - | - | - | 2 |
| Grade A (T.T.) milk, | - | - | - | - | - | - | - | 15 |
| Certified milk, Grade A (T.T.) milk, and Pasteurised milk, | - | - | - | - | - | - | - | 1 |
| Certified milk and Grade A (T.T.) milk, | - | - | - | - | - | - | - | 1 |
| Grade A (T.T.) milk and Pasteurised milk, | - | - | - | - | - | - | - | 2 |
| Grade A milk Pasteurised, | - | - | - | - | - | - | - | 1 |
| Pasteurised milk, | - | - | - | - | - | - | - | 5 |

The list of the licence-holders with tubercle-free herds is given in the report of the County Veterinary Inspector, and shows the average number of animals in the herd and the estimated number of gallons of milk produced per annum.

The following table gives the results of bacteriological examination of samples of graded milk taken during the year:—

| Blood Heat Organisms per c.c. | | | Certified. | Grade A (T.T.). | Grade A. | Pasteur- ised. | Grade A Pasteurised. |
|----------------------------------|----------|---|------------|--------------------|-------------|-------------------|-------------------------|
| Under | 1,000, | - | - 5 | 2 | — | — | 1 |
| " | 2,500, | - | - 13 | 13 | — | 2 | 1 |
| " | 5,000, | - | - 11 | 47 | 2 | 7 | — |
| " | 10,000, | - | - 13 | 64 | 5 | 3 | — |
| " | 20,000, | - | - 7 | 62 | 9 | 3 | — |
| " | 30,000, | - | - 2 | 25 | 1 | 2 | — |
| " | 50,000, | - | - 2 | 11 | 4 | 1 | — |
| " | 100,000, | - | - 1 | 8 | — | — | — |
| " | 200,000, | - | - — | 2 | 1 | 2 | — |
| Over | 200,000, | - | - — | 8 | 1 | 1 | — |
| | | | 54 | 242 | 23 | 21 | 2 |

| | | | Certified. | Grade A (T.T.). | Grade A. | Pasteur- ised. | Grade A Pasteurised. |
|---------------------------|--|--|------------|--------------------|-------------|-------------------|-------------------------|
| Coliform Bacilli present— | | | | | | | |
| in One-tenth of a c.c., | | | 12 | — | — | 1 | — |
| in One-hundredth of | | | | | | | |
| of a c.c., | | | — | 27 | 2 | 1 | — |
| in One-hundredth of | | | | | | | |
| a c.c., | | | — | — | — | 1 | — |

Out of the 317 samples of Certified Grade A (T.T.) and Grade A milk taken, 270, or 85 per cent., complied with the bacteriological requirements of the Milk (Special Designations) Order. 47 samples taken did not comply with the bacteriological requirements in the following respects:—

6 exceeded the bacterial count.

35 did not comply in respect of the presence of coliform bacilli.

6 exceeded the bacterial count and coliform bacilli were also present.

The samples which did not conform to the bacteriological requirements were obtained from 19 producers and 6 dealers. There were, therefore, 32 producers of graded milk in the County whose milk samples were found to be free from bacteriological contamination throughout the year.

The following table gives the results of chemical examination of samples of graded milk taken during the year:—

| Milk Fat per cent. | Certified. | Grade A (T.T.). | Grade A. | Pasteurised. | Grade A Pasteurised. | Non-fatty Solids per cent. | Certified. | Grade A (T.T.). | Grade A. | Pasteurised. | Grade A Pasteurised. |
|--------------------|------------|-----------------|----------|--------------|----------------------|----------------------------|------------|-----------------|----------|--------------|----------------------|
| 2.9 | — | 1 | — | — | — | 8.5 | 1 | 3 | — | 1 | — |
| 3.0 | 1 | 2 | — | — | — | 8.6 | 2 | 10 | — | 1 | — |
| 3.1 | — | 2 | — | — | — | 8.7 | 5 | 21 | 2 | 1 | — |
| 3.2 | 1 | — | 1 | — | — | 8.8 | 6 | 33 | 4 | 3 | — |
| 3.3 | 1 | 2 | — | — | — | 8.9 | 11 | 47 | 5 | 1 | — |
| 3.4 | — | 5 | 2 | — | — | 9.0 | 8 | 43 | 7 | 1 | — |
| 3.5 | 1 | 7 | 3 | 1 | — | 9.1 | 6 | 33 | 2 | 2 | 1 |
| 3.6 | 1 | 13 | 4 | 2 | — | 9.2 | 8 | 12 | 1 | 1 | — |
| 3.7 | 2 | 12 | — | 1 | 1 | 9.3 | 2 | 7 | — | — | 1 |
| 3.8 | 2 | 20 | — | 4 | 1 | 9.4 | — | 6 | — | — | — |
| 3.9 | 3 | 15 | 2 | 3 | — | 9.5 & over | — | 2 | — | — | — |
| 4.0 | 6 | 30 | — | — | — | | | | | | |
| 4.1 | 5 | 31 | 5 | — | — | | | | | | |
| 4.2 | 2 | 16 | 2 | — | — | | | | | | |
| 4.3 | 8 | 19 | 2 | — | — | | | | | | |
| 4.4 | 4 | 14 | — | — | — | | | | | | |
| 4.5 & over | 12 | 28 | — | — | — | | | | | | |
| — | 49 | 217 | 21 | 11 | 2 | | 49 | 217 | 21 | 11 | 2 |

From the foregoing table it will be seen that 18 samples of graded milk did not comply with the milk fat standard of 3·5 per cent. These samples were taken from 15 producers and 3 retailers. The matter was taken up with the producers concerned, and subsequent sampling showed that the standard was being complied with.

35 producers complied with the standard for milk fat on all occasions throughout the year.

Cleanliness of Non-Graded Milk.

During the year 620 samples of milk were taken by the Food and Drugs Inspectors and the Sanitary Inspectors for examination bacteriologically. The results of examination showed that 412, or 66 per cent., of these samples complied with the standard laid down for Grade A (T.T.) milk and Grade A milk, and of this number 178 also complied with the standard laid down for Certified milk.

The 208 samples above the standard did not comply with it in the following respects:—

| | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|-----------------|
| Samples containing over 200,000 blood heat organisms per c.c. and coliform bacilli present in ·01 or ·001 of a c.c., | - | - | - | - | - | - | - | - | 52 |
| Samples containing over 200,000 blood heat organisms per c.c., | - | - | - | - | - | - | - | - | 13 |
| Samples with coliform bacilli present in ·01 or ·001 of a c.c., | - | - | - | - | - | - | - | - | 143 |
| | | | | | | | | | <hr/> 208 <hr/> |

Where a sample of ordinary milk is found to contain a large number of bacteria per c.c. or coliform bacilli is present in ·001 of a c.c, the Sanitary Inspector is instructed to visit the farm concerned at milking time, and report with regard to the cleanliness of the premises and the methods employed. At the same time he suggests any improvements which he may consider will give cleaner milk. This has always the desired effect, and subsequent samples taken have shown a satisfactory improvement. I would again point out that there is no hardship in asking all dairy farmers to comply with the standard of Grade A milk so far as the bacteriological examination is concerned, and the improvement shown by subsequent sampling of vendors, from whom samples of milk badly contaminated had been obtained, shows that the standard of Grade A milk can be attained by all dairy farmers.

The Food and Drugs Inspector has been supplied with a sediment tester, which he utilises when taking a sample of milk to impress the producer with regard to the cleanliness to the naked eye. Should the pad, after filtration, show marked evidence of "visible" or insoluble dirt, it is exhibited and explained to the farmer at once.

The following table shows the results of bacteriological examination of ordinary milk samples taken during the year:—

| Blood Heat Organisms, per c.c. | Jan. to March. | April to June. | July to Sept. | Oct. to Dec. | Total. |
|--------------------------------|----------------|----------------|---------------|--------------|--------|
| Under 10,000, | 18 | 38 | 9 | 12 | 77 |
| „ 30,000, | 27 | 88 | 22 | 61 | 198 |
| „ 50,000, | 20 | 24 | 9 | 60 | 113 |
| „ 100,000, | 10 | 32 | 16 | 53 | 111 |
| „ 200,000, | 5 | 19 | 8 | 24 | 56 |
| „ 300,000, | 2 | 8 | 1 | 7 | 18 |
| „ 500,000, | — | 10 | 3 | 7 | 20 |
| „ 1,000,000, | 2 | 5 | 2 | 2 | 11 |
| Over 1,000,000, | — | 5 | 9 | 2 | 16 |
| | 84 | 229 | 79 | 228 | 620 |

Coliform bacilli present—

| | | | | | |
|----------------------------------|----|----|----|----|-----|
| In one-tenth of a c.c. | 16 | 43 | 8 | 58 | 125 |
| In one-hundredth of a c.c., - - | 7 | 30 | 20 | 43 | 100 |
| In one-thousandth of a c.c., - - | 5 | 42 | 17 | 31 | 95 |

VETERINARY INSPECTION OF HERDS.

To enable all the dairy herds in the County being inspected three times in each year, two additional temporary Veterinary Surgeons were appointed on 1st January, 1931, and carried out duty until 15th May, 1931. This additional assistance was again employed from 1st November, 1931.

The additional inspection led to the detention of 158 animals suffering from tuberculosis of the udder, compared with 74 in the previous year. It is therefore apparent that many more tubercular animals have been detected in the earlier stages of the disease, and the danger of infection in the milk supply must have decreased

correspondingly. It will be interesting to note what effect the increased inspection may have in the eradication of tuberculosis from the dairy stock, but no proper comparison is possible until the increased inspection has been in operation for some years.

Under the Milk and Dairies (Scotland) Act, 1914, it is an offence to sell milk from a cow suffering from any disease liable to infect or contaminate the milk. Samples of milk are therefore taken in any case where a suspicious condition of the udder is noted. If, on examination in the Laboratory, any samples are found to contain the streptococcus mammitis, or other infectious organisms, a letter is sent to the owner of the animal pointing out that it is an offence to sell the milk from such a cow for human consumption, and asking him what he is doing to comply with the statute.

The following tabular statement shows the work carried out during the year :—

| | | | | | | | | |
|-------------------|---|---|---|---|---|---|---|--------|
| Herds Registered, | - | - | - | - | - | - | - | 1,447 |
| Herds Inspected, | - | - | - | - | - | - | - | 4,572 |
| Cows Inspected, - | - | - | - | - | - | - | - | 92,819 |

Cows with Abnormal Condition of Udder—

| | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|-------|
| Tubercle, | - | - | - | - | - | - | - | 158 |
| Atrophy, | - | - | - | - | - | - | - | 3,530 |
| Mammitis, | - | - | - | - | - | - | - | 397 |
| Induration, Non-Tuberculous, | - | - | - | - | - | - | - | 1,014 |
| Eruption on Teats, | - | - | - | - | - | - | - | 180 |

Samples of Milk—

| | | | | | | | | |
|---|---|---|---|---|---|---|---|-------|
| Number taken, | - | - | - | - | - | - | - | 1,776 |
| Number found to contain tubercle bacilli (including group and duplicate samples), | - | - | - | - | - | - | - | 175* |
| Number found to contain other infectious organisms, | - | - | - | - | - | - | - | 288† |
| Number negative, | - | - | - | - | - | - | - | 1,313 |

Further details regarding the work carried out will be found in the Annual Report of the County Veterinary Inspector.

* 2 samples also contained other infectious organisms.

† Taken from 284 cows.

RIVERS POLLUTION PREVENTION.

SENIOR INSPECTOR, - - - FRANK M'ARTHUR.

The work done during the year by the two Inspectors is summarised in the following table:—

SOURCES OF POLLUTION.—INSPECTIONS AND POLLUTIONS DETECTED.

| Nature. | SOURCES LIABLE TO POLLUTE. | | | | POLLUTIONS DETECTED. | |
|----------------------------|----------------------------|-------------------|------------------------|-----------------|----------------------|------------------|
| | Number. | Number Inspected. | Number of Inspections. | *Samples Taken. | Number of Sources. | Number Detected. |
| Coal-Dross Washers, - | 68 | 65 | 693 | 508 | 32 | 79 |
| Lead Washer, - - | 1 | 1 | 2 | 2 | 1 | 1 |
| Ammonia Works, - | 18 | 10 | 55 | 22 | 3 | 3 |
| Paper Mills, - - | 2 | 2 | 27 | 39 | 2 | 21 |
| Print, Dye Works, &c., | 4 | 4 | 16 | 5 | — | — |
| Chemical Work, - - | 1 | 1 | 1 | — | — | — |
| Sewage Works and Outfalls, | — | 124 | 303 | 61 | 6 | 8† |
| Streams, &c., | — | 250 | 2,077 | 1,095 | — | — |
| TOTAL, | — | 457 | 3,174 | 1,732 | 44 | 112 |

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

† Only one pollution is recorded against Westthorn Sewage Works, but the discharge of crude sewage was continuous throughout the year.

Trade Pollutions.

The total mining and manufacturing pollutions detected numbered 104. Of these, 79 were from coal-dross washers, 1 from the lead washer at Leadhills, 3 from ammonia works, and 21 from paper mills. All of these sources of pollution discharge their effluents direct to streams.

COAL-DROSS WASHERS.—There were 68 coal-dross washers on the register. The washers at Bent, East Parkhead, and Monkland Collieries have been removed, and a new washer at Kingshill No. 2 Colliery came into operation during the year. This colliery drains to a tributary of the Breich Water, which is within the watershed of the River Almond.

693 inspections were made, 508 samples taken, and 79 pollutions, involving 32 collieries, detected.

Pollutions were detected at the following collieries :—

| | |
|-------------------|--------------------|
| Auchengeich. | *Hassockrigg. |
| Auchlochan No. 9. | Hattonrig. |
| Bardykes. | Hirstrigg. |
| Baton. | Holytown. |
| Blantyre. | Kenmure. |
| *Blantyreferme. | *Kingshill. |
| Bothwellpark. | *North Motherwell. |
| Broomfield. | Priory. |
| Brownieside. | Quarter. |
| Cadzow. | Shawfield. |
| Carfin. | Stepends. |
| *Cornsilloch. | Thankerton. |
| Dalquhandy. | *Viewpark. |
| Dechmont. | Westrigg. |
| *Douglas Castle. | *Wilsontown. |
| Earnock. | Woodhall. |

* Specially reported to the County Clerk.

With regard to the collieries at which serious pollutions occurred, or on which reports were forwarded to the County Clerk, the following notes might be made :—

Blantyreferme Colliery, Uddingston.—This colliery was again, in the early part of the year, under suspicion as a source of serious intermittent pollution of the River Clyde, and was the subject of a special communication to the County Clerk dealing with the results of inspections made between 15th January and 10th April, which was in the following terms :—

I have to inform you that the Rivers Inspector again reports serious pollution of the River Clyde from the above colliery under the following circumstances :—

This colliery has for some time again been under suspicion as to serious pollution of the River Clyde, and I have to specially report the results of recent inspections. On 15th January last it was observed that the outfall (now referred to as Outfall No. 1) by which coal-dross washings effluent, intermittently of a grossly polluting nature, had for many years been discharged to the river, was in a satisfactory condition, and that, so far as could be judged, there had been no recent gross pollution from it. A few yards below this outfall, however, there is another outfall pipe (now referred to as Outfall No. 2), at the mouth of which were observed large deposits of coal silt, which indicated the occurrence of gross pollution. Further, the silt deposits on the lower side of the outfall had been covered with a thin layer of clean soil obtained from the river bank, obviously in an attempt to hide the evidence of pollution.

Between 15th January and 10th April a number of inspections was made, the results of which strengthened the suspicion of the occurrence of intermittent pollution, and, in an effort to actually detect such pollution, special inspections were made. Thus, on the night of 22nd-23rd April, observations were made at the outfalls from shortly before 11 p.m. to 12.30 a.m. During that period the effluent from Outfall No. 1 was satisfactory, but that from Outfall No. 2 was polluting during the whole period, the analyses of effluent samples taken being as follows:—

| | | | Suspended Solids, Parts per 100,000. |
|---------------------------|-----|-----|---|
| Outfall No. 1—10.55 p.m., | ... | ... | 16.4 |
| „ No. 2—10.50 p.m., | ... | ... | 811.6 |
| „ No. 2—11.15 p.m., | ... | ... | 1901.6 |
| „ No. 2—11.45 p.m., | ... | ... | 662.8 |
| „ No. 2—11.55 p.m., | ... | ... | 450.4 |
| „ No. 2—12.30 a.m., | ... | ... | 54.4 |

On the forenoon of 24th April Outfall No. 2 was again found to be polluting, the discharge containing 1104.8 parts per 100,000 of suspended solids. On the following day (Saturday, 25th April) further observations were made from 2 to 3.20 p.m., at 7 p.m., and again at 11 p.m. In the afternoon Outfall No. 2 was discharging a polluting effluent during the whole time of observation, the suspended solids in the samples taken being as follows:—

| | | | Suspended Solids, Parts per 100,000. |
|-----------------------|-----|-----|---|
| Outfall No. 2—2 p.m., | ... | ... | 1348.8 |
| „ No. 2—2.15 p.m., | ... | ... | 1213.6 |
| „ No. 2—2.30 p.m., | ... | ... | 1194.8 |
| „ No. 2—3.20 p.m., | ... | ... | 628.4 |

Outfall No. 1, while satisfactory at 2 p.m., was polluting for a short period about 2.40 p.m. (suspended solids, 600.4). With regard to the inspections made at 7 p.m. and 11 p.m., there was no cause for complaint as to coal-dross washings pollution.

It will thus be seen that there is ground for serious complaint of pollution, although gross pollution, due to heavy discharges from the silt-recovery tank, which are indicated by the silt deposits in the river, has not been actually detected. The action of systematically covering up silt deposits is condemnatory. I had a meeting with Mr. David Moore and the manager, Mr. Armstrong, on the 5th May, when I complained of the condition of affairs, subsequently inspecting the outfalls with Mr. Armstrong. Promises were then given that the matter would be looked into and action taken to prevent further pollution, but the matter should be formally taken up with owners.

I have no doubt you will take the matter up with the Colliery Company.

This report was submitted to a meeting of the Public Health Sub-Committee held on 18th June, previous to which the County Clerk had communicated with the owners of the colliery, who replied on 1st July to the effect that action had been taken to prevent any further pollution. Inspections made during the months of June and July showed that cause for complaint had been removed and that the preventive measures were in satisfactory order, and thereafter to the end of the year there was no further cause for complaint.

Cornsilloch Colliery, near Larkhall.—Inspections made in the spring of the year showed that quite serious pollution of the Mill Burn and of the ditch which flows through Cornsilloch Farm lands had been occurring. The sources of such pollution appeared to be (a) the bing settling pond, the outlet from which was unsatisfactory; and (b) polluting discharges of surface drainage from the washer buildings. The former pollution was the more serious. On 30th April the effluent from this pond contained 2294·8; the ditch 30 yards below the pond outfall, 1368·4; the ditch below all the colliery outfalls, 808·0; and the Mill Burn, not far from its junction with the River Clyde, 194·0 parts per 100,000 of suspended solids. Measures were taken to prevent pollution from the settling pond, and in October it was learned that arrangements were being made for dealing with the surface drainage complained of, which arrangements were not, however, given effect to until early in the current year.

Douglas Castle Colliery.—Complaint was made in January, on behalf of the United Clyde Angling Protective Association, alleging pollution of the Douglas Water by coal-dross washings from this colliery. Other effluents besides coal-dross washings appeared to be involved in this complaint, and a report of special inspections made was transmitted to the County Clerk. The matter is further referred to under the heading "Streams" in page 186.

Hassockrigg Colliery, near Shotts.—Serious pollution of the River Almond headstream, detected on 11th March, was found to be due to a pump which throws the coal-dross washings to the bing settling pond breaking down. The necessary repairs were effected and a duplicate pump obtained for use in the event of a further breakdown. On 7th April serious pollution was again detected, due, on this occasion, to the bing settling pond being silted up. A communication with regard to this pollution was forwarded to the County Clerk, in which the necessity for new settling ponds was referred to. On 24th April it was noted that certain banks had been constructed to

prevent pollution from the bing pond, but evidence was also observed of recent pollution having occurred, due to a sump in which the washings are collected for pumping to the bing having overflowed. On the same date the farmer at Easter Baton complained of the occurrence of pollution of the River Almond headstream on several occasions just previously, and support was lent to this complaint by the fact that deposits of fresh silt could be seen in the stream near the farm. The owners of the colliery, on being communicated with by the County Clerk in regard to the conditions found on 7th April, having stated that no pollution was occurring from their settling ponds and that everything was being done to avoid pollution, the colliery and stream were specially inspected by the County Medical Officer on 27th April, when the manager admitted the occurrence of gross pollution prior to the inspection of 24th April referred to. The owners, however, in a letter received on 15th May stated that they did not agree that there was evidence of gross pollution in the stream, but that new settling ponds were in course of construction. There was no cause for complaint from the month of May to the end of the year, and in September it was noted that the whole volume of washings was being discharged to a flooded portion of a field adjoining the colliery, with satisfactory results.

Kingshill Colliery, near Newmains.—There was less cause to complain of pollution from this colliery than in the two preceding years. Pollution was detected once in March, once in April (when, in addition to coal-dross washings pollution, the outfall ditch was seriously polluted by oil, the source of which was subsequently traced and steps taken to prevent such pollution), and once in May. None of these pollutions was of a serious nature. On 23rd December, however, serious pollution was found to be occurring, due to the settling pond in use being silted up. Temporary remedy was effected by diverting the washings to an old refuse bing and earth-work pond.

North Motherwell Colliery.—The report forwarded to the County Clerk referred to pollution of an outfall ditch, due to failure to operate the pumps which discharge the washings from a collecting pond to a bing settling area. Attention was also directed to the fact that a ground-surface settling area required to be cleaned out. Remedial measures were taken by the owners. The colliery was closed down later in the year and a commencement made to dismantle the plant.

Viewpark Colliery, Uddingston.—This colliery was again the source of very serious intermittent pollution. The results of inspections made early in the year showed quite clearly that gross pollution of the Pow Burn was occurring during the night, and several inspections at late hours and on other occasions outside the ordinary day-working hours were made with a view to detecting such pollution. At one of these inspections, made on the night of 17th-18th April, pollution was detected in circumstances somewhat similar to those associated with the occurrence of gross pollution in the previous year, when, consequent on complaint through the County Clerk, the owners of the Colliery expressed regret and explained that disciplinary action had been taken to prevent cause for further complaint. At this inspection, when the Inspector arrived at the outfall at 11 p.m., a large flow of grossly-polluting effluent was found discharging to the Pow Burn. This flow was conveyed by a channel alongside the colliery railway. Shortly afterwards another large volume of washings commenced to flow down the refuse bing. These two streams of washings eventually passed through one of the ground-surface settling ponds and thence to the outfall to the Pow Burn. After a series of samples had been taken between 11.15 p.m. and 12.30 a.m., it was found on inspection that the inlet to the primary collecting pond had been deliberately blocked up with brattice cloth, which caused the washings to be diverted alongside the railway to the burn, and that, in addition, while the pulsometer in the primary collecting pond was in operation, the one in the secondary collecting pond on the bing was not in operation, with the result that the whole volume of washings, instead of being conveyed to the settling ponds on the north side of the Edinburgh Road, was discharging down the bing and thence to the burn as already described. It might be noted that samples of effluent taken at 11.15 p.m., midnight, 12.5 a.m., and 12.20 a.m., contained, respectively, 2717.2, 5584.8, 14466.4, and 25083.2 parts per 100,000 of suspended solids, and the Pow Burn below the outfall at 12.30 a.m., 392.0. At a meeting of the Public Health Sub-Committee held on 12th May the County Clerk reported that he had communicated with the owners, pointing out that the County Council had already been very indulgent in dealing with recurrent complaints of serious pollution of the Pow Burn from their colliery, and asking for any reason or explanation why immediate prosecution should not be taken against them. The owners in reply expressed regret at the necessity for the complaint, and asked for time to allow their new Managing Director to inquire into the matter.

After consideration, the meeting instructed that the necessary steps towards prosecution should be taken. This was accordingly done, and statutory notice given of the intention of the Local Authority to institute proceedings. Thereafter the Company asked leave to be heard before proceedings were instituted. This was agreed to, and at a meeting held on 16th September, at which the County Clerk intimated that the consent of the Department of Health for Scotland to the institution of proceedings had been given, the Managing Director and other officials of the Company duly appeared, when it was explained that, since formal complaint had been made, the Managing Director had personally taken every possible step to have the preventive measures made satisfactory and to prevent further pollution, and the County Medical Officer having reported that the conditions were then satisfactory, and that, with the exception of a minor instance of pollution, no serious pollution had been observed since the night of 17th-18th April, the committee decided not to institute proceedings on this occasion, and instructed the Clerk to address a suitable warning to the Company. There was no cause for complaint during the remainder of the year.

Wilsontown Colliery.—Reports were forwarded to the County Clerk in respect of serious pollution detected on 3rd February, when the outlet sluice of a settling pond was defective; on 26th March, when the settling pond in use was found to be silted level with the outlet; and on 1st July, when the settling pond was again found to be silted up. On 26th March evidence of previous serious pollution was also noted in the form of large deposits of coal silt in the Mouse head-stream, and the County Clerk, in communicating with the owners of the colliery regarding this instance of pollution, intimated that, unless they were prepared to take immediate steps towards further means for preventing pollution of the River Mouse, legal proceedings would be taken against them. The owners replied, expressing regret at the occurrence of pollution, and stating that the settling ponds would be kept in satisfactory order in future, and that an additional pond would be constructed. Pollution occurring on 1st July was noted on the occasion of special inquiries into a complaint made by a local resident to the Under Secretary of State for Scotland alleging gross intermittent pollution of the River Mouse from the works at Wilsontown, and is fully referred to under "Streams" in page 187.

In addition to the foregoing sources of pollution, regarding which reports were transmitted to the County Clerk, reference might also

be made to the action taken in connection with the following collieries, which were sources of more or less serious pollution during the year or in previous years, and at which remedial measures were provided without formal complaint being necessary:—

Blantyre Colliery, High Blantyre.—Pollution, affecting the Park Burn, was detected on numerous occasions in the month of February, due to unsatisfactory effluent from a surface drainage settling pond to which there is a considerable flow. Several meetings were held with the colliery officials, as a result of which measures were taken to remove cause for complaint. Slight pollution was noted in March, due, however, to other circumstances. On 8th May evidence of gross pollution was observed in the outfall ditch, the Park Burn headstream, and the Park Burn itself. These circumstances were specially inquired into, when it was considered that the pollution indicated had been caused by washings pumped from the silt-recovery tank to a bing pond escaping at a burning part of the pond. A recurrence of similar pollution was prevented by forming a channel to convey such washings to an adjoining deep bing pond. Pollution which was observed on various dates in November and on 1st December was again mainly due to unsatisfactory effluent from the surface drainage settling pond. On the matter being again gone into with the colliery management remedial measures were adopted, which proved entirely satisfactory.

Bothwellpark Colliery.—Pollution of the Pow Burn, detected on 30th July, was found to be due to the fact that surplus washings were not being pumped to the bing in certain exceptional circumstances. On the manager's attention being drawn to the matter, arrangements were made to pump the washings as formerly, thus removing cause for complaint.

Hirstrigg Colliery, Salsburgh.—As in previous years, in view of the liability to pollution of the Shotts Burn above Roughrigg Reservoir intake, this colliery was under close observation during the year. On two occasions (once in January and once in October), the manager of the Airdrie, Coatbridge and District Water Board complained of pollution. Inquiries were at once made into these complaints, and any apparent defects in the preventive measures were made good without delay. On the whole, the preventive measures were maintained in good order during the year.

Priory Colliery, Blantyre.—In 1929 there was reason to complain of serious intermittent pollution of the River Clyde, and action was

then taken which appeared to remove cause for complaint. As a result of an inspection made on 12th October, however, conditions were noted in the main outfall ditch and in the River Clyde at the junction of this outfall, which indicated the recurrence of serious intermittent pollution, and special observations were undertaken over a period with a view to its detection. The result of these observations was that on the morning of Sunday, 1st November, gross pollution was detected, which appeared to indicate the direct discharge of the silt-recovery tank or of the washer tanks. The matter was at once gone into with the manager, who happened to be at the colliery that morning, and an admission obtained from the washerman that he had discharged the washer tanks direct to the pit water outfall instead of pumping the washings to the silt-recovery tank, explaining that he had to do so because of a choked pipe. The manager promised to go further into the question later, especially in regard to the reason given by the washerman for discharging the washer tanks direct to the river.

With reference to the remaining 20 collieries in the list of collieries at which pollution was detected (page 170), these do not call for special comment, being mainly isolated instances of minor pollution, which the inspectors were able to deal with without difficulty.

LEAD WASHER.—At an inspection made by the County Medical Officer on 21st April, the settling ponds were found to be silted up and the effluent discharging to the Glengonnar Water polluting. Samples taken contained the following amounts of suspended solids in parts per 100,000. Effluent as entering settling ponds, 1637·6; effluent as leaving settling ponds, 256·6; Glengonnar Water immediately below outfall, 217·4; Glengonnar Water at Townfoot, 50·6.

AMMONIA WORKS.—The number of inspections made during the year was 55, and only 3 instances of pollution were recorded. Two of these related to pollution by spent ammoniacal liquor (Uddingston Gas Works and Cambuslang Gas Works) and one to slight oil pollution at Wilsontown Works. With regard to the gas works mentioned, however, all the spent ammoniacal liquor produced continued to be discharged without treatment, in the case of Uddingston to the Myers Burn and of Cambuslang to the River Clyde.

Uddingston Gas Works.—Correspondence continued with regard to a complaint made in December, 1930, by a resident in Douglas Gardens alleging the existing of a nuisance due to pollution of the

Myers Burn, and in regard to which the County Medical Officer wrote to the County Clerk as follows:—

“I am well aware of the condition of the burn as a result of spent ammoniacal liquor discharges from the gas works. It is undoubtedly seriously polluted by these discharges, but I am still unable to certify that, as a result, a nuisance which could be dealt with under the Public Health Act exists.

“Yesterday, about mid-day, an inspection was made by the Rivers inspector and Local Sanitary Inspector. The stream was then grossly polluted, but any evidence of pollution to the sense of smell was slight, and not at all objectionable.

“Apart from the question of nuisance, however, measures should have been taken long ago to purify or properly dispose of the gas works’ effluent. I cannot press this too strongly. Not only is the Myers Burn grossly polluted, but the Pow Burn from its junction with the Myers Burn to the River Clyde is seriously affected.”

This communication, together with a report from the Gas Engineer and Manager, was considered at a meeting of the Gas Committee held on 14th January, when it was agreed that, should the complainer again consider nuisance conditions present and at once communicate with the County Medical Officer, an immediate inspection would be made. With regard to the question of the purification of the spent ammoniacal liquor, it was explained that, when the matter had been last under consideration, it had been agreed to await the report of a Research Committee of the Institution of Gas Engineers, which report had not up to that time been issued.

MANUFACTORIES.—The number of inspections made during the year was 44; 27 of these were at Caldercruix and Moffat Paper Mills; 16 at print, &c., works; and 1 at Tannoch Chemical Works.

Caldercruix Paper Mills.—The following figures show the amounts of suspended solids in parts per 100,000 contained in 15 of the samples taken at these mills during the year:—

| Date of Sampling. | Upper Outfall. | Lower Outfall. | Sludge Area Pipe. |
|--------------------|----------------|----------------|-------------------|
| 28th January, ... | 32 | 21 | — |
| 12th March, ... | 12·2 | 12 | — |
| 12th May, ... | 11·4 | 16·8 | — |
| 5th June, ... | — | — | 11·4 |
| 18th September, | 9 | 11·8 | — |
| 13th October, ... | 15·1 | 8·3 | — |
| 20th November, ... | 11·5 | 9·2 | — |
| 17th December, ... | 7·7 | 8·3 | — |

Moffat Paper Mills.—The amount of suspended solids in the samples taken at these mills were as follows:—

| Date of Sampling. | | | | | Suspended Solids. |
|-------------------|-----|-----|-----|-----|-------------------|
| 27th January, | ... | ... | ... | ... | 37 |
| 10th March, | ... | ... | ... | ... | 14·4 |
| 10th „ | ... | ... | ... | ... | 12·6 |
| 10th April, | ... | ... | ... | ... | 25·4 |
| 12th May, | ... | ... | ... | ... | 53·8 |
| 25th June, ... | ... | ... | ... | ... | 25·2 |
| 29th July, ... | ... | ... | ... | ... | 32·8 |
| 8th October, | ... | ... | ... | ... | 76·8 |
| 13th „ | ... | ... | ... | ... | 38·2 |
| 13th „ | ... | ... | ... | ... | 30·4 |
| 6th November, | ... | ... | ... | ... | 48·0 |
| 20th „ | ... | ... | ... | ... | 11·8 |
| 27th „ | ... | ... | ... | ... | 38·2 |
| 11th December, | ... | ... | ... | ... | 19 |

It will be noted from the above figures that while the samples taken at Caldercruix Paper Mills contain more suspended solids than the standard of 6 parts per 100,000 recommended by the Royal Commission on Sewage Disposal, they may be regarded as reasonably satisfactory. A number of other effluent samples contained less suspended solids than the provisional standard of 6 parts per 100,000. The samples taken at Moffat Mills, however, are not nearly so good, and considerable improvement could be effected by the more frequent cleaning of the settling ponds.

Solid Matter Pollution.

No instances of serious contravention of Section 2 of the Rivers Pollution Prevention Act, 1876, were noted during the year. A complaint was, however, received with regard to the depositing of rubbish in the mill tail-race at Carmyle. The channel was cleaned out and cautionary notices posted and improvement thus effected. Similar complaint was also received with respect to the River Nethan at Turfholm, Lesmahagow. Cautionary notices were displayed here and the local police asked to report any offence observed. Similar action was also taken with regard to the Light Burn at Flemington. A verbal complaint was also received as to debris from the bing at South Longrigg Colliery choking up a ditch on South Netherburn Farm. Certain remedial measures were taken.

Sewage Pollution and Sewage Disposal.

In connection with sewage pollutions, 303 inspections were made of sewage purification works and sewage outfalls, and 61 samples taken.

Unsatisfactory conditions resulting in pollution were observed at the undernoted sewage purification works:—

| Purification Works. | Dates of Inspections. | Notes of Inspections. |
|--------------------------------|--|---|
| Bellefield Sanatorium, Lanark, | 25th June, - | Woodend Burn polluted by discharge from humus tank. |
| Bishopbriggs, | 21st July, . . | Under reconstruction and extension. Crude sewage discharging direct to Bishopbriggs Burn. |
| Carbarns (Wishaw), | 23rd October, | Crude sewage discharging direct to River Clyde. |
| Crossford Tank, | 18th November, | Tank which discharges to River Clyde silted up. |
| Lanark, - - | <div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;"> 9th January, 18th January, 24th March, </div> <div style="font-size: 3em; vertical-align: middle; margin: 0 5px;">}</div> </div> | Effluent a source of pollution of River Clyde. Effluent from sludge pond a source of pollution of River Clyde. |
| Westthorn (Tollcross), | During whole of year, | Part of crude sewage discharging direct to River Clyde. |

Bellefield Sanatorium Sewage Purification Works.—Several special inspections were made by the County Medical Officer in connection with complaints of pollution of the Woodend Burn and possible pollution of a well water supply. It was found that the works were not being properly operated and that the frequent discharge of a humus tank was a source of serious pollution. Attention was drawn to these matters, and a copy of the results of analyses of stream and humus tank effluent samples, which showed that the stream when polluted was unfit for watering cattle, forwarded to the Medical Superintendent. The discharge of the humus tank was discontinued and other improvements effected, whereby cause for complaint was removed.

Bishopbriggs Sewage Purification Works.—The reconstruction and extensions of these works was commenced at the end of March and were not completed until the current year. Pollution of the Bishopbriggs Burn occurred while the work was proceeding, and complaint

was made by the estate owners regarding the foul condition of the burn from the sewage purification works to the point where it discharges into the River Kelvin and near Cawder Estate. Complaints were also made in the month of February through the Department of Health as to alleged offensive odours from the works.

Carbarns (Wishaw) Sewage Purification Works.—As above noted, it was found on 23rd October that the whole of the sewage discharged at Carbarns was flowing in a crude state to the River Clyde. With regard to the new sewage purification works for the Wishaw area of the Burgh of Motherwell and Wishaw, the Rivers Inspector made a special inspection along with the Burgh Sanitary Inspector and certain members of the Burgh Local Authority, when the general scheme of the proposed sewage purification works was explained and special attention directed to the proposed arrangements for sludge disposal.

Crossford Tank.—A complaint was received with regard to the offensive nature of the effluent discharged to the River Clyde from a small septic tank within the Special Drainage District. Inspection showed the tank to be silted up and the sewage discharging therefrom in a crude state. The complaint also concerned the question of wayleave for the sewer and tank, which appeared not to have been dealt with when the works were executed. The tank was put into satisfactory order.

Lanark Sewage Purification Works.—Complaint was received alleging serious intermittent pollution of the River Clyde by the effluent from these works. Inquiries and special inspections were made, when it appeared that the nature of the pollution, which was verified, was similar to what had been detected in 1922 when the works were found to be in very unsatisfactory condition, due mainly to the fact that the septic tanks were completely sludged up and also to the fact that the crude sewage discharged at the works was intermittently of an abnormal character, containing trade effluents from a tannery and a skinner's premises in the burgh. Remedial measures were taken at that time. The County Medical Officer made special inspections of these premises and also at the gas works, which discharge spent ammoniacal liquor to the public sewer. On 28th January made formal complaint to the Town Council, with his observations as to the unsatisfactory nature of the preliminary treatment of the effluents produced at the tannery and skinner's

premises. The nature of the gas works' effluent was also referred to, and it was pointed out that it had been found on analysis to contain on one occasion 239·6 parts per 100,000 of phenols, which was sufficiently great to be destructive to bacterial life, and to thus hinder purification of the sewage. As a result of this action, the Town Council arranged for the cleaning out of the sewage works' tanks (purchasing a suitable pump for the purpose), the work being commenced in the beginning of March and completed early in May. This resulted in an improved effluent, but it was still reported to be causing considerable froth on the surface of the river. After the tanks had been cleaned out the filter beds were freed from weeds, and towards the end of the year the mechanical gearing for distributing the tank effluent to the filter beds was brought into operation. Observations to ascertain the results of these measures are being continued, and it may be found necessary to reconstruct the filters and renew the filtering material.

Westthorn Sewage Purifications Works.—The direct discharge to the River Clyde of part of the crude sewage continues, and will continue until the works are enlarged. The County Council are agreed as to the necessity for this being done, but there has been delay on the part of the City Authorities, who have, however, much the larger interest in the works, in the matter.

Baillieston Drainage.—Complaint was made through the Department of Health as to the polluted condition of the water-course which conveys the untreated sewage of Baillieston to the North Calder Water, the remedy for which is the provision of sewage purification works.

Burgh of Coatbridge.—Work on the construction of the sewage purification works on the Luggie Burn continued during the year.

Cambuslang Drainage.—The attention of the engineer was directed to the fact that an old sewer outfall situated a short distance below the Orion Bridge, utilised mainly as a storm overflow, had been observed in dry weather to be discharging a large volume of sewage and causing serious pollution of the River Clyde. Cause for complaint was removed.

Chapelhall Drainage.—The Kennel Burn, which conveys the drainage of the housing scheme at Chapelhall and is seriously polluted, was complained of as creating a nuisance. It was agreed to consider a proposal to provide sewage purification works for the outfall which is the source of pollution.

Chapelton Drainage.—The question of the disposal of the drainage of Chapelton Village was again raised in a complaint made by the owner of Noltlairs Farm. When similar complaint was made in the preceding year, the ditch concerned, which flows on the farm lands, was cleaned out and some adjustments made to a field drain, all at the expense of the Local Authority. On the present complaint being considered, the County Council agreed to continue keeping the ditch clean, without prejudice to their position, having regard to the fact that the village of Chapelton is not a special drainage district.

Forth Drainage.—A complaint was received with regard to the condition of the ditch on Bank Farm, which conveys part of the sewage from Forth Village to the River Mouse. The ditch was cleaned out by the Local Authority. Later, on complaint being made that, as the ditch was unfenced and dangerous to stock grazing on the lands traversed by it, an arrangement was come to for the ditch being fenced, the Local Authority providing the material and the complainer carrying out the work. The County Council had under consideration the question of forming the areas of Forth and Wilsontown into a Special Drainage District, and instructed the Engineer to submit a report on the question.

Mount Vernon Drainage.—Complaint was made through the Department of Health with regard to outfall sewers discharging to the River Clyde from the Carmyle area. The Local Authority is aware of the necessity for purification works to deal with the drainage of the area referred to.

Rutherglen Drainage.—Reference was made in the report for the preceding year to the inadequacy of certain sewers in this area and to the fact that a sub-committee of the Drainage Committee had been appointed to go into the matter. As bearing on the question, it might be noted that a communication, dated 29th May, was received from the Clyde Paper Company, Ltd., complaining strongly of the serious pollution of the River Clyde caused by the discharge of crude sewage to the river from a storm overflow on the joint intercepting sewer immediately above their river-water intake, and pointing out that, as a result, the manufacture of white papers was becoming increasingly difficult.

Drainage and Sewage Disposal—Special Reports.—With reference to the special reports submitted to the County Council in the preceding year in which the question of drainage and sewage disposal works was fully dealt with, and in which information was given

with regard to 57 localities and Special Drainage Districts throughout the County for which drainage and sewage purification works or sewage purification works only were necessary, the works which have been carried out, or the action taken during the year, are briefly indicated below:—

| Number in List in 1930 Report. | Area or Special Drainage District. | Nature of Works carried out or Action taken. |
|--------------------------------------|---------------------------------------|--|
| 2 | East Kilbride, - | Filter material of all filters at sewage purification works renewed. |
| 4 | Lesmahagow, - | Report on scheme for new sewage purification works submitted by Engineer. |
| 5 | Crawford, - - | Scheme of sewerage and sewage disposal submitted by Engineer. |
| 6 | Salsburgh, - - | Sewerage and full scheme of sewage purification being carried out. |
| 7 | Waterloo, - - | Sewerage works and construction of tank commenced. |
| 12 | Larkhall, - - | Negotiations for site for sewage purification works for River Clyde outfalls. |
| 14 | Cleland and Omoa, | Filters at sewage purification works reconditioned. |
| 15 | Chapelhall, - - | Scheme for sewage purification works for Kennel Burn outfall submitted by Engineer. |
| 16 | Greengairs, - - | Complete scheme of drainage and sewage disposal submitted by Engineer and approved. |
| 17 | Glenmavis, - - | Complete drainage scheme carried out and sewage purification works commenced. |
| 19 | Bishopbriggs, - | Scheme of reconstruction and extension of sewage purification works carried out. |
| 20 | Carmunnock, - | Filters added to sewage purification works. |
| 23 | Cambuslang, - | Drainage of Fishescoates area taken out of Scion Burn and connected up to Cambuslang (Eastfield) Purification Works. |
| 28 | Blantyre, - - | Inquiries and negotiations for site for joint-works on Bothwell side of River Clyde. |
| 29 | Bothwell, - - | |
| 36 | Plains, - - | |
| | | Complete scheme of drainage and sewage disposal submitted by Engineer. |
| 56 | Crawfordjohn, - | Report on drainage and sewage disposal submitted by Engineer. |

With regard to certain areas or Special Drainage Districts for which arrangements had been made, and which are not included in the list of 57 localities referred to, their position at the close of the year was as follows:—

| | |
|-------------------------|---|
| Ashgillhead, - - - | Scheme of sewerage completed and tank and filters added to sewage purification works. |
| Glasford, - - - | Scheme of drainage and sewage disposal completed. |
| Glenboig, - - - | Complete scheme of drainage and sewage purification works under construction. |
| Harthill and Eastfield, | Complete scheme of drainage and sewage purification works brought into operation. |

Streams.

In connection with trade and sewage pollutions, 2,077 inspections were made and 1,095 samples taken. These included 60 special samples of the River Clyde and certain of its tributaries.

Bishopbriggs Burn.—Reference is made at page 180 to a complaint as to pollution of this burn from Bishopbriggs Sewage Purification Works.

Bothlin Burn, Auchengeich Works.—With regard to the question of oil pollution referred to in the report for the preceding year, and regarding which the Department of Health made further inquiries as to the measures proposed to be taken to deal with such pollution, reports were submitted as to the delay in carrying out the extension of the ponds for the outfall concerned. The work was found to be completed at an inspection made on 7th April.

Bothlin Burn—Petition as to Cleaning of the Burn, &c.—Consideration of this petition, referred to in the report for the preceding year, was continued, and meetings with the parties interested and representatives of the Department of Agriculture held. The matter was not, however, disposed of at the close of the year.

Ditch at Pather Iron Works (Waterloo Drainage).—Further complaints having been made with regard to sewage pollution of the ditch which conveys the untreated sewage from the Waterloo area, and which is impounded in a reservoir at Pather Iron Works, at a meeting held at the works on 14th July, a suggestion made by the complainers that the reservoir referred to might be cleaned out at the Fair Holidays was specially considered. It was then agreed that this suggestion was impracticable, and the whole question of

pollution and measures for its prevention were again fully gone into, having in view the question of a comprehensive scheme for dealing with the drainage and sewage disposal requirements of the Waterloo area previously considered. This scheme was subsequently departed from, and a modified scheme for constructing the necessary sewers and the provision of a sewage tank for the whole population, but excluding Gillhead, agreed on. This scheme was estimated to cost £7,455. The tank will intercept the sewage at a point above Pather Iron Works. The work was commenced towards the end of the year, and the question of the cleaning of the reservoir at the iron works held over.

Ditch at Springboig Holiday School, Shettleston.—Further complaint was received from the Education Authority of Glasgow as to the pollution, by piggery drainage, of a ditch which flows through the grounds of this school. In an endeavour to remove cause for complaint an additional intercepting tank was provided at the piggery, but this did not prove satisfactory, and the owner of the piggery is being pressed by the Sanitary Department to have the drainage taken out of the ditch and connected to a public sewer.

Douglas Water.—Complaint was made by the United Clyde Angling Protective Association alleging pollution of the Douglas Water by coal-washings discharges from Douglas Castle Colliery. Special inquiries were made into this complaint, when it appeared that, while there was believed to be no cause for serious complaint of pollution by coal-dross washings, the pit water as raised from the mine was a source of pollution, and, further, that the arrangements for treating the sewage from the houses at Douglas West and the pithead baths were unsatisfactory. These matters were taken up with the proprietors and improvement effected.

Garrion Burn.—A complaint was received that the Garrion Burn had been seriously polluted by coal-dross washings on Sunday, 29th March. As a result of inspection and inquiries it was ascertained that pollution had occurred, as alleged, due to chokage of a drain which conveys coal washings from the silt-recovery tank to settling ponds. Repairs were effected and cause for complaint removed.

Glengonnar Water.—A complaint was received with regard to the objectionable condition of the Glengonnar Water in Leadhills due to deposits of household refuse, &c. The complaint was inquired into and the burn was cleaned out.

Kittoch Water.—The work of renewing the filtering material of the filters at the sewage purification works in an endeavour to minimise pollution of the Kittoch Water and, if possible, remove cause for complaint of nuisance, was commenced at the end of September.

Myers Burn, Uddingston.—Further complaint was made alleging nuisance conditions arising from pollution of the Myers Burn by discharges from Uddingston Gas Works. There is no question as to the occurrence of pollution by spent ammoniacal liquor, but the existence of a nuisance could not be certified. Special inspections and inquiries were made with a view to finding a means of disposing of the spent ammoniacal liquor by taking it into the public sewer at a point either above or below the sewage purification works at Uddingston, or by certain other methods, but no action was deemed desirable meantime, and pollution of the stream as formerly continued.

River Mouse.—A complaint as to pollution made to the Parliamentary Under Secretary of State for Scotland and transmitted by the Department of Health for a report, was carefully inquired into. The complainer alleged that gross intermittent pollution of the River Mouse from the works at Wilsontown occurred every time the river was in spate, and that in these circumstances effluent was carried for miles down the river, giving rise to offensive smells. At special inquiries and inspections made evidence of previous serious coal-dross washings pollution was observed and the question of intermittent pollution fully discussed with the works management. With regard to the allegation of offensive smells said to arise coincident with gross intermittent pollution, the Rivers Inspector reported that this condition was more difficult to explain, as there is no smell from coal-dross washings, although objectionable odours might be evident during a spate when surface water from all over the works is washed down the river. Verbal reference was also made by the complainer to smells emanating from a ditch which conveys treated sewage effluent from Wilsontown Terrace and Forth Slaughterhouse and which joins the River Mouse at Burnfoot. A detailed report of the inquiries was transmitted to the Department of Health. About two months after receipt of the complaint, the works were closed down for an indefinite period and no cause for serious complaint arose in the interval. The sewage effluent referred to was taken into a new sewer constructed for a housing scheme at Forth and conveyed to the existing sewage purification works.

River Nethan at Lesmahagow.—In writing with regard to pollution of the Douglas Water, the Secretary of the United Clyde Angling Protective Association drew attention to pollution of the River Nethan at Turfholm, Lesmahagow, by the depositing of household refuse in the stream. Cautionary notices were again posted up.

Scion Burn, Rutherglen.—With reference to the complaints made and referred to in the report for the preceding year, as to sewage pollution of this small stream due to the discharge into it of the drainage of a large housing scheme at Fishescoates in Cambuslang Parish, further complaint was made by the Burgh of Rutherglen Authorities and by a householder in the burgh. To obviate cause for complaint as far as possible, until a sewer to divert the sewage into the Cambuslang drainage system was constructed, a flushing tank was provided. However, the construction of the intercepting sewer referred to was completed towards the end of the year, and the sewage diverted from the burn. All cause for complaint is now therefore removed.

Shotts Burn, Salsburgh.—The question of pollution of the Shotts Burn by sewage from Salsburgh and claims made by the proprietor of Longacre Farm continued to be the subject of inquiry and negotiation and was not disposed of at the close of the year.

Stewart Gill, Dalserf Parish.—With reference to the question of sewage pollution of this stream in respect of which an action of interdict was threatened and a claim for compensation for personal and other injury and damage made, the claim referred to was disposed of. Claims were also made in the beginning of the year by two other occupiers of property in the vicinity of the stream. Liability in respect of these claims was repudiated. The extension of the sewage purification works by the construction of an additional tank and of filters was completed during the summer and all cause for complaint is now removed.

Swinstie Burn, Cleland.—Complaint was made by the farmer at Spindleside Farm, Cleland, regarding sewage pollution of the Swinstie Burn. The Engineer was instructed to report on the question of purification of the sewage causing pollution of the burn.

Tillan Burn.—Complaint was again received from the tenant of Whitecraighead Farm, Cleland, regarding the sewage polluted condition of the Tillan Burn, which appeared to involve the Knackery at Omoa as well as sources of domestic pollution. Reports were submitted and a sub-committee of the Drainage Committee appointed towards the close of the year to consider the whole matter.

CHEMICAL LABORATORY.

WALTER BROWN, F.C.S.

The number of samples analysed or examined during the year amounted to 5,553, an increase of 407 over last year.

The following table shows for each year since 1925 the number of samples 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. | Special. | | |
| 1925 | 14 | 413 | 757 | 83 | 116 | 829 | 2,212 |
| 1926 | 61 | 331 | 696 | 30 | 217 | 978 | 2,313 |
| 1927 | 96 | 659 | 1,083 | 47 | 301 | 1,586 | 3,772 |
| 1928 | 115 | 696 | 1,195 | 45 | 933 | 1,691 | 4,675 |
| 1929 | 53 | 713 | 1,004 | 46 | 4,592 | 1,337 | 7,745 |
| 1930 | 44 | 663 | 1,026 | 36 | 1,564 | 1,813 | 5,146 |
| 1931 | 39 | 744 | 943 | 61 | 981 | 2,785 | 5,553 |

Samples of Sewage.

SEWAGE WORKS.—39 samples from the following purification works:—
Lanark Burgh, 13; Westthorn, 12; Coursington, Motherwell, 3; East Kilbride, 3; Lesmahagow, 2; Bellfield, Lanark, 2; Westeraig, Hairmyres, Overton, and Busby, 1 sample each.

Samples of Trade Effluents.

744 samples were examined from the following sources :—

| Effluents. | Samples. |
|-----------------------|----------|
| Coal Washers, | 549 |
| Pit Waters, | 107 |
| Paper Mills, | 38 |
| Ammonia Works, | 22 |
| Knackeries, | 13 |
| Bleach Works, | 3 |
| Creameries, | 3 |
| Iron Works, | 3 |
| Lead Mines, | 2 |
| Skin Works, | 2 |
| Print Works, | 1 |
| Tanneries, | 1 |

Streams.

943 samples of water were examined, of which 101 were examined for evidence of sewage pollution, and 842 specially for trade waste impurities.

Streams affected by Sewage.—River Clyde routine sampling, 60 ; also at Lanark Burgh Sewage Works, 15 ; Nethan, 3 ; Bothlin Burn, 3 ; Kittoch Water, 2 ; Hawbank Ditch, 2 ; Gilgovan Burn, 2 ; Woodend Burn, 2 ; Jock's Burn, 2 ; Bogton Burn, 2 ; Hairmyres Ditch, 2 ; Springboig Ditch, 2 ; Barbauchlaw Burn, Glengonnar Water, Auchter Water, and Inundation at Allerston, Bellshill, 1 sample each.

Streams affected by Trade Effluents.—The following table gives the number of samples, the source of pollution affecting same, and the number of samples of effluent examined :—

| Streams. | No. of Samples. | Affected by | No. of Samples. |
|----------------------|-----------------|---------------------------------|-----------------|
| River Clyde, - - - - | 1 | Blantyre Ferme Colliery, - - | 43 |
| " " - - - - | 11 { | Broomside Colliery, - - | 24 |
| " " - - - - | - | Broomside Colliery Pit Water, - | 7 |
| " " - - - - | - | Overtown Colliery Pit Water, - | 1 |
| " " - - - - | 1 | North Motherwell Colliery, - | 10 |
| " " - - - - | - | Lanark Gas Works, - - | 2 |
| " " - - - - | - | Carmyle Bleach Works, - - | 3 |
| " " - - - - | 1 | Lanark Skin Works, - - | 2 |
| " " - - - - | - | Cambuslang Gas Works, - - | 2 |
| " " - - - - | - | Lanark Tannery, - - | 1 |
| " " - - - - | - | Clydebridge Steel Works, - - | - |
| " " - - - - | 4 | Priory Colliery, - - | 10 |

| Streams. | No. of Samples. | Affected by | No. of Samples. |
|--------------------------------|--------------------|--|--------------------|
| River Clyde, - - - - | - - - - | Kenmuirhill Colliery, - - - - | 2 |
| " " - - - - | - - - - | Clyde Iron Works, - - - - | 2 |
| " " - - - - | 2 | Ferniegair Colliery Pit Water, - - - - | 1 |
| River Clyde, - - - - | - - - - | Bogleshole Colliery, - - - - | - |
| and Bogleshole Ditch, - - - - | 4 | | |
| River Mouse, - - - - | 38 | Wilsons town Colliery, - - - - | 42 |
| | | " " Pit Water, - - - - | 7 |
| River Almond, - - - - | 11 | Muiracre Colliery, - - - - | 9 |
| River Almond, - - - - | 7 | Hassockrigg Colliery, - - - - | 17 |
| and Hassockrigg Ditch, - - - - | 23 | | |
| River Almond, - - - - | 22 | Baton Colliery, - - - - | 16 |
| and Curry Burn, - - - - | 7 | | |
| North Calder, - - - - | - | Glengowan Print Works, - - - - | 1 |
| " " - - - - | 15 | Caldercruix Paper Mills, - - - - | 23 |
| " " - - - - | 9 | Moffat Paper Mills, - - - - | 15 |
| " " - - - - | 15 | Stepends Colliery, - - - - | 3 |
| " " - - - - | 3 | Gartness Colliery, - - - - | - |
| " " - - - - | 6 | Brownieside Colliery, - - - - | 12 |
| " " - - - - | | " " Pit Water, - - - - | 2 |
| " " - - - - | 6 | Rosehall Colliery, - - - - | 11 |
| South Calder, - - - - | 5 | Shotts Iron Works, - - - - | - |
| " " - - - - | 2 | Shotts Gas Works, - - - - | - |
| " " - - - - | 2 | Carfin Colliery, - - - - | 8 |
| " " - - - - | 11 | Glenclelland Colliery, - - - - | 7 |
| " " - - - - | | " " Pit Water, - - - - | 7 |
| South Calder, - - - - | - | Westwood Colliery Pit Water, - - - - | 1 |
| and Hill Glen, - - - - | - | | |
| South Calder, - - - - | - | Kingshill Colliery, - - - - | 29 |
| and Kingshill Ditch, - - - - | 41 | | |
| Breich Water, - - - - | 4 | Kingshill No. 2 Colliery, - - - - | 3 |
| Auchter Water, - - - - | 11 | Royal George Colliery, - - - - | 8 |
| Barbauchlaw Burn, - - - - | 28 | Dewshill Colliery, - - - - | 22 |
| " " - - - - | 7 | Westrigg Colliery, - - - - | 5 |
| Blind Burn, - - - - | 4 | Stane Colliery, - - - - | 15 |
| | | " " Pit Water, - - - - | 6 |
| Bothlin Burn, - - - - | 4 | Mossrigg Colliery Pit Water, - - - - | 3 |
| " " - - - - | 1 | Auchengeich Colliery, - - - - | 1 |
| " " - - - - | 12 | Auchengeich Ammonia Works, - - - - | 18 |
| " " - - - - | 5 | Cardowan Colliery, - - - - | 2 |
| " " - - - - | 1 | Gartcosh Iron Works, - - - - | - |
| Butter Burn, - - - - | 12 | Cadzow Colliery, - - - - | 13 |
| and Meikle Burn, - - - - | 15 | | |
| Coal Burn, - - - - | 26 | Dalquhandy Colliery, - - - - | 13 |
| | | " " Pit Water, - - - - | 2 |
| Broomfield Ditch, - - - - | 8 | Broomfield Colliery, - - - - | 11 |
| Dalzell Burn, - - - - | - | Excelsior Iron Works, - - - - | 2 |
| Whinney Burn, - - - - | 3 | " " " - - - - | 1 |
| Divoty Burn, - - - - | 1 | Quarter Colliery, - - - - | 3 |
| and Quarter Burn, - - - - | 8 | | |

| Streams. | No. of Samples. | Affected by | No. of Samples. |
|--------------------------------|--------------------|---|--------------------|
| Garrion Burn, - - - - | 14 | { Castlehill Colliery, - - - - | 3 |
| Garrion Burn, - - - - | 23 | ,, ,, Pit Water, - - - - | 2 |
| and Brownlie Ditch, - - - - | 16 | { Shawfield Colliery, - - - - | 18 |
| Gateside Burn, - - - - | 3 | Gateside Colliery, - - - - | 5 |
| Glengonnar Water, - - - - | 2 | Leadhills Mines, - - - - | 2 |
| Gowkthrapple Burn, - - - - | 1 | Pather Iron Works, - - - - | 1 |
| Howe Burn, - - - - | 19 | { Barblues Colliery, - - - - | 11 |
| Douglas Water, - - - - | 13 | ,, ,, Pit Water, - - - - | 8 |
| and Kennel Burn, - - - - | 30 | { Douglas West Colliery, - - - - | 4 |
| Light Burn, - - - - | 1 | ,, ,, Pit Water, - - - - | 31 |
| Light Burn, - - - - | 9 | Clyde Nail Works, - - - - | — |
| and Dechmont Ditch, - - - - | 6 | { Dechmont Colliery, - - - - | 7 |
| Lingore Burn, - - - - | 2 | { Knowton Colliery, - - - - | 1 |
| Mill Burn, - - - - | 7 | ,, ,, Pit Water, - - - - | 2 |
| and Cornsillock Ditch, - - - - | 33 | { Cornsillock Colliery, - - - - | 16 |
| Mollin Burn, - - - - | 11 | ,, ,, Pit Water, - - - - | 1 |
| and Luggie Burn, - - - - | 1 | Bedlay Colliery, - - - - | — |
| Muir Burn, - - - - | 12 | Auchlochan Colliery, - - - - | 10 |
| ,, ,, - - - - | 8 | { Auchlochan No. 9 Colliery, - - - - | 7 |
| Molendinar Burn, - - - - | 2 | ,, ,, Pit Water, - - - - | 7 |
| Myers Burn, - - - - | 5 | Cardowan Colliery Pit Water, - - - - | 3 |
| Newton Burn, - - - - | 1 | Uddingston Gas Works, - - - - | — |
| Nethan, - - - - | — | Dechmont Colliery, - - - - | — |
| Park Burn, - - - - | 3 | Lesmahagow Creamery, - - - - | 3 |
| ,, ,, - - - - | 5 | Greenfield Colliery Pit Water, - - - - | 2 |
| ,, ,, - - - - | — | Earnock Colliery, - - - - | 1 |
| Park Burn, - - - - | 19 | Auchinraith Colliery Pit Water, - - - - | 1 |
| and Blantyre Ditch, - - - - | 20 | Blantyre Colliery, - - - - | 23 |
| Pow Burn, - - - - | 15 | Viewpark Colliery, - - - - | 43 |
| ,, ,, - - - - | 2 | Bothwell Park Colliery, - - - - | 8 |
| ,, ,, - - - - | 10 | Uddingston Gas Works, - - - - | — |
| Ravel Burn, - - - - | 9 | Bredisholm Colliery, - - - - | — |
| ,, ,, - - - - | 8 | Tannochside Colliery, - - - - | 2 |
| Shirrel Burn, - - - - | 17 | Holytown Colliery, - - - - | 1 |
| and Holytown Ditch, - - - - | 8 | { Hirst Colliery, - - - - | 35 |
| Shotts Burn, - - - - | 72 | ,, ,, Pit Water, - - - - | 11 |
| Spittal Burn, - - - - | 5 | Bardykes Colliery, - - - - | 5 |
| Tillan Burn, - - - - | 2 | Omoa Knackery, - - - - | 13 |
| Dykehead Ditch, - - - - | 2 | Dykehead Colliery, - - - - | — |
| Hattonrig Ditch, - - - - | 4 | Hattonrig Colliery, - - - - | — |
| Thankerton Ditch, - - - - | 14 | Thankerton Colliery, - - - - | 1 |
| Woodhall Ditch, - - - - | 8 | Woodhall Colliery, - - - - | 6 |
| Ross Inundation, - - - - | 2 | Ross Colliery, - - - - | — |
| Tollcross Burn, - - - - | 1 | Shettleston Chemical Works, - - - - | — |
| Kelvin, - - - - | 1 | Blackhill Colliery, - - - - | — |

Water Supplies.

61 samples of domestic water were analysed, 47 being from public water supplies and 14 from private sources.

Public water supplies:—Camps Reservoir, 35; Glengavel, 1; Newmains, 7; Dura Springs, 1; Glasford Filters, 1; Dunwan, 1; and Burnside, 1.

Private supplies:—West Quarter Farm, Carluke, 4; Penty Farm, Cleland, 2; Stonehouse Coup, 2; Station House, Newbigging; Glenburn, Lanark; East Shields Cottage; Drumclog School; Firknowe, Biggar; and Bellcraig, East Kilbride, 1 sample each.

Food and Drugs.

2,785 samples were examined, consisting of the following:—

| | No. Examined. | No. not Genuine. |
|------------------------------|---------------|------------------|
| Sweet Milk, | 1,886 | 118 |
| Mince, | 548 | 37 |
| Butter, | 56 | — |
| Whisky, | 43 | — |
| Bacon, | 23 | — |
| Sausage Meat, .. | 61 | — |
| Wintergreen Oil, | 15 | 12 |
| Condensed Milk, | 12 | — |
| Cream, | 12 | — |
| Almond Oil, | 13 | — |
| Skimmed Milk, | 11 | 2 |
| Cheese, | 11 | — |
| Veal, | 9 | 2 |
| Methyl Salicylate, | 6 | — |
| Chicken, Ham, Tongue, | 6 | — |
| Ground Ginger, | 5 | — |
| Mixed Fruit, | 5 | — |
| Mince Pie, | 4 | — |
| Pickles, | 4 | — |
| Apples, | 3 | — |
| Barley, | 3 | — |
| Cocoa, | 3 | — |
| Cherries, | 2 | — |
| Luncheon Meat, | 2 | — |
| Lunch Sausage, | 2 | — |
| Coffee, | 2 | — |
| Soap Powder, | 2 | — |
| Sausage, | 2 | — |
| Vinegar, | 2 | — |
| Sugar, | 2 | — |
| Vanilla Essence, | 2 | — |
| Rice, | 2 | — |

| | No. Examined. | No. not Genuine. |
|---------------------------|---------------|------------------|
| Table Jelly, | 2 | — |
| Ham Loaf, | 1 | — |
| Iodine Tincture, | 1 | — |
| Evaporated Milk, | 1 | — |
| Wine, | 1 | — |
| Extract of Coffee, | 1 | — |
| Carbolic Soap, | 1 | — |
| Beefex Cube, | 1 | — |
| Macaroni, | 1 | — |
| Lime Juice, | 1 | — |
| Sausage Polony, | 1 | — |
| Salmon Roll, | 1 | — |
| Soup, | 1 | — |
| Sauce, | 1 | — |
| Mints, | 1 | — |
| Pork Galantine, | 1 | — |
| Bread, | 1 | — |
| Borax, | 1 | — |
| Gregory's Powder, | 1 | — |
| Brawn, | 1 | — |
| Peach Oil, | 1 | — |
| Fluid Magnesia, | 1 | — |
| Jam, | 1 | — |
| Margarine, | 1 | — |
| Fish Dressing, | 1 | — |

Milk of Hygienic Quality.

308 samples of milk were examined, consisting of the following grades :—

| | |
|-------------------------|-----|
| Certified, | 59 |
| Grade A (T. T.), | 214 |
| Grade A, | 23 |
| Pasteurised, | 12 |

18 of these samples did not contain the required amount of butter fat, and 1 sample was deficient in solids not fat.

Special Samples.

Total, 673 samples. Milk, 595 samples. Bitumen, 2 samples. Stomach contents, 2 samples.

Hospital supplies, 74 samples consisting of the following :—

Sausages, 13 ; Butter, 12 ; Rice, 10 ; Soap, 9 Mince, 4 ; Milk, 4 ;
 Flour, 2 ; Ground Rice, 2 ; Barley, 2 ; Syrup, 2 ; Vinegar, 2 ;
 Rennet, 2 ; Soap Powder, 2 ; Raisins, Coffee, Vanilla, Demerara
 Sugar, Whisky, Apricots, Liquid Browning, and Cocoa, 1
 sample each.

BACTERIOLOGICAL LABORATORY.

T. GOW BROWN, M.B., Ch.B., D.P.H.

The following table shows the total number of specimens dealt with since the opening of the Laboratory in 1903, and the sources of supply :—

RECORD OF WORK DONE SINCE 1903.

| Year. | Specimens. | Sources of Supply. | | | | | |
|-------|------------|--------------------|-------------|--------------|------------------|----------------|----------------|
| | | Med. Pract. | P.H. Staff. | Hosp. Staff. | Sch. Med. Staff. | Vet. Surgeons. | Slaugh. Staff. |
| 1903 | 569 | ... | ... | ... | ... | ... | ... |
| 1904 | 791 | ... | ... | ... | ... | ... | ... |
| 1905 | 1,270 | ... | ... | ... | ... | ... | ... |
| 1906 | 2,061 | 1,651 | 142 | 209 | ... | 59 | ... |
| 1907 | 5,678 | 2,739 | 1,794 | 1,094 | ... | 40 | 11 |
| 1908 | 8,311 | 4,310 | 1,813 | 1,911 | ... | 249 | 28 |
| 1909 | 7,774 | 3,202 | 1,148 | 3,041 | ... | 336 | 47 |
| 1910 | 6,945 | 2,951 | 406 | 3,200 | 29 | 322 | 37 |
| 1911 | 5,949 | 2,890 | 494 | 2,250 | 99 | 191 | 25 |
| 1912 | 6,715 | 3,542 | 753 | 2,193 | 91 | 117 | 19 |
| 1913 | 6,199 | 3,006 | 627 | 2,190 | 120 | 244 | 12 |
| 1914 | 7,193 | 2,481 | 1,314 | 2,985 | 96 | 295 | 22 |
| 1915 | 6,497 | 2,370 | 1,212 | 2,848 | 2 | 52 | 13 |
| 1916 | 3,730 | 2,161 | 535 | 952 | ... | 79 | 3 |
| 1917 | 4,725 | 1,990 | 480 | 2,136 | ... | 117 | 2 |
| 1918 | 6,283 | 1,941 | 745 | 3,514 | ... | 81 | 2 |
| 1919 | 8,595 | 2,741 | 1,219 | 4,446 | 23 | 166 | ... |
| 1920 | 9,162 | 3,075 | 1,205 | 4,483 | 90 | 302 | 7 |
| 1921 | 10,409 | 3,118 | 1,794 | 5,139 | 67 | 285 | 6 |
| 1922 | 9,702 | 3,108 | 2,475 | 3,803 | 41 | 243 | 31 |
| 1923 | 10,485 | 3,294 | 2,062 | 4,785 | 84 | 241 | 19 |
| 1924 | 11,030 | 3,537 | 2,280 | 4,936 | 70 | 189 | 18 |
| 1925 | 11,193 | 3,758 | 2,495 | 4,517 | 56 | 357 | 10 |
| 1926 | 17,327 | 6,472 | 2,769 | 7,232 | 49 | 796 | 9 |
| 1927 | 19,331 | 6,382 | 3,759 | 8,097 | 33 | 1,053 | 7 |
| 1928 | 21,059 | 6,051 | 3,472 | 10,525 | 74 | 934 | 3 |
| 1929 | 23,296 | 7,285 | 4,079 | 10,301 | 55 | 1,564 | 12 |
| 1930 | 28,589 | 9,047 | 5,388 | 12,362 | 22 | 1,768 | 2 |
| 1931 | 26,761 | 8,380 | 5,731 | 10,715 | 114 | 1,814 | 7 |

The following table shows the specimens received from the County and from other areas:—

| | County | | Other Areas. | | Total. | |
|------------------------------|--------|-------|--------------|-------|--------|--------|
| | + | o | + | o | + | o |
| SPECIMENS OF HUMAN ORIGIN— | | | | | | |
| Tuberculosis, - - | 1,163 | 2,961 | 212 | 545 | 1,375 | 3,506 |
| Typhoid Fever, - - | 69 | 458 | 4 | 53 | 73 | 511 |
| Diphtheria, - - - | 2,177 | 9,512 | 514 | 1,381 | 2,691 | 10,893 |
| Cerebro-Spinal Meningitis, - | 19 | 29 | 7 | 18 | 26 | 47 |
| Venereal Diseases, - | 303 | 1,351 | 243 | 804 | 546 | 2,155 |
| Miscellaneous, - - | 650 | 760 | 180 | 284 | 830 | 1,044 |
| SPECIMENS FROM ANIMALS— | | | | | | |
| Tuberculosis, - - - | 219 | 1,572 | 11 | 149 | 230 | 1,721 |
| Anthrax, - - - - | 21 | — | — | — | 21 | — |
| Scabies, - - - - | 4 | 7 | — | — | 4 | 7 |
| Miscellaneous, - - | 12 | 14 | — | 5 | 12 | 19 |
| Milk for bacterial count, | 989 | | 61 | | 1,050 | |
| TOTAL, - - - | 22,290 | | 4,471 | | 26,761 | |

The specimens from other areas were received from the following Local Authorities:—Hamilton, 1,604; Motherwell and Wishaw, 710; Airdrie, 589; Coatbridge, 876; Rutherglen, 279; Lanark, 239; Biggar, 24; Dumbarton, 141; and other Authorities, 9.

Tubercle.

4,881 specimens were examined for the presence of *B. tuberculosis*, with the following results:—

| | Sputa. | | Urines. | | Others. | |
|---------------------------------|--------|-------|---------|----|---------|-----|
| | + | o | + | o | + | o |
| Medical Practitioners—County, - | 88 | 530 | — | 21 | 2 | 4 |
| „ „ Burghs, - | 208 | 513 | — | 9 | 4 | 23 |
| Hospital Physicians, - - - | 883 | 1,830 | 5 | 17 | 23 | 71 |
| Public Health Staff, - - - | 151 | 473 | 3 | 6 | 8 | 9 |
| | 1,330 | 3,346 | 8 | 53 | 37 | 107 |

The following table is inserted as a matter of interest in connection with the question of the reliability of direct microscopic examination as against animal inoculation in the search for *B. tuberculosis*. It will be seen that, out of a total of 194 submitted to both methods of examination, 26 were missed by the microscope.

| | Sputa. | | Urines. | | Others. | |
|----------------------------|--------|-----|---------|----|---------|----|
| | + | o | + | o | + | o |
| Direct Film Examination, - | — | 105 | — | 21 | — | 68 |
| Animal Examination, - | 9 | 96 | 4 | 17 | 13 | 55 |

Of the 13 positive "others" 6 were specimens of cerebro-spinal fluid, 4 were specimens of pus, and 3 were specimens of pleural fluid.

Typhoid Fever.

584 specimens were examined, with the following results:—

| | Agglutination Test. | | Blood Cultures. | | Fæces. | | Urines. | |
|------------------------|---------------------|-----|-----------------|----|--------|-----|---------|-----|
| | + | o | + | o | + | o | + | o |
| Medical Practitioners— | | | | | | | | |
| County, - | 14 | 64 | — | 2 | — | 2 | — | 1 |
| Burghs, - | 3 | 43 | — | 2 | 1 | 8 | — | — |
| Hospital Physicians, - | 24 | 26 | 1 | 15 | 10 | 54 | 1 | 52 |
| Public Health Staff, - | 18 | 90 | — | — | 1 | 75 | — | 77 |
| | 59 | 223 | 1 | 19 | 12 | 139 | 1 | 130 |

Diphtheria.

13,584 specimens were examined from the following sources:—

| | Throat. | | Nose. | |
|-------------------------------|---------|-------|-------|-------|
| | + | o | + | o |
| Medical Practitioners—County, | 495 | 1,875 | 23 | 36 |
| „ „ Burghs, | 479 | 1,334 | 35 | 47 |
| Hospital Physicians, - | 959 | 3,046 | 455 | 1,562 |
| Public Health Staff, - | 235 | 2,982 | 10 | 11 |
| | 2,168 | 9,237 | 523 | 1,656 |

Of the primary swabs examined in direct smear preparation, 214 gave positive results.

The biological test for virulence of the diphtheria bacillus was applied in 148 cases with 31 positive results.

Cerebro-Spinal Meningitis.

73 specimens were examined for the presence of the meningococcus, with positive results in 26 cases.

Venereal Diseases.

Syphilis.—2,089 specimens were submitted to the Wassermann test for syphilis, and gave the following results:—

| | | | | Blood. | |
|-------------------------------|---|---|---|-------------|-------------|
| | | | | + | o |
| Medical Practitioners—County, | - | - | | 67 | 206 |
| Burghs, | - | - | | 168 | 658 |
| Hospital Physicians, | - | - | - | 147 | 803 |
| Public Health Staff, | - | - | - | 6 | 34 |
| | | | | <hr/> 388 | <hr/> 1,701 |
| | | | | <hr/> <hr/> | <hr/> <hr/> |

Treponema Pallidum.—12 specimens were examined with negative results.

Gonorrhœa.—401 specimens were examined, with the following results:—

| | | | | Smears. | |
|-------------------------------|---|---|---|-------------|-------------|
| | | | | + | o |
| Medical Practitioners—County, | - | - | | 41 | 80 |
| Burghs, | - | - | | 75 | 135 |
| Hospital Physicians, | - | - | - | 35 | 30 |
| Public Health Staff, | - | - | - | — | 5 |
| | | | | <hr/> 151 | <hr/> 250 |
| | | | | <hr/> <hr/> | <hr/> <hr/> |

Ophthalmia Neonatorum.—199 specimens were examined for the presence of gonococci, and 7 of these gave positive results. Of the 192 specimens giving negative results, 13 showed staphylococci, 2 streptococci, 37 “diphtheroid” bacilli, 3 Koch-Weeks bacillus, 3 organisms.

Miscellaneous Specimens.

Vaccines.—121 were prepared, 117 for medical practitioners, and 4 for hospital physicians. These were for the treatment of boils, acne, bronchitis, asthma, cystitis, &c.

Vincent's Angina.—16 specimens were examined, with positive results in all.

Puerperal Fever.—131 blood cultures were examined. Streptococci were recovered in 3 cases.

Urine for Albumin.—316 specimens gave 156 positive results.

Others. — The other miscellaneous specimens included pus and urine for pathogenic bacteria; faeces for dysentery, intestinal worms, and ova; blood films for malaria and other blood diseases; hairs for ringworm; footstuffs for the food-poisoning group of organisms; and potable and bath waters.

Specimens from Animals.

Milk for Tubercle.—1,875 samples of milk were received from various Veterinary Inspectors and the Public Health Staff, of which 89 were found positive by microscopic examination, and 99 by biological examination, making a total of 188 positive samples.

Oral Mucus.—60 specimens were examined, and acid-alcohol-fast bacilli were found in 37.

| | Milk. | | | Oral Mucus. | | Others. | | |
|--------------|-------------------------|----|-------|-------------|----|---------|---|--|
| | + | o | | + | o | + | o | |
| | Biolo- Smear. gical. | | | | | | | |
| County, | 84 | 93 | 1,538 | 37 | 23 | — | — | |
| Other Areas, | 5 | 6 | 149 | — | — | — | — | |
| | 89 | 99 | 1,687 | 37 | 23 | — | — | |

All the above 1,875 samples of milk were also examined for other deleterious organisms (streptococci, &c.), with positive results in 328.

1,713 of the specimens found negative on microscopic examination were submitted to animal inoculation, and 99 gave positive results.

Anthrax.—21 specimens were submitted by the County Veterinary Inspector, and all were positive.

Scabies.—11 specimens were examined, with 4 positive results.

Others.—41 specimens were examined, with positive results in 17 cases—deleterious organisms, 12; tubercle, 5.

Bacterial Content of Milk.—The results of the examination of 1,050 samples are classified as under :—

| | Certified Milk. | Grade "A" (TT) Milk. | Grade "A" Milk. | Pasteurised Milk. | Ordinary Milk. |
|-------------------------------|--------------------|-------------------------|--------------------|----------------------|-------------------|
| Under 5,000 bacteria per c.c. | 53 | 62 | 4 | 10 | 42 |
| „ 10,000 „ „ | 15 | 66 | 6 | 3 | 54 |
| „ 20,000 „ „ | 9 | 65 | 8 | 3 | 107 |
| „ 30,000 „ „ | 3 | 29 | 1 | 2 | 98 |
| „ 100,000 „ „ | 7 | 22 | 4 | 1 | 238 |
| „ 200,000 „ „ | — | 2 | 1 | 3 | 57 |
| Over 200,000 „ „ | — | 8 | 1 | 1 | 65 |
| Totals, | 87 | 254 | 25 | 23 | 661 |
| Coliform bacillus present, | 24 | 43 | 4 | 5 | 350 |

Included in the above totals are 7 Certified, 17 Grade "A" (TT), 1 Pasteurised, and 36 ordinary samples of milk from areas other than the County. They are classified as under :—

| | Certified Milk. | Grade "A" (TT) Milk. | Grade "A" Milk. | Pasteurised Milk. | Ordinary Milk. |
|--------------------------------|--------------------|-------------------------|--------------------|----------------------|-------------------|
| Under 5,000 bacteria per c.c., | 7 | 1 | — | — | 11 |
| „ 10,000 „ „ | — | 3 | — | — | 5 |
| „ 20,000 „ „ | — | 6 | — | — | 2 |
| „ 30,000 „ „ | — | 3 | — | — | 4 |
| „ 100,000 „ „ | — | 3 | — | — | 12 |
| „ 200,000 „ „ | — | 1 | — | 1 | — |
| Over 200,000 „ „ | — | — | — | — | 2 |
| Coliform bacillus present, | — | 3 | — | 1 | 19 |

Destruction of Rats.

570 bottles of rat virus were supplied, free of charge on application, to farmers, householders, shopkeepers, &c.

COUNTY HOSPITAL

NEAR

MOTHERWELL

REPORT BY THE PHYSICIAN-SUPERINTENDENT,
JOHN REID, M.D., D.P.H., F.R.F.P.S.

1931.

At the beginning of the year 160 patients were in residence. Throughout the year 2,430 were admitted, making a total of 2,590. Of these, 2,200 were discharged recovered or improved, 173 died, and 217 were in hospital at the end of the year. The total number of admissions was 277 less than for the previous year.

SCARLET FEVER admissions were 17 less than the previous year's figure. Throughout most of the year the type was mild. In the late autumn a distinct increase in severity was noted. The very mild type seems to be reverting to the classical variety. The death-rate is still low.

DIPHTHERIA admissions were 144 less than for the preceding year. Although the percentages of mild and severe cases were very similar to the previous year, towards the end of the year a more malignant type of disease was evident. The reduction in the death-rate by 2.1 per cent. is possibly accounted for by the more extensive use of antitoxin. In the faucial group, where the figures were largest, the severe variety had on an average 18,600 units more serum than for the similar group in the previous year. In 1 case 576,000 units were administered. Laryngeal cases are coming in earlier. Only 13 patients required operative interference, with the small fatality rate of 15.3 per cent.

ENTERIC FEVER.—Of the 10 proved cases discharged, 7 were paratyphoid B. and 3 true enteric.

PUERPERAL SEPSIS.—The number admitted was exactly the same as for the previous year, namely, 132. The average day of disease was 5·8 days, as compared with 6·2 days. The fatality rate was reduced by 4·5 per cent. Too many cases were still not removed until moribund. On the other hand requests were made for removal of threatened abortions and hæmorrhage cases to the fever hospital.

PNEUMONIA admissions were 383, or 3 less than for the preceding year. The term "pneumonia" appears to be becoming increasingly elastic and wide, to embrace not only all chest conditions, but any disease with the faintest suspicion of a rôle in the chest. The present economic conditions, the desire of practitioners to pass cases on to hospitals, and the difficulty of getting certain types of patients into general hospitals may all contribute to the large wrong diagnosis figure. The diagnosis was revised in 35 per cent. of the cases notified as pneumonia. In quite a number of these there was not the faintest suspicion of lung trouble. Although much useful work is accomplished by accepting all chest conditions, cases like cardiac disease, chronic nephritis, intussusception, pyloric stenosis and marasmus might be treated in other hospitals; and conditions like constipation, discharging noses and tooth abscesses might very well be treated at home while the hospital is busy and overcrowded. Too many adults are still removed in a dying condition.

TUBERCULOSIS work is chiefly confined to urgent operative work, cases for diagnosis, and pneumothorax.

VENEREAL DISEASES.—111 patients were admitted for indoor treatment. In the outdoor department 4,623 attendances were recorded. This figure is 651 less than that of the previous year.

MEASLES.—Although the biannual increase of measles occurred in the latter part of the year, only 22 cases were able to be accommodated. A fair proportion of these were admitted on account of broncho-pneumonia.

RADIOLOGICAL WORK.—1,079 cases were photographed. Of these, 829 were done for the sanatoria and outdoor dispensaries. Unfortunately, the limit to this outdoor work has now been reached, and no increase or extension of the electrical work can take place until further increase in the accommodation and staff occurs. The outdoor radiological work is now interfering materially with the routine work of the hospital.

The number of admissions from ALL DISEASES was greatest in the month of March. The total for the whole month was 261. During the week ending 21st February, 71 were admitted. The greatest number admitted on one day was 17, on 20th February, 27th March, and 3rd November. The average daily number of patients resident was 190.8. The greatest number resident on any one day was 255, on 17th November; and the smallest, 131, on 22nd August.

The average duration of residence of all cases discharged was 37.2 days; of all recovered cases, 40 days; and of fatal cases, 10 days.

The fatality rate, calculated on all cases discharged, was 7.2 per cent. This figure includes all cases dying in hospital. 8 died within 24 hours of admission and 1 in the ambulance.

The diagnosis of the medical attendant was revised in 617 cases, or 21.7 per cent. of the total discharged.

Request for removal of patients to hospital was made by the medical attendant in 40.2 per cent. of the cases, and by the Public Health Department in 59.7 per cent.

ACCOMMODATION.—The comments made in previous reports regarding overcrowding still hold good. The prevalence of measles with the concurrent increase in diphtheria and scarlet fever resulted in many cross infections, increased complications, and an increase of 7 days in the average residence in hospital. A serious financial loss to the hospital, due to overcrowding, is the prevalence of sickness among the indoor staff. They lost 614 working days throughout the year.

Scarlet Fever.

52 cases of scarlet fever were in hospital at the beginning of the year. During the year 824 patients were admitted. The diagnosis was revised in 92 instances, and 25 other cases proved to be scarlet fever. Of these 809 cases, 712 were discharged well, 2 died, and 95 were in hospital at the end of the year.

REMOVAL TO HOSPITAL was carried out in 96·2 per cent. of the cases in the first week of illness, 2·5 per cent. in the second week, and 1·2 per cent. in the third week or later.

THE AVERAGE DAY OF DISEASE of all cases was 3·3 days.

THE AVERAGE DURATION OF RESIDENCE of all cases was 36·4 days; of recovered cases, 36·5 days; and of fatal cases, 13 days. The following table indicates the period of residence of the 712 recovered cases :—

| Week of Discharge. | No. of days in Residence when Discharged. | | | | | | | | No. of Cases in each day. | | | | | | | | No. of Cases in each week. |
|------------------------|--|----|----|----|----|----|----|----|---------------------------|----|----|----|----|----|----|--|-------------------------------------|
| | | | | | | | | | | | | | | | | | |
| Under fifth, | | | | | | | | | | | | | | | | | 188 |
| Fifth, | | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 61 | 46 | 44 | 9 | 40 | 33 | 12 | | 245 |
| Sixth, | | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 11 | 25 | 15 | 11 | 22 | 22 | 10 | | 116 |
| Seventh, | | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 14 | 19 | 17 | 5 | 11 | 8 | 1 | | 75 |
| Eighth, | | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 4 | 4 | 5 | 5 | 1 | 6 | 3 | | 28 |
| Ninth, | | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 6 | 2 | 1 | 4 | 2 | — | 1 | | 16 |
| Tenth, | | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 2 | 4 | 5 | 1 | 1 | 2 | 1 | | 16 |
| Over ten weeks, | | — | — | — | — | — | — | — | — | — | — | — | — | — | — | | 28 |
| Total Number of Cases, | | | | | | | | | | | | | | | | | 712 |

TYPE OF DISEASE.—651, or 91·1 per cent., of the total cases discharged were classified as mild; 45, or 6·3 per cent., as moderately ill; and 18, or 2·5 per cent., as very severe. In the latter group 4 were of the septic or anginose type and 1 toxic or malignant.

THE FATALITY RATE, as calculated on the discharges, was 0·28 per cent.

A female, aged 1 year, was admitted with scarlet fever of the moderate type. She died of a broncho-pneumonia.

A female, aged 7 years, died within a few hours of admission from malignant scarlet fever. A large dose of streptococcal antitoxin given intravenously failed to save the child.

CORRECTED DIAGNOSES.—Of the cases notified as scarlet fever 11·4 per cent. were wrongly diagnosed. These were:—Bronchitis, 3; broncho-pneumonia, 2; burn, 2; chickenpox, 1; dermatitis herpetiformis, 1; diphtheria, 2; erysipelas, 1; erythema, 4; gastro-enteritis, 1; impetigo, 1; mastitis, 1; measles, 5; naso-pharyngitis, 1; parotitis, 1; puerperal fever, 2; teething, 2; tonsillitis, 1; tuberculosis, 1; sore throat, 8; doubtful, 34; negative, 18.

CASES WHICH, ON OBSERVATION, PROVED TO BE SCARLET FEVER.—Diphtheria, 22; mastoiditis, 1; puerperal fever, 2.

COMPLICATIONS.—33·6 per cent. of the cases discharged had one or more complications.

Glands.—105, or 14·7 per cent., of the cases discharged showed glandular enlargement. These were:—Non-suppurative adenitis, 91; suppurative adenitis, 14. All degrees of glandular involvement are included.

Ear.—47, or 6·5 per cent., developed otitis media; 3 were moist on discharge and 4 developed acute mastoiditis.

Heart.—In 6 cases transient murmurs developed. In other 3 organic disease resulted.

Nose.—74, or 10·3 per cent., developed rhinitis.

Joints.—In 8, or 1·1 per cent., transient arthritis was present.

Kidney.—14, or 1·9 per cent., had true nephritis; and in 22 transient albuminuria developed during the course of the disease.

Lungs.—Bronchitis, 6; broncho-pneumonia, 1 (fatal).

Eye.—Blepharitis, 1; conjunctivitis, 5.

Skin.—Paronychia, 19; purpura, 1; urticaria, 3; other rashes, 1.

Sepsis.—Abscesses, 11; lymphangitis, 1; sores, 1.

Other Complications.—Enteritis, 3; folliculitis, 1; jaundice, 1; laryngitis, 1; positive swab, 8; tonsillitis, 3.

Other Conditions present on Admission and not related to the Attack of Scarlet Fever.—Burn, 1; chronic eczema, 1; chronic endocarditis, 8; chronic otitis media, 5; hæmophilia, 1; herpes, 3; impetigo, 10; mastitis, 1; scabies, 1; sinus, 1; vaginitis, 1; wound forehead, 1.

The two following tables show the age-periods and week of illness at which the complications occurred:—

| AGE. | CERVICAL ADENITIS. | | OTITIS MEDIA PURULENTA. | | | CARDIAC COMPLICATIONS. | | Rhinitis. | Mastoiditis. | Arthritis. | Nephritis. |
|-----------------|--------------------|------------------|-------------------------|--------|---------|------------------------|-------------|-----------|--------------|------------|------------|
| | Suppurative. | Non-Suppurative. | Left. | Right. | Double. | Organic. | Functional. | | | | |
| Under 1 Year, - | — | 1 | — | — | 1 | — | — | 1 | — | — | — |
| -2 " - | — | 3 | 1 | 4 | — | — | — | 9 | 1 | — | — |
| -3 " - | 1 | 8 | 2 | 3 | 1 | — | — | 13 | 2 | — | 1 |
| -4 " - | 1 | 8 | 2 | 5 | 3 | — | — | 16 | — | 1 | 2 |
| -5 " - | 5 | 17 | 2 | 4 | 1 | 1 | 2 | 12 | — | 1 | 2 |
| -6 " - | 2 | 15 | — | 2 | 1 | — | 1 | 9 | 1 | — | 3 |
| -7 " - | 3 | 8 | 1 | 1 | 1 | — | — | 3 | — | — | 2 |
| -8 " - | 1 | 6 | — | 1 | — | — | — | 3 | — | 1 | 1 |
| -9 " - | 1 | 12 | 1 | 1 | 1 | 1 | — | 3 | — | 1 | 2 |
| -10 " - | — | 3 | — | — | — | 1 | — | 1 | — | 1 | — |
| -15 " - | — | 7 | 3 | 2 | 1 | — | 3 | 4 | — | 1 | 1 |
| -20 " - | — | 3 | 1 | — | 1 | — | — | — | — | 1 | — |
| Over 20 " - | — | — | — | — | — | — | — | — | — | 1 | — |
| Total, - | 14 | 91 | 13 | 23 | 11 | 3 | 6 | 74 | 4 | 8 | 14 |

| WEEK OF ILLNESS. | CERVICAL ADENITIS. | | OTITIS MEDIA PURULENTA. | | | CARDIAC COMPLICATIONS. | | Rhinitis. | Mastoiditis. | Arthritis. | Nephritis. |
|------------------|--------------------|------------------|-------------------------|--------|---------|------------------------|-------------|-----------|--------------|------------|------------|
| | Suppurative. | Non-Suppurative. | Left. | Right. | Double. | Organic. | Functional. | | | | |
| First, - - | 7 | 32 | 6 | 6 | 4 | — | 2 | 37 | — | 4 | 1 |
| Second, - - | 4 | 26 | 4 | 7 | 4 | 1 | 1 | 14 | 2 | 2 | 1 |
| Third, - - | 1 | 20 | — | 8 | 1 | 1 | 2 | 7 | — | 2 | 8 |
| Fourth, - - | — | 9 | 1 | 1 | 2 | — | 1 | 8 | 1 | — | 2 |
| Fifth, - - | 1 | 4 | 1 | 1 | — | 1 | — | 3 | — | — | 1 |
| Sixth, - - | — | — | 1 | — | — | — | — | 3 | 1 | — | 1 |
| Seventh, - - | 1 | — | — | — | — | — | — | 1 | — | — | — |
| Eighth, - - | — | — | — | — | — | — | — | — | — | — | — |
| Ninth, - - | — | — | — | — | — | — | — | 1 | — | — | — |
| Total, - | 14 | 91 | 13 | 23 | 11 | 3 | 6 | 74 | 4 | 8 | 14 |

DIPHTHERIA ANTITOXIN.—67 cases received diphtheria antitoxin. The average amount given was 9,400 units.

SCARLET FEVER ANTITOXIN.—94 cases received on an average 25 c.c. of scarlet fever antitoxin. 34 were mild in type, 42 moderate, and 18 severe. Of the 94 cases, 46, or 48·9 per cent., developed one or more complications.

POLYVALENT STREPTOCOCCAL SERUM.—16 cases received on an average 13·7 c.c. of polyvalent serum.

Serum after-effects were noted in 27. The rashes were:—Urticaria, 25; morbilliform, 2.

MIXED INFECTIONS.—Parotitis, 1; whooping cough, 4.

CROSS INFECTIONS.—6 cases were incubating measles. These infected 6 others. 1 case, incubating chickenpox, infected 4 others.

“RETURN” CASES.—28 days is taken as the period within which a case is regarded as a “return.” In the following figures, cases which proved on observation not true cases have been disregarded. 4 cases presumably infected 4 others. 1 of the “infecting” cases had rhinitis and otitis media while in hospital; the others were clean. 1 of the “return” cases died from broncho-pneumonia.

The infectivity rate is 0·56 per cent. of all true cases discharged.

Summary of the most important statistics relating to scarlet fever during the past six years:—

| | 1926. | 1927. | 1928. | 1929. | 1930. | 1931. |
|--|-------|-------|-------|-------|-------|-------|
| Number of scarlet fever patients discharged recovered, . . . | 707 | 465 | 661 | 676 | 757 | 712 |
| Number of presumably infectious cases discharged, - - - | 9 | 12 | 5 | 2 | 3 | 4 |
| Infectivity rate, - - - | 1·2 | 2·5 | 0·75 | 0·29 | 0·39 | 0·56 |
| Number of deaths from scarlet fever, - - - | 7 | 3 | 5 | 2 | 3 | 2 |
| Fatality rate, - - - | 0·98 | 0·64 | 0·75 | 0·2 | 0·3 | 0·28 |
| Average duration in days of the cases discharged, - - - | 50·6 | 51·9 | 43·6 | 38·2 | 32·9 | 36·4 |

IONISATION OF OTITIS MEDIA.

6 cases of otitis media were treated with zinc ionisation. All the cases were first tried for a short period with the usual antiseptic treatment.

Of 5 cases of scarlet fever, cure apparently resulted in 4, and 1 was moist after varying periods of treatment.

1 diphtheria patient with otitis media was cured.

Both ears were involved in 1, the right ear in 4, and the left ear in 1. The average number of applications given was 3.

SCHICK TEST IN SCARLET FEVER.

AGE-PERIODS.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Over 10 | Total. |
|-----------|---|----|----|----|----|----|----|----|----|----|---------|--------|
| Positive, | 1 | 30 | 36 | 59 | 40 | 31 | 25 | 22 | 18 | 15 | 48 | 325 |
| Negative, | 2 | 19 | 30 | 33 | 45 | 32 | 37 | 32 | 19 | 14 | 114 | 377 |
| Total, | 3 | 49 | 66 | 92 | 85 | 63 | 62 | 54 | 37 | 29 | 162 | 702 |

302 of the susceptibles were immunised with toxoid-antitoxin.

PROPHYLAXIS IN OTHER DISEASES.

Children admitted to hospital suffering from other diseases, like measles, whooping cough, tuberculosis, &c., as far as possible had the Dick Test performed, and the susceptibles were immunised.

Of 205 cases, 45 were positive, and of these, 7 were immunised against scarlet fever.

Diphtheria.

At the beginning of the year 33 patients were in hospital, 555 were admitted as such, in 241 the diagnosis was revised, and 4 others proved to be cases of diphtheria. Of these 351 patients, 277 were discharged well, 10 died, and 64 were in hospital at the end of the year.

REMOVAL TO HOSPITAL was carried out within the first three days of illness in 58.5 per cent. of the cases. In the fatal cases the average duration of illness prior to admission was 5.5 days.

THE AVERAGE DAY OF DISEASE of all cases on admission was 3.7 days.

DURATION OF RESIDENCE.—The average duration of residence of all cases was 34.2 days; of recovered cases, 35 days; and of fatal cases, 14.2 days.

TYPE OF DISEASE.

FAUCIAL DIPHTHERIA.—In 235 cases, including 6 fatal, the faucial region of the throat was involved.

Mild. — In 170 instances, including 1 fatal, the exudate was limited, with little or no toxæmia. 6 patients had serum prior to admission. The average amount of serum given in hospital was 8,700 units. 3 cases had scarlet fever antitoxin. In 7 instances where the organism was isolated, 6 proved avirulent and 1 virulent.

In this group 1 child died from concurrent broncho-pneumonia following measles.

Complications and Sequelæ. — Adenitis, 1; albuminuria, 1; arrhythmia, 4; broncho-pneumonia, 1; cardiac murmur, 1; conjunctivitis, 1; enteritis, 1; folliculitis, 1; otitis media, 2; palatal paresis, 1; paronychia, 1; rhinitis, 1; septic toe, 1; serum rash, 9.

Moderate.—In 43 patients, including 1 fatal, the membrane was more extensive and accompanied by considerable toxæmia. 1 case only had serum prior to admission. The average amount administered in hospital was 22,600 units. 6 patients had, in addition, scarlet fever antitoxin. In 1 instance, where the organism was isolated, it proved virulent.

Complications and Sequelæ.—Albuminuria, 1; arrhythmia, 1; cardiac paralysis, 1; furunculosis, 1; naso-pharyngitis, 1; paronychia, 2; rhinitis, 1; serum rash, 8; suppurative adenitis, 1.

Severe.—In 22 cases, including 4 fatal, the toxæmia was profound. 3 cases had serum before admission. The average amount of serum given was 112,100 units. 7 patients had scarlet fever antitoxin.

Complications and Sequelæ. — Arrhythmia, 4; bradycardia, 1; broncho-pneumonia, 1; cardiac paralysis, 1; nephritis, 1; otitis media, 1; palatal paresis, 5; paralysis of accommodation, 1; rhinitis, 1; serum rash, 8; vaginitis, 1.

LARYNGEAL DIPHTHERIA. — In 29 patients, including 1 fatal, the larynx was involved.

Mild.—In 18 instances the stenosis was slight. 1 patient had serum before admission. The average amount of serum given was 10,100 units.

Moderate. — In 2 cases the stenosis was more extensive but not extreme. The average amount of serum given was 20,000 units.

Severe.—In 9 instances, including 1 fatal, the obstruction was extreme and required immediate operative interference. The average amount of serum given was 23,300 units. 1 case had scarlet fever antitoxin.

Complications and Sequelæ.—Bronchitis, 1; broncho-pneumonia, 1; rhinitis, 1; serum rash, 7; intubation, 1; tracheotomy, 8.

FAUCIAL AND LARYNGEAL DIPHTHERIA.—The faucial and laryngeal regions were involved in 17 cases.

Of 4 mild cases, 1 developed rhinitis. The average amount of serum administered was 13,000 units.

In 10 moderate cases the average amount of serum given was 32,200 units. 1 patient had scarlet fever antitoxin.

3 severe cases had tracheotomy performed. The average amount of serum given in hospital was 79,000 units.

Complications and Sequelæ. — Albuminuria, 1; arrhythmia, 1; serum rash, 1.

FAUCIAL AND NASAL DIPHTHERIA.—Of 3 cases, 2 were fatal.

A female, aged 5 years, had been ill 5 days prior to admission. She received 8,000 units of serum and 40 c.c. of scarlet fever antitoxin while in hospital. This child recovered.

A male, aged 3 years, who had been ill 2 days, died very rapidly from a septic naso-pharyngitis. He had 16,000 units of serum and 20 c.c. of scarlet fever antitoxin.

A male, aged 13 years, was admitted on the ninth day of illness suffering from hæmorrhagic diphtheria. Although 576,000 units of serum in addition to 110 c.c. of scarlet fever antitoxin and 60 c.c. of polyvalent streptococcal serum were administered, he died in 10 days.

TRACHEO-BRONCHIAL DIPHTHERIA.—1 child was admitted moribund with membrane extending into the bronchioles.

NASAL DIPHTHERIA—1 mild case received 8,000 units of serum.

DIPHTHERIA PARALYSIS.—A female, aged 12 years, was admitted 2 months after the primary attack with cardiac paresis, paresis of accommodation and of the palate. She recovered after 58 days' treatment without serum.

The following table summarises the sites of membrane in the total cases discharged:—

| SITE OF MEMBRANE. | MILD. | | MODERATE. | | SEVERE. | | TOTAL. | |
|------------------------------|------------|-------|------------|-------|------------|-------|------------|-------|
| | Recovered. | Died. | Recovered. | Died. | Recovered. | Died. | Recovered. | Died. |
| Faucial, - - - - - | 169 | 1 | 42 | 1 | 18 | 4 | 229 | 6 |
| Laryngeal, - - - - - | 18 | — | 2 | — | 8 | 1 | 28 | 1 |
| Faucial and laryngeal, - - - | 4 | — | 10 | — | 3 | — | 17 | — |
| Faucial and nasal, - - - - | — | — | — | — | 1 | 2 | 1 | 2 |
| Tracheo-bronchial, - - - - | — | — | — | — | — | 1 | — | 1 |
| Nasal, - - - - - | 1 | — | — | — | — | — | 1 | — |
| Paralysis, - - - - - | — | — | — | — | 1 | — | 1 | — |
| | 192 | 1 | 54 | 1 | 31 | 8 | 277 | 10 |

DIPHTHERITIC PARALYSIS. — 15 patients, or 5·2 per cent. of the clinical cases, developed paresis or paralysis in one form or another. The regions affected were:—Heart, 3; palate, 7; eye, 2; arrhythmia, 10.

MIXED INFECTIONS.—Diphtheria and chickenpox, 1; diphtheria and measles, 5; diphtheria and scarlet fever, 1; diphtheria and whooping cough, 5.

COMPLICATIONS. — 65, or 22·6 per cent., of the clinical cases developed one or more complications. This figure includes 33 serum rashes.

OTHER CONDITIONS PRESENT ON ADMISSION.—Impetigo, 1; old heart disease, 2; scabies, 2.

CORRECTED DIAGNOSES.—241, or 45·6 per cent., of the cases discharged were wrongly diagnosed: — Albuminuria, 1; aphonia, 1; bronchitis, 1; burn, 1; enteritis, 1; mastoiditis, 1; measles, 3; nasopharyngitis, 6; nephritis, 1; otitis media, 2; pharyngitis, 1; pneumonia, 2; positive swabs, 30; rhinitis, 1; scarlet fever, 22; sore throat, 81; tonsillar abscess, 5; vaginitis, 1; Vincent's angina, 1; whooping-cough, 2; negative, 77.

CASES WHICH, ON OBSERVATION, PROVED TO BE DIPHTHERIA.—Observation, 1; scarlet fever, 2; Vincent's angina, 1.

FATALITY RATE.—10 cases, or 3·48 per cent. of the clinical cases, were fatal.

FATAL CASES.—Of the 10 deaths, 8 were males and 2 females. The average age was 6·1 years; the average duration of illness prior to admission was 5·5 days; and the average residence in hospital was 14·2 days. The average amount of serum given was 107,600 units. 1 only had serum before admission. 3 had scarlet-fever antitoxin and 1 pneumococcal serum. 7 of the 10 cases had been ill more than 3 days before being admitted.

OPERATIVE TREATMENT.—In 11 patients tracheotomy was performed. 1 of these died. 1 patient was intubated and 1 tracheo-bronchial case had tracheotomy performed after intubation. This latter case died. The fatality rate was, therefore, 15·3 per cent. of the cases operated on.

ANTITOXIN.—Only in 11, or 3·8 per cent., was a history obtained that serum had been given prior to admission. This figure is probably under estimated. The average amount given in all clinical cases discharged was 23,500 units. 21 cases had on an average 34 c.c. of scarlet fever antitoxin. Only in the severe cases was the intravenous route adopted. In 7 patients over 100,000 units were given between the intravenous and intramuscular routes; in 2 over 200,000 units; and in 1 over 300,000 units. A hæmorrhagic case had 576,000 units.

After-effects.—33, or 11·5 per cent., had serum rashes. These were:—Urticarial, 27; scarlatiniform, 3; morbilliform, 3. Messrs. Burroughs Wellcome & Co.'s concentrated serum was used throughout the year. The increase in the number of serum rashes is to some extent due to the frequency in which scarlet fever antitoxin is given in combination in septic cases.

BACTERIOLOGICAL CASES.—The cases classified as bacteriological or "positive swab" cases are those in which no clinical signs were present, but where the diphtheria organism was found in the throat while the case was in hospital.

Negative cases were those in which neither the organism was found while in hospital, nor were abnormal signs present. Most of those negative cases were admitted on account of a positive swab being obtained before admission to hospital.

The term "sore throat" is used for those cases with slight redness, or deposit of mucus due usually to the streptococcus.

Of 30 bacteriological cases, 17 were Schick negative, 11 Schick positive, and in 2 the test was not performed. 3 of the Schick positive cases were actively immunised. The organism in 1 Schick negative case was avirulent and in 2 Schick positive cases virulent. In 2 instances the tonsils were removed before the patient could be discharged.

In 77 negative cases, the Schick Test was negative in 49, positive in 25, and in 3 was not performed. 5 of the Schick positive cases were actively immunised. In 1 instance the tonsils were enucleated.

The Schick Test was negative in 55 of the 81 sore throat cases, 10 were Schick positive, and 16 were not done. 3 were actively immunised.

In 20 others notified as diphtheria, the Test was negative in 7, positive in 1, and not done in 12.

A CASE OF HÆMORRHAGIC DIPHTHERIA.

A boy, aged 12 years, was admitted on the ninth day of illness as a case of diphtheria and chickenpox. The patient was extremely toxic. A dirty grey membrane covered both tonsils, uvula, and extended from the pharynx to the anterior nares. The odour was overpowering. There was also a profuse right otitis media and facial paralysis. The temperature was 100·2°F., pulse 114 and of low tension.

Rash.—The elements of the eruption were circular, vesicular, and hæmorrhagic. The size varied from one-eighth inch to half-inch. There was no tendency to rupture, many appeared to be drying up. Among the vesicular elements was a considerable number of small hæmorrhagic papules.

Distribution.—The eruption was profuse over the buttocks, scapular regions, and extensor surfaces of the elbows. A few elements were present over the extensor surfaces of both knees. The head, neck, chest, abdomen, flexor surfaces of arms and legs were quite free.

As the membrane of the throat began to disintegrate it became hæmorrhagic. Although the nasal discharge continued to the end, no epistaxis occurred, and there were no hæmorrhages into the conjunctivæ.

Two days before death occurred melæna was present.

The patient had 576,000 units of antitoxin given intravenously and intramuscularly with 110 c.c. of streptococcal serum.

He died from cardiac failure 10 days after admission.

Post-mortem Examination.—The bases of lungs were congested. The heart muscle was pale and flabby. The liver was large and dark in colour. The spleen, kidneys, and intestines appeared normal. No hæmorrhages anywhere were detected.

The history of the case obtained from the practitioner in attendance is of interest. On 6th January, the child complained of headache, for which he received a powder. The doctor's first visit was on the 9th January when tonsillitis was diagnosed. Next day the grandmother said the tonsil had "burst" leaving a yellow patch between one tonsil and uvula. The child had difficulty in swallowing and the breath was very offensive. No rash was present.

The practitioner's next visit was on the 12th January, when a fairly extensive vesicular rash over the buttocks and shoulders was noticed. The vesicles varied in size, contents watery and greyish in colour, but apparently not hæmorrhagic. The throat condition had become progressively worse and a profuse rhinitis was present. As the child was getting rapidly worse further advice was asked, when the child was notified as diphtheria and chickenpox on the ninth day of illness.

Comment.—The case is of considerable interest, in so far that the grandmother's remark to the practitioner that she thought the tonsil had "burst" confirmed the doctor's first impression that the case was one of tonsillitis, and thereby delayed a visit to the patient by three days. The appearance of a vesicular eruption further mystified the medical attendant.

The occurrence of a vesicular eruption becoming hæmorrhagic is of considerable rarity. At the onset, apparently, the elements were quite suggestive of chickenpox. When the child came into hospital there was a superficial resemblance to hæmorrhagic chickenpox. The elements were circular, superficial, and of various sizes, confined practically to the buttocks and shoulders. They were all at one stage, and gradually dried up, leaving a discrete hæmorrhage in the skin. Except the melæna, there were none of the usual hæmorrhages into the mucous membranes. There was also a complete absence of hæmorrhages in the serous membranes.

TWO TRACHEOTOMIES IN ONE PATIENT WITHIN A YEAR.

A male, aet. 2 years, was admitted in February suffering from severe laryngeal diphtheria, necessitating immediate tracheotomy. He made an uneventful recovery. Swabs from trachea were positive.

In June of the same year he was admitted with urgent laryngeal stenosis. Both tonsils were covered with adherent mucus. Through a tranverse incision the trachea was opened. There was much thick mucus, but no membrane was coughed up. The patient was discharged in 40 days.

It is probable that the second obstruction was due to a streptococcal infection. Unfortunately, no direct examination was made on admission. Repeated swabs from the throat and wound were negative for *B. diphtheria*.

STREPTOCOCCAL LARYNGEAL STENOSIS.

In the 1927 Report a case of streptococcal laryngeal stenosis is described. The girl was in hospital three years, during which period she had 8 intubations and 8 emergency tracheotomies performed.

The stenosis was successfully dilated by intubation tubes. When examined two years later, except for slight hoarseness, she was perfectly well.

The present case is of a similar nature, but was dilated in one year by means of Rimner's dilators. The patient was a boy, aged 3 years, admitted in February, 1929, as laryngeal diphtheria. The obstruction necessitated immediate operation. Intubation was first performed. After several attempts at removal, it was evident the child could not do without a tube. Tracheotomy was then performed. For the next few weeks unsuccessful attempts were made to remove the cannula. An intubation tube was again inserted to prevent contracture. Re-intubation was continued for a year. At first the patient could not do without the tube for more than a few hours. Latterly it took two to three weeks before the stricture contracted.

Throughout these twelve months the tube was coughed out 12 times and intubation was performed on 28 occasions. Several times when the tube was out sudden cyanosis and collapse resulted. Five times tracheotomy was performed either from sudden collapse or from failure to re-insert the smallest tube.

After two years' work a Rimner's dilator was inserted upwards through the tracheotomy wound and loosely attached to a special tracheotomy tube. The child could then be fairly safely discharged. He continued to return at intervals for dilation. After a year the dilator and tracheotomy tube were removed and the wound allowed to close.

At the time of writing, six months later, the child is apparently well.

Comment.—(1) A primary tracheotomy is preferable to intubation provided a diagnosis of streptococcal laryngitis has been made before operation.

(2) A nervous child is much more difficult to treat than one of placid temperament.

(3) The Rimner's apparatus is of definite value in such cases.

(4) The exhibition of much time and great patience on the part of the parents and staff is necessary if a permanent tracheotomy is to be prevented.

The use of Rimner's apparatus was demonstrated to me by Dr. Gardiner of Edinburgh.

DICK TEST.

Diphtheria cases had the Dick Test performed as a routine, and the susceptibles were immunised. Of 390 notified cases, 121 were positive, and 97 were immunised against scarlet fever.

AGE-PERIODS.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Over 10 | Total. |
|-----------|----|----|----|----|----|----|----|----|----|----|---------|--------|
| Positive, | -- | 13 | 15 | 13 | 11 | 11 | 9 | 11 | 7 | 4 | 27 | 121 |
| Negative, | 3 | 14 | 16 | 17 | 19 | 23 | 19 | 27 | 17 | 21 | 93 | 269 |
| Total, | 3 | 27 | 31 | 30 | 30 | 34 | 28 | 38 | 24 | 25 | 120 | 390 |

Meningitis.

CEREBRO-SPINAL FEVER.—Of 5 proved cases, 2 recovered and 3 were fatal. 3 were males and 2 females.

The average age was 12·2 years; the average day of disease, 5·4 days; and the average duration of residence, 50·4 days.

Type of Disease.—All were serious on admission.

Treatment.—The average amount of serum per patient was 476 c.c. by the cisterna and intravenous routes.

PNEUMOCOCCAL MENINGITIS.—3 males, aged 13, 16, and 18 years respectively, were admitted. All died within a few hours of admission.

CORRECTED DIAGNOSES.—Cerebellar abscess, 1; constipation, 3; encephalitis, 2; gastro-enteritis, 2; meningismus, 2; negative, 2; uræmia, 1.

Tetanus.

On the 16th October, 1931, a male, aged 25 years, fell from his cycle and scraped one of his hands. By the 30th October he was unable to open his mouth. When admitted to hospital on the 31st October the muscles of the jaw and neck were in a state of tetanus and the muscles of the trunk and lower limbs were stiff. No clonic spasms occurred. Very slowly the stiffness relaxed and he was discharged in 29 days. In all, he had 199 c.c. of tetanus antitoxin. The organism was not recovered from the granulating wounds of his fingers.

Skin Diseases.

The following skin conditions were treated:—Alopecia areata, 2; chronic eczema, 2; dermatitis herpetiformis, 5; folliculitis, 2; impetigo, 7; scabies, 33; tinea barbae, 1; tinea capitis, 2.

Enteric Group.

2 cases were in hospital at the beginning of the year, 13 were admitted, 6 were wrongly diagnosed, and 1 other proved to be a case of enteric fever. Of these 10 cases, 7 recovered and 3 were fatal.

REMOVAL TO HOSPITAL was carried out during the first week of illness in 1 case, or 10 per cent.; during the second week in 6 cases, or 60 per cent.; and during the third week or later in 3 cases, or 30 per cent.

THE AVERAGE DAY OF DISEASE was 12 days, and the average duration of residence in hospital 30·1 days.

THE AVERAGE AGE was 29·6 years. There was only 1 child, aged 2 years, in the group.

SEX.—Male, 3; female, 7.

THE FATALITY RATE was 30 per cent.

A female, aged 19 years, notified as pneumonia, perforated and died from broncho-pneumonia.

A female, aged 43 years, suffering from severe enteric fever died from hypostatic pneumonia.

A male, aged 41 years, died early in the disease from myocarditis.

TYPE OF DISEASE.—In 3 cases the organism was *B. typhosus*, and in 7 *B. paratyphosus B.* 5 cases were mild, 1 moderate, and 4 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. | | | |
| | No. of Cases. | Percentage | No. of Cases. | Percentage. | No. of Cases. | Percentage. | No. of Cases. | Percentage. | No. of Cases. | Percentage. |
| First, - - | — | — | — | — | — | — | 1 | 33·3 | 1 | 10·0 |
| Second, - - | 4 | 80·0 | 1 | 100·0 | — | — | 1 | 33·3 | 6 | 60·0 |
| Third, - - | 1 | 20·0 | — | — | 1 | 100·0 | 1 | 33·3 | 3 | 30·0 |
| Total, - - | 5 | 50·0 | 1 | 10·0 | 1 | 10·0 | 3 | 30·0 | 10 | — |

COMPLICATIONS.—Broncho-pneumonia and perforation, 1; hypostatic pneumonia, 1; myocarditis, 1.

RELAPSE.—In 1 case only did a relapse occur.

CORRECTED DIAGNOSES.—Influenza, 1; positive Widal reaction, 4; negative, 1.

OTHERS.—1 case, notified as pneumonia, proved to be a case of enteric fever.

BACTERIOLOGICAL RESULTS.—In no case of the paratyphoid group was a positive blood culture obtained. In the *B. typhosus* group 2 were positive. The faeces was positive in 6 and the urine in 1.

Dysentery.

7 patients and 1 nurse were admitted from Stonehouse Orthopaedic Hospital with abdominal signs extremely suggestive of dysentery. The nurse took ill in the early hours of the morning. She felt sick, but could not vomit. The temperature was elevated. Later in the day the abdomen became painful all over, with tenderness in the right iliac fossa, but with no vomiting or diarrhoea. For a time she looked like an acute appendix. Two nights later loose motions containing blood and mucus were passed. She then gradually improved.

The other cases were not so acute. They all, however, took ill fairly suddenly, but recovered rapidly when diarrhoea set in. In all the cases blood and mucus were present.

Repeated bacteriological examinations failed to recover organisms of the Flexner, Shiga, or Sonne group. The bloods all agglutinated the Flexner type of organism.

Puerperal Sepsis.

9 patients were in residence at the beginning of the year, 132 were admitted as puerperal fever or pyrexia, 15 were wrongly diagnosed, and 4 others proved to be cases of puerperal sepsis. Of these 130 patients, 104 recovered, 21 died, and 5 were in hospital at the end of the year.

TYPE OF DISEASE.—Mild, 68; moderate, 25; severe, 32.

THE AVERAGE AGE of the patients was 29·3 years; 11 were under 20 years of age, 29 between 21 and 25 years, 32 between 26 and 30 years, 27 between 31 and 35 years, 19 between 36 and 40 years, and 7 over 40 years of age.

THE AVERAGE DURATION OF ILLNESS of all cases prior to admission was 5·8 days; of recovered cases, 5·8 days; and of fatal cases, 6 days.

THE AVERAGE DURATION OF RESIDENCE was 30·8 days.

ATTENDANCE AT BIRTH.—Doctor, 8; midwife, 22; doctor and midwife, 78; hospital cases, 16; nil, 1.

THE FATALITY RATE was 16·8 per cent.

COMPLICATIONS AT BIRTH.—Abortion, 9; gross tearing and laceration, 1; hæmorrhage, 2; instrumental delivery, 44; perineal tears, 29; still-birth, 1.

NUMBER OF PREGNANCY at which disease occurred:—

| Pregnancy. | No. of Cases. | | Instrumental Delivery. | |
|------------|---------------|-------|------------------------|-------|
| | Recovered. | Died. | Recovered. | Died. |
| 1 | 43 | 7 | 26 | 5 |
| 2 | 17 | 2 | 4 | 1 |
| 3 | 10 | 4 | 2 | — |
| 4 | 6 | 3 | 1 | — |
| 5 | 3 | — | 1 | — |
| 6 | 7 | 1 | — | — |
| 7 | 7 | — | — | — |
| 8 | 3 | 2 | — | 1 |
| 9 | 2 | 1 | — | — |
| 10 | 2 | — | 1 | — |
| 11 | 1 | — | 1 | — |
| 12 | — | — | — | — |
| 13 | 1 | 1 | — | 1 |
| Uncertain | 2 | — | — | — |
| Total, - - | 104 | 21 | 36 | 8 |
| | 125 | | 44 | |

COMPLICATIONS DURING THE FEVER.—Abscesses, 6; albuminuria, 4; anæmia, 13; arthritis, 3; bronchitis, 1; enteritis, 1; facial paralysis, 1; general peritonitis, 1; mastitis, 6; myocarditis, 2; pelvic cellulitis, 2; pelvic peritonitis, 2; phlegmasia, 13; pulmonary embolism, 2; pneumonia, 2; pyelitis, 1; serum rashes, 12; tuberculosis, 1.

CORRECTED DIAGNOSES.—Abortion, 1; albuminuria, 1; anæmia, 1; arthritis, 1; bronchitis, 1; cholecystitis, 1; glycosuria, 1; pelvic cellulitis, 2; phlegmasia, 2; scarlet fever, 2; serum disease, 1; negative, 1.

OTHERS WHICH PROVED TO BE CASES OF PUERPERAL FEVER.—Erysipelas, 1; phlebitis, 1; scarlet fever, 2.

BLOOD CULTURES.—Of 118 blood cultures taken only 4 were positive.

WASSERMANN TEST.—11 were positive in 143 tests.

DICK TEST.—4 were positive in 99 skin tests.

POST-PUERPERAL CONDITIONS.—Post-puerperal cases, which arose after a month from confinement, are not included in the true puerperal figures. These were:—Pelvic cellulitis, 3; phlegmasia, 4; severe anæmia, 1; suppurating mastitis, 9.

TREATMENT.—During the year the general lines of treatment were:—Careful nursing, glycerine drainage without douching, Fowler position, and large doses of puerperal serum—Parke Davis, & Co.—administered chiefly intravenously. In a few cases scarlet fever antitoxin, polyvalent streptococcal serum, anti-gas gangrene serum, and pneumococcal serum were used.

Erysipelas.

3 patients were in hospital at the beginning of the year, 57 were admitted, 20 were wrongly diagnosed, and 1 other proved to be a case of erysipelas. Of these 41 cases, 36 recovered, 4 died, and 1 was in hospital at the end of the year.

SEX.—Male, 13; female, 27.

TYPE OF DISEASE.—Mild, 19; moderate, 11; severe, 10.

SITUATION OF DISEASE.—Face, 31; legs, 5; shoulder, 1; wandering, 3.

THE AVERAGE AGE was 37·9 years; 3 were under 1 year of age, 3 between 1 and 10 years, 4 between 11 and 20 years, 4 between 21 and 30 years, 1 between 31 and 40 years, 12 between 41 and 50 years, 8 between 51 and 60 years, 4 between 61 and 70 years, and 1 over 70 years of age.

THE AVERAGE DAY OF DISEASE was 4·4 days, and the average residence, 17·5 days.

THE FATALITY RATE was 10 per cent. of the cases discharged.

Of the 4 fatal cases, 2 were of the wandering type in babies a few months old; a girl of 15 years died from cardiac failure after the disease had subsided; and a female, aged 73 years, died within 24 hours from hæmatemesis.

COMPLICATIONS AND OTHER CONDITIONS. — Cardiac disease, 2; diabetes, 1; hæmatemesis, 1.

CORRECTED DIAGNOSES.—Oedema eyelids, 1; burn, 1; cancer breast, 1; cellulitis, 4; congenital syphilis, 1; dacryo-cystitis, 1; dermatitis, 4; erythema, 1; puerperal fever, 1; septic wound, 3; seborrhœa, 1; serum rash, 1.

OTHERS. — 1 case notified scarlet fever proved to be a case of erysipelas.

TREATMENT.—31 of the 40 clinical cases were treated with scarlet fever antitoxin. The average dose was 70 c.c.

Although erysipelas is one of the most difficult diseases in which to assess the value of a particular treatment, the general impression was that in approximately half of the cases receiving serum definite improvement, locally and generally, resulted. In the other half the value was doubtful. Wandering erysipelas in young babies is usually fatal. 1 case, a baby of 2 months, was considered to have been saved by a large dose of scarlet fever antitoxin. The best results were obtained where a large dose was given intravenously within 3 days of the onset,

Tuberculosis.

At the beginning of the year 4 cases were in residence, 83 were admitted, in 15 the diagnosis was revised, and 13 others proved to be cases of tuberculosis. Of these 85 patients, 74 were discharged improved or well, 10 died, and 1 was in hospital at the end of the year.

The following table shows the age-periods and sexes of the cases discharged:—

| AGE. | RECOVERED. | | DIED. | | TOTAL. | |
|-------------|------------|----------|--------|----------|--------|----------|
| | Males. | Females. | Males. | Females. | Males. | Females. |
| -5 years, - | 1 | 1 | 2 | 1 | 3 | 2 |
| -10 " - | — | 1 | 2 | 1 | 2 | 2 |
| -15 " - | 3 | 5 | — | — | 3 | 5 |
| -20 " - | 6 | 11 | — | 1 | 6 | 12 |
| -25 " - | 2 | 10 | 1 | — | 3 | 10 |
| -30 " - | 10 | 12 | — | — | 10 | 12 |
| -35 " - | 1 | 5 | — | — | 1 | 5 |
| -40 " - | — | 1 | 1 | — | 1 | 1 |
| Over 40 " - | 5 | — | 1 | — | 6 | — |
| | 28 | 46 | 7 | 3 | 35 | 49 |

SEX.—Male, 35; female, 49.

THE AVERAGE AGE was 23·1 years, and the average residence, 20·9 days.

CLASSIFICATION OF CASES.

| | | | |
|-------------------------|----|-------------------------|----|
| Glandular Tuberculosis, | 11 | Pulmonary Tuberculosis, | 58 |
| Osseous " " | 3 | Meningeal " " | 8 |
| Articular " " | 1 | General, " " | 1 |
| Renal, " " | 2 | | |

GLANDULAR TUBERCULOSIS. — 11. Males, 4; females, 7. The average age was 18·8 years, and the average duration of residence, 31 days.

The group comprised abscesses and old sinuses. In 1 case only was excision possible.

OSSEOUS TUBERCULOSIS.—3. 2 males had rib abscesses drained. Both healed before dismissal.

A female, aged 26 years, suffering from extensive disease of the tarsal bones was transferred to a sanatorium.

ARTICULAR TUBERCULOSIS.—1. A male, aged 3 years, with disease of the upper tibio-fibular joint was removed to the Orthopædic hospital for treatment.

RENAL TUBERCULOSIS.—2. A male, aged 32 years, was admitted for diagnosis. Another male, aged 21 years, suffering from advanced disease of both kidneys, died in hospital.

PULMONARY TUBERCULOSIS.—58. 14 patients were admitted for diagnosis or some minor operation. The other 44 represent the re-admissions of 16 separate pneumothorax cases for re-fills. Those 16 pneumothorax cases had 73 re-fills.

MENINGEAL TUBERCULOSIS.—8. Males, 5; females, 3. The average age was 12·5 years, and the average residence, 7·7 days.

GENERAL TUBERCULOSIS.—1. A male, aged 39 years, died from generalised tuberculosis.

FATAL CASES.—10. Males, 7; females, 3. The average age was 16 years, and the average residence, 12·9 days.

Type of Disease.—General, 1; meningeal, 8; renal, 1.

CORRECTED DIAGNOSES.—Constipation, 1; debility, 1; encephalitis, 1; enteritis, 3; pneumonia, 3; poliomyelitis, 1; pyelitis, 1; pyogenic osteitis, 1; suppurative adenitis, 2; whooping-cough, 1.

OTHERS WHICH PROVED ON OBSERVATION TO BE TUBERCULOSIS.—Bursitis, 1; observation, 1; pleural effusion, 2; pneumonia, 8; scarlet fever, 1.

Pneumonia.

37 patients were in residence at the beginning of the year; 383 were admitted; in 136 the diagnosis was revised; and 12 others proved to be cases of pneumonia. Of these 296 cases, 205 recovered, 71 died, and 20 were in hospital at the end of the year.

The following table shows the age-periods and the sex of the cases discharged:—

| AGE. | RECOVERED. | | DIED. | | TOTAL. | |
|--------------|------------|----------|--------|----------|--------|----------|
| | Males. | Females. | Males. | Females. | Males. | Females. |
| - 5 years, - | 27 | 28 | 23 | 11 | 50 | 39 |
| - 10 „ - | 26 | 7 | 1 | — | 27 | 7 |
| - 15 „ - | 13 | 7 | 1 | — | 14 | 7 |
| - 20 „ - | 24 | 2 | 1 | 1 | 25 | 3 |
| - 25 „ - | 13 | 6 | 3 | 2 | 16 | 8 |
| - 30 „ - | 12 | — | 2 | 2 | 14 | 2 |
| - 35 „ - | 6 | 4 | 6 | — | 12 | 4 |
| - 40 „ - | 3 | — | 1 | — | 4 | — |
| Over 40 „ - | 20 | 7 | 12 | 5 | 32 | 12 |
| | 144 | 61 | 50 | 21 | 194 | 82 |

CLASSIFICATION OF DISEASE.—Acute lobar pneumonia, 164; broncho-pneumonia, 98; hypostatic pneumonia, 4; unresolved pneumonia, 9; convalescent pneumonia, 1.

TYPE OF DISEASE.—Mild, 101; moderate, 75; severe, 100.

THE SITUATION OF THE LESION in the lobar cases was as follows:—Double, 13. Right side—Base, 47; apex, 17; whole, 11. Left side—Base, 58; apex, 9; whole, 9.

THE AVERAGE DAY OF DISEASE of all cases on admission was 5·4 days; of recovered cases, 5·3 days; and of fatal cases, 5·9 days.

THE AVERAGE DURATION OF RESIDENCE of all cases was 24·4 days; of recovered cases, 30·2 days; and of fatal cases, 7·7 days.

THE FATALITY RATE was 25·7 per cent. for all cases; of the lobar pneumonias, 14 per cent., and of the broncho-pneumonia, 42·8 per cent. Right side pneumonia was fatal in 14·6 per cent., and left side disease in 9 per cent.

COMPLICATIONS.—28, or 10·1 per cent. of the discharges, developed one or more complications. These were:—Albuminuria, 3; cellulitis, 1; dermatitis herpetiformis, 1; empyema, 8; gastro-enteritis, 3; ischio-rectal abscess, 1; jaundice, 1; meningitis, 1; myocarditis, 1; nephritis, 1; noma, 1; otitis media, 3; paronychia, 1; peritonitis, 1; suppurative pericarditis, 1.

CORRECTED DIAGNOSES.—Alveolar abscess, 1; arthritis, 1; bronchitis, 76; cardiac disease, 1; cellulitis of leg, 1; constipation, 1; emphysema, 1; empyema, 4; enteric fever, 1; enteritis, 1; gangrene of lung, 1; intussusception, 1; marasmus, 3; measles, 2; meningitis, 1; nephritis, 3; pericardial effusion, 1; peritonitis, 1; pharyngitis, 3; pleurisy, 5; pyloric stenosis, 1; rheumatism, 1; suppurative mastitis, 1; tuberculosis, 8; whooping cough, 12; negative, 3.

CASES WHICH, ON OBSERVATION, PROVED TO BE PNEUMONIA were admitted to hospital as:—Diphtheria, 2; empyema, 1; influenza, 1; meningitis, 1; pleurisy, 2; pulmonary tuberculosis, 2; tubercular meningitis, 1; scarlet fever, 2.

CASE OF PNEUMONIA COMPLICATED BY SUPPURATIVE PERICARDITIS AND EMPYEMA.—RECOVERY.

A boy, aged 11 years, was admitted moderately ill with broncho-pneumonia of four days' duration. For the first ten days the temperature and pulse gradually subsided. The temperature then began to swing between 99° and 102° F., and the pulse increased to 130 per minute. As the patient was becoming slightly cyanotic, dyspnoëic, and the cardiac dulness had increased to four inches, the pericardium was punctured and 240 c.c. of hæmorrhagic fluid were withdrawn. A week later the fluid had become purulent, containing pneumococci. Mr. M'Lellan now resected a rib and inserted a tube into the pericardium. Unfortunately the right pleural cavity was opened at the operation. Two days after the operation 370 c.c. of slightly turbid fluid were aspirated from the right pleural cavity. On three subsequent occasions purulent fluid was withdrawn; then a tube was inserted between the ribs. The temperature gradually subsided and both wounds healed. The patient went home after three months' residence quite well. The X-ray picture showed the heart slightly retracted to the right and a good deal of pleural thickening at the right base.

Empyema.

9 cases of empyema were admitted for operation. These were in addition to the cases occurring as a complication in the various infections.

SEX.—Male, 5; female, 4.

THE AVERAGE AGE was 7·2 years, and the average residence in hospital, 55 days.

TYPE OF INFECTION.—Pneumococcus, 6; streptococcus, 2; coliform, 1.

In 8 instances rib resection was carried out after repeated aspiration. The coliform infection got well with aspiration alone.

1 case died from pericarditis.

Measles.

22 cases of measles were admitted to hospital. In 3 the diagnosis was revised, and 13 others proved to be cases of measles. Of these 32 patients, 21 recovered, 4 died, and 7 were in hospital at the end of the year.

SEX.—Male, 10; female, 15.

THE AVERAGE DAY OF DISEASE was 3·8 days; the average residence, 20·4 days; and the average age, 7·4 years.

TYPE.—Mild, 16; moderate, 4; severe, 5.

FATAL CASES.—4 of the 25 clinical cases were fatal. 3 had broncho-pneumonia on admission and 1 of them developed an empyema. 1 died from encephalitis following measles.

COMPLICATIONS.—Bronchitis, 1; broncho-pneumonia, 3; empyema, 1; encephalitis, 1; meningismus, 1.

CORRECTED DIAGNOSES.—Purpura hæmorrhagica, 1; negative, 2.

OTHERS WHICH, ON OBSERVATION, PROVED TO BE MEASLES were admitted to hospital as:—Diphtheria, 3; meningitis, 2; pneumonia, 3; scarlet fever, 5.

ENCEPHALITIS FOLLOWING MEASLES.

A girl, aged 9½ years, was admitted, notified as meningitis. Four days before admission she had sickened from what appeared to be an ordinary attack of measles. The day before admission she was noticed to be very drowsy.

On admission, a well-marked fading measles rash was present. Although very drowsy she could be roused. No rigidity was present and no definite paralysis was noted. Lumbar puncture revealed

normal sterile cerebro-spinal fluid. Beyond slight congestion of the discs nothing abnormal was present in the eyes. The urine contained acetone. Next day the patient became quite comatose, and died on the fourth day of residence. The temperature swung between 101° and 103° F.

On post-mortem examination general congestion of the membranes was present. The cut surface of the white matter showed minute petechial hæmorrhages all over. The region of the basal nuclei showed nothing abnormal macroscopically. Sections showed typical appearance of encephalitis.

Whooping Cough.

13 cases were admitted as whooping cough during the year, 4 were wrongly diagnosed, and 15 others proved to be cases of the disease. Of these 24 patients, 22 recovered and 2 were fatal.

SEX.—Male, 9; female, 15.

THE AVERAGE DAY OF DISEASE was indefinite. Many had been ill several weeks before admission.

THE AVERAGE RESIDENCE was 38·2 days, and the average age, 4·5 years.

TYPE.—Mild, 11; moderate, 5; severe, 8.

FATAL CASES.—2 of the 24 cases died from broncho-pneumonia, having been ill three to five weeks before admission.

COMPLICATIONS.—Broncho-pneumonia, 5; bronchitis, 3; nephritis, 1; otitis media, 1.

OTHERS WHICH PROVED TO BE CASES OF WHOOPING COUGH.—Diphtheria, 2; pneumonia, 12; tubercular meningitis, 1.

CORRECTED DIAGNOSES.—Impetigo, 1; malnutrition and wasting, 2; negative, 1.

TREATMENT.—In addition to general dietetic treatment, vitamins, sunlight, whooping cough vaccine and whooping cough immunogen were used throughout the year.

WHOOPING COUGH VACCINE.—This remedy is of definite value prophylactically in contacts, is of some use in early cases, but seems to be quite valueless by the time spasms are well developed.

Whooping cough immunogen was used in late cases. It appeared to control the spasms but did not shorten the duration of the disease.

Venereal Diseases.

At the beginning of the year 6 cases were in residence. Throughout the year 111 patients were admitted for indoor treatment. Of these, 26 were wrongly diagnosed; and 1 other proved to be a case of venereal disease. Of 92 cases, 76 were discharged in varying stages of improvement, 4 died, and 12 were in hospital at the end of the year.

SEX.—Male, 44; female, 36.

AGE.—1 to 10 years, 15; 11 to 20 years, 9; 21 to 30 years, 33; 31 to 40 years, 10; 41 to 50 years, 7; over 50 years, 6.

The average age of the proved cases was 25·7 years, and the average duration of residence, 28·9 days.

The indoor cases were:—Gonorrhœa, 40; syphilis, 25 (7 congenital); gonorrhœa and syphilis, 4; ophthalmia neonatorum, 8; balanitis, 3.

CORRECTED DIAGNOSES.—Albuminuria, 1; arsenical dermatitis, 1; cancer of pharynx, 1; dermatitis herpetiformis, 1; erysipelas, 1; napkin rash, 1; photophobia, 1; simple ophthalmia, 10; tubercular keratitis, 1; vulvo-vaginitis, 5; negative, 3.

OTHERS WHICH PROVED TO BE CASES OF VENEREAL DISEASE were:—Erysipelas, 1.

COMPLICATIONS AND REASONS FOR INDOOR TREATMENT.—Auricular fibrillation, 1; balanitis, 3; bubo, 1; chronic nephritis, 1; epididymitis, 5; gonorrhœal warts, 2 hæmaturia (papilloma bladder), 1; keratitis, 4; nitritoid crisis, 1; perforation of palate, 1; periostitis, 1; periurethral abscess, 1; phimosis, 8; retention of urine, 1.

FATAL CASES.—4. A male, aged 70 years, died from a gumma of cerebellum; a baby with ophthalmia neonatorum had congenital cardiac disease; another baby, notified erysipelas, was admitted dying from congenital syphilis; and a male, aged 66 years, died from chronic nephritis and syphilitic aortitis.

Ophthalmia Neonatorum.—8. The type of disease was mild in 5 and moderate in 3. The eyes cleared up perfectly. 1 baby died from congenital heart disease.

10 other cases, notified as gonorrhœal ophthalmia, proved to be cases of simple ophthalmia.

The number and nature of the cases attending at the outdoor clinic and the areas from which they came are shown in the following table. 279 new cases were registered:—193 males and 86 females:—

VENEREAL DISEASES, 1931.

| | Syphilis. | Gonorrhoea. | Syphilis and Gonorrhoea. | Soft Sore. | Others V. D. | Others Non V. D. | Total. | Indoor Cases. | Indoor Days. | Outdoor Attendances |
|-----------------------------|-----------|-------------|-----------------------------|------------|--------------|---------------------|--------|---------------|--------------|------------------------|
| County of Lanark, | 76 | 105 | 8 | 3 | 9 | 48 | 249 | 73 | 1,802 | 2,532 |
| Airdrie, - - | 3 | 4 | 1 | — | — | — | 8 | 5 | 137 | 19 |
| Biggar, - - | — | 1 | — | — | — | — | 1 | 1 | 38 | — |
| Coatbridge, - - | 4 | 3 | — | — | — | — | 7 | 3 | 54 | 40 |
| Hamilton, - - | 10 | 13 | 1 | — | 1 | 2 | 27 | 6 | 122 | 331 |
| Lanark, - - | 12 | 1 | — | — | 1 | 2 | 16 | 4 | 45 | 63 |
| Motherwell and Wishaw, - | 31 | 49 | 5 | 1 | 5 | 13 | 104 | 7 | 212 | 1,634 |
| Glasgow, - - | 1 | — | — | — | — | 1 | 2 | 2 | 103 | — |
| Ayrshire, - - | — | 1 | — | — | — | — | 1 | — | — | 1 |
| Dumfries, - - | 1 | — | — | — | — | — | 1 | — | — | 3 |
| Dunbartonshire, - | — | 4 | — | — | — | 2 | 6 | 5 | 121 | — |
| Stirlingshire, - | 1 | — | — | — | — | — | 1 | 1 | 171 | — |
| Total, - - | 139 | 181 | 15 | 4 | 16 | 68 | 423 | 107 | 2,805 | 4,623 |

The following is a synopsis of the venereal diseases work since 1924:—

| | 1924 | | 1925 | | 1926 | | 1927 | | 1928 | | 1929 | | 1930 | | 1931 | |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. |
| <i>New Cases:—</i> | 163 | 55 | 191 | 68 | 158 | 52 | 234 | 76 | 231 | 95 | 212 | 75 | 227 | 67 | 193 | 86 |
| Syphilis, - | 31 | 19 | 35 | 24 | 20 | 8 | 24 | 16 | 41 | 16 | 62 | 22 | 46 | 16 | 33 | 26 |
| Gonorrhœa, - | 76 | 21 | 108 | 32 | 78 | 27 | 126 | 39 | 106 | 43 | 83 | 28 | 107 | 25 | 92 | 32 |
| Syphilis and Gonorrhœa, - | 1 | 1 | — | 2 | — | 2 | 2 | 3 | 4 | 4 | 3 | 2 | 6 | 9 | 5 | 5 |
| Soft Sore, - | — | — | — | — | — | — | — | — | — | — | 1 | — | — | — | 4 | — |
| Others V.D., - | 5 | — | 6 | 1 | 2 | — | 7 | — | 14 | 2 | 6 | — | 10 | 1 | 14 | 2 |
| Others Non V.D., | 47 | 14 | 42 | 9 | 58 | 15 | 75 | 18 | 66 | 30 | 57 | 23 | 58 | 16 | 45 | 21 |
| <i>Cases treated during Year:—</i> | | | | | | | | | | | | | | | | |
| Syphilis, - | 123 | 56 | 88 | 43 | 88 | 32 | 71 | 44 | 124 | 52 | 104 | 41 | 102 | 42 | 90 | 49 |
| Gonorrhœa, - | 99 | 22 | 137 | 48 | 106 | 42 | 157 | 48 | 160 | 55 | 120 | 39 | 142 | 39 | 135 | 46 |
| Syphilis and Gonorrhœa, - | 12 | 5 | 6 | 4 | 4 | 3 | 4 | 3 | 11 | 4 | 5 | 3 | 10 | 11 | 8 | 7 |
| Soft Sore, - | 2 | — | — | — | 1 | — | — | — | — | — | 1 | — | 1 | — | 4 | — |
| Others V.D., - | 8 | — | 4 | — | 6 | — | 8 | — | 28 | 2 | 7 | — | 11 | 1 | 14 | 2 |
| Others Non V.D., | 48 | 17 | 51 | 12 | 60 | 15 | 83 | 18 | 66 | 30 | 64 | 23 | 55 | 20 | 46 | 22 |
| Outdoor Attend- ances, - | 3174 | 411 | 5531 | 1167 | 3070 | 747 | 4518 | 837 | 3673 | 608 | 2973 | 890 | 4056 | 1218 | 3808 | 815 |
| Indoor Cases, - | 41 | 32 | 53 | 61 | 44 | 47 | 55 | 57 | 79 | 78 | 67 | 43 | 70 | 56 | 55 | 52 |
| Indoor Days, - | 1044 | 1110 | 1702 | 1846 | 1268 | 1399 | 1404 | 2380 | 1783 | 1786 | 1432 | 1331 | 1665 | 1672 | 1111 | 1694 |
| Salvarsan Sub- stitute Injec- tions, - | 594 | 240 | 910 | 407 | 812 | 401 | 926 | 650 | 1024 | 379 | 1489 | 554 | 1716 | 655 | 1377 | 764 |
| No. of Operations | 10 | — | 8 | 1 | 6 | — | 12 | 2 | 15 | 1 | 17 | 2 | 18 | 1 | 9 | 1 |
| „ Wassermann, | 269 | 91 | 172 | 64 | 165 | 69 | 198 | 127 | 294 | 81 | 257 | 117 | 284 | 89 | 281 | 116 |
| „ Smears Spiro- chætes, | 7 | — | 6 | — | 1 | — | 3 | — | 4 | — | 2 | — | 3 | — | — | — |
| „ „ Gonococci, | 138 | 53 | 126 | 71 | 51 | 39 | 144 | 86 | 115 | 77 | 83 | 63 | 116 | 89 | 116 | 76 |

Note.—Included under Salvarsan Substitute Injections are 1209 Bismuth Injections.

Miscellaneous Cases Discharged during 1931.

| | Rec. | Died | | Rec. | Died |
|-------------------------------|------|------|----------------------------|------|------|
| Abdominal adhesions, | 1 | — | Influenza, | 3 | — |
| Abdominal pain, ... | 2 | — | Laryngeal stenosis (1 case | | |
| Abscesses (various), ... | 9 | — | —re-admissions), ... | 8 | — |
| Anæmia, | 2 | — | Leukæmia, | 1 | — |
| Arsenical dermatitis, ... | — | 1 | Marasmus, | — | 1 |
| Born in Hospital (premature), | — | 1 | Mastoid sinus, | 1 | — |
| Brain abscess, | — | 2 | Mediastinal tumour, ... | 1 | — |
| Brain tumour, | — | 1 | Naso-pharyngitis, ... | — | 5 |
| Bronchiectasis, | 3 | — | Nephritis, | 2 | 1 |
| Bronchitis, | 1 | — | Neurasthenia, | 1 | — |
| Bronchitis and emphysema, | — | 2 | Otitis media, | 1 | — |
| Burns, | — | 1 | Parotitis, | 1 | — |
| Cardiac disease, | 3 | — | Pericarditis, | — | 1 |
| Cellulitis, | 2 | 1 | Pernicious anæmia, ... | — | 1 |
| Chickenpox, | 8 | — | Pleural effusion, ... | 6 | — |
| Chorea, | 2 | — | Poliomyelitis, | 1 | — |
| Cold, | 1 | — | Polyneuritis, | 1 | 1 |
| Conjunctivitis, | 3 | — | Positive swab, | 1 | — |
| Constipation, | 3 | — | Purpura hæmorrhagica, | — | 1 |
| Diabetes, | 2 | 1 | Rheumatism, | 5 | — |
| Encephalitis, | — | 2 | Septicæmia, | — | 2 |
| Fibroid, | 1 | — | Sore throat, | 10 | — |
| For barium meal, | 2 | — | Sprained ankle, | 1 | — |
| Gangrene of lung, | — | 1 | Tonsillitis, | 6 | — |
| Gastro-enteritis, | 3 | 3 | Trachoma, | 2 | — |
| General peritonitis, ... | — | 1 | Vaginitis, | 1 | — |
| Headache, | 1 | — | Negative, | 4 | — |
| Intussusception, | — | 1 | | | |

Electrical Department.

During the year 1,079 cases were photographed. These were:—
Chest, 934; chest and abdomen, 4; chest and spine, 5; spine, 20;
pelvis, 16; joints, 40; bones, 45; fractures, 4; skull, 4; kidneys, 2;
foreign body, 1; barium enema, 1; barium meals, 3.

The sources from which the 1,079 cases came were as follows:—

| Centres and Dispensaries. | | Institutions, &c. | |
|---------------------------|-----|---------------------------|-----|
| Baillieston | 6 | County Hospital, | |
| | | Motherwell, - | 193 |
| Bellshill | 166 | Calderbank House, - | 1 |
| Blantyre, - - - | 60 | Lightburn Hospital, - | 10 |
| Cambuslang, - . - | 91 | Roadmeetings Hospital, - | 35 |
| Chapelhall, - - - | 4 | Omoa House, - - - | 1 |
| Lanark, - - - - | 5 | Longriggend Sanatorium, | 124 |
| Larkhall, - - - - | 3 | Shotts do., | 103 |
| Shotts, - - - - | 88 | Hamilton Burgh, - - | 14 |
| V.D. Centres, . - - | 9 | Medical Practitioners, - | 34 |
| | | Public Health Department, | 132 |

Operations.

During the year the following operations were performed in the hospital: —

| DISEASE | | OPERATION. | RECOVERED. | DIED. | TOTAL. |
|-------------------|--------------------------|----------------------------|------------|-------|--------|
| Scarlet Fever | Mastoiditis | Mastoidectomy | 4 | — | 4 |
| | Abscesses | Opening | 22 | — | 22 |
| | Cellulitis | Incision | 1 | — | 1 |
| | Mastitis | Opening | 1 | — | 1 |
| | Tonsils | Tonsillectomy | 2 | — | 2 |
| Diphtheria | Laryngeal stenosis | Tracheotomy | 10 | 1 | 11 |
| | | Intubation | 1 | — | 1 |
| | | Intubation and tracheotomy | — | 1 | 1 |
| | Glands | Opening abscesses | 1 | — | 1 |
| Enteric Fever, | Perforation | Laparotomy | — | 1 | 1 |
| Puerperal Fever | Abscesses | Opening | 7 | — | 7 |
| | Mastitis | Opening | 3 | — | 3 |
| | Septic arthritis | Incision | 2 | — | 2 |
| Pneumonia | Empyema | Resection of rib | 9 | 1 | 10 |
| | | Drainage | 2 | — | 2 |
| | Ischio-rectal abscess | Incision | 1 | — | 1 |
| | Suppurative pericarditis | Drainage | 1 | — | 1 |
| Measles | Empyema | Resection of rib | — | 1 | 1 |
| Tuberculosis | Glands | Excision or scraping | 13 | — | 13 |
| | Abscesses | Opening | 4 | — | 4 |
| | Caries rib | Resection of rib | — | 1 | 1 |
| Venereal Diseases | Phimosis | Circumcision | 8 | — | 8 |
| | Periurethral Abscess | Incision | 1 | — | 1 |
| | Ulcers | Scraping | 1 | — | 1 |
| Others | Abscesses | Opening | 7 | 1 | 8 |
| | Appendicitis | Laparotomy | — | 1 | 1 |
| | Bronchiectasis | Lipiodol injection | 1 | — | 1 |
| | Cerebellar Abscess | Mastoidectomy | — | 1 | 1 |
| | Cellulitis | Incision | 6 | 2 | 8 |
| | Empyema | Resection of rib | 9 | — | 9 |
| | Knee | Arthrotomy | 1 | — | 1 |
| | Mastitis | Opening | 9 | — | 9 |
| | Mastoiditis | Mastoidectomy | 3 | 1 | 4 |
| | Osteitis | Scraping sinus | 1 | — | 1 |
| | Peritonitis | Laparotomy | — | 1 | 1 |
| | Tonsils | Tonsillectomy | 6 | — | 6 |
| | | | 137 | 13 | 150 |

The following operations and consultations were undertaken by the consulting staff:—

Dr. MacLennan, Surgeon.—Laparotomy, 2; excision of glands, 1; incision rib abscess, 1; drainage suppurative pericarditis, 1.

Dr. Adam, Otologist.—Tonsillectomy, 5; mastoidectomy, 3; opening cerebellar abscess and mastoidectomy, 1.

Dr. Mortimer, Ophthalmologist.—Consultation, 2.

Dr. Harrington, Physician.—Consultation, 5.

Laboratory Work.

The following table shows the number of specimens examined during the year by the County Laboratory and the Hospital Laboratory:—

| | County Laboratory. | Hospital Laboratory. | Total. |
|---|-----------------------|-------------------------|--------|
| Throat Swabs, - - - - - | 1,649 | 581 | 2,230 |
| Swabs for virulence - - - - - | 408 | — | 408 |
| Agglutinations (enteric), - - - - - | 51 | — | 51 |
| Blood cultures (enteric), - - - - - | 15 | — | 15 |
| Urine (enteric), - - - - - | 30 | — | 30 |
| Faeces (enteric), - - - - - | 57 | — | 57 |
| Blood cultures (puerperal), - - - - - | 129 | — | 129 |
| Uterine swabs (puerperal), - - - - - | 123 | 124 | 247 |
| Blood counts, - - - - - | — | 30 | 30 |
| Cerebro-spinal fluid, - - - - - | 66 | 20 | 86 |
| Sputa, - - - - - | 6 | 25 | 31 |
| Others (tuberculosis), - - - - - | 14 | 3 | 17 |
| Pleural effusion, - - - - - | 41 | — | 41 |
| Wassermann, - - - - - | 607 | — | 607 |
| Urethral smears (gonorrhoea), - - - - - | — | 159 | 159 |
| Eye smears (gonorrhoea), - - - - - | — | 22 | 22 |
| Pus, - - - - - | 69 | 50 | 119 |
| Urine (others), - - - - - | — | 29 | 29 |
| Tinea, - - - - - | 1 | — | 1 |
| Pathological specimens, - - - - - | 61 | — | 61 |
| Totals, - - - - - | 3,327 | 1,043 | 4,470 |

Although the total figures are considerable, they represent only routine examinations for diagnosis and discharge of patients, but nothing of real bacteriological or pathological investigation.

The Hospital Laboratory is modern and well equipped, but unfortunately possesses no staff. Until the requisite staff is working

where the patients are situated, many real problems in infectious disease work must go unsolved and much valuable pathological material go to waste.

Post-mortem examinations were carried out in 87, or 50.2 per cent., of the 173 fatal cases.

The Staff.

On 31st December, 1931, the indoor staff comprised 1 physician-superintendent, 2 assistant medical officers, 1 matron, 12 sisters, 66 probationers, and 35 maids.

The outdoor staff consisted of 1 engineer, 3 firemen, 1 gardener, 5 assistant gardeners, 2 chauffeurs, 1 V.D. attendant, 1 X-ray attendant, 2 clerks, 1 telephone operator, and 1 storekeeper.

The total staff numbered 135.

LECTURES.—From October till April lectures and demonstrations on elementary anatomy and physiology, hygiene, fevers, the theory and practice of nursing, and medical and surgical nursing, in accordance with the syllabus of the General Nursing Council, were given by the medical staff and matron. The course in cooking and dietetics was given by the Education Authority.

14 probationers passed the Final Examination and were granted the General Nursing Council Certificate for Fever Nursing, whilst 14 others completed the Preliminary Examination under this scheme. 16 probationers were awarded cookery certificates by the Education Authority.

STAFF ILLNESSES.—36 probationers and 6 maids were warded for the following illnesses:—Abdominal pain, 2; alveolar abscess, 1; bronchitis, 1; buttock abscess, 1; cold, 1; conjunctivitis, 2; constipation, 1; dermatitis, 2; diphtheria, 1; headache, 1; influenza, 2; measles, 1; nephritis, 1; otitis media, 1; parotitis, 1; pulmonary tuberculosis, 1; quinsy, 1; septic finger, 2; septic hand, 1; septic sore, 1; sore throat, 10; sprain, 1; suppurative adenitis, 1; tonsillitis, 3; negative, 2.

The sick staff lost 614 working days.

INOCULATIONS.—23 probationers were vaccinated with T.A.B. vaccine against the enteric group of diseases.

IMMUNISATION.—88 of the staff had the Schick Test performed. Of 26 positives, 21 were immunised.

Of 74 Dick Tests, 9 reacted and 7 of these were immunised.

Ambulance Work.

| | Admissions. | Discharges. | Tuberculosis. | Disinfections. | Others. | Total. |
|-------------|-------------|-------------|---------------|----------------|---------|--------|
| Patients, - | 2,077 | 860 | 616 | — | 40 | 3,593 |
| Journeys, - | 1,786 | 262 | 197 | 41 | 64 | 2,350 |
| Mileages, - | 27,015 | 8,237 | 6,874 | 522 | 1,426 | 44,074 |

STATISTICS.

TABLE I.—ADMISSIONS (AS NOTIFIED) AND DISCHARGES DURING 1931, WITH THE NUMBERS IN HOSPITAL AT THE BEGINNING AND END OF THE YEAR.

| Disease. | In Hospital, 1st January, 1931. | | Admitted. | | Discharged. | | | | Remaining in Hospital 31st Dec., 1931. | |
|-----------------------|---------------------------------------|----|-----------|-------|-------------|-------|-------|----|---|-----|
| | | | | | Recovered. | | Died. | | | |
| | M. | F. | M. | F. | M | F. | M. | F. | M. | F. |
| Scarlet Fever, - - | 26 | 26 | 365 | 459 | 346 | 429 | 2 | 4 | 43 | 52 |
| Diphtheria, - - - | 14 | 19 | 259 | 296 | 231 | 278 | 13 | 2 | 29 | 35 |
| Enteric Fever, - - | 1 | 1 | 4 | 9 | 5 | 8 | — | 2 | — | — |
| Erysipelas, - - - | 1 | 2 | 20 | 37 | 19 | 34 | 2 | 4 | — | 1 |
| Puerperal Fever, - - | — | 9 | — | 132 | — | 115 | — | 21 | — | 5 |
| Tuberculosis, - - - | 3 | 1 | 33 | 50 | 27 | 48 | 9 | 2 | — | 1 |
| Measles, - - - - | — | — | 9 | 13 | 6 | 7 | — | 2 | 3 | 4 |
| Whooping Cough, - | — | — | 4 | 9 | 3 | 8 | 1 | 1 | — | — |
| Venereal Disease, - - | 2 | 4 | 55 | 56 | 50 | 50 | 4 | 1 | 3 | 9 |
| Pneumonia, - - - - | 25 | 12 | 256 | 127 | 217 | 108 | 48 | 27 | 16 | 4 |
| Others, - - - - - | 5 | 9 | 96 | 141 | 81 | 130 | 17 | 11 | 3 | 9 |
| | 77 | 83 | 1,101 | 1,329 | 985 | 1,215 | 96 | 77 | 97 | 120 |
| | 160 | | 2,430 | | 2,200 | | 173 | | 217 | |
| | 2,590 | | | | 2,590 | | | | | |

TABLE II.—ADMISSIONS AND DISCHARGES IN EACH MONTH OF THE YEAR 1931.

| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|----------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Admitted, - - | 212 | 207 | 261 | 181 | 193 | 165 | 175 | 142 | 202 | 240 | 198 | 254 | 2,430 |
| Discharged— | | | | | | | | | | | | | |
| Recovered, - - | 176 | 176 | 211 | 224 | 162 | 156 | 162 | 161 | 157 | 208 | 162 | 245 | 2,200 |
| Died, - - - - | 15 | 10 | 25 | 19 | 25 | 10 | 8 | 9 | 6 | 9 | 17 | 20 | 173 |

TABLE III.—AGE AND SEX OF PATIENTS DISCHARGED DURING THE YEAR 1931, WITH THE FATALITY RATE.

SCARLET FEVER.

| Age. | Male. | | | Female. | | | Total. | | |
|------------|------------|-------|--------------------|------------|-------|--------------------|------------|-------|--------------------|
| | Recovered. | Died. | Fatality per cent. | Recovered. | Died. | Fatality per cent. | Recovered. | Died. | Fatality per cent. |
| 0-1, | 2 | — | — | — | — | — | 2 | — | — |
| -2, | 11 | — | — | 11 | 1 | 8.3 | 22 | 1 | 4.3 |
| -3, | 25 | — | — | 19 | — | — | 44 | — | — |
| -4, | 34 | — | — | 40 | — | — | 74 | — | — |
| -5, | 47 | — | — | 45 | — | — | 92 | — | — |
| -6, | 41 | — | — | 44 | — | — | 85 | — | — |
| -7, | 33 | — | — | 32 | — | — | 65 | — | — |
| -8, | 26 | — | — | 31 | 1 | 3.1 | 57 | 1 | 1.7 |
| -9, | 21 | — | — | 26 | — | — | 47 | — | — |
| -10, | 20 | — | — | 21 | — | — | 41 | — | — |
| -15, | 38 | — | — | 68 | — | — | 106 | — | — |
| -20, | 11 | — | — | 14 | — | — | 25 | — | — |
| Over 20, | 15 | — | — | 37 | — | — | 52 | — | — |
| Total, - - | 324 | — | — | 388 | 2 | 0.5 | 712 | 2 | 0.28 |

TABLE III. (contd.)—DIPHTHERIA.

| Age | Male. | | | Female. | | | Total. | | |
|----------|------------|-------|--------------------|------------|-------|--------------------|------------|-------|--------------------|
| | Recovered. | Died. | Fatality per cent. | Recovered. | Died. | Fatality per cent. | Recovered. | Died. | Fatality per cent. |
| 0-1, | — | — | — | 3 | — | — | 3 | — | — |
| -2, | 9 | 1 | 10.0 | 2 | 1 | 33.3 | 11 | 2 | 15.3 |
| -3, | 9 | 3 | 25.0 | 8 | — | — | 17 | 3 | 15.0 |
| -4, | 9 | — | — | 6 | 1 | 14.2 | 15 | 1 | 6.2 |
| -5, | 13 | — | — | 13 | — | — | 26 | — | — |
| -6, | 12 | — | — | 13 | — | — | 25 | — | — |
| -7, | 11 | — | — | 12 | — | — | 23 | — | — |
| -8, | 9 | — | — | 13 | — | — | 22 | — | — |
| -9, | 7 | 2 | 22.2 | 19 | — | — | 26 | 2 | 7.1 |
| -10, | 9 | — | — | 4 | — | — | 13 | — | — |
| -20, | 24 | 2 | 7.6 | 49 | — | — | 73 | 2 | 2.6 |
| Over 20, | 13 | — | — | 10 | — | — | 23 | — | — |
| Total, | 125 | 8 | 6.0 | 152 | 2 | 1.2 | 277 | 10 | 3.48 |

TABLE IV.—THE STAGE OF THE DISEASE IN WHICH PATIENTS DISCHARGED IN 1931, WERE ADMITTED TO HOSPITAL.

| Disease. | Days of 1st Week. | | | | | | | Week of Illness. | | | | Total |
|--------------------|-------------------|-----|-----|-----|----|----|----|------------------|------|------|-----|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1st. | 2nd. | 3rd. | 4th | |
| Scarlet Fever, - - | 48 | 249 | 192 | 121 | 53 | 17 | 7 | 687 | 18 | 7 | 2 | 714 |
| Diphtheria, - - - | 15 | 76 | 77 | 51 | 26 | 13 | 9 | 267 | 16 | 3 | 1 | 287 |
| Enteric Fever, - - | — | — | — | — | — | — | 1 | 1 | 6 | 3 | — | 10 |
| Pneumonia, - - - | 4 | 29 | 51 | 52 | 41 | 28 | 21 | 226 | 38 | 8 | 4 | 276 |

TABLE V.—COMPLICATIONS OBSERVED IN PATIENTS DISCHARGED DURING 1931.

| Scarlet Fever. | Suppurative Cervical Adenitis. | Non-Suppurative Cervical Adenitis. | Otitis Media Purulenta. | Rhinorrhoea. | Cardiac Complications. | Nephritis. | Arthritis. | Mastoiditis. | Pulmonary Complications. | Skin Conditions. | Others. |
|-------------------------|--------------------------------|------------------------------------|-------------------------|--------------|------------------------|------------|------------|--------------|--------------------------|------------------|---------|
| In 712 Recovered Cases, | 14 | 91 | 47 | 73 | 9 | 14 | 8 | 4 | 6 | 24 | 58 |
| In 2 Fatal Cases, | — | — | — | 1 | — | — | — | — | 1 | — | — |
| In 714 Cases, - - | 14 | 91 | 47 | 74 | 9 | 14 | 8 | 4 | 7 | 24 | 58 |
| Percentage, - - | 1.9 | 12.7 | 6.5 | 10.3 | 1.2 | 1.9 | 1.1 | 0.5 | 0.9 | 3.3 | 8.1 |

| Diphtheria. | Adenitis. | Rhinitis. | Otitis Media. | Pneumonia. | Paralysis, all Forms. | Nephritis. | Albuminuria. | Serum Rashes. |
|-------------------------------|-----------|-----------|---------------|------------|-----------------------|------------|--------------|---------------|
| In 277 Recovered Cases, - - - | 2 | 5 | 1 | — | 12 | — | 3 | 32 |
| In 10 Fatal Cases, - - - | — | — | 2 | 4 | 3 | 1 | — | 1 |
| In 287 Cases, - - - | 2 | 5 | 3 | 4 | 15 | 1 | 3 | 33 |
| Percentage, - - - | 0.6 | 1.7 | 1.0 | 1.3 | 5.2 | 0.3 | 1.0 | 11.4 |

TABLE VI.—ADMISSIONS (AS NOTIFIED) SINCE OPENING OF HOSPITAL.

| Year. | Enteric Fever. | Scarlet Fever. | Diphtheria. | Erysipelas. | Puerperal Fever. | Measles. | Pulmonary Tuberculosis. | Non-Pulmonary Tuberculosis. | Cerebro-Spinal Fever. | Veneral Diseases. | Tinea. | Pneumonia. | Other Diseases | Total. |
|-------|----------------|----------------|-------------|-------------|------------------|----------|-------------------------|-----------------------------|-----------------------|-------------------|--------|------------|----------------|--------|
| 1897 | 19 | 70 | — | 1 | — | 9 | — | — | — | — | — | — | 5 | 104 |
| 1898 | 211 | 349 | 12 | 2 | 2 | 13 | — | — | — | — | — | — | 22 | 611 |
| 1899 | 235 | 571 | 21 | 5 | — | 1 | — | — | — | — | — | — | 16 | 849 |
| 1900 | 145 | 638 | 21 | 6 | 2 | 6 | — | — | — | — | — | — | 14 | 832 |
| 1901 | 291 | 621 | 31 | 7 | — | — | — | — | — | — | — | — | 14 | 964 |
| 1902 | 160 | 431 | 16 | 12 | — | 6 | — | — | — | — | — | — | 86 | 711 |
| 1903 | 174 | 187 | 22 | 14 | 1 | 2 | — | — | — | — | — | — | 17 | 417 |
| 1904 | 112 | 155 | 53 | 13 | 1 | 3 | — | — | — | — | — | — | 329 | 666 |
| 1905 | 300 | 114 | 66 | 12 | 4 | 1 | 23 | — | — | — | — | — | 93 | 613 |
| 1906 | 214 | 283 | 72 | 8 | 2 | 6 | 76 | — | 8 | — | — | — | 16 | 685 |
| 1907 | 99 | 317 | 283 | 4 | 9 | 2 | 106 | — | 94 | — | — | — | 16 | 930 |
| 1908 | 131 | 508 | 206 | 14 | 6 | 9 | 53 | — | 61 | — | — | — | 23 | 1,011 |
| 1909 | 109 | 834 | 164 | 11 | 10 | 3 | 1 | — | 10 | — | — | — | 9 | 1,151 |
| 1910 | 148 | 696 | 267 | 16 | 12 | 1 | 27 | — | 5 | — | — | — | 15 | 1,187 |
| 1911 | 122 | 670 | 248 | 16 | 12 | 4 | — | — | 7 | — | 67 | — | 47 | 1,193 |
| 1912 | 106 | 888 | 193 | 11 | 9 | 5 | 5 | 13 | 2 | — | 73 | — | 47 | 1,352 |
| 1913 | 126 | 838 | 246 | 12 | 6 | 2 | 16 | 37 | 7 | 2 | 61 | — | 15 | 1,368 |
| 1914 | 108 | 958 | 361 | 20 | 11 | 4 | 11 | 44 | 7 | 5 | 27 | — | 13 | 1,569 |
| 1915 | 115 | 750 | 286 | 25 | 12 | 4 | 18 | 65 | 29 | 4 | 26 | — | 30 | 1,364 |
| 1916 | 95 | 1,030 | 251 | 12 | 16 | 1 | 16 | 45 | 17 | 2 | — | — | 14 | 1,499 |
| 1917 | 92 | 642 | 191 | 17 | 13 | 22 | 3 | 120 | 26 | 99 | 4 | — | 26 | 1,255 |
| 1918 | 105 | 313 | 241 | 13 | 7 | 29 | 7 | 93 | 14 | 236 | 13 | — | 204 | 1,275 |
| 1919 | 118 | 595 | 280 | 16 | 28 | 24 | 11 | 87 | 24 | 111 | 6 | — | 155 | 1,455 |
| 1920 | 59 | 1,128 | 313 | 33 | 39 | 10 | — | 107 | 29 | 124 | 5 | 55 | 48 | 1,950 |
| 1921 | 107 | 1,047 | 250 | 38 | 54 | 1 | — | 156 | 12 | 123 | 19 | 51 | 50 | 1,908 |
| 1922 | 49 | 1,093 | 234 | 39 | 56 | 12 | — | 133 | 12 | 87 | 11 | 124 | 60 | 1,910 |
| 1923 | 61 | 931 | 254 | 47 | 56 | 7 | 11 | 122 | 9 | 91 | 5 | 87 | 67 | 1,748 |
| 1924 | 35 | 878 | 295 | 36 | 45 | 38 | 24 | 138 | 8 | 80 | 10 | 133 | 110 | 1,830 |
| 1925 | 25 | 922 | 285 | 44 | 44 | 5 | 24 | 84 | 2 | 106 | 11 | 123 | 96 | 1,771 |
| 1926 | 14 | 791 | 406 | 53 | 65 | 33 | 13 | 75 | 4 | 80 | 8 | 197 | 135 | 1,874 |
| 1927 | 9 | 452 | 419 | 47 | 88 | 11 | 7 | 62 | 5 | 105 | 16 | 259 | 193 | 1,673 |
| 1928 | 20 | 783 | 571 | 50 | 108 | 70 | 16 | 48 | 17 | 158 | 27 | 290 | 163 | 2,321 |
| 1929 | 11 | 732 | 643 | 60 | 111 | 4 | 8 | 28 | 10 | 111 | 14 | 347 | 214 | 2,293 |
| 1930 | 107 | 841 | 699 | 64 | 132 | 17 | 42 | 38 | 5 | 121 | 6 | 386 | 249 | 2,707 |
| 1931 | 13 | 824 | 555 | 57 | 132 | 22 | 58 | 25 | 5 | 111 | 5 | 383 | 240 | 2,430 |
| | 3845 | 22880 | 8455 | 835 | 1093 | 387 | 576 | 1520 | 429 | 1756 | 414 | 2435 | 2851 | 47,476 |

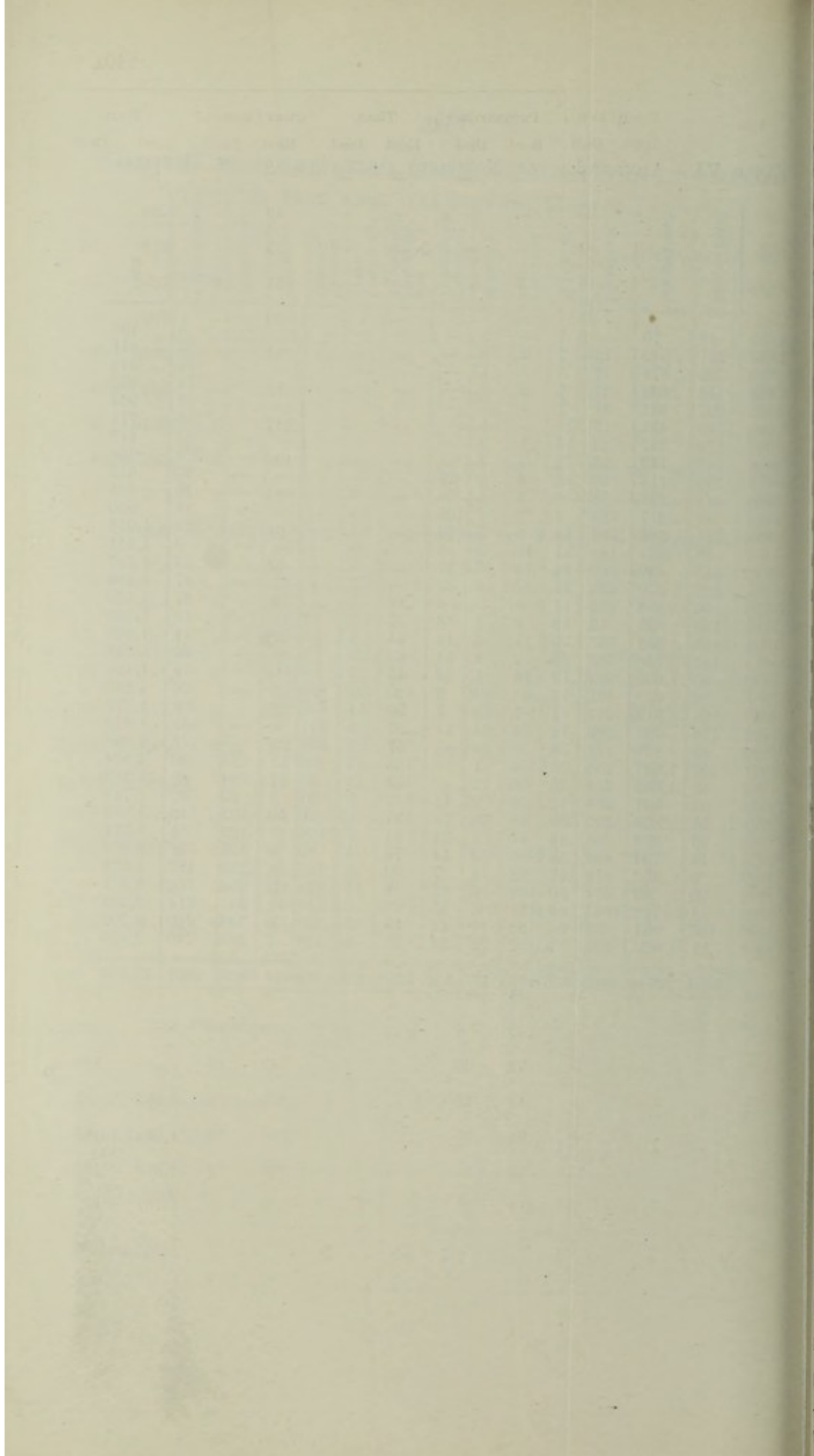


TABLE VII.—DISCHARGES SINCE OPENING OF HOSPITAL.

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| Years. | Enteric Fever. | | Scarlet Fever. | | Diphtheria. | | Erysipelas. | | Puerperal Fever. | | Measles. | | Pulmonary Tuberculosis. | | Non-Pulmonary Tuberculosis. | | Cerebro-Spinal Fever. | | Venereal Diseases. | | Pneumonia. | | Typhoid. | | Other Diseases. | | TOTAL. | |
|--------------------|----------------|-------|----------------|-------|-------------|-------|-------------|-------|------------------|-------|----------|-------|-------------------------|-------|-----------------------------|-------|-----------------------|-------|--------------------|-------|------------|-------|----------|-------|-----------------|-------|--------|-------|
| | Recd. | Died. | Recd. | Died. | Recd. | Died. | Recd. | Died. | Recd. | Died. | Recd. | Died. | Recd. | Died. | Recd. | Died. | Recd. | Died. | Recd. | Died. | Recd. | Died. | Recd. | Died. | Recd. | Died. | Recd. | Died. |
| 1897 | 11 | 1 | 43 | 2 | — | — | 1 | — | — | — | 1 | 1 | — | — | — | — | — | — | — | — | — | — | — | — | 2 | 1 | 58 | 5 |
| 1898 | 155 | 23 | 296 | 12 | 11 | — | 1 | 1 | — | — | 16 | 4 | — | — | — | — | — | — | — | — | — | — | — | — | 19 | — | 498 | 40 |
| 1899 | 201 | 24 | 536 | 20 | 15 | 4 | 3 | 1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 55 | 1 | 810 | 50 |
| 1900 | 134 | 14 | 592 | 15 | 16 | 2 | 5 | — | — | 1 | 7 | — | — | — | — | — | — | — | — | — | — | — | — | — | 31 | 3 | 785 | 35 |
| 1901 | 209 | 21 | 640 | 22 | 20 | 7 | 8 | 1 | — | — | 1 | — | — | — | — | — | — | — | — | — | — | — | — | — | 30 | — | 908 | 51 |
| 1902 | 183 | 27 | 438 | 20 | 14 | 2 | 10 | 1 | — | — | 6 | — | — | — | — | — | — | — | — | — | — | — | — | — | 84 | — | 735 | 50 |
| 1903 | 140 | 24 | 179 | 4 | 15 | 3 | 13 | 2 | 1 | — | 2 | — | — | — | — | — | — | — | — | — | — | — | — | — | 12 | — | 362 | 33 |
| 1904 | 88 | 13 | 171 | 7 | 44 | 9 | 12 | — | 1 | — | 1 | 1 | — | — | — | — | — | — | — | — | — | — | — | — | 347 | 5 | 664 | 35 |
| 1905 | 241 | 22 | 109 | 5 | 42 | 8 | 12 | 1 | 3 | 1 | 4 | 4 | 21 | 1 | — | — | — | — | — | — | — | — | — | — | 108 | 3 | 540 | 45 |
| 1906 | 192 | 19 | 241 | 4 | 44 | 11 | 4 | 2 | — | 1 | 6 | — | 62 | 13 | — | — | 1 | 5 | — | — | — | — | — | — | 65 | 2 | 615 | 57 |
| 1907 | 91 | 9 | 313 | 9 | 192 | 16 | 9 | 1 | 3 | — | 2 | 1 | 77 | 19 | — | — | 28 | 58 | — | — | — | — | — | — | 91 | 6 | 806 | 119 |
| 1908 | 107 | 13 | 425 | 8 | 170 | 17 | 12 | 3 | 3 | 2 | 9 | 2 | 55 | 10 | — | — | 21 | 30 | — | — | — | — | — | — | 56 | 6 | 858 | 91 |
| 1909 | 99 | 3 | 781 | 24 | 129 | 16 | 10 | 1 | 8 | 2 | 3 | — | 1 | — | — | — | 2 | 4 | — | — | — | — | — | — | 56 | 5 | 1,089 | 55 |
| 1910 | 117 | 5 | 678 | 16 | 226 | 22 | 13 | 1 | 5 | 8 | 7 | — | 28 | — | — | — | 1 | — | — | — | — | — | — | — | 52 | 10 | 1,127 | 62 |
| 1911 | 78 | 11 | 617 | 18 | 232 | 18 | 18 | — | 5 | 5 | 3 | — | 1 | 1 | 10 | — | 1 | 2 | — | — | — | — | 61 | — | 115 | 7 | 1,141 | 62 |
| 1912 | 58 | 10 | 748 | 22 | 136 | 15 | 11 | — | 3 | 5 | 6 | — | 2 | 2 | 4 | — | — | 1 | — | — | — | — | 76 | — | 226 | 5 | 1,270 | 60 |
| 1913 | 87 | 5 | 724 | 15 | 150 | 13 | 10 | 1 | 2 | 4 | 1 | 1 | 11 | 3 | 41 | 5 | 1 | — | — | — | — | — | 61 | — | 228 | 8 | 1,316 | 55 |
| 1914 | 75 | 10 | 833 | 27 | 228 | 38 | 15 | 4 | 9 | 2 | 2 | 1 | 5 | 4 | 37 | 4 | 1 | 1 | — | — | — | — | 27 | — | 205 | 11 | 1,437 | 102 |
| 1915 | 82 | 10 | 641 | 20 | 214 | 29 | 18 | 6 | 9 | 1 | 5 | 3 | 15 | 5 | 47 | 4 | 11 | 9 | — | — | — | — | 36 | — | 148 | 10 | 1,226 | 97 |
| 1916 | 82 | 10 | 1,017 | 23 | 214 | 27 | 13 | — | 8 | 7 | 1 | — | 6 | 5 | 63 | 2 | 3 | 5 | — | — | — | — | — | — | 84 | 5 | 1,491 | 84 |
| 1917 | 77 | 14 | 563 | 19 | 185 | 25 | 14 | 1 | 7 | 3 | 20 | 1 | 2 | 1 | 109 | 2 | 6 | 13 | 98 | — | — | — | 4 | — | 111 | 11 | 1,196 | 90 |
| 1918 | 42 | 15 | 269 | 11 | 135 | 18 | 11 | 4 | 3 | 3 | 29 | 7 | 7 | 2 | 83 | 10 | 1 | 4 | 231 | — | — | — | 13 | — | 334 | 35 | 1,158 | 109 |
| 1919 | 82 | 11 | 450 | 12 | 180 | 14 | 13 | — | 15 | 10 | 27 | 4 | 7 | 4 | 94 | 3 | 6 | 10 | 104 | 1 | — | — | 6 | — | 301 | 38 | 1,285 | 107 |
| 1920 | 39 | 3 | 985 | 10 | 191 | 19 | 24 | 4 | 25 | 11 | 16 | 3 | — | — | 103 | 7 | 1 | 13 | 124 | — | 33 | 17 | 5 | — | 226 | 18 | 1,772 | 105 |
| 1921 | 76 | 14 | 997 | 19 | 167 | 22 | 31 | 7 | 41 | 13 | 2 | — | — | — | 136 | 9 | 1 | 4 | 122 | 3 | 40 | 8 | 19 | — | 221 | 10 | 1,853 | 109 |
| 1922 | 29 | 3 | 979 | 18 | 147 | 31 | 31 | 5 | 43 | 14 | 22 | 6 | — | — | 132 | 10 | — | 4 | 66 | 4 | 79 | 25 | 11 | — | 249 | 12 | 1,788 | 132 |
| 1923 | 42 | 3 | 879 | 19 | 186 | 18 | 38 | 4 | 34 | 17 | 5 | 1 | 10 | 1 | 103 | 16 | 1 | 1 | 77 | 3 | 45 | 18 | 9 | — | 203 | 10 | 1,632 | 111 |
| 1924 | 21 | 1 | 818 | 16 | 189 | 18 | 27 | 1 | 35 | 13 | 39 | 11 | 20 | 1 | 111 | 22 | — | 10 | 54 | 7 | 65 | 25 | 10 | — | 295 | 23 | 1,684 | 148 |
| 1925 | 14 | 3 | 800 | 16 | 179 | 11 | 39 | 4 | 31 | 14 | 6 | 1 | 20 | 4 | 90 | 7 | — | 2 | 93 | 1 | 70 | 19 | 11 | — | 297 | 30 | 1,650 | 112 |
| 1926 | 13 | 2 | 707 | 7 | 237 | 13 | 41 | 7 | 33 | 20 | 39 | 2 | 10 | 3 | 60 | 10 | 1 | 3 | 61 | 2 | 114 | 31 | 8 | — | 377 | 35 | 1,701 | 135 |
| 1927 | 1 | 1 | 465 | 3 | 280 | 7 | 41 | 4 | 56 | 24 | 6 | 1 | 6 | 1 | 47 | 13 | — | 6 | 76 | 3 | 135 | 41 | 16 | — | 470 | 38 | 1,599 | 142 |
| 1928 | 12 | 2 | 661 | 5 | 353 | 20 | 40 | 4 | 73 | 31 | 78 | 5 | 13 | 3 | 41 | 15 | 1 | 7 | 114 | 2 | 144 | 52 | 27 | — | 577 | 32 | 2,134 | 178 |
| 1929 | 9 | 1 | 676 | 2 | 325 | 12 | 46 | 5 | 87 | 22 | 14 | — | 6 | 2 | 22 | 9 | 6 | 4 | 88 | 2 | 197 | 69 | 14 | — | 659 | 40 | 2,149 | 160 |
| 1930 | 71 | 2 | 757 | 3 | 353 | 21 | 51 | 4 | 92 | 25 | 24 | 8 | 42 | 3 | 17 | 20 | 1 | 4 | 97 | 3 | 217 | 77 | 6 | — | 769 | 42 | 2,497 | 212 |
| 1931 | 7 | 3 | 712 | 2 | 277 | 10 | 36 | 4 | 104 | 21 | 21 | 4 | 58 | — | 16 | 10 | 2 | 3 | 76 | 4 | 205 | 71 | 5 | — | 681 | 41 | 2,200 | 173 |
| Total | 2,965 | 352 | 20,740 | 455 | 5,496 | 516 | 681 | 85 | 739 | 280 | 431 | 72 | 485 | 88 | 1,366 | 178 | 97 | 203 | 1,481 | 35 | 1,344 | 453 | 425 | — | 7,784 | 503 | 44,034 | 3,220 |
| Fatality per cent. | 10.6 | | 2.1 | | 8.5 | | 11.0 | | 27.4 | | 14.3 | | 15.5 | | 11.5 | | 67.6 | | 2.3 | | 25.2 | | — | | 6.0 | | 6.8 | |

Lightburn Joint-Hospital.

Annual Report, 1931.

Resident Physician—H. MUIR DAVIE, M.B., Ch.B.

Matron—Miss M. TOWNSEND, R.R.C.

The admissions and discharges during the year, classified according to the disease notified, and to constituent authority, are shown in Table A and Table B respectively.

TABLE A.

| Disease. | | In Hospital 1st Jan., 1931. | Admitted. | Discharged. | | In Hospital. 31st Dec., 1931. |
|-------------------------------|-----|--------------------------------|-----------|-------------|-------|----------------------------------|
| | | | | Recovered. | Died. | |
| Scarlet Fever, | ... | 52 | 429 | 391 | 7 | 83 |
| Diphtheria, | ... | 19 | 171 | 164 | 10 | 16 |
| Pneumonia, | ... | 21 | 161 | 136 | 33 | 13 |
| Erysipelas, | ... | — | 18 | 15 | 1 | 2 |
| Tuberculosis, | ... | 1 | 2 | — | 3 | — |
| Cerebro-spinal Meningitis, | ... | 1 | 10 | 2 | 7 | 2 |
| Measles, | ... | — | 2 | 2 | — | — |
| Enteric Fever, | ... | — | 2 | — | — | 2 |
| Other Diseases,* | ... | — | 7 | 4 | — | 3 |
| | | 94 | 802 | 714 | 61 | 121 |

*Eczema, 1; Empyema, 1; Enteritis, 1; Observation, 1; Tonsillitis, 1; Pleurisy, 2.

TABLE B.

Admissions classified according to constituent authority.

| Disease. | | | | | | County of Lanark. | City of Glasgow. |
|--------------------------------|-----|-----|-----|-----|-----|-------------------------|---------------------|
| Scarlet Fever, ... | ... | ... | ... | ... | ... | 399 | 30 |
| Diphtheria, ... | ... | ... | ... | ... | ... | 146 | 25 |
| Pneumonia, ... | ... | ... | ... | ... | ... | 129 | 32 |
| Erysipelas, ... | ... | ... | ... | ... | ... | 10 | 8 |
| Tuberculosis, ... | ... | ... | ... | ... | ... | 2 | — |
| Cerebro-spinal Meningitis, ... | ... | ... | ... | ... | ... | 9 | 1 |
| Measles, ... | ... | ... | ... | ... | ... | 2 | — |
| Enteric Fever, ... | ... | ... | ... | ... | ... | 2 | — |
| Other Diseases, ... | ... | ... | ... | ... | ... | 7 | — |
| | | | | | | 706 | 96 |

Compared with last year's figures, there was an increase in the total number of cases admitted, due mainly to an increase in the scarlet fever cases, the numbers of other diseases remaining fairly constant.

At the beginning of the year there were 94 cases in residence. The number of admissions was 802, making a total of 896. Of these, 714 were discharged well and 61 died, leaving 121 cases in hospital at the end of the year.

The fatality rate, calculated on all the cases discharged, was 7.8 per cent. This figure includes all cases dying in hospital, including 7 cases which were moribund on admission and died within a few hours.

The average monthly rate of admission was 66, the lowest number of admissions occurring in July and the highest number in October, the figures being 44 and 95 respectively.

The average daily number of patients resident was 88, the highest number in residence being 129 on 29th December, and the lowest number 54 on 19th August.

The number of diseases admitted during the year was reduced owing to the centralisation of cases of puerperal sepsis and ophthalmia neonatorum at Motherwell.

Throughout the greater part of the year the hospital was again distinctly overcrowded. The lack of facilities for the isolation of doubtful cases and of cases of mixed infection detracts very considerably from the efficiency of the hospital. The present necessity for putting doubtful cases into the same ward as true cases, and also of allowing secondary infections to travel throughout a ward owing to lack of space for isolation, is bad for the morale of the staff and inevitably detracts from the good name of the hospital in the eyes of the public.

Scarlet Fever.

52 cases of scarlet fever were in hospital at the beginning of the year. The number of cases admitted was 429. In 40 cases the diagnosis was revised. Of the 441 true cases, 353 were discharged well and 5 cases died, leaving 83 cases in hospital at the end of the year.

REMOVAL TO HOSPITAL was carried out in 94 per cent. of cases in the first week of illness, 3.2 per cent. in the second week, and 2.8 per cent. in the third week or later. The average duration of disease on admission was four days.

THE AVERAGE DURATION OF RESIDENCE of mild cases was 34 days, of severe cases 80 days, and of fatal cases 9 days.

REVISED DIAGNOSIS.—The diagnosis was revised in 40 cases as follows:—Diphtheria, 3; doubtful, 22; negative, 12; pneumonia, 2; whooping-cough, 1.

TYPE OF DISEASE.—The disease proved generally to be of a slightly more severe type than in recent years. Of the 358 cases discharged, 293 were classified as mild, 51 as moderately severe, and 14 as very severe. Of the last group 7 were of the septic type.

THE FATALITY RATE as calculated on discharges was 1.39 per cent. Of the 5 fatal cases, 4 were of the septic type and the other died of nephritis and purpura.

COMPLICATIONS.—107 cases, or 26.9 per cent., of discharges developed one or more complications, as follows:—

Glands.—34 cases, or 8.5 per cent., of discharges had glandular enlargement. In 4 of these suppuration resulted.

Ear.—30 cases, or 7.5 per cent., developed otitis media. In 1 of these mastoidectomy was required. 1 case was discharged with the ear still moist.

Nose.—30 cases, or 7.5 per cent., developed rhinitis.

Joints.—8 cases, or 2 per cent., developed arthritis.

Kidneys.—10 cases, or 2.5 per cent., had true nephritis. There were 9 cases of mild albuminuria.

Heart.—In 2 cases organic disease developed. 2 cases had functional heart murmurs and 6 cases arrhythmia.

Lungs.—Bronchitis, 2; pneumonia, 2.

Sepsis.—Abscesses, 2; cellulitis of neck, 1; maxillary antrum suppuration, 1; paronychia, 29.

Other Complications.—Enteritis, 4; jaundice, 1; laryngitis, 1; tonsillitis, 5.

OTHER CONDITIONS PRESENT ON ADMISSION.—Asthma, 1; burn, 1; blepharitis, 1; chronic otitis media, 1; paronychia, 3; septic wound, 2.

MIXED INFECTION.—Chicken-pox, 1; diphtheria, 6; measles, 21.

ANTITOXIN.—All the severe and moderately severe cases were given scarlet fever antitoxin and 12 cases had diphtheria antitoxin in addition. In most cases beneficial results were noticed.

Diphtheria.

19 cases were in hospital at the beginning of the year. 171 cases were admitted, of whom 29 were wrongly diagnosed. Of the 161 proved cases, 135 were discharged well and 10 died, leaving 16 cases in residence at the close of the year.

REMOVAL TO HOSPITAL was carried out within the first three days in 59.5 per cent. of cases. The average number of days which had elapsed in fatal cases was 6 days.

THE AVERAGE DURATION OF RESIDENCE of recovered cases was 38.2 days and of fatal cases 15 days.

ALTERED DIAGNOSIS.—In 29 cases the diagnosis was altered as follows:—Laryngitis, 1; lobar pneumonia, 1; periostitis, 1; positive swab, 17; scarlet fever, 3; sore throat, 1; stomatitis, 1; tonsillitis, 3; quinsy, 1.

TYPE OF DISEASE:—

FAUCIAL DIPHTHERIA.—In 126 cases, including 4 fatal cases, the fauces were affected.

Mild.—62 cases were of a mild type, with little toxæmia. The average amount of antitoxin given was 12,000 units.

Complications.—Albuminuria, 2; cardiac arrhythmia, 4; serum rash, 5.

Moderate.—54 cases, with more extensive lesions and well-marked toxæmia, were classed as moderately severe. The average amount of antitoxin given to these was 25,000 units. 4 cases had, in addition, scarlet fever antitoxin.

Complications.—Adenitis, 3; albuminuria, 4; arrhythmia, 6; mastoiditis, 1; otitis media, 2; palatal paresis, 2; serum rash, 3; tonsillitis, 1.

Severe.—10 cases, including 4 fatal cases, had extensive local lesions and profound toxæmia. The average amount of serum given was 55,000 units, while in 5 cases scarlet fever antitoxin was given in addition.

Complications.—Albuminuria, 5; anuria, 1; arrhythmia, 5; palatal paresis, 3; paresis of legs, 1; serum rash, 2.

LARYNGEAL DIPHTHERIA.—In 2 cases the larynx alone was involved, and in 8 cases the fauces also were affected. 1 of the former died. The average amount of antitoxin given was 36,000 units. The fatal case had also scarlet fever antitoxin.

Complications.—Arrhythmia, 1; otitis media, 1; palatal paresis, 1; serum rash, 2; strabismus, 1; streptococcal tonsillitis, 1.

Tracheotomy.—In 2 cases the stenosis was so severe as to require tracheotomy. Both recovered.

FAUCIAL AND NASAL DIPHTHERIA.—In 9 cases, including 5 fatal cases, the fauces and nose were involved. All these cases were severe. The average amount of antitoxin given was 60,000 units.

Complications.—Arrhythmia, 5; albuminuria, 4; mastoiditis, 1; palatal paresis, 1.

FATAL CASES.—Of the 10 fatal cases, 4 were faucial, 5 were faucial and nasal, and 1 was laryngeal. The average period of residence was 15 days. The average duration of disease before admission was 5 days. The laryngeal case was admitted moribund. The average amount of antitoxin given was 60,000 units.

THE FATALITY RATE, calculated on the clinical cases, was 6·8 per cent.

OTHER CONDITIONS PRESENT.—Arthritis, 1; blepharitis, 1; cardiac murmur, 2; enteritis, 1; furunculosis, 1; pyelitis, 1.

MIXED INFECTION.—Scarlet fever, 11.

ANTITOXIN.—10 cases, or 5·6 per cent., of discharges had antitoxin before admission to hospital. The average amount given to all cases discharged throughout the year was 22,000 units. Messrs. Burroughs, Wellcome, & Company's concentrated serum was used throughout the year.

Pneumonia.

21 cases were in hospital at the beginning of the year. 161 cases were admitted, of whom 27 were wrongly diagnosed. Of the 155 true cases, 27 died and 115 were discharged well, leaving 13 cases in hospital at the end of the year.

CLASSIFICATION OF DISEASE.—Acute lobar pneumonia, 92; broncho-pneumonia, 52; influenzal pneumonia, 10; unresolved pneumonia, 1.

THE AVERAGE DAY OF DISEASE on admission of all cases was 5.8 days.

THE FATALITY RATE calculated on discharges was 19 per cent. This figure includes 6 cases which were moribund on admission and died within a few hours.

Complications.—Albuminuria, 2; cardiac arrhythmia, 1; convulsions, 2; empyema, 6; enteritis, 5; otitis media, 1; pleurisy with effusion, 5.

OTHER CONDITIONS PRESENT.—Measles, 4; whooping-cough, 6.

CORRECTED DIAGNOSIS.—Acute appendicitis, 1; bronchial catarrh, 3; bronchitis, 2; cardiac disease, 1; diphtheria, 1; empyema, 1; influenza, 3; hyperemesis gravidarum, 1; pleurisy with effusion, 5; pulmonary tuberculosis, 3; rheumatic fever, 1; tuberculous meningitis, 1; whooping-cough, 4.

Erysipelas.

No cases were in hospital at the beginning of the year. 18 cases were admitted, 15 of whom were discharged well and 1 case died, leaving 2 cases in hospital at the end of the year.

THE AVERAGE AGE was 38 years.

THE AVERAGE DURATION OF RESIDENCE was 25 days.

SITUATION OF DISEASE.—Face, 10; leg, 2; scalp, 3; wandering, 1.

Complications.—Albuminuria, 1; otitis, 1; positive swab, 1; residual abscess, 2.

FATAL CASE.—The fatal case was a woman of 68 years, suffering from carcinoma of the throat, the erysipelas being a terminal condition.

Tuberculosis.

1 case was in hospital at the beginning of the year. 2 cases were admitted. Of these 3 cases, 1 was wrongly diagnosed and the other two proved to be cases of tuberculous meningitis. Both died.

ALTERED DIAGNOSIS.—Lung abscess, 1.

Cerebro-Spinal Meningitis.

1 case was in hospital at the beginning of the year and 10 cases were admitted. Of these 11 cases, 4 only proved to be true cases, 1 case recovered, and 3 died.

FATAL CASES.—Of the 3 fatal cases, one was a man of 26 years, who died shortly after admission, the diagnosis being confirmed *post-mortem*. The other two were girls of 11 years and 2 years respectively, both of whom improved for a time, but lapsed into the chronic stage and died after long illness.

ALTERED DIAGNOSIS.—Cavernous sinus thrombosis, 1; encephalitis, 1; enteritis, 1; influenza, 1; meningismus, 1; tuberculous meningitis, 2. Of these 7 cases, 3 died and 2 remained in hospital at the end of the year.

Measles.

Only 2 cases of measles were admitted during the year. Both cases were adult females and were discharged well.

TYPE OF DISEASE.—Both cases were severe, but uncomplicated.

Miscellaneous Cases Discharged.

Empyema, 1; pleurisy with effusion, 1; skin disease, 1; streptococcal tonsillitis, 1.

Ambulance Work.

| | Miles. |
|--------------------|--------|
| Admissions, | 6,503 |
| Discharges, | 2,758 |
| Other runs, | 3,263 |
| | <hr/> |
| | 12,524 |
| | <hr/> |

Grounds and Buildings.

During the year a considerable amount of work was carried out on the hospital buildings.

The whole of the external joiner work, slating, gutters, &c., of all the buildings were overhauled and renovated where necessary by the County Works Department.

Pavilions III and V, the operating theatre, and part of the administrative block were redecorated.

The north boundary wall was taken down and rebuilt, and the other boundary walls repaired and pointed where necessary.

Staff.

The staff at the end of the year comprised :—1 resident physician, 1 matron, 5 sisters, 2 staff nurses, and 21 probationer nurses.

The domestic staff consisted of 1 cook and 15 maids.

The outdoor staff comprised 1 foreman mechanic, 2 firemen, 1 chauffeur, and 1 gardener.

The health of the staff throughout the year was satisfactory.

Infectious Diseases Hospital and Sanatorium, Roadmeetings.

Annual Report, 1931.

Resident Physician—EFFIE S. STEPHEN, M.B., Ch.B., D.P.H.

Matron—MISS RAMSAY.

Infectious Diseases Hospital.

Admissions (as notified) and discharges during 1931, with the number in hospital at the beginning and end of the year.

| DISEASE. | In Hospital | | | | Admitted. | | DISCHARGED. | | | | Remaining in Hospital 31/12/31. | |
|---|-------------------|----|------------|-----|-----------|-----|-------------|----|----|----|---------------------------------------|--|
| | 1st Jan. 1931. | | Recovered. | | | | Died. | | | | | |
| | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | | |
| Scarlet Fever, - - | 17 | 23 | 110 | 150 | 114 | 155 | — | — | 13 | 18 | | |
| Diphtheria, - - | 10 | 7 | 75* | 80* | 71 | 76 | 5 | 4 | 5 | 11 | | |
| Enteric and Paraty- phoid Fever, - - | — | — | 4 | 1 | 4 | 1 | — | — | — | — | | |
| Pneumonia, - - | 1 | — | 8 | 6 | 7 | 6 | 2 | — | — | — | | |
| Erysipelas, - - | — | — | 2 | 2 | 2 | 1 | — | 1 | — | — | | |
| Others, - - | — | — | 5 | 21 | 3 | 20 | — | — | 2 | 1 | | |
| <hr/> | | | | | | | | | | | | |
| | 28 | 30 | 204 | 260 | 201 | 259 | 7 | 5 | 20 | 30 | | |
| | 58 | | 464 | | 460 | | 12 | | 50 | | | |
| | 522 | | | | 522 | | | | | | | |

*2 Readmissions.

These admissions include 25 from the Burgh of Lanark, 10 from the Burgh of Biggar, and 12 members of staff who were warded with minor or other complaints.

At the beginning of 1931, 58 cases were in residence. During the year 464 were admitted, making a total of 522. Of these, 460 were discharged recovered or improved, 12 died, and 50 were in hospital at the end of the year.

The majority of admissions were cases of scarlet fever and diphtheria. The number of admissions from all diseases was greatest in the month of November, the total for the month being 74. The lowest number of admissions occurred in August, the total being 20. The greatest number of patients admitted in one day was 7. The average monthly rate of admissions was 38·8.

The average duration of residence of all cases discharged was 38·9 days; of recovered cases, 39·9 days; and of fatal cases, 8·4 days.

The fatality rate calculated on all cases discharged was 2·6 per cent.

Scarlet Fever.

40 cases were in hospital on January 1st, 1931. During the year 260 were admitted. In 19 cases the diagnosis was revised. Of these 281 cases, 250 were discharged well and 31 were in hospital on 31st December, 1931.

Removal to Hospital was carried out in 95·5 per cent. of the cases in the first week of illness, 2·6 per cent. in the second week, and 1·8 per cent. in the third week or later.

The Average Day of Disease of all cases was 3·3 days.

The Average Duration of Residence of all cases was 44·9 days.

Type of Disease.—179 or 66·5 per cent. of the total discharges were classified as mild; 22 or 8·2 per cent. as moderately ill; and 9 or 3·3 per cent. as severe.

The Fatality Rate.—There were no deaths.

Corrected Diagnosis.—The diagnosis was revised in 19 cases. These were:—Acute rheumatism, 1; cellulitis of scalp, 1; doubtful, 2; erythema, 1; gastro-enteritis, 1; measles, 2; pregnancy and nephritis, 1; not verified, 6; otorrhœa, 1; tonsillitis, 1; septic rash, 1; whooping-cough, 1.

COMPLICATIONS.—39·2 per cent. of the cases discharged had one or more complications.

Glands.—22 or 8·8 per cent. showed glandular enlargement. Non-suppurative adenitis, 21; suppurative adenitis, 1.

Ear.—24 or 9·6 per cent. developed otitis media.

Nose.—18 or 7·2 per cent. developed rhinitis.

Heart.—5 or 2 per cent. showed arrhythmia.

Joints.—2 developed arthritis; 6 had rheumatic pains.

Kidney.—1 pyelitis; 4 or 1·7 per cent. nephritis; pyuria, 1; 10 or 4 per cent. slight albuminuria.

Sepsis.—Axillary abscess, 1; sores, 9.

Others.—Swab positive, 25, 2 of which were virulent; urticaria, 2; quinsy, 2; tonsillitis, 3; erysipelas, 1; epistaxis, 1; chickenpox, 1; serum rash, 4; secondary rash, 1; conjunctivitis, 2; ulcerative stomatitis, 1; measles, 2; cellulitis of scalp, 1; dacryocystitis, 1; chronic dermatitis, 1; diphtheria, 1.

Other conditions present on admission and not related to the attack of Scarlet Fever.—Mental defectives, 2 (1 mongol); epilepsy, 2; endocarditis, 1; blepharitis, 1; chickenpox, 2; pyorrhœa, 1; systolic bruit of heart, 1; alopecia areata, 1; bronchitis, 2; T.B. abdomen, 1; septic fingers, 3; impetigo, 3; infantile paralysis, 1; acne, 1; urticaria, 2; injury to knee, 1; hæmorrhoids, 1; amenorrhœa, 1; glycosuria, 1; rhinorrhœa, 2; double talipes, 1; albuminuria of pregnancy, 1; pulmonary tuberculosis, 1; anæmia, 1; enema rash, 1; burn of leg, 4.

Scarlet Fever Antitoxin was given in 30 cases. Of these 8 were mild, 16 moderately ill, and 6 severe. The average dose was 10·5 c.c. 6 cases developed serum rashes; 7 or 23·3 per cent. developed one or more complications.

Diphtheria Antitoxin was given in 45 cases. The average dose was 6,000 units.

Mixed Infection.—Measles, 1; chickenpox, 2; diphtheria, 2.

Return Cases.—28 days has been taken as the period within which a case is regarded as a "return." Six cases presumably infected six others. These return cases occurred from 3 to 20 days after the dismissal of the "infecting" cases. All the infecting cases were clean, and had no discharge either while in hospital or on dismissal.

Diphtheria.

17 cases were in hospital on 1st January, 1931. 155 were admitted as such, 44 were wrongly diagnosed, and 1 other proved to be suffering from diphtheria. Of these 129 patients, 104 were discharged recovered, 9 died, and 16 were in hospital on 31st December, 1931.

Removal to Hospital was carried out within the first 3 days of illness in 48.9 per cent. of all cases. In the fatal cases the average duration of illness prior to admission was 4.1 days.

The Average Day of Disease on admission of all cases was 3.2 days.

Duration of Residence.—The average duration of residence of all cases was 37.3 days, of recovered cases 39.7 days, and of fatal cases 8.9 days.

TYPE OF DISEASE.

1. FAUCIAL DIPHTHERIA.—In 88 cases the faucial region of the throat was affected.

(a) *Mild.*—47 cases were of the mild type, 3 cases had serum prior to admission. The average amount of serum given in hospital was 15,600 units.

Complications and Sequelæ.—Albuminuria, 3; bradycardia, 2; cardiac irregularity, 1; cervical adenitis, 1; rhinorrhœa, 1; systolic bruit, 1; serum rashes, 7.

MIXED INFECTION.—Chickenpox, 1.

(b) *Moderate.*—31 cases were moderately ill. The average amount of serum given in hospital was 31,300 units. 1 case had also scarlet antitoxin.

Complications and Sequelæ.—Albuminuria, 2; cervical adenitis, 1; serum rashes, 10; tonsillitis, 2; tachycardia and irregularity, 1.

(c) *Severe.*—10 cases were of the severe type, 2 of whom died. The average amount of serum given was 52,000 units. 2 cases also received scarlet fever antitoxin.

Complications and Sequelæ.—Albuminuria, 3; palatal paralysis, 2; serum rashes, 6.

II. LARYNGEAL DIPHTHERIA.—3 cases were admitted with laryngeal diphtheria.

III. FAUCIAL AND LARYNGEAL DIPHTHERIA.—Fauces and larynx were involved in 4 cases. The average amount of serum given was 36,000 units.

Complications.—Albuminuria, 2; palatal paralysis, 1; serum rash, 1.

IV. NASAL DIPHTHERIA.—1 severe case was admitted.

Complications.—Vaccination and gastro-enteritis.

V. FAUCIAL AND NASAL.—Fauces and nose were involved in 9 cases, including 4 fatal cases. 1 was mild; 1 moderately ill; and 7 severe. The average amount of serum given for severe cases was 68,000 units. 5 cases had scarlet fever antitoxin.

Complications.—Albuminuria, 2; cardiac paralysis, 1; cervical adenitis, 1; otorrhœa, 1; retropharyngeal abscess, 1; serum rash, 1.

VI. FAUCIAL, NASAL, AND LARYNGEAL.—Fauces, nose, and larynx were involved in 4 cases, including 2 fatal cases. The average amount of serum given was 47,000 units. 2 cases had scarlet fever serum.

Complications.—Tracheotomy, 1; palatal paralysis, 1; serum rashes, 2.

VII. FAUCIAL, NASAL, AND CONJUNCTIVAL.—1 patient was admitted moderately ill. The average amount of serum given was 48,000 units.

CORRECTED DIAGNOSIS.—Swab positive, 26; tonsillitis, 7; scarlet fever, 3; septic pneumonia, 1; influenza, 1; bronchitis, 1; negative, 4; cellulitis of face, 1. 1 case had also chickenpox.

FATALITY RATE.—9 cases or 7 per cent. of the clinical cases were fatal. Of the 9 cases, 5 were males, 4 were females. The average age was 4.6 years. The average duration of illness prior to admission was 4.1 days. The average residence in hospital was 8.8 days. The average amount of serum given in 8 cases was 65,000 units. 1 other case was moribund on admission and no serum was given.

Enteric Fever.

5 cases were admitted as such. All 5 cases recovered.

Removal to Hospital was carried out during the first week of illness in 3 cases, and during the second week in 2.

The Average Day of Disease was 17·9 days.

The Average Duration of Residence in Hospital was 49·3 days.

The Average Age was 31·4 years.

Sex.—Males, 4; female, 1.

Type of Disease.—5 cases were due to bacillus paratyphosus B. 1 was a paratyphoid carrier; 3 were mild and 1 moderately severe.

Erysipelas.

4 cases were admitted as such, 2 males and 2 females. 3 cases were facial and mild, and 1, a female, was severely ill and died.

Pneumonia.

1 case was in residence at the beginning of the year. During the year 14 cases were admitted. In 4 cases the diagnosis was revised. Of the 11 cases, 9 recovered and 2 died.

Classification.—Lobar pneumonia, 7; broncho pneumonia, 4.

Situation of the Lesion in Lobar Cases.—Right base, 4; apex, 1; whole lung, 1; left base, 1.

The Average Day of Disease of all cases on admission was 4·9 days; of all recovered cases 3·8 days and of fatal cases 9·5 days.

The Average Duration of Residence of all cases was 24·63 days; of recovered cases 29·7 days and of fatal cases 1 day.

The Fatality Rate was 18 per cent.

Complications.—Urticaria, 1; pleurisy and rheumatism, 1.

CORRECTED DIAGNOSIS. — Bronchitis, 2; pulmonary T.B., 1; gangrene of lung, 1.

OTHER CONDITIONS PRESENT ON ADMISSION.—Mental deficiency, 1; otorrhœa, 1; dermatitis, 1.

MISCELLANEOUS CASES.

| | Recovered. | Died. |
|---------------------------------|------------|-------|
| Septic Bursitis, - - - - - | 1 | — |
| Chickenpox, - - - - - | 2 | — |
| Marasmus, - - - - - | 1 | — |
| Whooping Cough, - - - - - | 5 | — |
| Influenza, - - - - - | 5 | — |
| Conjunctivitis, - - - - - | 1 | — |
| Flat-foot, - - - - - | 1 | — |
| Tonsillitis, - - - - - | 1 | — |
| Tuberculous Adenitis, - - - - - | 1 | — |
| Furunculosis, - - - - - | 1 | — |
| Gastro-Enteritis, - - - - - | 1 | — |
| Acute Rheumatism, - - - - - | 1 | — |
| T.B. Mastoid, - - - - - | 1 | — |

SANATORIUM.

Admissions and Discharges.—

| In Residence 1st Jan., 1931. | Admitted | Discharged | Died | In Residence 31st Dec., 1931. |
|---------------------------------|----------|------------|------|----------------------------------|
| 19 | 42 | 26 | 12 | 23 |

1 patient was readmitted and completed the second period of residence in hospital. Statistics deal with 38 patients discharged or died during the year. Of these cases, 26 were pulmonary, 6 non-pulmonary, 2 tuberculised, and 4 non-tuberculous.

Places of Residence—

| | | | |
|------------|---|----------------|---|
| Blantyre | 1 | Lamington | 1 |
| Carstairs | 2 | Larkhall | 1 |
| Cobbinshaw | 1 | Lanark | 5 |
| Carmichael | 1 | Lesmahagow | 3 |
| Carnwath | 4 | Leadhills | 1 |
| Carluke | 5 | Kirkfieldbank. | 1 |
| Coalburn | 1 | New Lanark | 2 |
| Dolphinton | 1 | Stonehouse | 1 |
| Forth | 1 | Uddingston | 1 |
| Law | 5 | | |

Age and Sex.—The cases discharged are shown in the following table classified according to age and sex, and according to age groups for both sexes. In each group the number of pulmonary, non-pulmonary, tubercled, and non-tuberculous is shown :—

| Age Groups. | Males. | Females. | Total. | | Pul. | Non Pul. | Tuber- culised. | Non Tb. | Total. |
|-------------|--------|----------|--------|----------------|------|----------|-----------------|---------|--------|
| - 5 | 1 | 6 | 7 | Pre-school age | 2 | 3 | 1 | 1 | 7 |
| - 10 | 2 | — | 2 | School age | — | 1 | 1 | — | 2 |
| - 15 | 2 | 2 | 4 | | 2 | 2 | — | — | 4 |
| - 20 | 1 | 4 | 5 | Adolescence | 4 | — | — | 1 | 5 |
| - 25 | — | 2 | 2 | | 1 | — | — | 1 | 2 |
| - 30 | 2 | 2 | 4 | Early Maturity | 4 | — | — | — | 4 |
| - 35 | 1 | 1 | 2 | | 2 | — | — | — | 2 |
| - 40 | 2 | — | 2 | | 2 | — | — | — | 2 |
| - 45 | 2 | 1 | 3 | | 2 | 1 | — | — | 3 |
| - 50 | 1 | 2 | 3 | Late Maturity | 3 | — | — | — | 3 |
| - 55 | 1 | — | 1 | | 1 | — | — | — | 1 |
| - 60 | — | 1 | 1 | | 1 | — | — | — | 1 |
| - 65 | — | — | — | | — | — | — | — | — |
| - 70 | 2 | — | 2 | | 2 | — | — | — | 2 |
| | 17 | 21 | 38 | | 26 | 7 | 2 | 3 | 38 |

Duration of Residence.

| | Maximum. | Minimum. | Average. |
|------------------------|----------|----------|-----------|
| Pulmonary, - - - | 314 days | 8 days. | 133 days. |
| Non-Pulmonary, - - - | 309 „ | 22 „ | 162 „ |
| Tubercled, - - - | 96 „ | 19 „ | 57 „ |
| Non-Tuberculous, - - - | 204 „ | 30 „ | 93 „ |

Transfers to other Institutions.—Hairmyres, 2; Glasgow Royal Infirmary, 1.

Pulmonary Cases discharged—

26.

Duration of Illness recorded at time of admission and stated in monthly periods was as follows :—

| Classification on Admission. | 1-3 | 3-6 | 6-12 | 12-18 | 18-24 | Over 24 | Total |
|------------------------------|-----|-----|------|-------|-------|---------|-------|
| GI, | — | 1 | 1 | — | — | 2 | 4 |
| GII, | — | 1 | 2 | 4 | — | 3 | 10 |
| GIII, | 2 | 1 | 2 | — | — | 7 | 12 |

Duration of Illness of Fatal Cases.—10 cases died and the duration of illness from the date of onset to that of death recorded in monthly periods was as follows:—

| 1-3 | 3-6 | 6-12 | 12-18 | 18-24 | Over 24 |
|-----|-----|------|-------|-------|---------|
| — | 2 | 1 | 2 | — | 5 |

General Results of Treatment—

| Classification on Admission. | Very much Improved. | Improved. | Stationary. | Worse. | Died. |
|------------------------------|---------------------|-----------|-------------|--------|-------|
| GI, | 3 | 1 | — | — | — |
| GII, | 3 | 4 | 2 | — | 1 |
| GIII, | — | — | 2 | 1 | 9 |

Sputum Examinations—

| Classification on Admission. | Positive. | Negative. | No Spit. |
|------------------------------|-----------|-----------|----------|
| GI, - - | — | 2 | 2 |
| GII, - - | 5 | 4 | 1 |
| GIII, - - | 10 | 1 | 1 |

Non-Pulmonary Cases discharged—

6.

6 cases were discharged during the year. They were classified as follows:—Abdomen, 3; abdomen and kidney, 1; tuberculous mastoiditis, 1; tuberculous ankle, 1.

Duration of Illness recorded at time of admission and stated at monthly periods was as follows:—

| 1-3 | 3-6 | 6-12 | 12-18 | 18-24 | Over 24 | Total |
|-----|-----|------|-------|-------|---------|-------|
| 2 | 1 | 2 | — | — | 1 | 6 |

1 case of abdominal and kidney tuberculosis died.

General Results of Treatment—

| Very much Improved. | Improved. | Stationary. | Worse. | Died. |
|---------------------|-----------|-------------|--------|-------|
| 3 | 2 | — | — | 1 |

Tuberculised—

2.

2 children are included in this group, both were discharged improved.

Non-Tuberculous Cases—**4.**

Bronchiectasis, 1; debility following pneumonia, and nephritis, 1; pre-auricular abscess, 1; pneumonia, 1.

Other Infections.—1 female patient transferred to isolation with positive ear swabs.

X-ray Examinations.—22 patients were X-rayed at Motherwell County Hospital.

OPERATIONS AND CONSULTATIONS.

| | | | |
|---------------|----------------------------|-----|----|
| Mr. Duff, | Incision, Septic Bursitis, | ... | 1 |
| | Consultations, ... | ... | 4 |
| Dr. Adam, | Consultation, ... | ... | 1 |
| Dr. Mortimer, | Consultation, ... | ... | 1 |
| Dr. Reid, | Consultations, ... | ... | 11 |

Staff.

The Indoor Staff on 31st December, 1931, consisted of 1 resident physician, 1 matron, 3 sisters, 6 staff nurses, 16 probationers, and 16 maids.

The Outdoor Staff consisted of 1 engineer-fireman, 3 firemen, 1 chauffeur, 1 gardener, 1 assistant gardener, and 1 clerkess.

Lectures.—From October till April lectures and demonstrations were given on elementary anatomy and physiology, hygiene, and elementary theory and practice of nursing. 5 nurses passed the Preliminary Examination and were transferred to Motherwell County Hospital to complete their training.

Staff Illnesses.—8 nurses and 4 maids were warded for the following ailments:—

| | | | | | |
|-----------------|-----|---|------------------|-----|---|
| Conjunctivitis, | ... | 1 | Influenza, | ... | 5 |
| Diphtheria, ... | ... | 1 | Septic Bursitis, | ... | 1 |
| Flat-foot, ... | ... | 1 | Scarlet Fever, | ... | 1 |
| Furunculosis, | ... | 1 | Tonsillitis, ... | ... | 1 |

The sick staff lost 261 working days.

Inoculations.—7 nurses were vaccinated with T.A.B. vaccine against the enteric group of diseases. 16 of the staff had the Schick Test performed. 4 were positive and were immunised. 16 had the Dick Test performed; 4 were positive and were immunised.

Ambulance Work.

| | | | | | Miles. |
|-------------|---|-------------------------------|---|---|--------------------|
| ADMISSIONS, | - | Infectious Diseases Hospital, | - | - | 7,388 |
| | | Sanatorium, | - | - | 361 |
| DISCHARGES, | - | Infectious Diseases Hospital, | - | - | 6,121 |
| | | Sanatorium, | - | - | 193 |
| OTHERS, | - | - | - | - | 4,336 |
| | | | | | <hr/> 19,399 <hr/> |

Buildings and Grounds.

The Old Pavilion and the Scarlet Fever Pavilion were redecorated during the summer.

In October the boiler-house was enlarged and a second boiler installed.

HAIRMYRES COLONY.

REPORT BY THE PHYSICIAN-SUPERINTENDENT

JAMES JOHNSTONE, M.B., CH.B., D.P.H.

FOR THE YEAR 1931.

PATIENTS TREATED.

The number of patients under treatment during the course of the year is shown in the following tabular statement:—

| In Residence 1st January. | Admitted During Year. | Discharged During Year. | In Residence 31st December. |
|------------------------------|--------------------------|----------------------------|--------------------------------|
| 221 | 227 | 232 | 216 |

PATIENTS CLASSIFIED ACCORDING TO PLACE OF RESIDENCE.

(a) *County of Lanark.*

| | | | |
|------------------------|----|-----------------------|-----|
| Avondale, - - - - | 2 | New Monkland, - - - - | 5 |
| Blantyre, - - - - | 10 | Old Monkland, - - - - | 15 |
| Bothwell, - - - - | 77 | Shotts, - - - - | 30 |
| Cambuslang, - - - - | 10 | Stonehouse, - - - - | 1 |
| Cambusnethan, - - - - | 14 | Tollcross, - - - - | 1 |
| Dalserf, - - - - | 15 | Lower Ward, - - - - | |
| Hamilton, - - - - | 1 | Upper Ward, - - - - | |
| East Kilbride, - - - - | 1 | Total, - - - - | 192 |

(b) *Burghs in County.*

| | | | |
|---------------------|----|---------------------|----|
| Hamilton, - - - - | 11 | Rutherglen, - - - - | 1 |
| Motherwell, - - - - | 1 | Total, - - - - | 13 |

(c) *Outwith the County.*

| | | | |
|--------------------------|---|-------------------------|----|
| Ayrshire, - - - - | 9 | Dunbartonshire, - - - - | 3 |
| Berwickshire, - - - - | 1 | East Lothian, - - - - | 1 |
| City of Glasgow, - - - - | 4 | Renfrewshire, - - - - | 9 |
| | | Total, - - - - | 27 |

NATURE OF DISEASE.

Of the 232 patients discharged during the year under consideration, 216 proved to be tuberculous, in 62 cases the disease assuming the pulmonary form, while in 115 it was non-pulmonary, and 39 were classified as tuberculised. The diseases affecting 10 non-tuberculous cases were as follows:—Anthraxis, 3; asthma, 2; bronchiectasis, 1; bronchitis, 2; empyema, 1; pulmonary fibrosis, 1. In the remaining diseases, no lesion was detected.

In the statistics which follow, only 216 patients—discharged during the year—who proved to be tuberculous are referred to.

SOCIAL CONDITIONS.

| | 1 Apt. | 2 Apts. | 3 Apts. | 4 Apts. | 5 and over. | Total |
|-------------|--------|---------|---------|---------|-------------|-------|
| Men, - - | 18 | 38 | 18 | 6 | 2 | 82 |
| Women, - - | 2 | 1 | 1 | 1 | — | 5 |
| Boys, - - | 9 | 35 | 18 | 3 | 2 | 67 |
| Girls, - - | 12 | 29 | 18 | 3 | — | 62 |
| Totals, - - | 41 | 103 | 55 | 13 | 4 | 216 |

OCCUPATIONS.

| | | | |
|-----------------------------|----|----------------------------|---|
| Miners, - - - - | 22 | Carter, - - - - | 1 |
| Artisans, - - - - | 9 | Errand-boy, - - - - | 1 |
| Labourers, - - - - | 7 | Fruit-grower, - - - - | 1 |
| Bus Conductors, - - - - | 3 | Grocer, - - - - | 1 |
| Farm Workers, - - - - | 3 | Lead Miner, - - - - | 1 |
| Clerks, - - - - | 2 | Painter, - - - - | 1 |
| Cranemen, - - - - | 2 | Postman, - - - - | 1 |
| Railwaymen, - - - - | 2 | Seaman, - - - - | 1 |
| Soldiers, - - - - | 2 | Shoemaker, - - - - | 1 |
| Analytical Chemist, - - - - | 1 | Tram Conductor, - - - - | 1 |
| Butcher, - - - - | 1 | Warehouse Manager, - - - - | 1 |

PULMONARY TUBERCULOSIS.

| | ADMISSIONS. | | | DISCHARGES. | | | |
|-----------------|-------------|--------------|--------|-------------|--------------|--------|--------|
| | Direct. | By Transfer. | Total. | Direct. | By Transfer. | Death. | Total. |
| Men, - - - - | 29 | 26 | 55 | 49 | 4 | 2 | 55 |
| Women, - - - - | — | 1 | 1 | 1 | — | — | 1 |
| Boys, - - - - | 1 | 2 | 3 | 2 | 1 | — | 3 |
| Girls, - - - - | 3 | — | 3 | 2 | 1 | — | 3 |
| Totals, - - - - | 33 | 29 | 62 | 54 | 6 | 2 | 62 |

REASONS FOR DISCHARGE.

| | Stage I. | Stage II. | Stage III. | Totals. |
|--|----------|-----------|------------|---------|
| Period of Treatment Completed, - - - - | 14 | 4 | 2 | 20 |
| Against Medical Advice, - - - - | 7 | 5 | 9 | 21 |
| Domestic and Financial, - - - - | 3 | 4 | 4 | 11 |
| Misconduct, - - - - | — | 1 | 1 | 2 |
| Transferred to other Institutions, - - - - | 2 | 1 | 3 | 6 |
| Died, - - - - | — | — | 2 | 2 |
| Totals, - - - - | 26 | 15 | 21 | 62 |

AGE AND SEX DISTRIBUTION.

| Quinquennial Periods. | Males. | Females. | Both Sexes. | Age Groups. |
|-----------------------|--------|----------|-------------|-----------------|
| Under 5, | - | - | - | Pre-School Age. |
| „ 10, | - | 3 | 3 | School Age. |
| „ 15, | 4 | 1 | 5 | |
| „ 20, | 11 | - | 11 | Adolescence. |
| „ 25, | 11 | - | 11 | |
| „ 30, | 9 | - | 9 | Early Maturity. |
| „ 35, | 8 | - | 8 | |
| „ 40, | 7 | - | 7 | |
| „ 45, | 3 | - | 3 | |
| „ 50, | 5 | - | 5 | Late Maturity. |
| „ 55, | - | - | - | |
| „ 70, | - | - | - | Post Maturity. |
| Totals, | 58 | 4 | 62 | |

DURATION OF ILLNESS.

| Duration, | Months. | | | Years. | | |
|-----------|---------|-----|------|--------|-----|--------|
| | 1-3 | 3-6 | 6-12 | 1-2 | 2-4 | Over 4 |
| Cases, | 1 | 3 | 6 | 6 | 13 | 33 |

53 per cent. of the cases gave a history of over four years' illness. This percentage is still too high, and is a handicap to efficient treatment.

INITIAL MANIFESTATIONS OF ILLNESS.

| | | | | | | | | | | |
|-----------------|---|---|---|----|-----------------|---|---|---|---|---|
| Cough and spit, | - | - | - | 16 | Gastritis, | - | - | - | - | 2 |
| Pleurisy, | - | - | - | 15 | Adenitis, | - | - | - | - | 1 |
| Pneumonia, | - | - | - | 11 | Asthma, | - | - | - | - | 1 |
| Influenza, | - | - | - | 4 | Dyspnoea, | - | - | - | - | 1 |
| Debility, | - | - | - | 3 | Loss of weight, | - | - | - | - | 1 |
| Hæmoptysis, | - | - | - | 3 | Spinal caries, | - | - | - | - | 1 |
| Lassitude, | - | - | - | 3 | | | | | | |

RESULTS OF TREATMENT.

The classification adopted is that of Turban-Gerhardt.

| Stage of Disease. | Number of Patients. | T.B. Present. | Quiescent. | Improved. | No Change | Worse. | Died. |
|-------------------|---------------------|---------------|------------|-----------|-----------|--------|-------|
| I, - - - | 26 | 1 | 17 | 5 | 4 | - | - |
| II, - - - | 15 | 2 | 4 | 7 | 4 | - | - |
| III, - - - | 21 | 13 | - | 13 | 6 | - | 2 |
| Totals, - - | 62 | 16 | 21 | 25 | 14 | - | 2 |

65 per cent. of the cases in Stage I were discharged with the disease "quiescent," an increase on last year's figures. 56 per cent. of the cases in Stages II and III were discharged with their condition improved. All the cases in Stage I were capable of resuming their normal occupation. It is obvious that the type of case admitted to the Colony is becoming more advanced. The Colony is becoming more like an ordinary sanatorium, with a certain proportion of the cases confined to bed for the whole or part of the day, and this entails more medical and nursing supervision.

COMPLICATIONS.—The undernoted table shows complications present in the different stages of the disease. This is only retained for official purposes; strictly speaking, they are manifestations of the disease.

| | Stage I. | Stage II. | Stage III. | Totals |
|-----------------------------|----------|-----------|------------|--------|
| Ex-ophthalmic goitre, . . . | — | — | 2 | 2 |
| Otorrhoea, | 1 | 3 | 1 | 5 |
| Cardiac murmur, | — | 1 | — | 1 |
| Totals, | 1 | 4 | 3 | 8 |

DURATION OF RESIDENCE.

| | Under 4 weeks. | 4 and under 13 weeks. | 13 and under 26 weeks. | 26 and under 52 weeks. | 52 weeks and over. | Average duration of stay in days. |
|------------------|----------------|-----------------------|------------------------|------------------------|--------------------|-----------------------------------|
| Stage I, . . . | 6 | 3 | 2 | 6 | 9 | 337 |
| Stage II, . . . | 2 | 2 | 1 | 5 | 5 | 422 |
| Stage III, . . . | 3 | 6 | 1 | 4 | 7 | 257 |
| Totals, . . . | 11 | 11 | 4 | 15 | 21 | |

Compared with the previous year, there is a further reduction in the number of cases with a period of residence under 13 weeks.

DURATION OF RESIDENCE IN DAYS.

| | Average. | Maximum. | Minimum. |
|------------------|----------|----------|----------|
| Men, | 344 | 2,200 | 8 |
| Women, | 239 | 239 | 239 |
| Boys, | 286 | 545 | 27 |
| Girls, | 159 | 268 | 28 |

FAMILY HISTORY.

| | | | Number of Cases Discharged. | Positive History. | | | Percentage. |
|---------|---|---|--------------------------------|-------------------|-----------|------------|-------------|
| | | | | Stage I. | Stage II. | Stage III. | |
| Men, | - | - | 55 | 7 | 3 | 9 | 35 |
| Women, | - | - | 1 | 1 | — | — | 100 |
| Boys, | - | - | 3 | 1 | — | — | 33 |
| Girls, | - | - | 3 | 1 | — | — | 33 |
| Totals, | - | - | 62 | 10 | 3 | 9 | 35 |

NON-PULMONARY TUBERCULOSIS.

115 patients received treatment for the non-pulmonary form of tuberculosis, again outnumbering the pulmonary cases.

AGE AND SEX DISTRIBUTION.

| Quinquennial Periods. | Males. | Females. | Both Sexes. | Age Groups. |
|-----------------------|--------|----------|-------------|-----------------|
| Under 5, | — | 1 | 1 | Pre-School Age. |
| „ 10, | 27 | 23 | 50 | School Age. |
| „ 15, | 23 | 16 | 39 | |
| „ 20, | 11 | 1 | 12 | Adolescence. |
| „ 25, | 2 | 1 | 3 | |
| „ 30, | — | 2 | 2 | Early Maturity. |
| „ 35, | 3 | — | 3 | |
| „ 40, | 1 | — | 1 | |
| „ 45, | 2 | — | 2 | |
| „ 50, | 2 | — | 2 | Late Maturity. |
| „ 55, | — | — | — | |
| „ 70, | — | — | — | Post Maturity. |
| Totals, | 71 | 44 | 115 | |

The majority of the cases—77 per cent.—were between the ages of 5 and 15.

The following table shows results of treatment according to the nature of the disease:—

| | Quiescent. | Imp. | No Change. | Worse. | Total. |
|---------------------------|------------|------|------------|--------|--------|
| Peripheral glands, | 44 | 9 | 1 | 2 | 56 |
| Tracheo-bronchial glands, | 13 | 10 | 2 | — | 25 |
| Skin, | 7 | 4 | 1 | — | 12 |
| Abdomen, | 5 | 4 | 1 | — | 10 |
| Eyes, | 1 | 2 | — | — | 3 |
| Bone, | 1 | 1 | — | — | 2 |
| Spine, | 2 | — | — | — | 2 |
| Other organs, | 4 | — | 1 | — | 5 |
| Totals, | 77 | 30 | 6 | | 115 |

21 per cent. of the peripheral gland cases had discharging sinuses before or during treatment.

93 per cent. of the cases discharged were either "quiescent" or "improved," a percentage which indicates the more benign nature of the disease compared with the pulmonary type. It also indicates a very hopeful outlook in the treatment of the non-pulmonary type.

COMPLICATIONS. — The undernoted table shows complications present.

| | Peripheral Glands. | Skin. | Eyes. | Total. |
|-----------------------------------|-----------------------|-------|-------|--------|
| Otorrhoea, | 2 | 1 | — | 3 |
| Acne rosacea, | 1 | — | — | 1 |
| Blepharitis marginalis, | — | — | 1 | 1 |
| Interstitial keratitis, | — | 1 | — | 1 |
| Cardiac disease, | 1 | — | — | 1 |
| Ulcer of elbow, | 1 | — | — | 1 |
| Strabismus, | 1 | — | — | 1 |
| Totals, | 6 | 2 | 1 | 9 |

DURATION OF RESIDENCE.

| | Under 4 Weeks. | 4 Weeks and under 13. | 13 Weeks and under 26. | 26 Weeks and under 52. | 52 Weeks and over. | Average duration of stay in days. |
|-------------------------------------|----------------------|--------------------------------|---------------------------------|---------------------------------|--------------------------|--|
| Peripheral glands, | — | 6 | 3 | 27 | 20 | 336 |
| Tracheo-bronchial glands, | 3 | 3 | 3 | 8 | 8 | 276 |
| Skin, | 1 | 1 | 3 | 3 | 4 | 288 |
| Abdomen, | 1 | 1 | 1 | 3 | 4 | 326 |
| Eyes, | — | — | — | 2 | 1 | 308 |
| Bone, | — | — | — | 1 | 1 | 590 |
| Spine, | — | — | — | 2 | — | 219 |
| Other organs, | 1 | — | — | 4 | — | 249 |
| Totals, | 6 | 11 | 10 | 50 | 38 | |

DURATION OF RESIDENCE IN DAYS.

| | Average. | Maximum. | Minimum. |
|------------------|----------|----------|----------|
| Men, | 321 | 888 | 16 |
| Women, | 386 | 510 | 287 |
| Boys, | 315 | 1,196 | 5 |
| Girls, | 304 | 599 | 41 |

FAMILY HISTORY.

| | Number of Cases Discharged. | Positive. | Percentage |
|-----------------|--------------------------------|-----------|------------|
| Men, | 25 | 5 | 20 |
| Women, | 4 | 2 | 50 |
| Boys, | 46 | 12 | 26 |
| Girls, | 40 | 13 | 32 |
| Totals, | 115 | 32 | 28 |

It is interesting to record the small number of cases with a positive family history. Making allowance for a certain proportion of cases with a concealed family history, one is probably correct in assuming that a large number of the cases were infected with bovine tuberculosis through the milk supply. This is borne out by some research work in this connection detailed in this report.

TUBERCULISED.

One has to report a considerable increase in the number of tuberculised cases admitted to the Colony. These cases had no marked lesion, but showed evidence of early infection. They all gave a positive tuberculin reaction.

AGE AND SEX DISTRIBUTION.

| Quinquennial Periods. | Males. | Females. | Both Sexes. | Age groups. |
|-----------------------|--------|----------|-------------|-----------------|
| Under 5, | — | — | — | Pre-School Age. |
| „ 10, | 9 | 8 | 17 | School Age. |
| „ 15, | 10 | 11 | 21 | |
| „ 20, | 1 | — | 1 | Adolescence. |
| Totals, | 20 | 19 | 39 | |

RESULTS OF TREATMENT.

| | |
|--------------------|----|
| Quiescent, | 25 |
| Improved, | 11 |
| No Change, | 3 |
| Total, | 39 |

FAMILY HISTORY.

| | Number of Cases Discharged. | Positive. | Percentage. |
|-----------------|--------------------------------|-----------|-------------|
| Boys, | 20 | 7 | 35 |
| Girls, | 19 | 15 | 79 |
| Totals, | 39 | 22 | 56 |

PENSIONERS.

Included in the patients discharged during the year under consideration were 5 pensioners, a decrease of 1 on the previous year. All were affected with the pulmonary type of the disease, 2 being in Stage I, 2 in Stage II, and 1 in Stage III. This figure, as one would expect, is approaching the vanishing point.

GRADUATED LABOUR.

Of the 92 males discharged during the year, 59 registered for training. 21 were physically unfit for systematic training, but were engaged in occupational therapy, and 12 were unfit to work without prejudice to their condition.

NECESSITOUS CASES.

During the year, 83 necessitous cases—a decrease of 5 on last year—were supplied with clothing and boots, as follows:—

| | | Cases | Value |
|-----------|------------------------------|-------|----------|
| County of | Institution, | 45 | £81 1 3 |
| Lanark | Public Assistance Committee, | 15 | 31 13 10 |
| | Other Authorities, | 23 | 57 2 4 |

WASSERMANN TEST.

A specimen of blood for the Wassermann test was taken from all adult patients on admission, with the undernoted results:—

Positive, 2; strongly positive, 3. Total, 5.

This was equal to 4·8 per cent. of the adult admissions.

DENTAL TREATMENT.

During the year, 121 adults and 121 children received treatment, as follows:—Extractions, 465; fillings, 49; scalings, 33.

One has still to deplore the decision not to supply artificial dentures when required. Although Health Insurance Societies are willing to pay a proportion of the cost in certain cases, there are still a large number of patients who do not receive any assistance of this nature and who, for this reason, cannot have their treatment carried out to a successful conclusion.

Our dental surgeon reports a marked improvement in the dental condition of the patients, particularly in the case of children. This indicates the benefits of thorough dental treatment while attending school. Mr. Hutchison visited the Colony once a fortnight.

X-RAYS.

Our X-ray apparatus was in constant use throughout the year. Without it, it would be impossible to undertake the proper treatment of tuberculosis. X-rays were used for all purposes, but mainly for chest radiography. The majority of the films were stereoscopic and this method proved to be of great value in the diagnosing of doubtful cases.

The work done in this department was as follows:—521 patients were X-rayed during the year, the number of films used being 1,010. The number of chest examinations was 432. Other parts examined were as follows:—Elbow, 3; knee, 3; humerus, 2; skull, 2; feet, 2; ankle, 1; femur, 1; finger, 1; hand, 1; hip, 1; pelvis, 1; ribs, 1; shoulder, 1; toe, 1; wrist, 1.

One would again make a plea for better accommodation and more powerful apparatus. Although well aware that the present financial stringency does not permit of any unnecessary expenditure, one feels that the best results are not being obtained under present conditions. An improvement in this respect would mean better diagnosis and better treatment.

LIPIODOL.

A considerable amount of work was done with Lipiodol, both in diagnosis and treatment. Altogether 42 injections were given into the lungs. Both the direct method with laryngoscope and catheter and puncture of the crico-thyroid membrane were used, the latter method being more favoured. This is undoubtedly the most satisfactory method of diagnosing bronchiectasis and no case with this condition should be diagnosed without this method having been applied. In one case of bronchiectasis, weekly injections of Lipiodol were given as a form of treatment. The following are the particulars:—

J.S., æt. 27, admitted with well-marked bronchiectasis affecting the lower lobe of right lung. Abundant fetid sputum. The usual postural treatment was applied but with no improvement. In February, phrenic evulsion performed. It is interesting to record that immediately after the excision of the phrenic nerve patient coughed up about half a pint of pus. Condition showed slight improvement following on this operation. In March, treatment by Lipiodol injections was commenced and by the end of the year, 23 injections had been given altogether, the average amount being 20 c.cs.

There is no doubt that the patient's general condition showed a marked improvement, having increased about a stone in weight. The lung condition did not show much change. Although this procedure was a very unpleasant one for the patient, he looked forward to it because he stated he felt it was benefiting him. An injection of an antiseptic, such as Lipiodol, into septic cavities seems the correct procedure and we intend continuing with this treatment in the hope of ultimate cure. Anything which can improve the condition of a patient suffering from bronchiectasis should certainly be continued, particularly as one recognises the present unsatisfactory position of treatment of this disease.

ACTINOTHERAPY.

The ultra-violet rays, both natural and artificial, were again extensively used for the treatment of the non-pulmonary form of tuberculosis.

HELIO THERAPY.—This treatment, for the tenth year in succession, was applied during the summer season and, although only possible to a limited extent owing to our northern climate, it certainly proved to be of considerable benefit to the tuberculous children, all the cases reacting well. The treatment commenced on 4th April and terminated on 1st September. As stated in previous reports, it is certainly the best and cheapest method of obtaining the health-giving ultra-violet rays.

ARTIFICIAL LIGHT.—The equipment in this department was as follows:—Carbon arc lamps (long and short flame), quartz mercury vapour lamps (atmospheric and air-cooled).

All cases, regardless of the site of the lesion, received general light baths with, in addition, local applications if necessary, the reason being that tuberculosis is a general disease involving the whole system and must be treated accordingly.

| Lesion. | Patient. Name. | Age. | Sex. | Duration of Illness. | Duration of Treatment. | *Lamp. | Result. |
|-----------------------------------|-------------------|------|------|-------------------------|---------------------------|------------------------|-----------|
| Glands. | T. G. | 6 | M. | 2 years. | 6 months. | { S.F. L.F. M.V. | I.S.Q. |
| | P. A. | 17 | M. | 3 months. | 5 " | { L.F. U.V. | Cured. |
| | J. M'K. | 17 | M. | 10 years. | 4½ " | { L.F. U.V. | Cured. |
| | M. H. | 8 | F. | 4 " | 2½ " | { S.F. L.F. | Cured. |
| | C. M'C. | 6 | M. | 5 months. | 3½ " | { S.F. L.F. | Cured. |
| | M. G. | 10 | F. | 6 " | 1 year. | { S.F. L.F. U.V. | Cured. |
| | H. M'M. | 8 | F. | 2 years | 2 months. | { S.F. L.F. M.V. | Improved. |
| | M. C. | 8 | F. | 6 weeks. | 1 year. | { L.F. U.V. | Cured. |
| | A. B. | 17 | F. | 3 years. | 14 months. | { L.F. M.V. U.V. | I.S.Q. |
| | J. B. | 26 | M. | 3 " | 6 " | { S.F. L.F. M.V. | Improved. |
| | J. A. | 10 | F. | 8 " | 3½ " | { S.F. L.F. M.V. | Cured. |
| | A. R. | 5 | F. | 10 months. | 2½ " | { S.F. L.F. M.V. | Improved. |
| | T. D. | 15 | M. | 13 years. | 9 " | { L.F. M.V. | Cured. |
| | J. A. | 8 | F. | 7 months. | 7 " | { S.F. L.F. M.V. | Cured. |
| | W. K. | 17 | M. | 1 year. | 1 " | { S.F. M.V. | Cured. |
| Glands (Discharging Sinus). | T. A. | 9 | M. | 5 " | 13½ " | { L.F. M.V. | Cured. |
| | H. H. | 20 | F. | 1 " | 10 " | { L.F. U.V. | Cured. |
| | J. G. | 18 | M. | 11 " | 7½ " | { S.F. L.F. U.V. | Cured. |
| | J. W. | 12 | M. | 4 months. | 4 " | { L.F. M.V. | Cured. |
| | J. S. | 14 | M. | 2½ years. | 6 " | { L.F. U.V. | Cured. |
| | J. B. | 13 | F. | 6 months. | 18 " | { S.F. L.F. M.V. | Improved. |
| Bone. | W. N. | 9 | M. | 10 " | 2 " | S.F. | Cured. |
| | M. D. | 10 | F. | 4 " | 4 " | S.F. | Cured. |
| | J. V. | 12 | M. | 6 " | 9½ " | S.F. | Cured. |
| | W. D. | 52 | M. | 47 years. | 3 " | S.F. | Improved. |
| | W. B. | 16 | M. | 5 " | 10 " | L.F. | I.S.Q. |
| Catarrhal Lupus. | T. M. | 6 | M. | 1 " | 3½ " | S.F. | Cured. |
| | J. C. | 10 | F. | 4½ " | 8 " | S.F. | Cured. |

| Lesion. | Patient. Name. | Age. | Sex. | Duration of Illness. | Duration of Treatment. | *Lamp. | Result. |
|----------------|-------------------|------|------|-------------------------|---------------------------|--------------------------|---------|
| Fibroid Lupus. | J. T. | 33 | M. | 13 „ | 2 „ | { S.F. Improved. M.V. | |
| | J. H. | 18 | M. | 14 „ | 9 „ | { S.F. Cured. | |
| | A. W. | 19 | M. | 7 months. | 3½ „ | { S.F. Cured. U.V. | |
| | H. C. | 24 | M. | 14 years. | 11½ „ | { S.F. Cured. U.V. | |
| | T. V. | 47 | M. | 30 „ | 3 „ | { S.F. Improved. U.V. | |
| Abdomen. | M. M'A. | 11 | F. | 1 year. | 5½ months. | { S.F. Cured. L.F. | |
| Abdomen D.S. | T. K. | 14 | M. | 2 „ | 6½ „ | { S.F. Cured. L.F. | |
| Kidney. | E. M'G | 9 | M. | 3½ „ | 2 years. | M.V. Cured. | |
| Empyema. | J. M'I. | 17 | M. | 9 „ | 9 months. | { S.F. Cured. L.F. | |
| Testicle. | J. T. | 10 | M. | 7 months. | 3 „ | { S.F. Cured. M.V. | |
| Cold Abscess. | J. S. | 38 | M. | 26 years. | 11 „ | S.F. I.S.Q. | |
| Eczema. | J. C. | 6 | M. | 1 month. | 3 weeks. | S.F. I.S.Q. | |

* S.F.—Short Flame. M.V.—Mercury Vapour.
L.F.—Long Flame. U.V.—Uviator.

At the end of the year, 21 males and 6 females were still undergoing treatment.

OUT-PATIENTS.—The following table shows details of out-patients treated during the year. At the end of the year, 5 males and 6 females were still undergoing treatment.

| Lesion | Patient. Name. | Age. | Sex. | Duration of Illness. | Duration of Treatment. | *Lamp. | Result. |
|-----------------------------------|-------------------|------|------|-------------------------|---------------------------|----------------------------------|---------|
| Glands. | R. C. | 10 | F. | 7 weeks. | 2 months. | L.F. | I.S.Q. |
| | S. R. | 9 | F. | 1 year. | 10 „ | { S.F. L.F. Improved. U.V. | |
| Glands (Discharging Sinus). | M. T. | 13 | F. | 2 months. | 11 „ | { L.F. M.V. Cured. U.V. | |
| | C. F. | 9 | F. | | 6 „ | { L.F. Cured. M.V. | |
| Septic Finger. | H. B. | 30 | M. | 1 month. | 2 „ | M.V. Cured. | |
| Debility. | M. N. | 23 | F. | 2½ „ | 2 „ | L.F. Improved | |
| Otorrhoea. | A. N. | 18 | M. | | 2 „ | { L.F. I.S.Q. U.V. | |

Analysing the results, we find that 65 per cent. of the cases after treatment were classified as "cured," a very satisfactory result, especially when one considers that the majority of the cases had been ill for many years. One knows of no other method of treatment that could give such excellent results in the treatment of tuberculosis. All the cases were of the non-pulmonary type.

The remarks regarding our X-ray accommodation apply with equal, if not more, force to our Light Department. This work imposes a considerable strain on the nursing staff, and, in this respect, our present arrangements are far from satisfactory. The best solution would be a new building, housing both our X-ray and Light Departments.

As in former years, the cases showing the best results were those with catarrhal lupus and glands, particularly glands with discharging sinuses. Comparing the results of dispensary and sanatorium treatment, one finds that the results are better in a sanatorium where there is, in addition, good hygienic conditions, including fresh air, good food, &c. In other words, to obtain the best results, light should be combined with good hygienic treatment.

The Wood's glass filter was again extensively used in conjunction with the air-cooled mercury vapour lamp for the diagnosis of ringworm.

RADIANT HEAT.—The K.B.B. Gallois Infra-red Radiation Projector Lamp was of great value in the treatment of various painful conditions associated with pulmonary tuberculosis. The undernoted table gives details of the cases treated :—

| Lesion | Patient | | | Number of Treatments | Result |
|-------------------|---------|-----|-----|----------------------|-----------|
| | Name | Age | Sex | | |
| Pleurodynia, - | R. H. | 23 | M. | 5 | Cured. |
| | J. H. | 41 | M. | 16 | Cured. |
| | R. M'A. | 25 | M. | 14 | Cured. |
| | G. S. | 34 | M. | 5 | Cured. |
| Lumbago, - | W. B. | 26 | M. | 47 | Improved. |
| | A. W. | 49 | M. | 5 | Cured. |
| | J. M'K. | 55 | M. | 4 | Cured. |
| Sciatica, - | D. M. | 26 | M. | 21 | Cured. |
| | M. M. | 29 | M. | 14 | Cured. |
| Furuncle, - | J. A. | 21 | M. | 16 | Cured. |
| | J. M'H. | 21 | M. | 4 | Cured. |
| | J. B. | 19 | M. | 3 | Cured. |
| Teno-synovitis, { | A. M'P. | 23 | M. | 3 | Cured. |
| | S. S. | 23 | M. | 10 | Cured. |
| Arthritis, - | J. F. | 65 | M. | 14 | Cured. |
| T.B. Ankle, - | A. M'C. | 21 | M. | 9 | I.S.Q. |
| Rheumatism, - { | C. R. | 16 | M. | 13 | Cured. |
| | E. L. | 33 | F. | 15 | Cured. |
| Fibrositis, - | I. M'K. | 23 | M. | 14 | Improved. |

ARTIFICIAL PNEUMOTHORAX.

This form of treatment was extensively employed during the year. Altogether 158 injections, including inductions, were given. The results were very satisfactory, and there is no doubt that it is the best form of treatment for cases of pulmonary tuberculosis. Unfortunately, a certain proportion could not have the lung collapsed owing to the formation of pleural adhesions. All the cases were under X-ray control. With a larger medical staff, the treatment could be carried out on a more extensive scale. The day for passive measures in the treatment of pulmonary tuberculosis is past. One must be up and doing and give the patients all the benefits of modern treatment.

CHEST SURGERY.

This year a further step was taken in treatment, when arrangements were made with Mr. Donald Duff, Surgeon, Glasgow, to perform any operations that were considered necessary. Without a proper operating theatre, it was impossible to do all that was considered necessary: for example, one would like to consider the major operation of thoracoplasty, an operation which is of undoubted value in selected cases, and has been the means of saving patients that would otherwise have been considered hopeless. In the meantime, the operations have been limited to the more simple one of phrenic evulsion. This means the destruction of the phrenic nerve, causing a paralysis of the diaphragm, which rises and causes compression of the lung, making its volume less by one-sixth to one-tenth. This operation is generally performed where artificial pneumothorax has been found impossible owing to pleural adhesions. Four patients were treated in this manner, and the following were the details:—

F.H., male, æt. 28, marked tuberculous involvement of whole of right lung, with cavity formation at apex. Owing to adhesions, only 6 cms. of phrenic nerve could be removed. Since the operation his general condition has shown some improvement, and he is working regularly in the Cabinet-making Department of the Industrial Workshops.

J.D., male, æt. 11, case of bronchiectasis left base. Artificial pneumothorax was attempted, but was unsuccessful owing to adhesions. X-ray examination after the operation showed that the diaphragm had risen 3.5 cms. His general condition has improved and there is a diminution in the amount of sputum.

H.H., female, æt. 17, advanced tuberculosis of the whole of left lung. Artificial pneumothorax unsuccessful owing to adhesions. After operation, diaphragm was lifted 3 cms. General condition showed marked improvement. Her sputum, which, prior to the operation, had contained numerous tubercle bacilli, was found to be only occasionally positive.

J.S., male, æt. 28, case of bronchiectasis. Details already given in Lipiodol section.

All the cases benefited by the operation, some more markedly than others. There is no doubt that, if a proper operating theatre had been available, this technique would have been more extensively employed.

BLOOD SEDIMENTATION REACTION.

The blood sedimentation reaction is now included as part of the routine clinical examination of each adult admitted to the Colony. The test, upon which great reliance is placed, has undoubtedly a definite and important place in such clinical examination.

It is, of course, not specific for tuberculosis, and, for that reason, is not of great diagnostic value, but it gives us, as reflected in the blood stream, an indication of the amount of tissue destruction, of the systemic disturbance produced by the tuberculous process. In other words, it gives us an indication of the degree of activity of the disease. It is on the estimation, clinically, of the degree of activity that the accuracy of our prognosis depends. The sedimentation test is, therefore, a decided asset in helping us to form an opinion as to prognosis. Thus we always hesitate in giving a good prognosis where the sedimentation rate is high, even when the other clinical findings are favourable. On the other hand, we have every confidence where the sedimentation rate has been constantly low.

The technique used here is that introduced by Westergren, and is perfectly straightforward and simple. Venous blood is drawn into a syringe to make up a proportion of 4:1, with 3·8 per cent. sodium citrate solution. The citrated blood is drawn into a graduated pipette and allowed to stand. The column of supernatant serum is

measured in mms. as the red cells settle in the pipette. We take one single reading at the end of one hour. The normal readings (1 hour) are: for men, 1-3; and for women, 4-7.

Below, we have a critical analysis of the blood sedimentation results in 196 adults in residence during 1931. The test was done monthly in those cases showing a high sedimentation rate and every three months in the others.

Of our cases, only 20 showed a sedimentation rate which was constantly within the normal limits. These are classified in Table I. It is notable that 16 are pulmonary cases (14, Stage I; 2, Stage II), and that all have a negative spit.

Tables II, III, and IV are classified and divided into three groups, according to the sedimentation rate. In Column 1, we have patients with a low sedimentation rate (1-8); in Column 2, those with a fairly high rate, and in Column 3, those with an average sedimentation rate of over 50.

It is seen that, in the pulmonary cases, those patients with a positive sputum have a higher sedimentation rate than those with a negative sputum, and that the more advanced the disease (Turban-Gerhardt classification), the higher the rate.

In the non-pulmonary cases again, the sedimentation rate gives a good indication of the degree of activity. In the case of cervical glands with a discharging sinus and active disease of bone (with sinus formation), the sedimentation rate is in every case fairly high. That is, secondary infection sends the rate up.

Of our cases, 4 had a sedimentation rate of over 100. All were very advanced cases of pulmonary tuberculosis with positive sputum and with the other clinical signs and symptoms of rapidly progressing disease. 2 of these have since died, and in the case of the other 2, the outlook is most unfavourable.

TABLE I.

PATIENTS SHOWING A NORMAL SEDIMENTATION RATE—
1-3 mms. (1 hour).

| Lesion. | Number of Cases. | |
|----------------------------|---------------------|---------------|
| Lungs, | 16 | { Stage I—14. |
| Abdomen, | 1 | { Stage II—2. |
| Skin, | 2 | |
| Cervical Glands, | 1 | |
| Total, | 20 | |

NOTE.—All of the 16 Pulmonary cases had a negative spit.

TABLE II.

PULMONARY.

CASES WITH POSITIVE SPUTUM.

| Stage. | Number of Cases. | Sedimentation Rate. | | |
|----------------|---------------------|---------------------|------|---------|
| | | 1-8 | 9-50 | Over 50 |
| I, | 2 | — | 2 | — |
| II, | 16 | 2 | 14 | — |
| III, | 41 | 3 | 25 | 13 |

TABLE III.

CASES WITH NEGATIVE SPUTUM.

| Stage. | Number of Cases. | Sedimentation Rate. | | |
|----------------|---------------------|---------------------|------|---------|
| | | 1-8 | 9-50 | Over 50 |
| I, | 63 | 52 | 11 | — |
| II, | 29 | 15 | 14 | — |
| III, | 1 | — | 1 | — |

TABLE IV.

NON-PULMONARY.

| Lesion. | Number of Cases | Sedimentation Rate. | | |
|------------------------------|--------------------|---------------------|------|---------|
| | | 1-8 | 9-50 | Over 50 |
| Cervical Glands, | 15 | 10 | 5 | — |
| Lupus, | 11 | 8 | 3 | — |
| Abdomen, | 5 | 5 | — | — |
| Bone { active, | 5 | — | 4 | 1 |
| { quiescent, | 4 | 3 | 1 | — |
| Spine (quiescent), | 2 | 2 | — | — |
| Kidney, | 1 | 1 | — | — |

TUBERCULIN TEST.

The routine tuberculin test now used in the Colony is the intradermal test of Mantoux. This test is accepted as being more delicate and more scientifically accurate than the older methods of Moro and Von Pirquet. Although it requires a more careful technique than the Von Pirquet test, the readings are more definite and more easily taken.

For the initial dose, .01 mgm. is given (.1 c.c. of a 1:10,000 dilution of pure tuberculin). If this produces no reaction, the test is repeated after a few days with .1 mgm. tuberculin (.1 c.c. of a 1:1,000 dilution). If still negative, a third dose of 1 mgm. (.1 c.c. of a 1:100 dilution) is given. If there is no reaction to this maximum dose, the test is considered negative.

A positive reaction consists of infiltration and erythema of the skin at the site of injection. This reaction reaches a maximum by the end of 36 hours and lasts for several days. The oedema of the skin may or may not be followed by a localised desquamation, and as a rule an area of discoloration results, which may take several weeks to fade.

The diameter of the raised oedematous area is measured in millimetres, and the reaction is graded as follows:—+ represents an area of infiltration up to 10 mms., ++ an area of infiltration from 10 to 15 mms., +++ an area of infiltration greater than 15 mms., ++++ an area of infiltration greater than 15 mms., with, in addition, necrosis of the skin at the site of the injection. The injection is given intradermally on the flexor aspect of the forearm. Both the human and bovine tuberculin are used, the injection of human tuberculin being placed above the bovine on the forearm. No control is used, this being considered unnecessary in the Mantoux test. Burroughs, Wellcome & Co.'s old tuberculin (human and bovine) was used throughout, with Burroughs-Wellcome needles and all-glass tuberculin syringes.

105 children admitted to the Colony during 1931 had the test performed. Of these, 95 reacted to the first dose of .01 mgm. and 10 were negative. Of the 10, 2 reacted to the next dose of .1 mgm. and 8 were negative. 2 of these 8 patients left the Colony before the third injection was given, and, of the remaining 6, 2 reacted to

1 mgm. and 4 were negative. In no case, even with the larger doses, were there any untoward symptoms of malaise, increased pulse rate, or rise in temperature.

Thus, out of 105 cases, 99 gave a positive reaction. Of the 99, 6 gave a more marked reaction to the human tuberculin, 42 gave a more marked reaction to the bovine, and the remaining 51 a similar degree of reaction to each. These results are tabulated below, and, for comparison, we quote the results in 102 adult patients who gave a positive tuberculin reaction under similar conditions. Thus, according to the tuberculin test, of the children under review 6 per cent. show a human infection, compared to 43.13 per cent. of the adults, while 42.4 per cent. show a bovine infection, as compared with 13.73 per cent. of the adults.

Although only a limited number of cases was examined, and one must be guarded in drawing definite conclusions, still the results are interesting and of some value. A further step would be typing of the bacillus. However, only in a small proportion of cases could the necessary infectious material be obtained. It is evident that bovine infection is an important factor in children. Recent investigations by prominent authorities confirm this view. The intensive campaign for the eradication of tuberculosis in dairy herds is undoubtedly on the right lines, and one looks forward to the time when all milk will be guaranteed free from tuberculosis.

In Tables III and IV the children giving a positive reaction to the Mantoux test are divided into two groups—Group I, tuberculised, and Group II, those patients showing a gross tuberculous lesion either on physical or X-ray examination. The tuberculised children include those who show symptoms of tuberculosis but no signs, and in many of these cases there is a history of exposure to infection. The other group is made up of cases showing an obvious tuberculous infection, cervical glands, tracheo-bronchial glands, tuberculosis of bones, joints, and skin. Table III shows the cases grouped according to the intensity of the reaction, and it is seen that tuberculised children give just as marked a reaction as those having a gross lesion. Table IV shows the percentage of each group reacting more markedly to the human and bovine tuberculin respectively. Table V shows the reacting patients divided into the age groups, 5-7 years, 8-10 years, and 11-14 years, and sub-divided according to the

intensity of the reaction to tuberculin. It rather bears out the finding of the 1930 Report that the age group 8-10 years shows the most marked reaction.

Of the 105 children, 4 who had the complete test gave a negative reaction throughout. The details of these cases are as follows:—

I.M., girl, æt. 14, notified as pulmonary tuberculosis. Revised diagnosis—unresolved pneumonia.

M.H., girl, æt. 8, had enlarged tracheo-bronchial glands, with positive d'Espine's signs, a Eustace-Smith murmur, and, on X-ray examination, thickening of the mediastinum. The glandular enlargement must, therefore, be due to some other cause than tuberculosis.

A.H., boy, æt. 7, had an operation for appendicitis. At the operation he was found to have enlarged glands. These glands were presumably non-tuberculous.

E.M., girl, æt. 8, notified as tuberculosis of abdomen. On physical examination showed no evidence of abdominal tuberculosis, but X-ray examination revealed a malformation of the colon.

TABLE I.
CHILDREN.

| Number giving Positive Reaction. | Human Reaction more marked. | Bovine Reaction more marked. | Similar Reaction to both. |
|-------------------------------------|--------------------------------|---------------------------------|------------------------------|
| 99 | 6 | 42 | 51 |
| Percentage, | 6°/. | 42·4°/. | 51·6°/. |

TABLE II.
ADULTS.

| Number giving Positive Reaction. | Human Reaction more marked. | Bovine Reaction more marked. | Similar Reaction to both. |
|-------------------------------------|--------------------------------|---------------------------------|------------------------------|
| 102 | 44 | 14 | 44 |
| Percentage, ² | 43·1°/. | 13·8°/. | 43·1°/. |

TABLE III.

| | Number of Patients. | Degree of Reaction. | | | |
|---------------|------------------------|---------------------|---------|---------|--------|
| | | + | ++ | +++ | ++++ |
| Tuberculised, | 30 | 3 | 13 | 13 | 1 |
| Percentage, | | 10°/. | 43·3°/. | 43·3°/. | 3·3°/. |
| Gross Lesion, | 69 | 10 | 22 | 37 | — |
| Percentage, | | 14·5°/. | 31·9°/. | 53·6°/. | — |

TABLE IV.

| | Number of Patients. | Human Reaction more marked. | Bovine Reaction more marked. | Equal Reaction to both. |
|-----------------|---------------------|-----------------------------|------------------------------|-------------------------|
| Tuberculised, - | 30 | 1 | 12 | 17 |
| Percentage, | | 3.3% | 40% | 56.7% |
| Gross Lesion, - | 69 | 5 | 30 | 34 |
| Percentage, | | 7.2% | 43.5% | 49.3% |

NOTE.—Patients requiring a larger dose than .01 mgm. of tuberculin to produce a positive reaction are grouped under + irrespective of the intensity of the reaction to that dose.

TABLE V.

| Age Group Years. | Number of Patients. | + | ++ | +++ | ++++ |
|------------------|---------------------|---|----|-----|------|
| 5-7 years, - | 30 | 5 | 9 | 16 | — |
| 8-10 „, - | 38 | 3 | 14 | 21 | — |
| 11-14 „, - | 31 | 5 | 12 | 13 | 1 |

BLOOD PRESSURE.

In the clinical examination of patients, both on admission and at the routine monthly examination, we include a determination of the blood pressure.

The blood pressure reading is a very decided aid, especially in doubtful cases of tuberculosis, and may go far towards confirming the diagnosis. In the typical tuberculous patient, the systolic pressure is below normal and the pulse pressure is low. This subnormal systolic blood pressure is merely a part of the whole clinical picture, the result of a flabby myocardium and a poor general condition. Thus, with improvement in the condition, we often have a rise in the blood pressure. On the other hand, progression of the disease may be accompanied by a falling systolic pressure, and in an advanced case of phthisis we have recorded a systolic blood pressure as low as 82 mms. of mercury. But again there is no reason why active tuberculous disease should not be accompanied by other factors giving rise to high blood pressure, *e.g.*, arterio-sclerosis and a moderately high systolic blood pressure result.

During the year, our observations were made using the Tyco's Recording Sphygmomanometer and with very satisfactory results. This instrument has several advantages over the older auscultatory technique. It cuts out the personal element in taking the reading and prevents error from creeping in, due to any variation in the observer's acuity of hearing. It gives us a permanent record of the

blood pressure tracing, and it gives us more information than the mere reading of systolic and diastolic blood pressure, recording, as it does, the rhythm of the pulse and its strength. The instrument consists of a double armlet inflated by a hand bulb. The pressure in the armlet records through a delicate oscillometer chamber and pen arm. The record is taken on a revolving chart, a reproduction of which is shown. The first upstroke on the chart marks the systolic pressure and we find that it agrees very closely with readings taken by the auscultatory method. The upstrokes increase in amplitude until they reach a maximum and are then followed by a decline. This decline marks the diastolic pressure.

The tracing reproduced is that of a typical tuberculous patient with a systolic pressure of 103 and a diastolic pressure of 80.

TEST MEALS.

As previously, those patients who complained, during the year, of abdominal symptoms had a fractional test meal done. The method of Ryle is adhered to, being one which gives very satisfactory evidence as to the digestive process in the stomach.

On the preceding night, the patient eats two charcoal biscuits. The following morning, the Ryle's stomach tube is passed and the fasting juice withdrawn from the stomach. A meal of gruel is then given, and every 15 minutes for $2\frac{1}{2}$ hours a specimen of the gastric contents is withdrawn. Each specimen is examined and a fairly complete knowledge is gained as to the presence or absence of hydrochloric acid, the emptying of the stomach, the presence of mucus, and the regurgitation of the alkaline duodenal contents as shown by the presence of bile.

During the year, 18 patients had test meals done, and below are tabulated the details. The results more or less bear out the orthodox teaching that there is a tendency to hyperacidity in the early stages, with, later on, a diminution of the free H.Cl. This may progress to complete achlorhydria.

No case showed the presence of blood or marked delay in emptying of the stomach, but most cases showed a tendency to excess of mucus.

Of the two cases with a complete achlorhydria, one was a sputum negative pulmonary case of a chronic type and the other had a tuber-

culous ulcer of the nasal mucosa. Both were treated with a mixture of dilute hydrochloric acid taken along with meals, with remarkably good results.

| | | Achlorhydria. | Low H.Cl. | Normal. | High H.Cl. |
|-----------|------------|---------------|--------------|---------|---------------|
| Pulmonary | { Sputum + | — | — | 2 | 2 |
| | { Sputum — | 1 | 3 | 3 | 4 |
| Abdominal | . | — | — | 2 | — |
| Others, | . | 1 | — | — | — |
| TOTALS, | | 2 | 3 | 7 | 6 |

The work on blood sedimentation reaction, tuberculin test, blood pressure, and test meals has been done by Dr. Ian MacKay, Assistant Physician, and is an excellent record of clinical research.

OPEN-AIR SCHOOL.

This was one of the features of the Colony, and as a scheme of concurrent treatment and education, is quite unique. Many children who have been unable to attend school before are taught under ideal conditions and, on discharge, are able to take their places alongside normal school children. Tuberculous children are as a rule not difficult to educate. They are of a bright disposition and are mentally alert.

The school time-table was as follows:—

| | | | | |
|-----------------|---|----------------------|---|---------------|
| 9 a.m.—12 noon, | - | Seniors, | - | Miss Lamont. |
| 9 a.m.—12 noon | - | Juniors, | - | Miss Bayne. |
| 9—10.20 a.m., | - | Higher Infants, | - | Miss Skinner. |
| 10.20—12 noon, | - | Lower Infants, | - | Miss Skinner. |
| 12 noon—2 p.m., | - | Lunch and Rest Hour. | | |
| 2—4 p.m., | - | Seniors, | - | Miss Lamont. |
| 2—4 p.m., | - | Juniors, | - | Miss Bayne. |
| 2—2.30 p.m., | - | Higher Infants, | - | Miss Skinner. |
| 2.30—3 p.m., | - | Lower Infants, | - | Miss Skinner. |
| 3—4 p.m., | - | All Infants, | - | Miss Skinner. |

The average number of children attending school was 87; maximum, 94; minimum, 77.

BUILDINGS AND GROUNDS.

The Colony has accommodation for 250 patients, as follows:—

| | |
|---------------------------------------|------|
| Pavilion I—Adult Males, | 84 |
| Pavilion II—Adult Males, | 46 |
| Boys, | 33 |
| | — 79 |
| Pavilion III—Adult Females, | 9 |
| Children, | 61 |
| | — 70 |
| Observation Block—Children, | 17 |
| | — |
| Total Beds, | 250 |

All the avenues and footpaths were patched and tar-sprayed and are now in excellent condition. The following work was carried out by the County Works Department:—New sliding doors to school rest and recreation rooms. Painting:—Observation Pavilion, Pavilion II, Administration Buildings, Gardener's House, Recreation Hall, Kitchen (Old Home).

Our electric storage battery, which had been giving considerable trouble, was scrapped and a new 40-kilowatt generating set was installed in the old battery room. This will mean a considerable economy in coal consumption.

RECREATION.—This is considered an important part of the Colony Scheme and we are well equipped with a Recreation Hall. During the winter months, there was a weekly cinematographic entertainment, frequent concerts and a monthly whist drive. The billiard room was well patronised, there being frequent competitions. There were also facilities for carpet bowls and other indoor games. The arrangements for outdoor recreation consisted of a golf course, putting green, croquet lawn, and quoiting ground. Our thanks are due to the under-noted kind friends who so generously provided entertainments during the season:—

The Regalians Concert Party, Glasgow.

The Quest Players, Glasgow.

The Jolly Concert Party, Rutherglen (2 concerts).

The Players, Glasgow (2 entertainments).

St. George's Church Dramatic Club, Glasgow.

Dr. Scoullar's Party, Airdrie.

Miss Patricia Isles' Pupils, Cambuslang.

The Kyrle Choir, Glasgow.

Miss Bertha Waddell and The Children's Theatre.
 The Elite Concert Party, Rutherglen.
 St. Joseph's Dramatic Club, Clarkston.
 Miss Leggate's Concert Party, Strathaven.
 The Welfare Entertainers, Glasgow.
 The Impromptu Entertainers, Glasgow.
 The Arts League of Service, London.
 The Scotch Follies, Glasgow.
 The Ideal Entertainers, Waterloo.
 Hamilton Parish Church Young Men's Guild.
 Carfin Entertainers and Male Voice Choir.
 The Manhattan Follies, Glasgow.
 St. Charles' Dramatic Club, Newton.

RELIGIOUS SERVICES.—Regular services were held in the Recreation Hall, the undernoted clergymen very kindly giving their services voluntarily :—

Rev. John Anderson, Carmunnock.
 Rev. J. A. Cowley, Clarkston.
 Rev. Donald N. Dow, Busby.
 Rev. J. Maxwell Dewar, Eaglesham.
 Rev. J. G. Liddell, East Kilbride.
 Rev. Fr. Murray, Clarkston.
 Rev. D. Langlands Seath, Eaglesham.
 Rev. N. S. Boyd Scott, East Kilbride.
 Rev. A. Macfarlane Wright, Busby.

In addition, Sunday schools were conducted for both Protestant and Roman Catholic children.

In June, our new Canteen was officially opened by Mr. Gavin A. Shanks, our Chairman. The building, which is of brick and roughcast, contains canteen, tearoom, and showroom. In the words of the Chairman at the opening ceremony :—

“ The Committee felt that we were rather handicapped without
 “ a showroom to display the goods manufactured in our workshops,
 “ particularly in our basketmaking department, and it was
 “ decided to incorporate this in the building which would also
 “ include a canteen and tearoom. The tearoom has been a long-
 “ felt want in the Colony, especially on a Saturday when we have
 “ several hundred visitors coming from a considerable distance.”

STAFF.

At the end of the year the Institution Staff, in addition to the Physician-Superintendent, Assistant Physician, and Matron, included the following :—

| | | | |
|----------------------------|----|-------------------------------|-----------|
| Sisters, - - - - - | 6 | Typist, - - - - - | 1 |
| Staff Nurses, - - - - - | 3 | Clerks, - - - - - | 2 |
| Nurses, - - - - - | 17 | Electric Power Station, - - - | 6 |
| Supervisor, - - - - - | 1 | Handyman, - - - - - | 1 |
| Maids, - - - - - | 29 | Porter, - - - - - | 1 |
| School Teachers, - - - - - | 3 | Attendant, - - - - - | 1 |
| | | Total, - - - - - | <u>71</u> |

METEOROLOGICAL REPORT.

I. RAINFALL.

| Month. | Depth in Inches. | Month. | Depth in Inches. |
|---------------------|---------------------|--------------------------------|---------------------|
| January, - - - - - | 3.58 | July, - - - - - | 3.60 |
| February, - - - - - | 4.62 | August, - - - - - | 1.95 |
| March, - - - - - | 1.26 | September, - - - - - | 1.53 |
| April, - - - - - | 2.12 | October, - - - - - | 4.57 |
| May, - - - - - | 3.90 | November, - - - - - | 6.95 |
| June, - - - - - | 5.46 | December, - - - - - | 4.50 |
| | | Total Rainfall for Year, - - - | <u>44.04</u> |

This shows a decrease of .43 inches on previous year.

During the year, there were 205 completely dry days, being 22 days less than last year.

II. WINDS.

| | | | |
|-----------------------|----|-----------------------|------------|
| North, - - - - - | 42 | South, - - - - - | 37 |
| North-East, - - - - - | 24 | South-West, - - - - - | 34 |
| East, - - - - - | 64 | West, - - - - - | 95 |
| South-East, - - - - - | 15 | North-West, - - - - - | 54 |
| | | | <u>220</u> |
| | | 145 | |

III. TEMPERATURE.

| | | Highest Reading. | Lowest Reading. | Mean. |
|------------|-------|---------------------|--------------------|-------|
| January, | - - | 48 | 18 | 33 |
| February, | - - | 46 | 20 | 33 |
| March, | - - - | 58 | 16 | 37 |
| April, | - - - | 62 | 25 | 43·5 |
| May, | - - - | 70 | 28 | 49 |
| June, | - - - | 71 | 36 | 53·5 |
| July, | - - - | 75 | 42 | 58·5 |
| August, | - - | 75 | 32 | 53·5 |
| September, | - - | 68 | 32 | 50 |
| October, | - - | 64 | 22 | 43 |
| November, | - - | 52 | 28 | 40 |
| December, | - - | 54 | 20 | 37 |

The mean temperature for the year, therefore, works out at 44·25.

COLONY DEPARTMENTS.

The training conditions in all departments were similar to those of previous years, the patients being trained by experienced instructors. The working hours per day varied from two to six, according to the patient's physical condition.

GARDENS.

This department continued to take an important position in the Colony, supplying the Institution with the usual garden produce. It is well equipped for the training of patients in market gardening. Included in this department are the Institution grounds. The staff consists of a head gardener, inside and outside foremen, 7 under gardeners, and a carter.

FOREST NURSERY.

This department was working satisfactorily during the year. It continued to show a good financial return. The bothy, which was becoming somewhat dilapidated, was painted both inside and outside. There was an increasing demand for roses and all kinds of shrubs. Privet was reared for hedges at the various County housing schemes, and willows were supplied to our Basketmaking Department. The staff consists of a head forester (who is also in charge of Camps), a foreman forester, 6 under foresters, a carter, and a caretaker.

POULTRY FARM.

The work in this department is very suitable for tuberculous patients. It is an open-air occupation, and the duties are not too arduous. Poultry farming can be considered as both occupational therapy and vocational training. There is a certificated poultry-maid in charge, and the patients work in relays, thus ensuring constant supervision of the poultry. The patients do not require to be on duty more than three hours per day. During the year, 41 patients enrolled for training.

In September, Miss Westwater, N.D.D., was appointed poultry-maid in place of Miss Nicolson, who had resigned to get married.

In the Incubator House we had five incubators, capable of hatching 650 eggs at one time. The stock of poultry consisted of light and heavy breeds, and included Wyandottes, Rhode Island Reds, Black and White Leghorns. Owing to the exposed situation of the poultry farm, it was found that these were the best varieties to rear. It is gratifying to record a marked increase in the hatching and in the sales, especially of hatching eggs, 2,636 hatching eggs and 1,106 day-old chicks being sold.

Altogether, during the year, 2,118 chickens and 44 turkeys were hatched, an increase of 405 on the previous year. At the end of the year the stock consisted of 113 cockerels, 4 cocks, 294 pullets, and 202 hens—total, 613 fowls.

PIGGERY.

There was a steady demand for pigs, most of these being sold at the Public Auction Marts. The department continued to show a good profit, and the sales amounted to £469 10s. The patients received an excellent training in the rearing and preparation for market of the various breeds. 11 patients enrolled for training. The stock at the end of the year numbered 111, as follows:—1 large white boar, 14 middle white sows, 82 crossed young pigs, and 14 young pigs under 8 weeks.

GUINEA-PIG DEPARTMENT.

The work in this department was carried out by two patients, and the County Laboratory purchased all the stock. Owing to the increasing demands of the Laboratory, it has been suggested that

guinea-pigs should be reared on a large scale, so that we could supply all the requirements. This is an excellent suggestion and worthy of serious consideration. The rearing of guinea-pigs offers a good means of livelihood to disabled men.

| | |
|-----------------------------------|-----|
| Sold County Laboratory, - | 112 |
| Stock at end of year, - | 93 |

INSTITUTION WORKSHOP.

This department, organised for the carrying out of general Colony repairs, was carried on successfully during the year, patients with previous occupational experience being employed. Eight patients came under this category.

GARAGE.

The garage continued to be worked in conjunction with the Motor Repair Department, all the work in connection with our two motor lorries being done by trainees from this department—a good example of the value of Colony training. To stimulate healthy rivalry, a trainee, who had completed his training, was put in charge of each lorry. This arrangement has worked very satisfactorily, the lorries always being clean and in good condition. Our Dennis and Ford cars were kept steadily employed throughout the year.

FARM.

The stock is a pedigree herd of Ayrshire breed, and we hold a producer's licence for certified milk (the highest grade). The whole herd passed the tuberculin test, there being no reactors. This position has been maintained for many years. The average figure for the routine veterinary inspection was 95·8 per cent. All the milk produced was purchased by the Institution, none being retailed. Any surplus milk was made into butter. Being members of the Scottish Milk Records Association, the milk production was regularly tested by the official tester, the figures being 3·78 per cent. average butter fat. Five cows yielded over 1,000 gallons, the average for the whole herd being 834 gallons. The bacteriological examination of the milk gave the excellent result of only 1,210 blood heat organisms per c.c. and no coliform bacilli in a tenth of a c.c. When you consider that with certified milk you are allowed to have up to 30,000 bacteria per c.c., the result indicated a high standard of cleanliness.

The quality of our stock is still improving. We had a good sale for yearling bulls, the highest price being £40. The following were the awards gained at the various cattle shows:—

| | | | |
|---------------------|----------------------------|---|-------------------------------|
| 1st, - - - - | 1 year old Bull, - | - | May Show and Sale, Lanark. |
| 1st and Champion, - | Aged Bull, - | - | Hamilton. |
| 1st and 3rd, - - | 2-year old Heifers, - | - | do. |
| 3rd and 4th, - - | 1-year old Heifers, - | - | do. |
| 1st, - - - - | 2-year old Heifer, - | - | Chapelton. |
| 1st and 2nd, - - | 1-year old Heifers, - | - | do. |
| 2nd, - - - - | Pair 1-year old Heifers, - | - | do. |
| 1st, - - - - | 2-year old Heifer, - | - | East Kilbride. |
| 2nd, - - - - | 1-year old Heifer, - | - | do. |
| 3rd, - - - - | Aged Bull, - - - | - | do. |

We were breeders of the bull which gained the championship at East Kilbride Show.

The crops this year were of average quantity, the season being rather wet for our heavy soil. We had an excellent hay crop. The potato crop, though light, was of excellent quality.

In October Miss Reed was appointed dairymaid in place of Miss Allan, who had resigned to get married.

The staff consists of farm manager, dairymaid, assistant dairymaid, byreman, milker, 2 ploughmen, and 2 outdoor workers.

In August we purchased a stock bull, rising two years. It had the following excellent pedigree:—

Greenan Lord London.

Born—14th September, 1929.

Sire—Mill-o-Shiel Major, 28670.

Dam—Farden Cherub, 13621.

Record of dam as heifer—

1,240 galls. at 4.49 per cent. butter fat in 47 weeks.

Record of dam as 4-year-old—

1,214 galls. at 4.61 per cent. butter fat in 43 weeks.

Record of grand dam—

938 galls. at 4.44 per cent. butter fat in 40 weeks.

1,108 do. 4.18 do. do. 44 do.

980 do. 4.04 do. do. 43 do.

1,101 do. 4.26 do. do. 48 do.

Record of dam of sire—

| | | | | | | |
|-------|--------|---------|-----------|------------|-------|--------|
| 1,021 | galls. | at 3.84 | per cent. | butter fat | in 45 | weeks. |
| 1,064 | do. | 3.85 | do. | do. | 47 | do. |

Farden Cherub won the milking trials at the London Dairy Show in 1929 as a 3-year-old. She gave 61½ lbs. milk at 4.14 per cent. butter fat in one day, the largest quantity given by any heifer of any breed in the Show.

The stock at the end of the year was as follows:—2 stock bulls, 2 bull stirks, 11 bull calves, 47 cows, 30 heifers, 16 heifer calves, 7 work horses.

INDUSTRIAL WORKSHOPS.

This department is one of the essential features of the Colony, and, without it, our scheme of treatment and training would be incomplete. It is the final stage in the complete scheme for the treatment of tuberculosis. It enables the patient to be restored to normal health and trained in an occupation which will enable him to earn a livelihood. This scheme has been very harshly criticised on the score of expense. However, if some of the critics could only learn of the work that is being done by these trainees, they would be more enthusiastic. Quite recently a circular was received from one of our trainees who had completed his training. This circular showed considerable enterprise, and in it he laid emphasis on the high position he had attained at the test examination. This has been the means of his obtaining a large number of orders. One method of assisting trainees would be by the erection of huts in the trainees' own gardens or on vacant ground where they could carry on the occupation in which they had been trained. These huts would be of cheap construction and capable of being transported when necessary. This is one solution of the after-care problem, and one hopes it will receive serious consideration by the responsible authorities.

The Local Authority should never lose sight of a trainee on completion of his training, but must be prepared to give a helping hand where necessary.

In our Industrial Workshops training was the first consideration, and the success of the scheme must never be judged by the financial return, although it is gratifying to record that the receipts from the various departments totalled £944.

This year 8 trainees entered for the examination of the City and Guilds of London Institute—5 in basketmaking and 3 in cabinetmaking. The results were outstanding, and reflected great credit on both instructors and trainees. In the basketmaking examination one trainee was examined in the final grade and was successful in obtaining first prize—a silver medal and first-class certificate. The other four trainees were examined in Grade I. One obtained the first prize—a bronze medal and a first-class certificate—other 2 first-class certificates, and 1 second-class certificate. In the cabinetmaking section we obtained one first-class and two second-class certificates in Grade I. When one realises that pupils from all over the British Isles and Colonies enter for these examinations, then one has good reason to be enthusiastic about the results.

In June our workshop extension was opened, and one could not do better than quote the words of our Chairman, Mr. Shanks, who performed the opening ceremony:—

“We are all proud of our workshops, for they stand for the
 “most advanced effort yet made in the County to deal in a practical
 “way with tuberculosis and its dire results. The object of the
 “Hairmyres Scheme is not to train men for charity’s sake, but
 “to fit them to take their place in the attempt to gain for them-
 “selves and their families a rate of remuneration that would give
 “them a good standard of life. What we are really doing in
 “our workshops is giving new hope, and I believe that there is
 “no better medicine for the sick man than that. Training is
 “available in cabinetmaking, motor driving and repairing,
 “basketmaking, and boot-repairing, and, while we had formerly
 “accommodation for 36 men, we are now able to have 50 in the
 “occupations mentioned. We can look forward to the future
 “with renewed hope, and feel confident that the opening of the
 “extension is an important landmark in the scheme for the
 “treatment of tuberculosis.”

The following table shows the position at the end of the year since the inauguration of the workshops:—

| | Cabinet- making Dept. | Basket- making Dept. | Boot Re- pairing Dept. | Motor Dept. | Ministry of Pensions. | Civilian. |
|--|-----------------------------|----------------------------|------------------------------|----------------|-----------------------------|-----------|
| Number of trainees who have completed training, - - | 24 | 12 | 22 | 62 | 26 | 94 |
| Number working at trade in which they received training, - - - - | 12 | 7 | 14 | 32 | 15 | 50 |
| Number working at another trade:— | | | | | | |
| (a) Original occupation, - | — | — | — | 1 | 1 | — |
| (b) New occupation, - | 3 | 2 | 1 | 4 | 2 | 8 |
| Number failed to find employment, - - - | 1 | 1 | 3 | 13 | 2 | 16 |
| Poor Health, - - - | 2 | 1 | 1 | 3 | 1 | 6 |
| Dead, - - - - | 5 | 1 | 1 | 1 | 1 | 7 |
| Unable to trace, - - - | 1 | - | 2 | 8 | 4 | 7 |

MOTOR DEPARTMENT. — This is one of our most popular departments, as the training offered a good prospect of obtaining permanent employment. 22 patients enrolled for training. All the trainees, on completion of their training, were successful in obtaining the driving certificate of the Royal Scottish Automobile Club—not an easy certificate to obtain, as it entails a driving test in city traffic and a *viva voce* examination. Our three demonstration cars—an Austin, Vulcan, and Ford—were in constant use throughout the year. These are good cars for training purposes, as they exemplify all the different types of gear changes that a trainee is likely to meet with. Our Dennis and Ford lorries were used for traffic driving. The usual lectures and demonstrations were given on our Wolseley chassis, specially sectioned and illuminated for the purpose. Owing to the extension of the workshops, the old Boot-repairing Department was used for the lectures and demonstrations. This arrangement has been very beneficial. There was a certain amount of general repair work done in the workshop.

CABINETMAKING DEPARTMENT.—This department was fully employed during the year, the receipts showing a gratifying increase. The old Basketmaking Department was added to the workshop and was

used for french-polishing, an alteration which has made a marked improvement in the finishing of the various articles of furniture. It has also relieved the overcrowding. Furniture of all descriptions was made, the timbers used being oak, walnut, and mahogany. Extensive use was made of the various kinds of plywood, particularly Oregon and alder. A certain amount of veneering was done. There has been an increase in upholstering work, and this is now a recognised section of the training.

BOOT-REPAIRING DEPARTMENT.—This department continued to make satisfactory progress. The removal to the new workshop meant more accommodation and better facilities for training. A new finishing machine was installed, and it embodied all the latest principles for dust prevention—a very essential provision where tuberculous men are employed. We also installed a steeping tank for leather, and we are now able to steep whole sides at one time. This year the Public Assistance Committee arranged that we should do all the boot repairs for Omoa and Crosslaw Homes, and we hope this arrangement will be further extended. 9 patients enrolled for training.

BASKETMAKING DEPARTMENT.—Our new accommodation has been fully utilised, and we are now able to concentrate on the larger basket work, such as pigeon panniers and chairs. There was an increasing demand for these articles. Our new arrangement allowed us to store the cane and willow in a loft above the workshops, and this has proved a great convenience. Our new showroom in the canteen building enables us to display the goods to perfection. There are great possibilities in this form of training, and so far the trainees who have left this department are doing well. At present most of the pigeon panniers are made in England, and in this trade alone there is a very suitable opening in Scotland. As in former years, we displayed our wares at various fêtes, sales of work, and East Kilbride Show, with very satisfactory results. 10 patients enrolled for training.

HAIRMYRES COLONY,

March, 1932.

COUNTY ORTHOPÆDIC HOSPITAL, STONEHOUSE.

Physician-Superintendent—ALEXANDER SMITH, M.B., Ch.B.

Visiting Physician—ALEXANDER M'LEAN, M.B., Ch.B.

Matron—Miss A. SHORE.

ADMINISTRATION.

Buildings and Grounds.—Once more no alterations are to be recorded in the buildings, save that the Nurses' Home has been redecorated. The accommodation remains hopelessly inadequate for its volume of work, but this inadequacy is well known and need not be described in detail again.

The difficulties could be overcome with the addition of 150 new beds to make up for existing overcrowding and to meet the urgent need for provision for the cases remaining long on the Waiting List. Otherwise the hospital must continue to tackle that portion of the work its capacity permits. It must not be forgotten, however, that delay in the admission and scientific treatment of tuberculous disease of bones and joints is one of the certain methods by which cripples are manufactured. Instead of dealing with the cases as they arise, we are admitting them at late stages when hope of good results is not bright, and when treatment is very long and tedious.

Also, it is quite impossible with existing facilities to undertake the treatment of the large number of non-tuberculous orthopædic conditions such as infantile paralysis and the congenital deformities. For many of these no provision is made and no treatment given. The need for this problem to be solved, and solved decisively, is clamant.

I would particularly draw attention also to the amount of operative work, detailed later, undertaken in the Out-patient Department. These patients almost all get general anaesthetics and are thereafter sent home. They should practically all be in-patients, although the length of residence would not necessarily be great, but meantime there is no place to put them. The responsibility and anxiety thrown on the Medical Superintendent in consequence is much greater than it should be.

Twenty-two acres of ground are available for extensions. An excellent operating theatre and treatment block exists, and additional wards need not be over-elaborate. The site is an excellent one, and, in these days of motor transport, easily accessible.

STAFF.—The *Medical Staff*, as before, consists of a resident superintendent and a visiting physician, whose chief duties are the administration of anæsthetics.

The visiting dentist gives treatment when necessary. The teeth of the patients are thus kept in good condition, and the importance of dental hygiene is impressed on the patients.

The *Nursing Staff* consists of a matron, 5 trained sisters, and 17 probationers.

Clerical Staff.—1 clerkess, full-time, non-resident.

Teaching Staff.—1 full-time (non-resident) female teacher.

Domestic Staff.—1 cook, 1 laundrymaid, and 13 maids.

Outdoor Staff.—2 engineers, 2 gardeners, and 1 fireman.

PATIENTS.—Following the usual procedure, the patients are dealt with under the headings of outdoor and indoor.

Indoor Patients.

During the year 102 patients were admitted and 98 discharged. Their places of residence are detailed in Table I. With one exception from the Burgh of Hamilton they all came from the County.

TABLE I.

| | | | |
|-----------------------|----|--------------------|-------|
| Avondale, - - - | 8 | East Kilbride, - - | 1 |
| Blantyre, - - - | 6 | Glasford, - - - | 1 |
| Bothwell, - - - | 21 | Glasgow, - - - | 1 |
| Cadder, - - - | 2 | Hamilton, - - - | 1 |
| Cambuslang, - - | 8 | Lanark, - - - | 1 |
| Cambusnethan, - | 3 | Lesmahagow, - - | 1 |
| Carluke, - - - | 1 | New Monkland, - | 6 |
| Crawford, - - - | 1 | Old Monkland, - | 9 |
| Dalserf, - - - | 15 | Shotts, - - - | 7 |
| Dunsyre, - - - | 1 | Stonehouse, - - | 3 |
| | | | <hr/> |
| | | | 97 |
| Hamilton Burgh, - - - | | | 1 |
| | | | <hr/> |
| | | Total, - - - | 98 |
| | | | <hr/> |

TABLE II.

AGE AND SEX DISTRIBUTION.

| Quinquennial Periods. | Males. | Females. | Both Sexes. | Age—Groups. | Tuber- culous. | Non- Tuberculous. |
|-----------------------|--------|----------|-------------|-----------------|-------------------|----------------------|
| — 5 | 2 | 8 | 10 | Pre-School, | 8 | 2 |
| —10 | 16 | 12 | 28 | School Age, | { 17 | 11 |
| —15 | 6 | 9 | 15 | | { 13 | 2 |
| —20 | 5 | 8 | 13 | Adolescent, | { 10 | 3 |
| —25 | 2 | 5 | 7 | | { 7 | — |
| —30 | 2 | 4 | 6 | Early Maturity, | { 6 | — |
| —35 | 1 | 2 | 3 | | { 3 | — |
| —40 | 4 | 1 | 5 | | { 4 | 1 |
| —45 | 1 | 1 | 2 | | { 1 | 1 |
| —50 | — | 2 | 2 | Late Maturity, | { 1 | 1 |
| —55 | 5 | 1 | 6 | | { 6 | — |
| —60 | — | — | — | | { — | — |
| —65 | — | — | — | | { — | — |
| —70 | 1 | — | 1 | | { 1 | — |
| | 45 | 53 | 98 | | 77 | 21 |

Non-Tuberculous Disease.

Twenty-one patients, about the average number, were found suffering from conditions other than tuberculous. Table III gives details of this group.

Twelve of these patients were admitted with conditions usually treated in an orthopaedic hospital.

Non-Pulmonary Tuberculosis.

The remaining seventy-seven patients were suffering from tuberculous conditions, and these are classified and detailed in tables of the usual form:—

SPINAL DISEASE (15 Cases).

(See Pages 306 and 307.)

Twelve cases of spinal tuberculosis were discharged during the year, as compared with fifteen last year. Seven of these had well consolidated and healed lesions, two cases were improved, while in the remaining three no improvement occurred. These three were patients with sinuses and amyloid degeneration, and improvement was not to be expected in them.

HIP JOINT (16 Cases).
(See Pages 308 and 309.)

In most of these cases good results were obtained. Four had restoration of movement and were eventually able to walk almost normally. In six the final result was an ankylosis in a good position of abduction, obtained either by tenotomy and manipulation or subtrochanteric osteotomy. Four patients were transferred to other institutions for various reasons, but had their treatment continued, while two patients with old-standing sinuses went home after a period of treatment.

KNEE JOINT (5 Cases).
(See Page 310.)

The knee cases are less numerous than formerly. All were discharged well, but in two instances amputation was necessary to save the patient from amyloid degeneration. These were cases in which complete disintegration of the joint had occurred and multiple sinuses developed.

OTHER JOINTS (6 Cases).
(See Page 311.)

These comprised four elbow cases, three of whom were able to have the disease arrested with a fairly satisfactory functional result. One had his treatment interrupted owing to the development of an infectious disease, but was subsequently readmitted. In all, operative interference was necessary.

Of the two wrist cases, one was discharged quiescent and one improved.

MULTIPLE TUBERCULOSIS (12 Cases).
(See Pages 312 and 313.)

In this group practically all the deaths occurred. These cases usually do badly because they suffer from widely disseminated blood-borne infections. In only two was the disease arrested.

TUBERCULOUS CERVICAL ADENITIS (26 Cases).

These patients were mainly suffering from extensive glandular tuberculosis, and had usually undergone treatment elsewhere by light therapy, &c., before admission. In twelve instances complete excision of the gland masses was undertaken, while in the remainder the process of caseation had spread so far that incision and scraping alone was possible. Two cases had retropharyngeal abscesses.

REVIEW OF TREATMENT OF ARTICULAR AND OSSEOUS TUBERCULOSIS.

The modern treatment of these conditions is now well established, and dates from the post-war period. As a result of the work of the French orthopædic surgeons like Calot, at Berck, of Rollier and Bernhard in Switzerland, and Sir Henry Gauvain in England, it came to be conclusively recognised that special hospitals were necessary for the treatment of tuberculosis of bones and joints.

It must be clearly borne in mind that the local lesion is but a focal manifestation of a general or constitutional infection, and that as a result general treatment is of primary consideration. Special hospitals, then, must be of the open-air type and situated where an adequate supply of fresh air and sunshine are available. In addition, efficient orthopædic treatment must be given to prevent or correct deformity and to put the part at rest during the active stages of the disease. Also, it must be emphasised that tuberculous lesions anywhere, and of bones in particular, take a very long time to heal after the advance of the disease has been checked. Hence it is of supreme importance that such special institutions should have power to retain their patients for long periods. I do not see how the long residence is likely to be materially lessened by any therapeutic procedure, for even were it possible to arrest the progress of the disease at once, it would still require long recumbency to permit of consolidation and healing of disorganised bone and joint.

The usual dispensary machinery may prove efficient in the admission of cases, but, in addition to this, systematic attempts at after-care are essential, for many of the patients are dismissed wearing orthopædic appliances, and thus require periodic supervision.

Local treatment with us has followed the prevailing mode of conservatism in bone and joint cases. In fact, in recent times open operative measures have more and more come to be avoided wherever possible in the so-called surgical types of tuberculosis, while in pulmonary tuberculosis, once the exclusive domain of the physician, the surgeon has extended his activities in a variety of ways.

Spinal cases are treated in a variety of ways. We mainly make use of the Bradford frame or some modification of it. The method of partial immobilisation of Calot, the Berck tray on which the patient is kept hyperextended over a block as long as activity of disease is present can also be used, or complete immobilisation on the ingenious spinal carriage of Pugh, of Carshalton.

Our aim is not so much to reduce deformity by separating collapsed vertebræ, as to produce such compensatory lordosis above and below the lesion that the resultant, when the patient is dressed and about, is a fairly straight spine. Similarly for hip cases we make use of two methods, a weight extension which is a modification of that used by Gauvain, and which has an adjustable bar on it whereby flexion and adduction deformities can be gradually reduced, and the very valuable double Pyford frame, an elaboration of the Thomas splint.

Once the lesion is clinically inactive as evidenced by disappearance of protective muscular spasm, and at the same time is seen to be healed so far as radiological appearances show, the patients are allowed up for some time in a plaster apparatus, while a more durable appliance of celluloid is being constructed. The important point about these appliances is that they should be carefully moulded to ensure that the immobilisation of the part is complete while the patient is walking about. A plaster cast of the region is made, carefully smoothed, and the moulding slightly exaggerated so that when the splint is completed a grip on the necessary parts, particularly the pelvis, is ensured. The surface is covered with melted paraffin wax, and a paste, made by dissolving celluloid in acetone, is applied impregnated in muslin. The application is made layer by layer, rubbing in the celluloid to the meshes of the muslin until the requisite thickness—usually about twelve or thirteen layers—has been obtained. The whole cast is then left aside and allowed to dry for about seven days. Thereafter the splint is removed from the cast and fitted to the patients.

Probably one of the greatest weapons added to the armamentarium of those engaged in combat with tuberculosis has been the use of ultra-violet light, both from natural and artificial sources. The benefits of Alpine heliotherapy have been amply demonstrated by Bernhard and Rollier. The success of treatment by sunlight depends on gradual and scientific exposure. On the first occasion only the feet are exposed, and thus the sensitiveness of the patient is estimated, and subsequent dosage regulated according to individual requirements. After the feet, the legs are exposed up to the knees, then the thighs, then the abdomen, and then the chest, until the whole body is laid bare. There are thus five regions on the front and five on the back of the body, and in Rollier's scheme five minutes are initially given in the average case to each region. In this country, owing to the weak

actinic value of the sun's rays, we substitute for Rollier's five-minute periods periods of fifteen minutes. Of course, during the treatment the head and neck must be protected by a sunshade of some description.

However, in this country, because of the waywardness of the sunshine and the poor quality of the essential rays, absorbed as most of them are by cloud films or smoke or atmospheric moisture, some artificial source of light treatment becomes necessary.

As artificial sources of ultra-violet light there are three main types of apparatus in common use, the mercury vapour arc, the carbon arc, and the tungsten arc. The mercury vapour burner consists of a quartz tube—quartz being necessary because glass is opaque to ultra-violet rays—with two electrodes sealed into it, and containing a quantity of mercury. When the lamp is running mercury vapour bridges the gap between the two electrodes, forming the arc which gives rise to the light. This type of arc is rich in the shorter wave-lengths of ultra-violet.

The carbon arc lamp gives a source of light from an arc formed between the two carbon electrodes, most of the valuable rays coming from the crater on the positive pole. Such an arc gives off ultra-violet rays of the longer wave-lengths. The arc is maintained by means of an electro-magnetic arrangement which keeps the poles at a fixed distance, so that adjustment by hand is not necessary.

The tungsten arc, constructed on the same principle as the carbon arc, but having electrodes of tungsten, is rich in the shorter wave-lengths, although long waves are also present.

Treatment consists essentially of a general light bath, gradually increased in duration. With the carbon arc an initial exposure of from ten to twenty minutes is usually given, whereas with the mercury vapour and tungsten arcs the initial exposure is one of a few minutes only. The eyes have to be carefully protected during irradiation.

We have now treated many hundreds of cases, and it may be said that the graduated light bath is a valuable factor in treating surgical tuberculosis. In bone and joint tuberculosis it is merely an adjuvant, and proper orthopædic treatment to ensure rest of the part always comes first.

Of course, actinotherapy is a valuable agent in other forms of tuberculosis besides bone and joint lesions. It is very useful in lymphatic gland cases, particularly where there has been breaking down to the surface and involvement of the skin. In lupus also the results are sometimes good, particularly in the form known as catarrhal lupus, although in the fibroid and large papular varieties the condition may remain intractable and require local destructive measures.

Abscesses, when they exist, are treated by the aspiration of the contents, and never by incision unless a secondary pyogenic infection has occurred. It is important, particularly in spine disease, to avoid sinus formation, for such sinuses are exceedingly resistant to treatment, and are nearly always succeeded by pyogenic infection, long continued discharge, and waxy degeneration.

Spine cases in adults are also occasionally treated by an autogenous bone graft along the vertebrae to give additional immobilisation, after the method of Albée, &c. This operative procedure is not a direct attack on the disease, but merely the provision of an internal splint.

In hip-joint disease similar splintage is sometimes used when an extra-articular bony fixation of the hip is done.

Deformity in hip cases, when they are advanced, cannot always be overcome without recourse to operation. Adduction deformities have to be reduced by tenotomy and manipulation and the immediate application of plaster when failure to get good abduction has occurred. This is the method used extensively by Calot. In our experience it is not always satisfactory, the adduction deformity being very liable to recur. Where ankylosis has taken place nothing short of subtrochanteric osteotomy is of any avail, but the results of this operation are very satisfactory if it is undertaken only when the disease is quiescent. Good walking positions are then obtained, and recrudescence of the disease is unlikely.

Tuberculosis of the knee is usually treated here by extension to correct deformity, and by the use of the walking caliper splint when the patient is sufficiently well to get up. The fungoid form of the disease without much bony destruction is peculiarly resistant. In all knee cases flexion and subluxation are difficult to avoid, and a stable limb useful in walking not easily obtained by conservative methods. As De Quervan says—"The philosopher would look upon it as a dispensation of providence that it is in the knee joint where our

conservative treatment most frequently suffers shipwreck, and operative treatment has achieved its most brilliant results." It would seem that there will remain a certain percentage of knee-joint tuberculosis where resection of the joint will have to be performed either on account of considerations of time or failure to obtain a functionally useful limb.

The time element in treatment is an important one. Nine months to one year should not be considered too long for smaller bones; as long as two years may be necessary for the larger joints. Alternating periods of irradiation and rest are most suitable. There are, of course, some cases which prove intractable.

It is remarkable how completely osseous regeneration can take place under this combined treatment. If periodic radiographic examinations are made several phenomena can be observed. There is first of all disappearance of the surrounding atrophy. Any periosteal stratification is smoothed down. The bone takes on a sharp, firm outline. New coarse trabeculae form a wide-meshed framework, and any remaining defective areas become sharply delimited. Associated with the osseous changes reabsorption of soft tissue products also takes place, so that gross synovial shadows disappear and subcutaneous tissue swelling subsides. Complete clinical recovery with good function is, of course, possible, although residual osseous deformity can be detected. Sometimes, as Ernst and Collin have shown, clinical improvement is associated with apparent radiographic deterioration. This is due to coarse sclerosis surrounding areas where reabsorption is occurring, and is really of favourable omen.

X-Ray Department.

During the year 541 radiological examinations were made, 204 of these being of indoor patients and 337 of outdoor patients.

Dental Treatment.

The visiting dentist paid four visits during the year, and 42 patients were treated as follows:—

Extractions, 52; fillings, 22; total extractions under chloroform, 2.

INDOOR OPERATIONS.

The indoor operative work is detailed in the following table:—

OPERATIONS WITH GENERAL OR SPINAL ANÆSTHESIA.

| Disease. | Number of Cases. | Operation. | Remarks. |
|--|------------------|-------------------------------------|-----------|
| T.B. spine with sinus. | 3 | Incision and drainage. | Improved. |
| T.B. spine with sinuses. | 2 | Incision and drainage. | I.S.Q. |
| T.B. hip with sinus. | 1 | Incision and drainage. | Improved. |
| T.B. hip with sinuses. | 1 | Incision and drainage. | Well. |
| T.B. knee. | 1 | Excision. | Well. |
| T.B. knee. | 2 | Amputation. | Well. |
| T.B. knee with sinuses. | 1 | Incision and drainage. | Improved. |
| T.B. ankle with sinuses. | 1 | Incision and scraping | Well. |
| T.B. elbow with sinus. | 1 | Excision. | Well. |
| T.B. elbow. | 1 | Partial excision. | Well. |
| T.B. wrist. | 1 | Excision. | Well. |
| T.B. osteomyelitis of ilium. | 2 | Sequestrotomy. | Improved. |
| T.B. peritonitis with intestinal obstruction. | 1 | Laparotomy and separation of bands. | Improved. |
| Intestinal obstruction. | 1 | Laparotomy and separation of bands. | Well. |
| Hodgkin's disease. | 1 | Excision. | Improved. |
| Chronic osteomyelitis of femur. | 2 | Sequestrotomy. | Well. |
| Chronic osteomyelitis of femur. | 1 | Sequestrotomy. | Improved. |
| Chronic osteomyelitis of tibia. | 1 | Sequestrotomy. | Well. |
| Whitlow. | 2 | Incision, &c. | Well. |
| T.B. cervical adenitis. | 15 | Incision and scraping. | Well. |
| T.B. cervical adenitis. | 12 | Excision. | Well. |
| T.B. cervical adenitis with retropharyngeal abscess. | 2 | Drainage. | Well. |
| Acute cervical adenitis. | 3 | Incision and drainage. | Well. |
| Chronic tonsillitis and adenoids. | 7 | Enucleating and curetting. | Well. |

MINOR OPERATIONS WITH LOCAL ANÆSTHESIA.

Aspiration of psoas abscesses, paracentesis, &c., 457.

TABLE III.

| No. of Case. | Sex. | Age in Years. | Disease. | Treatment. | Result. | Residence in days. | Remarks. |
|--------------|------|---------------|---|---|--------------------|--------------------|---------------------------------|
| 1 | M. | 8 | Perthes' disease. | Extension. Rest. | Healed. | 649 | Walking normally. |
| 2 | M. | 7 | Double Perthes' disease. | Extension. Rest. | Healed. | 288 | Walking normally. |
| 3 | F. | 11 | Arthritis of knee. | Rest, &c. | Healed. | 40 | Complete recovery. |
| 4 | F. | 46 | Chr. osteomyelitis of tibia. | Removal of sequestra. Light therapy. | Improved. Well. | 131 81 | Discharged at own request. — |
| 6 | F. | 17 | Septic prepatellar bursitis. | Incision and drainage. | Healed. | 99 | Complete recovery. |
| 7 | M. | 18 | Spinal kyphosis. | Exercises. Support. | Improved. | 95 | Sent in as Tb. spine. |
| 8 | M. | 18 | Spinal kyphosis. | Exercises. Support. | Improved. | 128 | Sent in as Tb. spine. |
| 9 | F. | 8 | Congenital syphilitic disease of knees. | Anti-specific. | Improved. | 93 | Admitted as Tb. knees. |

| | | | | | | | |
|----|----|------------------|--------------------------------|----------------------------|----------------|----|--|
| 10 | F. | 43 | Pott's fracture. | Reduction. Plaster. | Well. | 59 | Admitted from Convalescent Home, Lanark. |
| 11 | M. | 7 | Infantile paralysis, left leg. | Splintage. Electricity. | Much improved. | 16 | Walking well. |
| 12 | F. | 8 | Congenital torticollis. | — | I.S.Q. | 2 | Parents refused operative treatment. |
| 13 | M. | 8 | Acute cervical adenitis. | Incision and drainage. | Well. | 11 | — |
| 14 | F. | 2 $\frac{9}{12}$ | Acute cervical cellulitis. | Incision and drainage. | Well. | 23 | — |
| 15 | F. | 6 $\frac{6}{12}$ | Chr. cervical adenitis. | Tonsillectomy. | Well. | 3 | — |
| 16 | M. | 6 | Chr. cervical adenitis. | Tonsillectomy. | Well. | 11 | — |
| 17 | M. | 8 | Chr. cervical adenitis. | Tonsillectomy. | Well. | 3 | — |
| 18 | M. | 37 | Chr. cervical adenitis. | Tonsillectomy. | Well. | 11 | — |
| 19 | F. | 9 $\frac{6}{12}$ | Chr. tonsillitis, &c. | Tonsillectomy. | Well. | 3 | — |
| 20 | M. | 10 | Chr. tonsillitis, &c. | Tonsillectomy. | Well. | 3 | — |
| 21 | F. | 7 | Chr. tonsillitis, &c. | Tonsillectomy. | Well. | 3 | — |

TABLE IV.—SPINAL DISEASE (15 CASES).

| No. of Case. | Condition on Admission. Region Affected, &c. | Sex. | Age. | Duration of Illness in Years. | Treatment. | Result. | | | | | Residence in Days. | Remarks. |
|--------------|--|------|------|----------------------------------|---|---------|-----------|----------|--------|-------|--------------------|--|
| | | | | | | Healed. | Improved. | I. S. Q. | Worse. | Died. | | |
| 1 | Cervico-dorsal c extensive kyphosis and paresis. | M. | 8 | $\frac{6}{1\frac{1}{2}}$ | Recumbency and extension. | 1 | — | — | — | — | 1,753 | Well consolidated. |
| 2 | 7th and 8th dorsal vertebrae c girdle pains. | F. | 52 | 40 | Recumbency, &c. | 1 | — | — | — | — | 391 | Able to walk well. |
| 3 | 9th dorsal vertebra c kyphosis. | M. | 19 | $1\frac{6}{1\frac{1}{2}}$ | Recumbency and celluloid jacket. | 1 | — | — | — | — | 145 | Well consolidated. |
| 4 | 11th and 12th dorsal verte- brae c right psoas abscess. | M. | 7 | $\frac{6}{1\frac{1}{2}}$ | Recumbency on frame: aspira- tion: celluloid jacket. | 1 | — | — | — | — | 1,103 | Kyphosis improved. Lesion well consoli- dated. |
| 5 | 10th, 11th, and 12th dorsal vertebrae c paralysis of lower limbs, and abscess. | M. | 20 | 2 | Recumbency and aspiration. | — | 1 | — | — | — | 155 | Transferred to County Hospital, Mother- well. |

| | | | | | | | | | | | |
|----|---|----|----|--------------------------|--|---|---|---|---|-------|--|
| 6 | 12th dorsal vertebra and 1st lumbar vertebra. Left sided psoas abscess. | F. | 19 | 1 | Recumbency on frame: aspiration: celluloid jacket. | 1 | — | — | — | 1,537 | Lesion consolidated. Able to walk well. |
| 7 | 12th dorsal vertebra and 1st lumbar vertebra c̄ discharging sinuses and amyloid disease. | M. | 19 | 3 | Dressings, &c. | — | — | 1 | — | 37 | Discharged at own request. |
| 8 | Extensive disease of whole of dorsal spine c̄ numerous sinuses and amyloid disease. | M. | 16 | 2 | Recumbency. Incision, &c. | — | — | 1 | — | 2,953 | Discharged at parents' request. |
| 9 | Old standing disease involving most of the dorsal spine c̄ marked kyphosis and paraplegia of lower limbs. | M. | 39 | 30 | Recumbency. | — | 1 | — | — | 136 | Discharged at own request. |
| 10 | 10th, 11th, and 12th dorsal vertebrae c̄ right psoas abscess. | F. | 17 | 1 | Recumbency. Aspiration. | 1 | — | — | — | 662 | Able to walk normally. |
| 11 | 1st and 2nd dorsal vertebrae c̄ partial dislocation. Left psoas abscess. | F. | 27 | 4 | Recumbency. Aspiration. Celluloid Jacket. | 1 | — | — | — | 734 | Able to walk well. |
| 12 | Extensive disease of lumbar spine c̄ sinuses. | F. | 16 | $\frac{6}{1\frac{1}{2}}$ | Recumbency. Dressing, &c. | — | — | — | 1 | 271 | Sent home at own request. Developed amyloid disease. |

TABLE V.—HIP JOINT (16 CASES).

| No. of Case. | Condition on Admission. Region affected, &c. | Sex. | Age. | Duration of Illness in Years. | Treatment. | Result. | | | | | Residence in Days. | Remarks. |
|--------------|--|------|------|----------------------------------|--|---------|-----------|--------|--------|-------|-----------------------|--|
| | | | | | | Healed. | Improved. | I.S.Q. | Worse. | Died. | | |
| 13 | Right hip. Disease of head of femur and acetabulum. | M. | 7 | 4 | Extension. Manipulation. Plaster. Celluloid splint. Extension, &c. | 1 | — | — | — | — | 1,074 | Now ankylosed in good position. |
| 14 | Right hip. Extensive disease of femur and acetabulum & sinuses. | M. | 8 | 2 | Extension, &c. | — | 1 | — | — | — | 964 | Transferred to Mother- well Hospital. |
| 15 | Right hip. Extensive disease of femur and acetabulum & sinuses. | M. | 9 | 2 | Extension, &c. | — | 1 | — | — | — | 51 | Transferred to Mother- well Hospital. |
| 16 | Left hip. Extensive disease & sinuses and adduction deformity. | M. | 11 | 1 | Extension. Incision and drainage, &c. Aspiration. Extension. | — | 1 | — | — | — | 2,409 | Transferred to Dalsersf Hospital. |
| 17 | Left hip. Extensive disease with adduction deformity and shortening. Abscess formation. | F. | 7 | 3 | Extension. Incision and drainage, &c. Aspiration. Extension. | — | 1 | — | — | — | 769 | Transferred to Dalsersf Hospital. |
| 18 | Right hip. Early disease. | M. | 7 | $\frac{6}{13}$ | Extension. | 1 | — | — | — | — | 107 | Able to walk normally. |
| 19 | Right hip. Disease of epi- physis of femur and ace- tabulum. Adduction de- formity. | F. | 11 | 1 | Extension. Celluloid splint. | 1 | — | — | — | — | 1,118 | Patient developed pyelitis from which she recovered. |
| 20 | Left hip. Disease of epiphy- sis of femur & limitation of movements. | F. | 12 | $\frac{6}{12}$ | Extension. Celluloid splint. | 1 | — | — | — | — | 859 | Able to walk well. |

| 21 | Left hip. Disease of head and neck of femur c̄ adduction deformity. | M. | 10 | 3 | EXAMINATION. Tenotomy. Manipulation. Plaster. Celluloid splint. Extension. Tenotomy and Subtrochanteric- Osteotomy. Plaster. Celluloid splint. Aspiration. Subtrochanteric- Osteotomy. Plaster. Celluloid splint. Extension. Celluloid splint. | 1 | — | — | — | — | 264 | Ankylosed in good position. | |
|----|--|----|----|----|---|---|---|---|---|---|-----|-----------------------------|---|
| 22 | Right hip. Extensive destruction of femur and acetabulum c̄ partial dislocation. | F. | 12 | 8 | | 1 | — | — | — | — | — | 264 | Ankylosed in good position. |
| 23 | Left hip. Extensive disease with multiple abscesses. | F. | 14 | 5 | | 1 | — | — | — | — | — | 1,476 | Ankylosed in good position. |
| 24 | Left hip. Early disease. | F. | 16 | 1 | | 1 | — | — | — | — | — | 915 | Able to walk well. Movements almost normal. |
| 25 | Right hip. Old disease c̄ gross deformity and shortening. | F. | 20 | 10 | | 1 | — | — | — | — | — | 299 | Ankylosed in good position. |
| 26 | Left hip. Disease of head of femur and acetabulum c̄ sinuses. | F. | 14 | 4 | | 1 | — | — | — | — | — | 349 | Ankylosed in good position. |
| 27 | Left hip. Extensive disease c̄ gross deformity, shortening, and sinuses. | F. | 26 | 1 | | — | 1 | — | — | — | — | 298 | Discharged at own request. |
| 28 | Left hip. Extensive disease with deformity and ankylosis. Numerous sinuses. | F. | 30 | 29 | | — | 1 | — | — | — | — | 103 | Discharged at own request. |

TABLE VI
KNEE-JOINT (5 CASES).

| No. of Case. | Condition on Admission. Region Affected, &c. | Sex. | Age. | Duration of Illness in Years. | Treatment. | Result. | | | | | Residence in days. | Remarks. |
|--------------|---|------|------|----------------------------------|---|---------|-----------|--------|--------|-------|-----------------------|---|
| | | | | | | Healed. | Improved. | I.S.Q. | Worse. | Died. | | |
| 29 | Right knee. Synovial disease with osteoporosis of fem- oral and tibial epiphyses. Abscess. | F. | 5 | $\frac{1}{2}$ | Extension. Aspiration. Walking caliper. | 1 | — | — | — | — | 656 | Movements greatly restored. |
| 30 | Left knee. Old ankylosed disease. Inactive. | M. | 13 | 7 | Walking caliper. | 1 | — | — | — | — | 27 | Admitted for renewal of splint. |
| 31 | Right knee. Old ankylosed disease. | F. | 34 | 27 | Rest. | 1 | — | — | — | — | 61 | — |
| 32 | Right knee. Extensive disease with disorganisa- tion of joint and multiple sinuses. | M. | 33 | 17 | Amputation through mid- third of thigh. | 1 | — | — | — | — | 176 | Amputation necessary to save his life. |
| 33 | Right knee. Gross disease with multiple abscesses down leg. | M. | 52 | 1 | Amputation through mid- third of thigh. | 1 | — | — | — | — | 220 | Patient now well. In Hairmyres Colony. |

OTHER JOINTS (6 CASES).

| No. of Case. | Condition on Admission. Region Affected, &c. | Sex. | Age. | Duration of Illness in Years. | Treatment. | Result. | | | | | Residence in Days. | Remarks. |
|--------------|---|------|------|----------------------------------|--|---------|-----------|--------|--------|-------|--------------------|---|
| | | | | | | Healed. | Improved. | I.S.Q. | Worse. | Died. | | |
| 34 | Rt. elbow. Disease of ulna c cario-necrosis. | M. | 38 | 12 | Splintage. Dressings. &c. | — | 1 | — | — | — | 44 | Transferred to County Hospital, Mother- well. |
| 35 | Right elbow. Disease of ole- cranon, &c., c sequestra and discharging sinuses. | M. | 38 | 12 | Incision and removal of ne- crosed bone. Celluloid Splint | 1 | — | — | — | — | 62 | — |
| 36 | Left elbow. Active disease of ulna and humerus c sinuses. | M. | 43 | 4 | Partial excision. Celluloid Splint | 1 | — | — | — | — | 441 | Now healed. Move- ment limited. |
| 37 | Left elbow. Humerus, ulna and head of radius in- volved. Numerous sinuses. | M. | 67 | 1 | Fixation in splint. Draining of sinuses. Light therapy. | 1 | — | — | — | — | 205 | Movements almost full. |
| 38 | Left wrist. Disintegration of almost all the carpus and of lower end of radius. Sinuses. | M. | 52 | 1 | Aspiration. Incision and drainage. Cellu- loid splint. | — | 1 | — | — | — | 207 | Transferred to County Hospital, Mother- well. |
| 39 | Left wrist. Healing lesion of carpus. Sinuses dis- charging slightly. | M. | 53 | 2 | Dressing. Cellu- loid splint. Light therapy. | 1 | — | — | — | — | 27 | Wrist partially fixed but useful. |

TABLE VIII.
MULTIPLE TUBERCULOSIS. (12 CASES).

| No. of Case. | Conditions on Admission. Region affected, &c. | Sex. | Age. | Duration of Illness in Years. | Treatment. | Result. | | | | | Residence in Days. | Remarks. |
|--------------|--|------|-----------------|----------------------------------|--|---------|-----------|--------|--------|-------|-----------------------|-------------------------|
| | | | | | | Healed. | Improved. | I.S.Q. | Worse. | Died. | | |
| 40 | Tuberculous cervical adenitis. Tuberculous meningitis. | M. | 1 $\frac{1}{2}$ | $\frac{4}{1}$ | Lumber puncture, &c. | — | — | — | — | 1 | 145 | — |
| 41 | Right hand \bar{c} sinuses. Left elbow \bar{c} sinuses. Right elbow \bar{c} sinuses, &c. | M. | 5 | $\frac{8}{1\frac{1}{2}}$ | Operation. Celluloid Splints, | 1 | — | — | — | — | 691 | Made a good recovery. |
| 42 | Tuberculous peritonitis \bar{c} ascites. Pulmonary tuberculosis. | F. | 7 | $4\frac{3}{1\frac{1}{2}}$ | Paracentesis abdominis, &c. | — | — | — | — | 1 | 149 | — |
| 43 | Tuberculous peritonitis \bar{c} ascites. Pulmonary tuberculosis. | F. | 8 | $\frac{3}{1\frac{1}{2}}$ | Paracentesis abdominis, &c. | — | — | — | — | 1 | 664 | — |
| 44 | Miliary tuberculosis. | F. | 12 | $\frac{4}{1\frac{1}{2}}$ | Palliative. | — | — | 1 | — | — | 39 | Died later at home. |
| 45 | Spine. Disease of 5th-7th dorsal vertebrae. Right wrist. Disease of carpal bones with sinuses. | M. | 21 | 2 | Recumbency. Celluloid jacket and splint. | 1 | — | — | — | — | 478 | Able to get about well. |

| | | | | | | | | | | | |
|----|--|----|----|--------------------------------|--|---|---|---|---|-----|---|
| 46 | Spine. Disease of 12th dorsal vertebra and 1st lumbar vertebra & breaking down abscess. Pulmonary tuberculosis. Tuberculosis of abdomen, &c. | M. | 29 | 4 | Aspiration. Incision and drainage, &c. | — | — | 1 | — | 792 | Transferred to County Hospital, Motherwell. |
| 47 | Pulmonary tuberculosis. Right foot. Disease of tarsus & sinuses. | F. | 29 | 3 | Dressings, &c. | — | — | — | — | 60 | Discharged at own request. |
| 48 | Left hip. Disease of femur and ilium & sinuses. Abdominal tuberculosis. | F. | 28 | 4 | Operation for drainage, &c. | — | — | — | 1 | 313 | Admitted from Road-meetings Hospital. |
| 49 | Generalised tuberculosis with more than 40 lesions. | F. | 46 | 1 | Aspiration. Incision, &c. | — | — | 1 | — | 76 | Admitted after being in other hospitals. Died subsequently at home. |
| 50 | Spine. Disease of lumbar region. Abdominal tuberculosis. Disease of pelvic bones. | M. | 50 | 1 ³ / ₁₂ | Recumbency, &c. | — | — | — | — | 263 | — |
| 51 | Spine. Lumbar disease and Abdominal tuberculosis, &c. | M. | 50 | 2 | Recumbency, &c. | — | — | — | — | 79 | — |

Outdoor Department.

The work of the outdoor department is detailed in the following tables. 1,021 new cases were attended during 1931, all on the recommendation of the Welfare Centres, Tuberculosis Dispensaries, or general practitioners.

Ultra-Violet Light Therapy.—Forty-three patients attended for the first time for ultra-violet light therapy; 2,717 revisits were paid and 4,751 exposures were given.

Electric Treatment.—Six patients received courses of electric treatment for rheumatoid arthritis, &c.

Miscellaneous and Dressings.—The remaining 34 cases attended for dressings, plasters, injections, &c.

Revisits.—In addition to the new cases, revisits were paid during the year for the undernoted purposes:—

Operations, 30; X-ray examinations, 69; Consultations, 266;
Miscellaneous, 1; Electric treatment, 17; Dressings, 471.

Consultations.

A.—TUBERCULOUS DISEASE.

| | |
|---|----|
| Pulmonary, | 19 |
| Glandular, | 42 |
| Skin, | 2 |
| Bones and Joints—Spine, 12; Sacro-iliac Joint, 1; Hip, 11; Knee, 15; Ankle, 1; Elbow, 2; Others, 3, | 45 |
| Genito-Urinary—Tb. Kidney, | 1 |
| Abdominal—Tb. Abdomen, | 2 |
| Multiple, | 1 |

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B.—NON-TUBERCULOUS DISEASE.

| | | |
|-----------------------------|--|------------|
| CIRCULATORY SYSTEM, &c. | Mitral Disease, 2; Mitral and Aortic Disease, 1; Hyperpiesia, 1, - - - | 4 |
| PULMONARY SYSTEM. | Pulmonary Fibrosis and Bronchiectasis, 5; Pulmonary Fibrosis and Asthma, 2; Bronchitis, 5; Pleurisy, 4; Silicosis, 1; no abnormality, 1, - - - | 18 |
| DIGESTIVE SYSTEM. | Gastric Ulcer, 3; Duodenal Ulcer, 1; Cancer of Stomach, 1; Cancer of Head of Pancreas, 1; Gallstones, 1; Cardiospasm, 1; Appendicitis, 1, - - - | 9 |
| NERVOUS SYSTEM. | Infantile Paralysis, 3; Bell's Paralysis, 1; Tumour of Brain, 1, - - - | 5 |
| GENITO-URINARY SYSTEM. | Renal Calculus, 5; Gonorrheal Epidydimitis, 2; Acute Balanitis, 1; Undescended Testicle, 1; Hypernephroma, 1. | 10 |
| DISEASES OF SPECIAL ORGANS. | Chronic Tonsillitis and Adenoids, 120; Deflected Septum, 1; Otitis Media, 1; Septic Antrum, 1, - - - | 123 |
| BONES AND JOINTS. | Fractures, 49; Dislocations, 7; Sprains, 17; Rheumatoid Arthritis, 2; Osteoarthritis, 5; Necrosis, 1; Osteomyelitis, 4; Periostitis, 4; Perthes' Disease, 4; Rickets, 5; Chondromata, 2; Scoliosis and Kyphosis, 3; Spina Bifida, 1; Cervical Rib, 1; Congenital Dislocation of Hip, 1; Injury to Coccyx, 2; Genu Valgum, 1; Dislocated Semi-lunar Cartilage, 1; Talipes Equino Varus, 5; Flat Foot, 4; Hallux Rigidus, 3; Hallux Valgus, 1; Painful Heel, 1; Hammer-toe, 1; Spring Finger, 1, - - - | 126 |
| SKIN. | Dermoid Cyst, 1; Alopecia, 4; Eczema, 1, | 6 |
| SEPTIC DISEASES. | Acute Cervical Abscesses, - - - | 7 |
| MISCELLANEOUS. | Paraphimosis, 1; Phimosis, 8; Foreign Bodies, 6; Shrapnel Wound, Shoulder, 1; Gunshot Wound, Tibia, 1; Prepatellar Bursitis, 2; Lumbago, 5; Sciatica, 2; Tenosynovitis, 3; Dental Caries, 3; Dupuytren's Contracture, 1; Lipoma, 1; Sarcoma, 1; Contusion of Hand, 2; Hæmatoma, 1; Pregnancy, 2; Malnutrition, 3, - - - | 43 |
| | Total, | <u>351</u> |

OPERATIONS.

| System. | Disease. | No. | Operation. | Result. |
|----------------|-----------------------------------|-----|------------------------------------|-----------------|
| OSSEOUS. | T. B. spine & sinuses. | 1 | Incision. | Improved |
| | T. B. spine & psoas abscess. | 1 | Aspiration. | Admitted later. |
| | T. B. metacarpal & abscess. | 1 | Aspiration. | Well. |
| | Multiple tuberculosis. | 2 | Incision. | Improved. |
| | Colles' Fracture. | 1 | Reduction under chloroform. | Well. |
| | Fracture of phalanx. | 2 | Reduction under chloroform. | Well. |
| ARTICULAR. | Chondroma of finger. | 1 | Excision. | Well. |
| | T. B. hip & sinuses. | 1 | Incision and removal of sequestra. | Improved. |
| | Septic synovitis of knee. | 1 | Incision. | Well. |
| GLANDULAR. | Hallux valgus | 2 | Excision. | Well. |
| | T. B. cervical adenitis. | 5 | Excision. | Well. |
| | T. B. cervical adenitis. | 8 | Incision. | Well. |
| | T. B. cervical adenitis. | 7 | Aspiration. | Well. |
| MISCELLANEOUS. | Acute cervical adenitis. | 3 | Incision. | Well. |
| | Chronic tonsillitis and adenoids. | 143 | Enucleating and cutting. | Well. |
| | Paraphimosis | 1 | Reduction. | Well. |
| | Phimosis. | 6 | Circumcision. | Well. |
| | Septic finger. | 4 | Removal of nail, &c. | Well. |
| | Acute abscess of chest wall. | 1 | Incision. | Well. |
| | Acute abscess of face. | 1 | Incision. | Well. |
| | Acute abscess of leg. | 1 | Incision. | Well. |
| | Septic sebaceous cyst. | 3 | Excision. | Well. |
| | Ischio-rectal abscess. | 1 | Incision and drainage. | Well. |
| | Hallux rigidus. | 1 | Excision. | Well. |
| | Hammer toe. | 1 | Excision of joint. | Well. |
| | Ingrowing toenail. | 1 | Removal of wedge. | Well. |
| | Dermoid cyst. | 1 | Excision. | Well. |
| | Lipoma of abdominal wall. | 1 | Excision. | Well. |
| | Dupuytren's contracture. | 1 | Excision of fascia. | Well. |
| | Crushing injury to two fingers. | 1 | Amputation. | Well. |
| | Foreign body arm. | 2 | Removal. | Well. |
| | Dental caries, | 2 | Extraction. | Well. |

X-RAY EXAMINATIONS.

A.—TUBERCULOUS DISEASE.

| | |
|--|-----------|
| Pulmonary Tuberculosis, - - - - | 26 |
| Bones and Joints—Spine, 9; Hip, 8; Sacro-iliac, 1; Knee, 9; Elbow, 2; Others, 5, - - - - | 34 |
| Genito-Urinary—Tb. Kidney, - - - | 1 |
| Total, | <u>61</u> |

B.—NON-TUBERCULOUS DISEASE.

| | | |
|----------------------------------|---|------------|
| PULMONARY SYSTEM. | Normal, 4; Pulmonary fibrosis, 7; Chronic Bronchitis, 14; Pleurisy, 4; Anthracosis, 1; Silicosis, 1, - - - - - | 31 |
| CIRCULATORY SYSTEM. | Mitral Regurgitation, 1; Mitral Stenosis, 2; Aneurysm, 1; Arterio-sclerosis, 1, - - | 5 |
| DIGESTIVE SYSTEM. | Barium Meal :—Normal, 4 Gastric Ulcer, 1; Duodenal Ulcer, 1; Cancer of Stomach, 1; Cancer of Head of Pancreas, 1; Cardio-spasm, 1, - - - - - | 9 |
| GENITO-URINARY SYSTEM. | Normal, 3; Renal Calculus, 4, - - - | 7 |
| INJURIES TO BONES AND JOINTS. | Normal, 30; Fractures, 55; Dislocations, 6; Fracture-dislocation, 1; Sprain, 5; Loose Semilunar Cartilage, 1; Sub-periosteal Hæmatoma, 1, - - - - - | 99 |
| DISEASES OF BONES AND JOINTS. | Normal, 3; Synovitis, 3; Chronic Osteomyelitis, 6; Rheumatoid Arthritis, 2; Osteo-Arthritis, 6; Secondary Cancer of Iliac Bone, 1; Sarcoma of Cranial Bones, 1; Chondroma of Toe, 1; Periostitis, 4; Perthes' Disease, 1; Rickets, 2, - - | 30 |
| DEFORMITIES OF BONES AND JOINTS. | Congenital Dislocation, 1; Scoliosis and Kyphosis, 2; Cervical Rib, 1; Hallux Valgus, 2; Hallux Rigidus, 3; Flat Foot, 2; Spring Finger, 1, - - - - - | 12 |
| MISCELLANEOUS. | Normal, 1; Gunshot Wound, 2; Foreign Bodies, 6; Chronic Antral Sepsis, 1; Pregnancy, 2; Teeth, 2, - - - - - | 14 |
| | Total, - - - - - | <u>207</u> |

COUNTY HOSPITAL, DALSERF.

Visiting Medical Officer—Dr. ALEXANDER SMITH, M.B., Ch.B.
Matron—Miss M. LAMONT.

BUILDINGS.—No alterations have been made here during the year.

The hospital continues to be used for the overflow from Stonehouse. Owing to the urgency for accommodation it is no longer restricted to convalescent patients.

STAFF.—The *Nursing Staff* consists of one fully-trained sister in charge and three probationers. *Domestic Staff*.—A cook and one maid. *Outdoor Staff*.—One male, full time, non-resident, who acts as attendant and gardener.

ACCOMMODATION.—6 male beds, 5 female beds, and 5 cots.

PATIENTS.—20 patients (9 males and 11 females) were admitted during the year, and 17 patients (10 males and 7 females) were discharged during the year.

TABLE I.

PLACE OF RESIDENCE.

| | | | |
|-------------------|---|---------------------|----|
| Bothwell, - - - | 4 | New Monkland, - - - | 1 |
| Cadder, - - - | 1 | Old Monkland, - - - | 3 |
| Cambuslang, - - - | 3 | Shotts, - - - | 3 |
| Dalsersf, - - - | 2 | | |
| | | Total, - - - | 17 |

AGE AND SEX DISTRIBUTION.

| Years. | Males. | Females. | Total. |
|--------|--------|----------|--------|
| - 5 | 1 | 1 | 2 |
| - 10 | 5 | — | 5 |
| - 15 | 1 | 2 | 3 |
| - 20 | 2 | 2 | 4 |
| - 25 | — | — | — |
| - 30 | — | 1 | 1 |
| - 35 | 1 | — | 1 |
| - 40 | — | — | — |
| - 45 | — | 1 | 1 |
| | 10 | 7 | 17 |

DIAGNOSIS.—In all the cases, with 2 exceptions, the diagnosis of tuberculosis was substantiated. Of these 2 cases, 1 suffered from a chronic cervical adenitis due to septic tonsils and the other had infantile paralysis.

Dalsersf Hospital.—Description of cases discharged.

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| No. | Sex. | Age. | Condition on Admission. | Treatment. | Result. | Residence in Days. | Remarks. |
|-----|------|------------------|---|--|------------|--------------------|--|
| 1 | F. | 10 | 6th and 7th cervical vertebrae and 1st dorsal vertebra. | Immobilisation. Extension. | Quiescent. | 450 | Fit for special school. |
| 2 | M. | 8 | Gross disease of cervico-dorsal spine c̄ paresis | Recumbency, &c. | Improved. | 1,022 | Able to walk fairly well. |
| 3 | F. | 17 | Lumbar spine c̄ psoas abscess. | Recumbency. Aspiration. | Quiescent. | 271 | Able to walk. |
| 4 | F. | 42 | 1st and 2nd lumbar vertebrae c̄ abscess. | Do. | Improved. | 191 | Transferred to Stonehouse. |
| 5 | F. | 25 | Old disease of most of dorsal spine c̄ sinuses and paresis. | Recumbency. Aspiration. Extension. | I.S.Q. | 154 | Transferred to Stonehouse. |
| 6 | M. | 12 | Right hip. Disease of acetabulum and femur. | Extension, &c., | Quiescent. | 449 | Transferred to Stonehouse to have celluloid splint made. |
| 7 | M. | 30 | Right knee. Disease of femur and tibia c̄ abscess. | Extension, Aspiration. | Improved. | 632 | Transferred to Stonehouse for further treatment. |
| 8 | M. | 9 | Right knee. Disease of femur and tibia. | Splintage. | Quiescent. | 438 | Knee now practically normal. |
| 9 | M. | 12 | Right knee. Disease of femur and tibia c̄ ankylosis. | Splintage. Walking caliper. | Quiescent. | 419 | Fit for special school. |
| 10 | M. | 17 | Right wrist. Old disease of all carpal bones c̄ sinuses. | Plaster. Celluloid splint. | Quiescent. | 243 | Wrist now quite useful. |
| 11 | F. | 16 | Tuberculous ribs c̄ sinuses. | Incision, &c. | Quiescent. | 400 | — |
| 12 | M. | 4 | Right elbow c̄ sinuses. Left tibia c̄ sinuses. | Splintage, &c. | Quiescent. | 322 | Good movement in elbow joint |
| 13 | F. | 19 | Tuberculous cervical and axillary adenitis. | Incision. | Improved. | 26 | Transferred to Stonehouse for further treatment. |
| 14 | F. | 10 | Tuberculous cervical adenitis. | Excision. | Quiescent. | 117 | — |
| 15 | F. | 4 $\frac{6}{12}$ | Tuberculous peritonitis c̄ ascites | Paracentesis, &c. | I.S.Q. | 7 | Transferred to Stonehouse. |
| 16 | M. | 10 | Chronic adenitis — non tuberculous. | Removal of tonsils and adenoids. | Healed. | 3 | — |
| 17 | M. | 7 | Infantile paralysis. Right leg. | Splintage. | I.S.Q. | 22 | Transferred to Stonehouse for electrical treatment. |

| Case No. | Name | Age | Sex |
|----------|-----------------|-----|-----|
| 1 | John Doe | 45 | M |
| 2 | Jane Smith | 32 | F |
| 3 | Robert Brown | 58 | M |
| 4 | Mary White | 28 | F |
| 5 | William Black | 65 | M |
| 6 | Elizabeth Green | 42 | F |
| 7 | Thomas Grey | 70 | M |
| 8 | Sarah Hall | 35 | F |
| 9 | Charles King | 55 | M |
| 10 | Anna Lee | 25 | F |
| 11 | Frank Miller | 60 | M |
| 12 | Grace Wilson | 30 | F |
| 13 | Henry Young | 75 | M |
| 14 | Irene Adams | 40 | F |
| 15 | James Baker | 50 | M |
| 16 | Katherine Clark | 20 | F |
| 17 | Louis Evans | 68 | M |
| 18 | Margaret Foster | 38 | F |
| 19 | Nathan Gibson | 52 | M |
| 20 | Olivia Harris | 22 | F |
| 21 | Philip Ingram | 72 | M |
| 22 | Rebecca Jones | 48 | F |
| 23 | Samuel Kelly | 62 | M |
| 24 | Tina Lambert | 33 | F |
| 25 | Victor Martin | 57 | M |
| 26 | Wendy Nelson | 27 | F |
| 27 | Xavier Oliver | 67 | M |
| 28 | Yvonne Parker | 37 | F |
| 29 | Zachary Quinn | 53 | M |
| 30 | Alice Reed | 23 | F |
| 31 | Benjamin Scott | 73 | M |
| 32 | Cynthia Taylor | 43 | F |
| 33 | Daniel Walker | 63 | M |
| 34 | Evelyn Young | 33 | F |
| 35 | Frederick Adams | 53 | M |
| 36 | Gerald Baker | 73 | M |
| 37 | Helen Clark | 23 | F |
| 38 | Isaac Evans | 63 | M |
| 39 | Julia Foster | 33 | F |
| 40 | Kenneth Gibson | 53 | M |
| 41 | Lillian Harris | 23 | F |
| 42 | Malcolm Ingram | 73 | M |
| 43 | Nancy Jones | 43 | F |
| 44 | Oscar Kelly | 63 | M |
| 45 | Pamela Lambert | 33 | F |
| 46 | Quinn Martin | 53 | M |
| 47 | Rachel Nelson | 23 | F |
| 48 | Stanley Oliver | 73 | M |
| 49 | Teresa Parker | 33 | F |
| 50 | Ulysses Quinn | 53 | M |
| 51 | Vivian Reed | 23 | F |
| 52 | Walter Scott | 73 | M |
| 53 | Xavier Taylor | 43 | M |
| 54 | Yvonne Walker | 33 | F |
| 55 | Zachary Young | 53 | M |

COUNTY SANATORIUM, UPPERTOWN, LONGRIGGEND.

Physician-Superintendent—J. M'CALLUM LANG, M.D., D.P.H.

Visiting Physician—RICHARD RAE, M.B., Ch.B., D.P.H.

Matron—Miss MORE.

ADMISSIONS AND DISCHARGES.

| In Residence 1st January. | Admitted during year. | Discharged during year. | Died during year. | In Residence 31st December. |
|------------------------------|--------------------------|----------------------------|----------------------|--------------------------------|
| 41 | 141 | *114 | 24 | 44 |
| | | 138 | | |

* Two patients were re-admitted and completed two periods of residence during the year, making a net total of 112 discharged and 24 died, and the subsequent statistics deal with the total of 136.

PLACE OF RESIDENCE.—All cases discharged resided in the County of Lanark, the place of residence according to parish being as follows :—

| | | | |
|----------------------|----|---------------------|-----|
| Avondale, - - - | 7 | Cambusnethan, - - - | 7 |
| East Kilbride, - - - | 2 | Dalserf, - - - | 11 |
| Stonehouse, - - - | 2 | Hamilton, - - - | 2 |
| Blantyre, - - - | 13 | Lanark, - - - | 1 |
| Bothwell, - - - | 29 | New Monkland, - - - | 10 |
| Cambuslang, - - - | 16 | Old Monkland, - - - | 13 |
| Carluke, - - - | 2 | Shotts, - - - | 9 |
| Cadder, - - - | 4 | Lesmahagow, - - - | 1 |
| Rutherglen, - - - | 4 | Glasgow, - - - | 3 |
| | | Total, - - - | 136 |

AGE AND SEX.—In the following table the cases are shown classified according to age and sex, and according to age-groups for both sexes, each age-group also containing the pulmonary, non-pulmonary, tuberculised, and non-tuberculous cases referable to it:—

| Quinquennial Periods. | Males. | Females. | Both Sexes. | Age-Groups. | Pulm. | Non-Pulm. | Tuber-culised. | Non-Tuber-culous. |
|-----------------------|--------|----------|-------------|-------------------|-------|-----------|----------------|-------------------|
| - 5 | 8 | 6 | 14 | Pre-School, - | 1 | 5 | 4 | 4 |
| - 10 | 6 | 17 | 23 | School Age, - | 1 | 5 | 10 | 7 |
| - 15 | 3 | 12 | 15 | | 2 | 5 | 3 | 5 |
| - 20 | 8 | 15 | 23 | Adolescent, - | 15 | 3 | — | 5 |
| - 25 | 5 | 11 | 16 | | 14 | — | 1 | 1 |
| - 30 | 2 | 7 | 9 | Early Maturity, - | 6 | 1 | — | 1 |
| - 35 | 1 | 10 | 11 | | 11 | — | — | — |
| - 40 | 6 | 8 | 14 | | 10 | 1 | — | 3 |
| - 45 | 2 | 5 | 7 | | 6 | 1 | — | — |
| - 50 | 1 | 1 | 2 | Late Maturity, - | 2 | — | — | — |
| - 55 | — | — | — | | — | — | — | — |
| - 60 | 2 | — | 2 | | — | — | — | 2 |
| - 65 | — | — | — | | — | — | — | — |
| - 70 | — | — | — | | — | — | — | — |
| | 44 | 92 | 136 | | 68 | 21 | 18 | 29 |

DURATION OF RESIDENCE.

RESIDENCE IN DAYS.

| | Maximum. | Minimum. | Average. |
|--------------------|----------|----------|----------|
| Pulmonary, - | 896 | 4 | 138 |
| Non-Pulmonary, - | 535 | 2 | 182 |
| Tuberculised, - | 185 | 19 | 95 |
| Non-Tuberculous, - | 150 | 4 | 75 |

RESIDENCE IN MONTHS.

| | 0-1 | 1-3 | -6 | -9 | -12 | -18 | -24 | Over. |
|--------------------|-----|-----|----|----|-----|-----|-----|-------|
| Pulmonary, - | 11 | 21 | 24 | 4 | 2 | 3 | 1 | 2 |
| Non-Pulmonary, - | 4 | 3 | 5 | 5 | 1 | 3 | — | — |
| Tuberculised, - | 3 | 8 | 6 | 1 | — | — | — | — |
| Non-Tuberculous, - | 4 | 16 | 9 | — | — | — | — | — |

TRANSFERS TO OTHER INSTITUTIONS.—After observation or at the end of their period of sanatorium treatment, 22 cases were transferred to other institutions, as follows:—

| | | |
|---------------|----|---|
| Motherwell, - | 6 | 1 Whooping cough, 1 empyema, 4 diphtheria. |
| Hairmyres, - | 11 | |
| Stonehouse, - | 2 | |
| Dalserf, - | 2 | |
| Bellshill, - | 1 | For confinement. |

Pulmonary Tuberculosis.

(68 CASES.)

Included under this heading are the following three cases of *tuberculous pleurisy*:—

F. 20. Pleural thickening, no parenchymatous deposits, recurrent swelling of knee joint; transferred to Dalserf Hospital.

F. 19. Convalescent pleural effusion, no parenchymatous deposits; admitted from Motherwell, where paracentesis and artificial pneumothorax treatment had been carried out. Went home after 27 days.

M. 1½. Pleural effusion and abdominal tuberculosis. Removed by parents after 59 days. Condition not improved.

These cases having been deducted, there remain 65 cases of *parenchymatous tuberculosis*.

DURATION OF ILLNESS.—The duration of illness recorded at the time of admission, and stated in monthly periods, was as follows:—

| Classification on Admission. | 1-3 | 3-6 | 6-12 | 12-18 | 18-24 | Over 24 | Total. |
|------------------------------|-----|-----|------|-------|-------|---------|--------|
| Group I, - | 2 | 5 | 7 | 3 | — | 3 | 20 |
| Group II, - | 4 | 6 | 3 | 3 | — | 6 | 22 |
| Group III, - | 2 | 5 | 5 | 5 | 2 | 4 | 23 |

DURATION OF ILLNESS OF FATAL CASES.—21 cases of pulmonary tuberculosis died, and the duration of illness from the date of onset to that of death was thus recorded in monthly periods:—

| 1-3 | 3-6 | 6-9 | 9-12 | 12-18 | 18-24 | Over 24 |
|-----|-----|-----|------|-------|-------|---------|
| 2 | 6 | 3 | 1 | 4 | 1 | 4 |

GENERAL RESULTS OF TREATMENT.—The general condition of the patients on discharge is shown in the following tabular statement:—

| Classification on Admission. | Quiescent. | Improved. | Stat. | Worse. | Died. |
|------------------------------|------------|-----------|-------|--------|-------|
| Group I, - | 5 | 8 | 7 | — | — |
| Group II, - | 1 | 7 | 11 | — | 3 |
| Group III, - | — | 1 | 3 | 1 | 18 |

SPUTUM EXAMINATIONS.—Bacteriological examinations showed that 84 per cent. of the verified cases had tubercle bacilli in the spit:—

| Classification on Admission. | Positive. | Negative. | No Spit. |
|------------------------------|-----------|-----------|----------|
| Group I, - | 15 | 5 | — |
| Group II, - | 17 | 4 | 1 |
| Group III, - | 24 | 1 | — |

PULMONARY TUBERCULOSIS IN CHILDREN UNDER 15 (3 cases):—

- (1) A girl of 5, admitted from Motherwell with extensive infiltration of both lungs and a characteristic swinging temperature. Onset 13 weeks before admission. Taken home by parents after 19 days. Condition unchanged.
- (2) A girl of 12, with advanced pulmonary disease (spit positive) and a secondary intestinal tuberculosis. Onset 22 months before admission; died after 140 days.
- (3) A girl of 13, whose history is especially worthy of note. Notified as a case of pulmonary tuberculosis, first in 1918, at the age of 2 years. She was found to have definite crepitations (apical) and cervical adenitis. Cough first developed at the age of 4 years, and her sputum was found to contain tubercle bacilli first at the age of 8 years (in 1924). Haemoptysis first occurred in 1925, and has been of frequent occurrence since then. During the period from 1920-1927 she received sanatorium treatment almost continuously. Readmitted to Longriggend in 1929, she was found to have active tuberculosis, involving the left lung. X-ray showed a dense opacity of the whole left lung, with flattening of the left side of the chest. Sputum was positive; general condition fairly good; child was bright and active. She remained in the Sanatorium for 899 days, after which she was sent home, at the parents' request. On discharge her condition was not improving. Sputum was still positive, and there were signs of involvement of the hitherto "good" lung.

SPUTUM NEGATIVE PULMONARY TUBERCULOSIS (11 cases). — In all of these cases the X-ray was positive, and the diagnosis was further supported by the following confirmatory signs:—

| | |
|--|---|
| Crepitations, | 4 |
| Crepitations and positive spit prior to admission, | 1 |
| Haemoptysis, | 1 |
| Haemoptysis and meningitis, | 1 |
| History of pleurisy, | 1 |
| History of pleurisy with positive guinea-pig inoculation, | 1 |
| History of pleurisy and definite abdominal tuberculosis, | 1 |
| Positive skin tests (girl of 15 years), | 1 |

Non-Pulmonary Tuberculosis.

(21 CASES.)

Cases of non-pulmonary tuberculosis requiring only hygienic and nursing treatment were dealt with in the Institution, and those for whom operative interference or special appliances were necessary were transferred to the County Hospitals at Motherwell and Stonehouse.

ABDOMINAL TUBERCULOSIS (13 cases).—Febrile, 6.

Distension, rigidity, definite abdominal tumour, recurrent abdominal pain, 1. (Died after 103 days.)

Distension, rigidity, recurrent abdominal pain, 1. (Died after 74 days.)

Distension, rigidity, enlargement of liver, 1. (Discharged at parents' request after 182 days, general and abdominal conditions deteriorating.)

Distension and rigidity, 1. (Removed by parents after 162 days; condition improved.)

Rigidity, tenderness, severe abdominal pain, 1. (Developed tuberculous meningitis and died after 118 days.)

Tenderness, resistance, diarrhœa, progressive asthenia, 1. (Left of own accord after 14 days; condition unchanged.)

Non-febrile, 7.

Operation diagnosis; distension and tenderness, 1. (Quiescent on dismissal after 318 days.)

Abdominal tumour, pain, distension, free fluid, enlargement of liver and spleen, 1. (Transferred to Dalserf Hospital; condition deteriorating.)

Abdominal tumour and pain, 2. (Dismissed after 459 and 207 days respectively; disease arrested.)

Marked distension, with bouts of diarrhœa, 1. (Quiescent on dismissal, after 467 days.)

Distension, rigidity, tenderness, enlarged mesenteric glands, 1. (Removed by parents after 27 days; condition unchanged.)

Distension and rigidity, 1. (Transferred to Hairmyres after 213 days; disease quiescent.)

BONES AND JOINTS (3 cases).—

F.35.—Admitted from Royal Infirmary, Glasgow; caries of lumbar spine, with psoas abscess and discharging sinus; general condition good; transferred to Stonehouse Hospital.

F.28.—Right tarsal and metatarsal bones affected; sinuses, with profuse discharge; general condition poor; transferred to Stonehouse Hospital.

M.19. — Dorsal spine affected; healed sinuses and marked deformity; disease arrested; transferred to Hairmyres.

GLANDS (5 cases). — Two patients were admitted from the County Hospital, Motherwell, after operative treatment for cervical adenitis. Both had a discharging sinus on admission and one had an active peritonsillitis; general condition of both very much improved on dismissal; local lesions quiescent. Two other cases had discharging sinuses on admission; healed on discharge. The remaining case had a glandular swelling without abscess formation, also impetigo and otorrhœa; developed whooping-cough, and was transferred to Motherwell after two days' residence.

Tuberculised Children.

(18 CASES.)

Where children are stated in this report to have been suffering from abdominal tuberculosis, pulmonary tuberculosis, &c., the diagnosis was definitely established and discernible by ordinary clinical methods. The classification "tuberculised" has been reserved for those who gave a positive tuberculin reaction, but did not present localising signs of diagnostic significance. Those patients were admitted with a history of poor general health, either alone or combined with respiratory or abdominal symptoms. Some of them were debilitated and had symptoms suggestive of tuberculosis; others gave one the impression that the positive tuberculin reaction was not indicative of the cause of their illnesses. In many cases it was undoubtedly only a coincidence, but in the meantime all have been classified as "tuberculised." One adult has been included in this general group—a patient notified as suffering from pulmonary tuberculosis. X-ray showed a definite hilum tuberculosis, but no parenchymatous involvement, and the patient was transferred to Hairmyres Colony.

In 8 instances the children were admitted as *notified cases of pulmonary tuberculosis*, and, in addition to the positive tuberculin reaction, the following conditions were found:—Debility, 3; pulmonary fibrosis, 1; hilus glands, 1; debilitated contact, 1; nasopharyngitis, 1; cardiac disease, 1.

In 8 instances the diagnosis on admission was *abdominal tuberculosis*, and the conditions noted were these:—Debility, &c., 6; splenomegaly, 1; no apparent disease, 1.

One child admitted as *tuberculised debility* suffered also from chronic otorrhœa.

Non-Tuberculous Diseases.

(29 CASES.)

In 29 cases—that is, 21·3 per cent. of those under review—the diagnosis of tuberculosis was altered, as follows:—

ADULTS (13). — *Notified pulmonary tuberculosis*. — Pulmonary fibrosis, 2; pulmonary fibrosis, asthma, 2; pulmonary fibrosis, cardiac disease, 1; pyogenic empyema, 1; bronchitis, 1; bronchitis, subacute nephritis, 1; debility, 4; debility, cardiac disease, 1.

CHILDREN (16). — *Notified pulmonary tuberculosis*. — Asthma, 1; debility, 2; debility, naso-pharyngitis, 1; chronic laryngitis, 1.

Notified abdominal tuberculosis. — Enteritis, 2; infantilism, 2; pyogenic empyema, 1; debility, 3.

Notified tuberculosis of spine (suspected).—Debility, 1.

Notified generalised tuberculosis.—Debility, 1; debility, rickets, 1.

The altered diagnosis in the case of the children was supported by repeated negative reactions to tuberculin applied to each child by the percutaneous, cutaneous, and subcutaneous methods. The ages of the children were:—1·5 years, 4; 5-10 years, 7; 10-15 years, 5.

SPECIAL EXAMINATIONS AND TREATMENT.

ARTIFICIAL PNEUMOTHORAX. — This form of treatment was carried out by transferring patients to Motherwell Hospital for the initial operation and for re-fills.

Several cases were still in residence at the end of the year, but only one was discharged during the year. She left the Institution of her own accord after a few months' residence, and her condition was not affected by the short period of treatment.

ARTIFICIAL LIGHT TREATMENT. — Suitable cases received this form of treatment, and the results in these selected cases were good.

X-RAY EXAMINATIONS. — 94 patients were X-rayed at the County Hospital, Motherwell, the radiographs being sent to the Sanatorium and read in conjunction with the clinical picture.

EAR, THROAT, AND NOSE SPECIALIST. — 4 cases were referred to the consulting laryngologist, and the following conditions were diagnosed:—Asthma, 1; chronic laryngitis, 1; laryngeal tuberculosis, 2.

DENTAL TREATMENT. — The visiting dentist made 14 visits and treated 62 patients, the total number of extractions being 113, and scalings, 3.

ADMINISTRATION.

BUILDINGS AND GROUND. — The administrative block was extended to provide three additional bedrooms and a dining-room for the maids.

ACCOMMODATION. — The accommodation was unchanged, and consisted of 41 beds and 14 cots, allocated as follows:—Adult males, 9; adult females (open cases), 19; adult females (closed cases) and juvenile females, 13; cots, 14.

STAFF. — The *Medical Staff* of 2 in non-resident. The Nursing Staff comprises the matron, 2 general trained sisters, 4 staff nurses, and 4 probationers. *Domestic Staff*.—1 cook, 3 laundrymaids, and 7 maids. *Outdoor Staff*.—1 engineer attendant (resident) and 2 assistant gardener-firemen (1 resident).

COUNTY SANATORIUM, SHOTTS.

—

Physician-Superintendent—D. R. HAMILTON, M.A., M.D., D.P.H.

Visiting Physician—JOHN MACMILLAN, M.B., Ch.B.

Matron—Miss KEIR.

—

Administration.

BUILDINGS AND GROUNDS.—During the year the outside woodwork was repainted.

No building extensions have been undertaken during the year.

ACCOMMODATION.—The accommodation remains unchanged—46 beds and 8 cots. 32 beds are allotted for males and 14 for females. The emergency bed in the side room of Pavilion II is not included in the number.

STAFF.—The *Medical Staff* remained unchanged at the end of the year. The *Nursing Staff* consists of Matron, 2 sisters, 3 staff nurses, and 5 probationers. During the holiday period, a sixth probationer nurse is required. *Domestic Staff.*—1 cook, 1 laundress, and 8 maids. *Outdoor Staff.*—1 gardener-attendant, 1 fireman, and 1 assistant gardener-attendant. In addition, 1 gardener-assistant is maintained on short hours and reduced wages, as noted in last year's report.

ADMISSIONS AND DISCHARGES.

| | | | | | |
|--|---|---|---|-----|-------|
| Number of patients in residence at 1/1/31, | - | - | - | 51 | |
| „ „ admitted during year, | - | - | - | 116 | |
| „ „ discharged „ „ | - | - | - | 89 | } 114 |
| „ „ died „ „ | - | - | - | 25 | |
| „ „ in residence at 31/12/31, | - | - | - | 53 | |

PLACE OF RESIDENCE.

All the cases discharged during the year resided within the County of Lanark, and the place of residence according to parish is as follows :—

| | |
|--------------------------|-------------------------|
| Avondale, - - - - 2 | Lesmahagow, - - - - 1 |
| East Kilbride, - - - - 1 | Cadder, - - - - 2 |
| Blantyre, - - - - 12 | Stonehouse, - - - - 2 |
| Bothwell, - - - - 27 | Lanark, - - - - 3 |
| Cambuslang, - - - - 15 | Glasgow, - - - - 1 |
| Cambusnethan, - - - - 2 | Carluke, - - - - 1 |
| Dalserf, - - - - 6 | Rutherglen, - - - - 3 |
| Hamilton, - - - - 3 | Crawfordjohn, - - - - 1 |
| New Monkland, - - - - 8 | |
| Old Monkland, - - - - 13 | 114 |
| Shotts, - - - - 11 | |

AGE AND SEX.

In the following table, the patients discharged are classified according to their age group, sex, and type of disease diagnosed :—

| Age Group | Sex | | Pulmonary Tuberculosis | Non-Pulmonary Tuberculosis | Tuberculised | Non- Tuberculous | Total |
|------------------------------|-----|----|---------------------------|-------------------------------|--------------|---------------------|-------|
| | M. | F. | | | | | |
| Pre-School, - - - 5 years, - | 3 | 6 | 1 | 3 | 3 | 2 | 9 |
| School, - - - { -10 " - | 4 | — | 2 | 1 | 1 | — | 4 |
| | 6 | 1 | 2 | — | 3 | 2 | 7 |
| Adolescence, - - { -20 " - | 14 | 2 | 13 | 3 | — | — | 16 |
| | 11 | 6 | 15 | 1 | — | 1 | 17 |
| | 11 | 7 | 14 | — | — | 4 | 18 |
| Early Maturity, - { -35 " - | 9 | 2 | 6 | 3 | — | 2 | 11 |
| | 6 | 2 | 7 | — | — | 1 | 8 |
| | 8 | 2 | 9 | — | — | 1 | 10 |
| Late Maturity, - 45+ " - | 12 | 2 | 11 | — | — | 3 | 14 |
| | 84 | 30 | 80 | 11 | 7 | 16 | 114 |
| | 114 | | 114 | | | | |

DURATION OF RESIDENCE.

| | RESIDENCE IN DAYS | | |
|---------------------------------|-------------------|---------|---------|
| | Maximum | Minimum | Average |
| Pulmonary Tuberculosis, ... | 1,119 | 4 | 161 |
| Non-Pulmonary Tuberculosis, ... | 542 | 3 | 155 |
| Tuberculised, ... | 330 | 45 | 172 |
| Non-Tuberculous, ... | 167 | 21 | 87 |

TRANSFERS TO OTHER INSTITUTIONS.

| | |
|-------------------------------------|---------------|
| Hairmyres Colony, | 21 |
| County Hospital, Motherwell, | 3 |
| | — |
| | 24 |
| | <u> </u> |

Pulmonary Tuberculosis.

Classified according to their condition on admission, 16 were placed in Group I, 30 in Group II, and 35 in Group III.

The number of deaths is again high. In a total of 114 discharges there were 25 deaths. The age groups of these fatal cases are as follows :—

| | | | | | | | | | | | |
|---------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| Age Groups, - | -5 | -10 | -15 | -20 | -25 | -30 | -35 | -40 | -45 | 45+ | Total |
| Total Cases, | 1 | — | — | 4 | 3 | 5 | 2 | 2 | 2 | 2 | 21 |

The following table shows the duration of illness in months in the fatal cases :—

| | | | | | | |
|-----|-----|------|-------|-------|-----|--------|
| 1-3 | 3-6 | 6-12 | 12-18 | 18-24 | +24 | Total. |
| 3 | 3 | 4 | 2 | 2 | 7 | 21 |

The duration of illness in months of all cases discharged was as follows :—

| | | | | | | |
|-----|-----|------|-------|-------|-----|--------|
| 1-3 | 3-6 | 6-12 | 12-18 | 18-24 | +24 | Total. |
| 10 | 12 | 18 | 5 | 3 | 33 | 81 |

The following table gives the general results of treatment :—

| | | | | | |
|------------|-----------|-------------|--------|-------|--------|
| Quiescent. | Improved. | Stationary. | Worse. | Died. | Total. |
| 24 | 22 | 8 | 6 | 21 | 81 |

SPIT NEGATIVE PULMONARY TUBERCULOSIS.

There were 34 cases of pulmonary tuberculosis with negative or no sputum.

The diagnosis in spit negative cases has been established in conformity with Trudeau standard.

PULMONARY TUBERCULOSIS IN CHILDREN UNDER 15.

(4 Cases.)

The cases were aged 12, 11, 8, and 5 years respectively. Two cases had positive sputum. One was a case of tuberculous pleurisy. One patient died. Two were transferred to Hairmyres Colony and the remaining case was taken home by the parents.

Non-Pulmonary Tuberculosis.

(10 Cases.)

TUBERCULOSIS OF BONES AND JOINTS (1 Case).—Right elbow joint, spine and left knee joints were affected. Patient was discharged at his own request after 316 days' residence, his general condition being good, but elbow sinuses still discharging.

TUBERCULOSIS OF ABDOMEN.

(5 Cases.)

Death occurred in two cases, a female, aet. 2, who was admitted in an extremely emaciated condition and died after 15 days' residence.

The other fatal case was a male, aet. 23, who was admitted in a moribund condition and died in 3 days.

A male, aet. 19, was discharged in a moribund condition at his parents' request.

The other two cases were (1) male, aet. 16, who refused transfer to Hairmyres and was discharged in a quiescent condition; and (2) female, aet. 4 years, who was taken home by her parents after 54 days' residence—improved.

Tuberculised Group.

(7 Cases.)

This classification is reserved for these children in whom no diagnostic localising signs were detected, but whose symptoms were suggestive, and who responded to tuberculin tests.

The following table shows grouping of the seven cases:—

| | |
|--|----|
| Spit positive contacts, | 2 |
| Tuberculised, with respiratory symptoms, ... | 3 |
| „ „ rickets, | 1 |
| „ „ abdominal symptoms, ... | 1 |
| | — |
| | 7 |
| | == |

Non-Tuberculous Diseases.

The following table shows the diagnosis prior to admission and the established diagnosis on discharge:—

| Admitted as Pulmonary T.B. | | Admitted as Abdominal T.B. | | Admitted as Bone T.B. | | Established Diagnosis. |
|-------------------------------|-------|-------------------------------|-------|--------------------------|-------|--|
| Adult | Child | Adult | Child | Adult | Child | |
| 2 | — | — | — | — | — | Pulmonary Fibrosis. |
| — | — | 1 | — | — | — | Syphilis. |
| 3 | — | — | — | — | — | Valvular Disease of the heart. |
| 1 | — | — | — | — | — | Pulmonary Fibrosis and transient Pleurisy. |
| — | — | — | — | — | 1 | Osteitis. |
| — | 1 | — | — | — | — | Bronchitis and Debility. |
| 1 | — | — | — | — | — | Pelvic Cellulitis. |
| 2 | — | — | — | — | — | Chronic Bronchitis. |
| 1 | — | — | — | — | — | Chronic Pharyngitis and Bronchitis. |
| 1 | — | — | — | — | — | No abnormality detected. |
| — | 1 | — | — | — | — | Debility following Influenza. |
| — | 1 | — | — | — | — | Subnutrition. |

Special Examinations and Treatment.

DENTAL TREATMENT.—During the year Mr. Allan, L.D.S., made four visits to the Sanatorium and treated 32 patients. The total number of extractions was 104.

X-RAY EXAMINATIONS.—Of the patients discharged during the year, 56 were X-rayed at the County Hospital, Motherwell.

EAR, NOSE, AND THROAT CLINIC.—Five cases were examined by Dr. Adam at the Motherwell County Clinic. In 2 cases thermo-cautery was given. Two cases had tonsillectomy performed.

Grateful recognition is made of the services of local clergymen throughout the year and of the entertainments to patients provided voluntarily by local parties.

COUNTY MATERNITY HOSPITAL, BELLSHILL

REPORT BY THE PHYSICIAN-SUPERINTENDENT,
HENRY JAMES THOMSON, M.D.

1931.

The form of the report has been altered and the information as set forth conforms in a modified fashion to the suggestions of the Royal Society of Medicine.

At the 31st December, 1930, 47 patients remained in hospital, of which 15 were babies. Adult admissions numbered 1,306; 693 babies were born in the Institution, while 51 were born before admission. At the end of the year 62 patients were left in hospital, of which 23 babies were born in hospital.

There were 744 confinements, 693 babies were born alive (13 were twin births) and 64 still-births.

The discharges are dealt with under the following headings:—

| | |
|---|-----|
| (1) Delivered at or near full term, | 740 |
| (2) Delivered before admission, | 51 |
| (3) Discharged undelivered, | 298 |
| (4) Cases of abortion, | 193 |
| (5) Gynæcological cases, | 20 |
| (6) Babies born before admission, | 48 |
| (7) Babies born in hospital (including S.B.), ... | 685 |

The more important events that occurred during the year are summarised in the following paragraphs:—

(1) Abnormal and complicated cases of confinement show a decrease of 10·5 per cent. The largest decrease is in the number of cases of "Eclampsia."

(2) There were 8 cases of eclampsia, compared with 38 cases in 1930. This may be due to greater ante-natal care.

(3) Post-natal cases remain about the same as in former years.

(4) Those discharged undelivered received ante-natal treatment, and when recovered were allowed to go home. There is a 20 per cent. increase in this section.

(5) Cases of abortion have increased by 16 per cent.

(6) 20 gynaecological cases were treated during the year for minor pelvic disorders.

(7) Still-births were less by 30 per cent., and the infantile deaths were the same as in 1930.

(8) Adult deaths numbered 12, a maternal mortality equal to a rate of 9 per 1,000. Cases confined before admission show a mortality rate of 79 per 1,000, while the rate for cases confined in hospital was 2.7 per 1,000.

(9) The average duration of residence of patients in hospital was 10.3 days.

| | In Residence, 1/1/31 | Admitted. | Discharged. | Died. | In Residence, 31/12/31 |
|------------------------------------|-------------------------|-----------|-------------|-------|---------------------------|
| Ante-natal, | 7 | 297 | 293 | 5 | 6 |
| Confinement, | 17 | 749 | 738 | 2 | 26 |
| Abortions, | 6 | 189 | 192 | 1 | 2 |
| Post-natal, | 1 | 51 | 47 | 4 | 1 |
| Gynaecological, | | 20 | 20 | — | — |
| | 31 | 1,306 | 1,290 | 12 | 35 |
| Babies born alive, - - | 15 | 693 | 648 | 37 | 23 |
| Babies born be- fore admission, | 1 | 51 | 46 | 2 | 4 |
| | 47 | 2,050 | 1,984 | 51 | 62 |

ABNORMAL OR COMPLICATED CASES OF CONFINEMENT.

There were 330 abnormal or complicated cases of confinement.

| | | | |
|------------------------------------|-----|------------------------------------|-----|
| Albuminuria, - - - - | 102 | External Hæmorrhage and Pyelitis, | 1 |
| Albuminuria and Oedema, - - | 27 | Hæmorrhage, External, - - - | 25 |
| Albuminuria and Contracted Pelvis, | 7 | Hæmorrhage, Concealed, - - - | 2 |
| Albuminuria and Respiratory | | Hyperemesis Gravidarum, - - - | 5 |
| Disease, - - - - | 5 | Hyperemesis Gravidarum & Diabetes, | 1 |
| Albuminuria and Hyperemesis, | 3 | Normal presentation but delivery | |
| Albuminuria and Hernia, - - | 1 | abnormal or complicated, - - - | 30 |
| Albuminuria and Hæmaturia, - | 1 | Oedema without other symptoms, | 3 |
| Albuminuria and Cardiac Disease, - | 2 | Others, - - - - - | 24 |
| Albuminuria, Contracted Pelvis and | | Pyelitis, - - - - - | 20 |
| Cardiac Disease, - - - - | 1 | Placenta Prævia, - - - - | 4 |
| Abnormal Presentation, - - - | 25 | Pyelitis and Hydramnios, - - - | 1 |
| Contracted Pelvis, - - - - | 24 | Respiratory Disease, - - - - | 6 |
| Cardiac Disease, - - - - | 4 | | |
| Eclampsia, - - - - | 6 | | |
| | | | 330 |

METHOD OF DELIVERY.

| | | | |
|------------------------------------|-----|--------------------------------|-----|
| Normal Deliveries, | 206 | Induction of Labour, | 32 |
| Forceps, | 59 | Cæsarean Section, | 11 |
| Failed Forceps before admission— | | Craniotomy, | 7 |
| Normal after admission, | 2 | | |
| Forceps after admission, | 6 | | 330 |
| Version, | 7 | | |

Results—

| | |
|----------------------------|-------|
| Discharged Well, | 270 |
| To Other Hospitals, | 47 |
| Improved, | 11 |
| Died, | 2 |
| | <hr/> |
| | 330 |
| | <hr/> |

OCCIPITO POSTERIOR (10).

There were 10 cases of occipito-posterior presentation. The method of delivery is shown below :—

| Mode of Delivery. | No. of Cases. | | Mother Lived. | | Child Alive. | | Stillborn. | |
|---------------------------|---------------|-----------|---------------|-----------|--------------|-----------|------------|-----------|
| | Bk. | Unbooked. | Bk. | Unbooked. | Bk. | Unbooked. | Bk. | Unbooked. |
| Spontaneous, | 4 | — | 4 | — | 4 | — | — | — |
| Forceps, | 2 | 3 | 2 | 3 | 2 | 1 | — | 2 |
| Failed Forceps—Forceps, — | — | 1 | — | 1 | — | — | — | 1 |
| | <hr/> | | | | | | | |
| Totals, | 6 | 4 | 6 | 4 | 6 | 1 | — | 3 |
| | <hr/> | | | | | | | |

There was one case of face presentation. The mother and child were discharged well.

There were 65 cases of delivery by forceps, and the undernoted table shows the indication for use of instruments, the number of cases, and the results to mother and child :—

| Indication. | No. of Cases. | Mother | | Child. | | Died. |
|---|---------------|--------|-------|-----------|------|-------|
| | | Alive. | Died. | Alive. | S.B. | |
| Failed Forceps before admission, | 7 | 7 | — | 2 | 5 | — |
| Fibroid, Cervix, | 1 | 1 | — | 1 (Twins) | — | — |
| Haemorrhage, | 2 | 2 | — | — | 2 | — |
| Contracted Pelvis, | 7 | 7 | — | 6 | 1 | — |
| Malpresentation—Breech, | 9 | — | — | — | — | — |
| —P.O.P., | 3 | 12 | — | 10 | — | 2 |
| Dystochia, | 36 | 36 | — | 32 | 4 | — |
| | <hr/> | | | | | |
| Totals, | 65 | 65 | — | 51 | 12 | 2 |
| | <hr/> | | | | | |

INDUCTION OF LABOUR (32).

| Indication. | | | No. of Cases. | Mother Alive. | Mother Died. | Alive. | Child S.B. | Died. |
|------------------------|-----|-----|---------------|---------------|--------------|--------|------------|--------------------|
| Albuminuria, ... | ... | ... | 11 | 10 | 1 | 9 | — | 3 (1 set twins) |
| Hyperpiesis, ... | ... | ... | 2 | 2 | — | 2 | — | — |
| Contracted Pelvis, ... | ... | ... | 9 | 9 | — | 9 | — | — |
| Hyperemesis, ... | ... | ... | 4 | 4 | — | 3 | — | 1 |
| Haemorrhage, ... | ... | ... | 1 | 1 | — | 1 | — | — |
| Pyelitis, ... | ... | ... | 1 | 1 | — | 1 | — | — |
| Epilepsy, ... | ... | ... | 2 | 2 | — | 1 | — | 1 |
| Eclampsia, ... | ... | ... | 1 | 1 | — | 1 | — | — |
| Still-births, ... | ... | ... | 1 | 1 | — | 1 | — | — |
| Totals, ... | ... | ... | 32 | 31 | 1 | 28 | — | 5 |

CÆSAREAN SECTION (11).

| Indication. | | | No. of Cases. | Mother Alive. | Mother Died. | Alive. | Child S.B. | Died. |
|------------------------|-----|-----|---------------|---------------|--------------|--------|------------|-------|
| Contracted Pelvis, ... | ... | ... | 10 | 10 | — | 8 | — | 2 |
| Elderly Primipara, ... | ... | ... | 1 | 1 | — | 1 | — | — |
| Totals, ... | ... | ... | 11 | 11 | — | 9 | — | 2 |

DETAILS OF CASES OF CÆSAREAN SECTION.

| Reg. No. | Category. | Age. | Parity. | Stage of Pregnancy. | Indication. | Mother. Child. | | | |
|----------|-----------|------|---------|---------------------|---------------------------|----------------|-------|--------|-------|
| | | | | | | Alive. | Died. | Alive. | Died. |
| 331 | Bk. | -35 | 2 | 40 wks. | Contracted Pelvis, ... | 1 | — | 1 | — |
| 42 | Bk. | -35 | 4 | 40 wks. | Contracted Pelvis, ... | 1 | — | 1 | — |
| 214 | Bk. | -25 | 2 | 40 wks. | Contracted Pelvis, ... | 1 | — | 1 | — |
| 99 | Bk. | -25 | 1 | 40 wks. | Contracted Pelvis, ... | 1 | — | 1 | — |
| 286 | Bk. | -25 | 1 | 38 wks. | Contracted Pelvis, ... | 1 | — | 1 | — |
| 58 | Bk. | -30 | 1 | 40 wks. | Contracted Pelvis, ... | 1 | — | 1 | — |
| 1,149 | Bk. | -25 | 1 | 38 wks. | C.P. and Albuminuria, ... | 1 | — | — | 1 |
| 689 | Bk. | -25 | 1 | 38 wks. | Contracted Pelvis, ... | 1 | — | 1 | — |
| 1,581 | Bk. | -40 | 1 | 40 wks. | Contracted Pelvis, ... | 1 | — | 1 | — |
| 415 | Bk. | -30 | 1 | 38 wks. | Contracted Pelvis, ... | 1 | — | — | 1 |
| 870 | Bk. | -45 | 1 | 38 wks. | Elderly Primipara, ... | 1 | — | 1 | — |
| | | | | | | 11 | — | 9 | 2 |

Craniotomy was performed in 7 cases and the conditions for this operation are shown below:—

| Indication. | | No. of Cases. | Mother Alive. | Dead. |
|--------------------|-----|---------------|---------------|-------|
| Contracted Pelvis, | ... | 4 | 3 | 1* |
| Hydrocephalus, | ... | 1 | 1 | — |
| Failed Forceps, | ... | 2 | 2 | — |
| | | 7 | 6 | 1 |

* Case of advanced Myocarditis with general Oedema and Albuminuria.

DETAILS OF CASES IN WHICH CRANIOTOMY WAS PERFORMED.

| Reg. No. | Category. | Age. | Stage of Pregnancy. | Indication. | Mother. Child. | | | |
|----------|-----------|------|---------------------|--|----------------|-------|--------|--------------|
| | | | | | Alive. | Died. | Alive. | Still Birth. |
| 1,806 | B | -25 | F.T. | C.P., ... | A. | — | — | S.B. |
| 487 | B | -30 | F.T. | Hydrocephalus, Haematuria, | A | — | — | S.B. |
| 1,215 | B | -40 | F.T. | C.P., ... | A | — | — | S.B. |
| 913 | B | -30 | F.T. | C.P. Albuminuria Myocarditis, gen. oedema, | — | D | — | S.B. |
| 1,296 | B | -45 | F.T. | C.P., ... | A | — | — | S.B. |
| 1,783 | B | -40 | F.T. | Failed Forceps, | A | — | — | S.B. |
| 1,855 | B | -35 | F.T. | Failed Forceps, | A | — | — | S.B. |

Of the 35 cases of *breech* presentation, 22 were primiparæ, while 13 were multiparæ. The tables below show the methods of delivery, booked and unbooked cases, the condition of the mother on discharge, and whether the child was alive or still-born:—

| Mode of Delivery. | No. of Cases | | Mother Lived. | | Child Alive. | |
|------------------------|--------------|------|---------------|------|--------------|------|
| | B.B. | N.B. | B.B. | N.B. | B.B. | N.B. |
| Spontaneous, ... | 4 | 7 | 4 | 7 | 2 | 4 |
| Forceps, ... | 5 | 2 | 5 | 2 | 5 | 2 |
| Version, Normal, ... | 1 | 1 | 1 | 1 | — | — |
| Caesarean Section, ... | 1 | — | 1 | — | 1 | — |
| Induction, Normal, ... | — | 1 | — | 1 | — | 1 |
| Totals, ... | 11 | 11 | 11 | 11 | 8 | 7 |

MULTIPARÆ (13).

| Mode of Delivery. | No. of Cases. | | Mother Lived. | | Child Alive. | |
|-----------------------|---------------|------|---------------|------|--------------|------|
| | B.B. | N.B. | B.B. | N.B. | B.B. | N.B. |
| Spontaneous, ... | 8 | 2 | 8 | 2 | 7 | 1 |
| Forceps, ... | — | 1 | — | 1 | — | 1 |
| Version, Forceps, ... | — | 1 | — | 1 | — | 1 |
| Version, Normal, ... | — | 1 | — | 1 | — | 1 |
| Totals, ... | 8 | 5 | 8 | 5 | 7 | 4 |

There were 14 cases in which version was undertaken, as noted below :—

| Indication. | | | No. of Cases. | Mother | | Child | |
|-------------------------|-----|-----|---------------|--------|-------|--------|------|
| | | | | Alive. | Dead. | Alive. | S.B. |
| Shoulder Presentation, | ... | ... | 2 | 2 | — | 1 | 1 |
| Second of Twins, | ... | ... | 1 | 1 | — | 1 | — |
| Placenta Praevia, | ... | ... | 3 | 3 | — | — | 3 |
| Accidental Haemorrhage, | ... | ... | 1 | 1 | — | — | 1 |
| Totals, | ... | ... | 7 | 7 | — | 2 | 5 |

ECLAMPSIA.

There were 8 cases of eclampsia, 6 cases occurring during labour, while 2 had their onset after the birth of the child.

The undernoted table shows a list of cases of eclampsia treated during the past seven years, with the number of deaths and percentage maternal mortality :—

| Year. | | | Cases. | Died. | Percentage Mortality. |
|-------|-----|-----|--------|-------|-----------------------|
| 1926, | ... | ... | 27 | 2 | 7·4 |
| 1927, | ... | ... | 19 | 2 | 10·5 |
| 1928, | ... | ... | 24 | 2 | 8·3 |
| 1929, | ... | ... | 22 | 3 | 13·6 |
| 1930, | ... | ... | 38 | 4 | 10·5 |
| 1931, | ... | ... | 8 | 2 | 25·0 |

TABLE SHOWING PREGNANCIES AT VARIOUS AGE-PERIODS.

| | | - 20 | - 25 | - 30 | - 35 | - 40 | - 45 | 45 and over | Total |
|------------|-----|------|------|------|------|------|------|-------------|-------|
| Para. | | | | | | | | | |
| 1, | ... | 66 | 151 | 50 | 25 | 5 | 1 | — | 298 |
| 2, | ... | 3 | 70 | 54 | 16 | 7 | 2 | — | 149 |
| 3, | ... | — | 26 | 17 | 21 | 5 | 1 | — | 70 |
| 4, | ... | — | 5 | 26 | 20 | 5 | 1 | — | 57 |
| 5, | ... | — | 2 | 12 | 11 | 3 | 1 | — | 29 |
| 6, | ... | — | — | 8 | 11 | 7 | 1 | — | 27 |
| 7, | ... | — | 1 | 4 | 14 | 13 | 1 | — | 33 |
| 8, | ... | — | — | — | 9 | 10 | 2 | 2 | 23 |
| 9, | ... | — | — | — | 2 | 10 | 2 | — | 14 |
| 10, | ... | — | — | — | 1 | 7 | 3 | — | 11 |
| 11, | ... | — | — | — | 1 | 2 | 3 | — | 6 |
| 12 & over, | — | — | — | — | 3 | 8 | 11 | 1 | 23 |

740

CASES OF NORMAL CONFINEMENTS.

| | |
|--|-----|
| Number of normal deliveries, | 409 |
| Number delivered without medical attendance, ... | — |
| Morbidity, | — |
| Number of deaths, | — |
| Infants dying in Institution, | 39 |
| Cases of puerperal pyrexia removed from Institution, ... | — |

Infants born in Hospital—

| In Residence, 1/1/31 | Infants born. Alive. | Still-born. | Discharged. Well. | Died. | In Residence, 31/12/31 |
|-------------------------|-------------------------|-------------|----------------------|-------|---------------------------|
| 15 | 693 | 64 | 648 | 37 | 23 |

Babies admitted with Mother—

| In Residence, 1/1/31 | Admitted. | Discharged. well. | Died. | In Residence, 31/12/31 |
|-------------------------|--------------------|----------------------|--------------------|---------------------------|
| 1 | 51 | 46 | 2 | 4 |
| Sex. | Babies born alive. | | Babies still-born. | |
| | Legitimate. | Illegitimate. | Legitimate. | Illegitimate. |
| Males, - | 282 | 36 | 27 | 2 |
| Females, - | 303 | 69 | 32 | 3 |
| | 693 | | 64 | |

The following table shows the number of infants born in hospital since the Local Authority began the treatment of maternity cases, 1918 to 1931 :—

| | In Residence. | Infants Born alive. | Still-born. | Discharged well. | Died. | In residence. |
|---------|------------------|------------------------|-------------|---------------------|-------|---------------|
| 1918, - | — | 7 | — | 5 | — | 2 |
| 1919, - | 2 | 30 | 2 | 22 | 5 | 5 |
| 1920, - | 5 | 110 | 6 | 105 | 6 | 4 |
| 1921, - | 4 | 203 | 22 | 183 | 15 | 9 |
| 1922, - | 9 | 213 | 50 | 201 | 11 | 10 |
| 1923, - | 10 | 288 | 57 | 273 | 20 | 5 |
| 1924, - | 5 | 334 | 61 | 303 | 23 | 13 |
| 1925, - | 13 | 501 | 56 | 458 | 28 | 28 |
| 1926, - | 28 | 643 | 64 | 605 | 43 | 23 |
| 1927, - | 23 | 683 | 62 | 659 | 27 | 20 |
| 1928, - | 20 | 646 | 71 | 621 | 32 | 13 |
| 1929, - | 13 | 508 | 50 | 478 | 31 | 12 |
| 1930, - | 12 | 638 | 85 | 600 | 35 | 15 |
| 1931, - | 15 | 693 | 64 | 648 | 37 | 23 |

INFANTILE DEATHS (39).

| | |
|--|-------|
| Prematurity, | 17 |
| Prematurity and debility, | 8 |
| Hæmatemesis and melæma, | 4 |
| Convulsions, | 2 |
| Difficult breech (delay in delivery), | 2 |
| Hydrocephalus spina bifida, | 2 |
| Debility, | 2 |
| Convulsions and debility, | 1 |
| Congenital stenosis of bile duct, | 1 |
| | <hr/> |
| | 39 |
| | <hr/> |

During the year there were 64 still-births out of a total of 740 confinements. This represents 8·6 per cent. foetal mortality, a lower rate than for the previous year.

The probable and certain causes in some cases in the mother and child respectively were as follows:—

| MOTHER. | | | FOETAL. | | |
|-----------------------------------|----|---|-----------------------------------|---|---|
| Ante-partum Hæmorrhage, | 16 | { | Negative, | - | 9 |
| | | | Macerated, | - | 2 |
| | | | Premature, | - | 5 |
| Albuminuria, | 12 | { | Negative, | - | 5 |
| | | | Premature, | - | 2 |
| | | | Macerated, | - | 3 |
| | | | Hydrocephalus, | - | 1 |
| | | | Meningocele Maceration, | - | 1 |
| Eclampsia, | 4 | { | Negative, | - | 2 |
| | | | Premature, | - | 1 |
| | | | Macerated, | - | 1 |
| Contracted Pelvis, | 5 | { | Negative, | - | 3 |
| | | | Craniotomy, | - | 2 |
| Delayed Labour, | 2 | | Negative, | - | 2 |
| Prolapsed Cord, | 2 | | Negative, | - | 2 |
| Failed Forceps, | 5 | { | Negative, | - | 2 |
| | | | Macerated, | - | 3 |
| Hydramnios, | 2 | { | Premature, | - | 1 |
| | | | Anencephalic, | - | 1 |
| Abnormal Presentation, | 5 | { | Negative, | - | 4 |
| | | | Craniotomy, | - | 1 |
| Normal, | 11 | { | Premature, | - | 5 |
| | | | Macerated, | - | 3 |
| | | | Meningocele, | - | 1 |
| | | | Anencephalic, | - | 1 |
| | | | Hydrocephalus, | - | 1 |

POST-NATAL CASES (51).

| | | | |
|------------------------------|----|-----------------------------------|----|
| B.B.A., - - - - - | 27 | Inversion of Uterus, - - - | 2 |
| Albuminuria, - - - - - | 4 | Hæmatemesis, - - - - - | 1 |
| Post Partum Hæmorrhage, - - | 3 | Confined prematurely, - - - | 1 |
| Respiratory Disease, - - - - | 2 | Cystitis, - - - - - | 1 |
| Adherent Placenta, - - - - - | 5 | Fibroid with Placenta adherent, - | 1 |
| Eclampsia, - - - - - | 2 | | — |
| Cardiac Disease, - - - - - | 1 | | 51 |
| Scabies, - - - - - | 1 | | — |

Results—

| | |
|----------------------------|----|
| Well, | 35 |
| Improved, | 3 |
| L.S.Q., | 1 |
| To other hospitals, | 8 |
| Died, | 4 |
| | — |
| | 51 |
| | — |

There were 34 cases of pyrexia, and the cause of elevation of temperature according to the B.M.A. Standard of Morbidity is as follows :—

| | |
|--|----|
| Pyelitis, | 2 |
| Mastitis, | 2 |
| Pleurisy, | 1 |
| Pneumonia, | 1 |
| Pulmonary tuberculosis, | 1 |
| After impacted breech, | 1 |
| Inversion of uterus, | 1 |
| Pyrexia without apparent cause, | 19 |
| Puerperal sepsis, | 1 |
| Abortion, septic on admission, | 3 |
| Gonococcal infection, | 1 |
| Necrosed perineum, | 1 |

Cases removed to County Isolation Hospital numbered 7.

ANTE-NATAL CASES (297).

| | | | |
|--|----|--|------------|
| Albuminuria, | 65 | Vertigo, | 1 |
| Albuminuria and Pyuria, | 4 | Hyperemesis and Cardiac Disease, . | 1 |
| Albuminuria and Hyperemesis, . . | 4 | Mastitis, | 1 |
| Albuminuria and Oedema, | 13 | Lumbar Pain, | 1 |
| Albuminuria and Respiratory Disease, | 2 | Melancholia, | 1 |
| Albuminuria and Cardiac Disease, . | 3 | Negative, | 61 |
| Albuminuria and Contracted Pelvis, . | 2 | Oedema of lower extremities with- out other symptoms, | 4 |
| Abdominal Pain, | 4 | Pyelitis, | 28 |
| Abnormal Presentation, | 1 | Pyelitis and Contracted Pelvis, . . | 2 |
| Cystitis, | 2 | Pyelitis and Cardiac Disease, . . | 1 |
| Cardiac Disease, | 7 | Pyelitis and Oedema of lower extremities, | 1 |
| Contracted Pelvis, | 4 | Placenta Prævia, | 1 |
| Chronic Appendicitis, | 1 | Respiratory Disease, | 3 |
| Chorea, | 2 | Retroverted gravid uterus, | 1 |
| Debility, | 5 | Prophylactic treatment for Sepsis, . | 3 |
| Disseminated Sclerosis, | 1 | Toxæmia, | 3 |
| External Hæmorrhage, | 14 | Others, | 6 |
| Hyperemesis Gravidarum, | 36 | | |
| Gastritis, | 1 | | <u>297</u> |
| Hyperpiesis, | 7 | | |

Results—

| | |
|-------------------------|-----|
| Well, | 202 |
| Improved, | 26 |
| I.S.Q., | 18 |
| Other hospitals, | 47 |
| Died, | 5 |

298*Causes of death were—*

| | |
|--|---|
| Toxæmias of pregnancy, | 2 |
| Cardiac disease with pulmonary embolism, ... | 2 |
| Accidental hæmorrhage, | 1 |

5

UTERINE HÆMORRHAGES (194).

There were 194 cases of uterine hæmorrhage which have been classified as follows:—

ABORTIONS—

| | | | |
|--------------------------|-----|----------------------------------|----|
| Threatened, - - - - | 35 | { Medical Treatment, - - - | 34 |
| | | { Curettage, - - - - | 1 |
| Complete, - - - - | 49 | { Medical Treatment, - - - | 46 |
| | | { Curettage, - - - - | 3 |
| Incomplete, - - - - | 104 | { Medical Treatment, - - - | 14 |
| | | { Curettage, - - - - | 90 |
| Induced, - - - - | 3 | { Cardiac Disease, - - - | 2 |
| | | { Hyperemesis, - - - - | 1 |
| ECTOPIC PREGNANCY, - - - | 1 | Abdominal Section, - - - | 1 |
| HYDATIFORM MOLE, - - - | 2 | Curettage for retained debris, - | 2 |

Results—

| | |
|----------------------------|-----|
| Well, | 142 |
| Improved, | 7 |
| I.S.Q., | 4 |
| To other hospitals, | 39 |
| Died, | 2 |

GYNÆCOLOGICAL CASES (20).

A detailed list of 20 gynæcological cases having either medical or surgical treatment is given below:—

| | | | |
|-------------------------------|----|----------------------------|---|
| Endometritis, - - - - | 11 | { Medical Treatment, - - - | 7 |
| | | { Curettage, - - - - | 4 |
| Uterine Hæmorrhage, - - - | 2 | { Medical Treatment, - - - | 1 |
| | | { Curettage, - - - - | 1 |
| Fibroid of the Uterus, - - - | 2 | Medical Treatment, - - - | 2 |
| Irregular Menstruation, - - - | 1 | Medical Treatment, - - - | 1 |
| Sterility, - - - - | 1 | Curettage, - - - - | 1 |
| Urethritis, - - - - | 1 | Medical Treatment, - - - | 1 |
| Polypus Cervix, - - - - | 1 | Medical Treatment, - - - | 1 |
| Dysmenorrhœa, - - - - | 1 | Curettage, - - - - | 1 |

Results—

| | |
|----------------------------|----|
| Well, | 12 |
| To other Hospitals, | 4 |
| Improved, | 2 |
| I.S.Q., | 2 |

MATERNAL DEATHS.

Mrs. M.—Patient had rheumatic history with cardiac symptoms since 1915. Admitted in advanced stage of mitral valvular disease. The heart was enlarged and there was auricular fibrillation. Her progress was downhill all the time in hospital; she developed a pulmonary embolus and died undelivered.

Mrs. M.—Notified as accidental hæmorrhage. Admitted in a very collapsed condition with concealed hæmorrhage. The patient responded temporarily to treatment, but hæmorrhage recurred. Patient collapsed and died a few hours after admission.

Mrs. S.—A case of incomplete abortion with profuse hæmorrhage. She refused hospital treatment at first. There was a cardiac history. On admission patient was extremely collapsed, blanched, and pulseless. She developed a right-sided hemiplegia. Death was due to myocarditis with cerebral embolism.

Mrs. F.—Notified as forceps delivery at home with severe post-partum hæmorrhage. The placenta and membranes were adherent. She was admitted in a very collapsed condition, unconscious, with Cheyne-Stokes breathing; she died 15 minutes after admission. Death was due to shock from post-partum hæmorrhage and adherent placenta.

Mrs. J.—Admitted as "Failed Forceps." She had advanced cardiac lesion with cyanosis, œdema, and auricular fibrillation. The pelvis was contracted and craniotomy was performed. After confinement her cardiac condition became worse—marked orthopnea and incidence of œdema so that she was waterlogged. Death was due to cardiac failure.

Mrs. P.—She was notified as eclampsia and had 16 fits before admission. She was admitted in a comatose condition and had several seizures after admission. Blood pressure rose steadily and treatment was unavailing. Death was due to eclampsia.

Mrs. G.—Patient was admitted on account of advanced cardiac lesion. On admission she was 2 months pregnant and there was marked cyanosis and orthopnea. The heart was dilated and was fibrillating; induction of abortion was performed. Patient developed pulmonary embolism 6 days after admission.

Mrs. T.—Patient notified as post-natal eclampsia—she had been confined normally at home and had two fits before admission. There was a history of swelling of feet, ankles, and puffiness of face. On admission she was semi-conscious, with marked cyanosis. Urine was loaded with albumen and blood. After admission she had two fits and did not regain consciousness. Death was due to puerperal eclampsia.

Mary L.—Patient had been confined at home of a still-born child. She had a very marked cardiac failure with auricular fibrillation and was admitted in a semi-conscious condition. There was slight improvement after admission, but she collapsed suddenly and died within half-an-hour. Post-mortem showed death was due to ulcerative endocarditis.

Mrs. G.—This patient was $7\frac{1}{2}$ months pregnant. On admission she was unconscious, with temperature 107° and pulse 140. There had been no bowel movement for a week previously, and there was marked abdominal distension. The patient was very cyanosed and she developed brown vomit which ultimately became faecal. She died $1\frac{1}{2}$ hours after admission. Post-mortem showed death was due to general toxæmia of pregnancy.

Mrs. S.—This patient was seven months pregnant. There was a history of diarrhoea for a few days prior to admission. On admission she was collapsed, with temperature 103° and pulse 144; respiratory rate 70-45, blood pressure 50; the stools were loose, dark, and offensive. There was no response to treatment and she became weaker and died. Post-mortem: Death was due to acute general toxæmia of pregnancy.

Mrs. S.—Admitted on account of albuminuria with generalised œdema and blood pressure 174, she had a troublesome cough as well. She was confined normally. After delivery cough more troublesome, but general condition was fair. On 3rd day of puerperium she developed acute dyspnœa with blood-stained sputum, and was very distressed. Respiratory rate increased and death was due to œdema of lungs and general toxæmia of pregnancy.

TRAINING OF PUPIL-MIDWIVES.

During the year 31 pupils were admitted for training, bringing the total number of pupils trained since the Institution was recognised as a training school up to 200.

The following are the regulations at present in force regarding applicants desirous of midwifery training:—

(1) Nurses who have completed their training in any of the County Institutions, applying within 6 months of leaving the Local Authority's service—£1.

(2) Nurses who have been trained in County Institutions and subsequently and consecutively have taken their general training, if applying within 6 months of completion of general training—£1.

(3) Nurses on the General or Supplementary Registers who have completed 2 years with the Local Authority, if applying during the time they are employed—£1.

(4) Nurses on General or Supplementary Registers—£5.

(5) Untrained applicants—£40.

Of the amounts mentioned, £1 must accompany the application for engagement and the balance will be payable when training is commenced. Nurses who are trained in the Local Authority's Institution must likewise make a deposit of £1 at the time of application for engagement. Such deposit shall not be repayable except, in the opinion of the Physician-Superintendent, special circumstances warrant repayment. Where an applicant has received previous training, one reference must be from the Matron under whom she last worked.

Applicants who are not certified nurses must have a good general education. Applicants who do not hold a certificate in English satisfactory to the Physician-Superintendent must pass a test in English (including dictation), arithmetic, and general knowledge.

In order to comply with the regulations of the Central Midwives Board, whereby every pupil-nurse must attend during her period of training five cases of confinement in the patient's home, arrangements have been made with the Glasgow Royal Maternity Hospital to take one nurse a month for this purpose.

A certified midwife in the Bellshill district has likewise agreed to take out a nurse from this hospital to necessitous cases. This arrangement has worked harmoniously up to the present time.

During the past eighteen months 29 nurses have completed their period of training under the new regulations.

Twenty-seven pupil-nurses went forward to the examination of the Central Midwives Board and all were successful.

ANTE-NATAL CLINICS.

The appended table gives a list of the number of patients treated at the Ante-natal Clinics and the reasons for treatment:—

| Number of Cases Treated, | | | | Cambuslang. | Blantyre. | Shotts. | Bellshill. |
|--------------------------------|-----|-----|-----|-------------|-----------|---------|------------|
| | | | | ... 189 | 188 | 142 | 815 |
| Normal Cases, | ... | ... | ... | 77 | 71 | 54 | 404 |
| Albuminuria, | ... | ... | ... | 30 | 36 | 17 | 82 |
| Hyperemesis, | ... | ... | ... | 13 | 6 | 5 | 13 |
| General Debility, | ... | ... | ... | 8 | 9 | 4 | 13 |
| Varicose Veins, | ... | ... | ... | 7 | 9 | 7 | 43 |
| Contracted Pelvis, | ... | ... | ... | 6 | 1 | 3 | 27 |
| Oedema, | ... | ... | ... | 6 | 2 | 3 | 40 |
| Hæmorrhage, | ... | ... | ... | 4 | 4 | 3 | 27 |
| Hyperpiesis, | ... | ... | ... | 4 | 3 | 4 | 7 |
| Hæmorrhoids, | ... | ... | ... | 2 | — | — | 4 |
| Transverse Presentation, | ... | ... | ... | 1 | — | — | — |
| Cardiac Disease, | ... | ... | ... | 1 | — | — | 1 |
| Postnatal, | ... | ... | ... | 5 | 17 | 8 | — |
| Gynæcological, | ... | ... | ... | 25 | 25 | 33 | 149 |
| Prolapse Uterus and Pregnancy, | ... | ... | ... | — | 2 | — | 3 |
| Others, | ... | ... | ... | — | 3 | — | — |
| Chorea, | ... | ... | ... | — | — | 1 | 1 |
| Hydramnios, | ... | ... | ... | — | — | — | 1 |

| Clinic. | Total First Visits. | Gyn. Cases. | Mat. Cases. | Primip. | Multip. | Primip. conf. in Hosp. | Multip. conf. in Hosp. |
|----------------|---------------------|-------------|-------------|---------|---------|------------------------|------------------------|
| Cambuslang, | 189 | 30 | 159 | 49 | 110 | 25 | 28 |
| Shotts, ... | 142 | 41 | 101 | 42 | 59 | 6 | 4 |
| Blantyre, ... | 188 | 42 | 146 | 29 | 117 | 12 | 27 |
| Bellshill, ... | 815 | 149 | 666 | 245 | 421 | 68 | 223 |
| Totals, ... | 1,334 | 1,072 | 262 | 365 | 697 | 111 | 282 |

REVISITS.

| Clinic. | Ante-natal. | Gynæcological. | Post-natal. | Total. |
|----------------|-------------|----------------|-------------|--------|
| Bellshill, ... | ... 1,082 | 196 | 2 | 1,280 |
| Cambuslang, | ... 393 | 23 | 5 | 421 |
| Blantyre, ... | ... 200 | 29 | 14 | 243 |
| Shotts, ... | ... 209 | 43 | 5 | 257 |
| | | | | 2,201 |

TREATMENT OF TOXIC CONDITIONS OF PREGNANCY
BY ALKALIES AND CALCIUM GLUCONATE.

Treatment of cases of albuminuria with alkalies (Sod. Bicarb., grs.-20, and Pot. Citras., grs.-40) was begun about three years ago. The results at first were disappointing, as many cases did not appear to react to this line of treatment, especially cases of advanced toxæmias of pregnancy.

At first calcium lactate, grs.-2½, was used in combination with the dose of alkali, and that dose has been increased to grs.-7½ three times daily. In nearly every case the result was curative, except in cases of advanced toxæmias and chronic nephritis.

It has, however, been shown that if the above doses of alkali and calcium are given intravenously an advanced toxic condition will improve rapidly. Some cases of hyperemesis gravidarum showed remarkable improvement.

The use of calcium alone is not sufficient to prevent eclamptic fits, but when administered with alkali the compound has proved effective in controlling fits.

In sterilising the alkaline compound it is essential to sterilize the constituents separately—Soda Bicarb. and Pot. Citras. in one container and Calcium Lactate in another. They should be allowed to cool and then mixed. If sterilized together a precipitate of Calc. Citrate is thrown down.

The alkaline compound in tablet form is distributed liberally at the Ante-Natal Clinics and Child Welfare Centres to all patients with symptoms of toxæmia.

The results obtained have fully justified a continuance of this treatment.

The following is a record of cases of eclampsia admitted for treatment over six years :—

| | | | | | |
|-------|-----|-----|-----|----|----------------------------|
| 1926, | ... | ... | ... | 27 | |
| 1927, | ... | ... | ... | 19 | |
| 1928, | ... | ... | ... | 24 | |
| 1929, | ... | ... | ... | 22 | Alkalies alone. |
| 1930, | ... | ... | ... | 38 | Calcium added. Oct., 1930. |
| 1931, | ... | ... | ... | 8 | Calcium continued. |

ADMINISTRATION.

Staff—

The staff of the Institution now is as follows :—

- 1 Physician-Superintendent.
- 1 Consulting Surgeon.
- 1 Resident Assistant Physician-Superintendent.
- 1 Matron.
- 3 Sisters.
- 3 Staff Nurses.
- 1 Typist.
- 10 Maids.
- 1 Chauffeur.
- 4 Stoker-gardeners.

In addition to the permanent staff, there are 16 nurses who are taking the qualifying course in midwifery.

The resident assistant medical officer is appointed for six months, and Dr. Gibson was appointed for the first part of the year 1931, while Dr. Brown was appointed for the following six months and took up duties on November 1st.

Accommodation—

Early in the year 1931 the number of patients desiring admission for treatment within the hospital far exceeded the accommodation, and it was decided to provide an additional 30 beds by the erection of a temporary wooden structure.

The work was begun about November 20th, 1931, and it is hoped that entry will be obtained early in the summer of 1932.

Receipts—

Every woman admitted for confinement is assessed according to her ability to contribute towards her maintenance and treatment. During the year the total amount of such assessments was £1,019 8s. 5d., and of this sum £848 15s. 5d. was recovered.

The fees received from pupil midwives amounted to £260.

CALDERBANK HOUSE, BAILLIESTON.

Physician-Superintendent—LESLIE J. LANG, M.B., Ch.B., D.P.H.

Consulting Otologist—JAMES ADAM, M.D., F.R.F.P.S.(G.).

Matron—MRS. MACDOUGALL.

Administration.

ACCOMMODATION.—Remains unchanged, and consists of 14 adult beds, 36 children's cots, and 18 treasure cots.

STAFF.—The nursing staff consists of Matron, 1 sister, 3 staff nurses, and 9 probationers. The domestic staff consists of 1 cook, 2 laundry maids, and 5 maids. There is an outdoor staff of gardener, assistant gardener, and apprentice gardener. During the year the staff lost 131 working days through illness.

BUILDING AND GROUNDS.—No work beyond ordinary maintenance was carried out during the year.

Admissions and Discharges.—

| | Infants (Under 1 year). | Children (1-5 years). | Adults. |
|------------------------------------|----------------------------|--------------------------|---------|
| In residence, 1st January, 1931, | 15 | 17 | 9 |
| Admitted during 1931, - - - | 247 | 171 | 317 |
| Discharged during 1931, - - - | 223 | 176 | 314 |
| Died during 1931, - - - | 19 | 2 | 1 |
| In residence, 31st December, 1931, | 20 | 10 | 11 |

CHILD WELFARE CENTRES AND INSTITUTIONS FROM WHICH ADMISSIONS WERE ARRANGED.

| | | | |
|-----------------------|----|-------------------------------|-----|
| Airdrie, - - - | 26 | Shotts, - - - | 13 |
| Baillieston, - - - | 37 | Tannochside, - - - | 12 |
| Bellshill, - - - | 18 | Uddingston, - - - | 17 |
| Bishopbriggs, - - - | 10 | | |
| Blantyre, - - - | 76 | | 369 |
| Cadzow, - - - | 6 | | |
| Cambuslang, - - - | 55 | | |
| Carluke, - - - | 3 | Ear, Nose, and Throat Clinic, | 77 |
| Chryston, - - - | 11 | Bellshill Hospital, - - - | 271 |
| Coalburn, - - - | 3 | Motherwell Hospital, - - - | 2 |
| Lanark, - - - | 3 | Roadmeetings Hospital, - - - | 1 |
| Larkhall, - - - | 47 | Lanark Hospital, - - - | 1 |
| Newarthill, - - - | 10 | Public Health Department, | 14 |
| New Stevenston, - - - | 11 | | 369 |
| Newmains, - - - | 11 | | |
| | | Total. | 735 |

Conditions Treated:—

ADULTS.

Ante-Natal—

| | | | |
|---------------------------|----|------------------------|---|
| Anæmia and Debility, - | 41 | Albuminuria, - - | 7 |
| Varicose Veins, - - | 3 | Threatened Abortion, - | 7 |
| Ante-partum hæmorrhage, - | 4 | Chorea, - - - | 1 |
| Hyperemesis, - - - | 7 | Rheumatism, - - - | 2 |
| Pyelitis, - - - | 5 | Cysticorimea, - - - | 1 |
| Cardiac, - - - | 10 | Leucorrhœa, - - - | 1 |
| Uterine displacement, - | 2 | Insomnia, - - - | 1 |
| —92 | | | |

Post-Natal—

| | | | |
|-------------------------|----|-----------------------|---|
| Lying-in, - - - | 86 | Phlegmasia, - - - | 2 |
| Anæmia and Debility, - | 52 | Rheumatism, - - - | 2 |
| Albuminuria, - - - | 6 | Post operation, - - - | 1 |
| Cardiac, - - - | 2 | Epilepsy, - - - | 1 |
| Uterine Displacement, - | 2 | Skin, - - - | 2 |
| —156 | | | |

Gynæcological—

| | | | |
|----------------------------|---|-----------------------|----|
| Menstrual Abnormalities, - | 2 | Post-operation, - - - | 2 |
| Leucorrhœa, - - - | 1 | Post-curettage, - - - | 43 |
| —48 | | | |

Others—

| | | | |
|--------------------------|----|----------------|---|
| With infant, - - - | 17 | Cardiac, - - - | 1 |
| Ear, Nose, and Throat, - | 1 | —19 | |

CHILDREN.

| | | | |
|--------------------|----|------------------------------|----|
| Debility, - - - | 29 | Leukaemia, - - - | 1 |
| Rickets, - - - | 26 | Mental defective, - - - | 1 |
| Respiratory, - - - | 6 | Cretinism, - - - | 2 |
| Diarrhœa, - - - | 9 | Ear, Nose, and Throat, - | 79 |
| Phimosis, - - - | 11 | Nothing abnormal detected, - | 2 |
| Skin, - - - | 8 | With mother, - - - | 4 |
| —178 | | | |

Other conditions noted in the above admissions:—Otorrhœa, 2; impetigo, 1; diarrhœa, 1; chickenpox, 1.

INFANTS.

| | | | |
|--------------------|-----|--------------------------|---|
| With mother, - - - | 121 | Gastro-enteritis, - - - | 6 |
| Phimosis, - - - | 45 | Skin, - - - | 7 |
| Marasmus, - - - | 14 | Rickets, - - - | 3 |
| Debility, - - - | 33 | Prematurity, - - - | 4 |
| Respiratory, - - - | 5 | Ear, Nose, and Throat, - | 4 |
| —242 | | | |

Other conditions noted in the above admissions:—Birth injuries, 2; cleft palate, 1; mongolism, 1; impetigo, 1.

Results.—

| | ADULTS. | CHILDREN. | INFANTS. |
|---------------|---------|-----------|----------|
| Discharged :— | | | |
| Well, - - | 246 | 140 | 190 |
| Improved, - - | 20 | 17 | 21 |
| I.S.Q., - - | 8 | 10 | 7 |
| Died, - - | 1 | 2 | 19 |

Transferred to :—

| | | | |
|------------------------|----|---|---|
| Bellshill Hospital, | 38 | — | — |
| Lanark Hospital, | 2 | 2 | — |
| Motherwell Hospital, | — | 6 | 5 |
| Roadmeetings Hospital, | — | 1 | — |

Of the above discharges, 8 adults and 17 infants were removed against medical advice.

The causes of the deaths recorded were as follows:—Marasmus, 8; congenital debility, 3; broncho-pneumonia, 3; prematurity, 2; prematurity and birth injuries, 2; gastro-enteritis, 2; asthma and cardiac failure, 1; V.D.H. and pulmonary embolism, 1 (adult).

EAR, NOSE, AND THROAT.—The following conditions were treated :—

| | |
|--|----|
| Enlarged Tonsils and Adenoids, - - - - | 38 |
| Adenoids, - - - - | 36 |
| Mastoiditis, - - - - | 5 |
| Otorrhœa, - - - - | 3 |
| Nasal obstruction, - - - - | 1 |
| Septal deflection, - - - - | 1 |

CIRCUMCISIONS.—During the year 56 circumcisions were carried out.

ARTIFICIAL LIGHT TREATMENT

IN-DOOR PATIENTS.

| | Infants and Children. | Adults. |
|---|-----------------------|---------|
| Receiving treatment, 1st January, 1931, - - | 4 | — |
| Commenced treatment during 1931, - - | 37 | 2 |
| Receiving treatment, 31st December, 1931, - | 3 | — |

Conditions treated and results :—

| Condition. | Discharged. | | | | Worse and Treat- ment Stopped. | Con- tinuing. | Stopped on own respon- sibility. |
|-----------------------|-------------|-------|-----------|--------|---|------------------|---|
| | No. | Well. | Improved. | I.S.Q. | | | |
| ADULTS. | | | | | | | |
| Psoriasis, | - | - | 1 | — | 1 | — | — |
| Alopecia, | - | - | 1 | — | 1 | — | — |
| INFANTS AND CHILDREN. | | | | | | | |
| Rickets, - | - | - | 25 | 12 | 3 | 1 | 5 |
| Debility, | - | - | 14 | 6 | 2 | — | 2 |
| Cervical Adenitis, | - | - | 1 | 1 | — | — | — |
| Bronchitis, | - | - | 2 | 2 | — | — | — |
| Marasmus, | - | - | 1 | — | 1 | — | — |
| Skin, | - | - | 1 | 1 | — | — | — |

OUT-DOOR PATIENTS.

| | Infants and Children. | Adults. |
|--|--------------------------|---------|
| Under treatment, 1st January, 1931, - - | 7 | 4 |
| Commenced treatment during 1931, - - | 9 | 1 |
| Receiving treatment 31st December, 1931, - | 4 | 3 |

Conditions treated and results :—

| Condition. | Discharged. | | | | Worse and Treat- ment stopped. | Con- tinuing. | Stopped on own Respon- sibility |
|----------------------------|-------------|-------|-----------|--------|---|------------------|--|
| | No. | Well. | Improved. | I.S.Q. | | | |
| ADULTS. | | | | | | | |
| Debility, - | 3 | — | 1 | — | — | — | 2 |
| Asthma, - | 1 | — | — | — | — | — | 1 |
| T.B. Cervical Glands, - | 2 | — | — | — | — | 1 | 1 |
| Lupus, - | 1 | — | — | — | — | 1 | — |
| T.B. Spine, - | 1 | — | — | — | — | 1 | — |
| INFANTS AND CHILDREN. | | | | | | | |
| Debility, - | 3 | — | 1 | — | — | 2 | — |
| Rickets, - | 2 | — | — | 1 | — | — | 1 |
| Bronchitis, - | 1 | — | 1 | — | — | — | — |
| Skin, - | 1 | — | — | — | — | — | 1 |
| T.B. Cervical Glands, - | 12 | 1 | 5 | 1 | 1 | 1 | 3 |
| Lupus, - | 1 | — | — | — | — | 1 | — |

INFECTIOUS DISEASE.—In March all children were discharged from the Institution and the wards disinfected on account of chickenpox, and in November for chickenpox and scarlet fever. During the year 11 children were transferred to the County Hospital, Motherwell. The conditions necessitating transfer were as follows:—

| | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|
| Chickenpox, | - | - | - | - | - | - | - | - | 7 |
| Scarlet Fever, | - | - | - | - | - | - | - | - | 2 |
| Erysipelas, | - | - | - | - | - | - | - | - | 1 |
| Pneumonia, | - | - | - | - | - | - | - | - | 1 |

PLACES OF RESIDENCE OF CASES ARRANGED ACCORDING TO PARISH.

| | | | | | | | | | |
|---------------|---|---|---|-----|----------------|---|---|---|-----|
| Avondale, | - | - | - | 10 | Dalziel, | - | - | - | 7 |
| Blantyre, | - | - | - | 110 | East Kilbride, | - | - | - | 12 |
| Bothwell, | - | - | - | 153 | Hamilton, | - | - | - | 28 |
| Cambuslang, | - | - | - | 93 | Lanark, | - | - | - | 14 |
| Cadder, | - | - | - | 35 | Lesmahagow, | - | - | - | 9 |
| Cambusnethan, | - | - | - | 10 | New Monkland, | - | - | - | 69 |
| Carluke, | - | - | - | 8 | Old Monkland, | - | - | - | 58 |
| Carnwath, | - | - | - | 3 | Shotts, | - | - | - | 48 |
| Carstairs, | - | - | - | 2 | Stonehouse, | - | - | - | 8 |
| Dalserf, | - | - | - | 58 | | | | | |
| | | | | | | | | | 735 |

COUNTY HOSPITAL, LANARK.

Physician-Superintendent—

GEORGE W. MURRAY, M.B., Ch.B., D.P.H.

Sister-in-Charge—Miss KEIR.

ACCOMMODATION.—Remains unchanged and consists of two blocks of two wards each, one being kept for children and one for mothers. The accommodation for patients is 20 cots and 16 beds.

STAFF.—The staff consists of charge sister, 3 staff nurses, 4 probationers, 1 cook, 1 house table maid, 2 ward maids, 1 laundry maid, 1 laundry and kitchen maid, and 1 gardener. An extra staff nurse and an extra probationer were appointed during the year. There is not sufficient accommodation for all the staff, and the cook, 3 maids, and gardener live out.

BUILDING AND GROUNDS. — Considerable improvements have been made in the garden and grounds during the year.

CASES TREATED. — Eleven cases were under treatment on 1st January, 1931, and during the year 321 cases were admitted, 305 were discharged and 1 died, leaving 26 cases under treatment at the end of the year.

PLACE OF RESIDENCE.—Of the 306 cases discharged, 304 were from County areas and 2 from the Burgh of Lanark. The parishes of residence of patients discharged were:—

| | | | |
|--------------------|----|----------------------|----|
| Blantyre, - - | 24 | Glasgow, - - | 2 |
| Bothwell, - - | 95 | Hamilton, - - | 1 |
| Cadder, - - | 7 | Lanark, - - | 5 |
| Cambuslang, - - | 20 | Lesmahagow, - - | 31 |
| Cambusnethan, - - | 23 | New Monkland, - - | 11 |
| Carluke, - - | 28 | Old Monkland, - - | 8 |
| Carmichael, - - | 2 | Rutherglen, - - | 11 |
| Carnwath, - - | 2 | Shotts, - - | 15 |
| Dalserf, - - | 16 | Stonehouse, - - | 2 |
| East Kilbride, - - | 1 | Burgh of Lanark, - - | 2 |

AGES OF PATIENTS.—The ages of patients under treatment were as follows :—

CHILDREN :—

| Months. | | Years. | | Total. |
|---------|------|--------|-----|--------|
| -6 | 6-12 | 1-2 | 2-5 | |
| 74 | 15 | 28 | 19 | 136 |

MOTHERS :—

| Years. | | | | | Over | Total. |
|--------|-----|-----|-----|-----|------|--------|
| -20 | -25 | -30 | -35 | -40 | 40 | |
| 12 | 34 | 48 | 39 | 25 | 12 | 170 |

NATURE OF ADMISSIONS. — The conditions which necessitated admission were :—

CHILDREN :—

| | | | |
|----------------------------|----|--------------------------------------|-----|
| Mothers in hospital, - - - | 88 | Prematurity, - - - | 1 |
| Malnutrition, - - - | 19 | Debility following other diseases, - | 4 |
| Rickets, - - - | 11 | Bronchitis, - - - | 2 |
| Marasmus, - - - | 4 | Meningitis, - - - | 1 |
| Enteritis, - - - | 4 | | |
| | | | 136 |

MOTHERS :—

Post-natal—

| | |
|------------------------|----|
| Debility, - - - | 92 |
| Abortion, - - - | 10 |
| Anæmia, - - - | 7 |
| Cardiac Disease, - - - | 4 |
| Mastitis, - - - | 3 |
| Varicose Veins, - - - | 1 |
| Leucorrhœa, - - - | 3 |
| Albuminuria, - - - | 3 |
| Phlebitis, - - - | 4 |
| Rheumatism, - - - | 3 |

130

Gynæcological—

| | |
|---------------------------|---|
| Dysmenorrhœa, - - - | 1 |
| Prolapse of Uterus, - - - | 1 |
| Debility, - - - | 1 |
| Menorrhagia, - - - | 2 |

5

Ante-natal—

| | |
|-----------------------|---|
| Debility, - - - | 5 |
| Albuminuria, - - - | 1 |
| Varicose Veins, - - - | 1 |

7

Others—

| | |
|-------------------|----|
| Debility, - - - | 20 |
| Rheumatism, - - - | 2 |
| Anæmia, - - - | 3 |
| Others, - - - | 3 |

28

It will be noted that the vast majority of the mothers admitted were post-natal, *i.e.*, within a year after their confinements, and that they almost always had their babies admitted with them. These patients suffered from debility and invariably showed some degree of anaemia and subnutrition. The main lines of treatment were rest, regular and varied diet, and the administration of iron, arsenic, and strychnine hypodermically, with as much time spent in the open air as possible. Particular cases were treated according to their need.

The children were kept in wards apart from the adults and the mothers were allowed access to them at regular intervals. This ensured for the mothers the maximum of rest and freedom, so far as possible, from domestic worries and the care of the young infant. The results of this treatment were very satisfactory, the patients showing marked improvement in their general condition, a bright outlook on life and an increased fitness to tackle the cares of a household again.

There can be no doubt that this form of convalescent treatment is of infinite service, particularly where the home conditions are not of the best.

RESULTS OF TREATMENT.—121 cases were discharged well, 162 very much improved, 12 I.S.Q., 5 were transferred to Roadmeetings Hospital, 4 to Motherwell Hospital, 1 to Calderbank House, and 1 child died. The cause of death was marasmus.

On 14/10/31 a case of whooping-cough developed in the Hospital and the patient was removed to Roadmeetings Hospital. No further cases occurred till 15/12/31 when two cases were transferred to the County Hospital, Motherwell. It was then decided to evacuate the remaining children from the ward and they were accordingly sent home as contacts. The wards were thoroughly cleaned and disinfected before readmissions were allowed. No further case of whooping-cough occurred.



COUNTY OF LANARK

MILK AND DAIRIES (SCOTLAND) ACT, 1914

County Veterinary Inspector's Report

FOR THE

COUNTY OF LANARK

AND

THE BURGHS OF BIGGAR AND LANARK

FOR THE YEAR 1931

To—

THE DEPARTMENT OF HEALTH FOR SCOTLAND.

THE COUNTY COUNCIL OF THE COUNTY OF LANARK.

THE TOWN COUNCIL OF THE BURGH OF BIGGAR.

THE TOWN COUNCIL OF THE BURGH OF LANARK.

MY LORDS AND GENTLEMEN,

I have the honour to submit the Sixth Annual Report of the work done by the Veterinary Department of the County of Lanark under the Milk and Dairies (Scotland) Act, 1914, for the year 1931.

(a) Review of the Year's Work.

(1) ANY MATTER OF OUTSTANDING GENERAL INTEREST.

Foot-and-Mouth Disease.

No case of foot-and-mouth disease occurred in the County during the year, and no suspected case was reported.

Anthrax.

During the year 20 outbreaks of Anthrax occurred, involving 21 animals, viz. :—12 dairy cows, 2 bulls, 1 bullock, and 6 animals under 3 years of age.

No case of human infection occurred in connection with any of these cases. The details regarding them were included in a special print of Notes by the County Veterinary Inspector on Outbreaks of Anthrax which have occurred in the County during twenty-one years from 1st January, 1911, to 31st December, 1931, inclusive.

(2) ANY PARTICULAR QUESTION OF INTEREST OR IMPORTANCE.

Producers of ordinary market milk experienced a rather unprofitable year, and it seems likely that their case will not be improved until they organise themselves so that an agreed-on proportion of their supplies can be diverted from the liquid milk market to feeding of calves for veal, cheesemaking, buttermaking, &c.

Not more than 4 per cent. of our dairy farms are producing butter or cheese to-day as regular dairy procedure, and most of them carry small herds.

The considerable amount of butter production that still prevailed in Lanarkshire until the third year of the Great War was suddenly

reduced on a given date, when all but a remnant were induced to go over to sweet milk production and thus a paralysing blow was given to what had been a well-established, though gradually declining, industry.

As a result of intensive sampling and laboratory examination of milk supplies from this County, the City of Glasgow notified our Public Health Department that the presence of tubercle-bacilli had been proved in 10 samples of milk from different farms, and from the City of Edinburgh 10 similar notifications were received.

Acting on instructions, the procedure followed by us is to visit and examine the suspected herd at once and take individual samples of milk from every udder that is in the least degree suspicious and group samples from the remaining cows for laboratory examination.

As a result of these special visits, 14 cases of tuberculosis of the udder were detected and 6 other cows were proved to be yielding tuberculous milk. These animals were dealt with under the powers of the Tuberculosis Order as well as a cow found to be suffering from chronic cough and showing definite clinical signs of tuberculosis.

In 5 cases investigated by us no animal was found to be yielding tuberculous milk, and one can only conjecture as to the source of infection of the bulk milk from which the original sample was taken.

There is no doubt that any material increase in the taking of milk samples from the bulk supplies of farms for laboratory examination, whether at the instance of receiving City Authorities or our own Public Health Department would at once enable the detection of many additional cases of incipient tuberculosis of the udder, &c., but this would involve *pro rata* additional work for the Veterinary and Bacteriological Departments, as well as increased expenditure. Moreover, our work in this connection as well as in the regular periodical veterinary inspection of our dairy herds has been greatly hampered and duplicated by the regrettable premature deaths of many guinea-pigs under test. These unfortunate fatalities, with their inconclusive results, have given great concern to the Public Health Department and have imposed on the Veterinary Department a quality of work in taking repeat samples that is sometimes resented by the producer.

It is a matter for consideration in the case of all samples taken from clinically suspicious udders whether they should not be inoculated into two guinea-pigs instead of only one, with the view of reducing the number of visits to the farm by the Veterinary Inspector.

Occasionally when a group sample taken from several cows has given a positive result we have, with the written consent of the owner, applied the tuberculin test to the cows concerned. This has not proved of much help in our effort to find the culprit, especially in herds maintained by periodic purchase of cows at public auction marts, because in these herds the percentage of reactors to tuberculin is usually high. A positive reaction is, however, no proof that the cow has reached the stage of yielding tubercle bacilli in her milk.

Happily, in the great majority of cows known by means of the tuberculin test to harbour the tubercle bacillus somewhere in their system, the disease remains subliminal for long periods and the animals maintain the appearance of perfect health and produce non-tuberculous milk.

Two cases notified from Edinburgh deserve special reference because of the unusual character of the results obtained from subsequent investigations.

In both cases it was reported that a guinea-pig inoculated with a bulk sample taken from the farmers' supplies was found to be tuberculous.

The first case concerned an upland herd of only seven cows—a herd that was self-supporting and which we had some reason to believe was comparatively free of tuberculous infection. No clinical evidence of tuberculosis was found in any of these cows, but an individual sample was taken from each animal. The microscopic examination of the seven samples proved "negative" and seven guinea-pigs were inoculated. After a month it was reported that five of the guinea-pigs were tuberculous, and re-examination of the cows concerned revealed nothing suggestive of tuberculosis of the udder. Despite the absence of any evidence of tuberculosis in the live animals, we could not fail to have cows, so indicted, slaughtered under the Tuberculosis Order.

After an exhaustive post-mortem examination of these cows we found no evidence of the disease in three cases and in the other two

only minute lesions, none of which was present in the udders. Indeed, the udders were brought to the laboratory, and, when microscopically examined, the results proved "negative."

We were left to conjecture as to how the tubercle bacilli which infected the inoculated guinea-pigs reached the milk samples which were tested both at Hamilton and Edinburgh. It is remarkable, however, that each of the five cows slaughtered showed distinct lesions of Johne's Disease on post-mortem examination, although one would not have suspected it in the live animals. It is worthy of note that the causal organism of Johne's Disease belongs to the same group of acid-alcohol-fast bacilli as the bacillus of bovine tuberculosis, and our findings in these cases perhaps indicate the pressing need for further research into the possibility of transmutation of members of this group of bacilli occurring under certain circumstances.

In the case of the other farm referred to, the examination of the herd revealed two cases of tuberculosis of the udder, which were immediately dealt with, and group samples were taken from the other cows. Three of these samples were reported within twenty-four hours as containing acid-alcohol-fast bacilli.

Further individual samples were taken from each cow in each group, three of these being found to contain acid-alcohol-fast bacilli, and when such are found in a properly-taken sample they are invariably regarded as tubercle bacilli.

These three cows were slaughtered, under the Tuberculosis Order, as "giving tuberculous milk." Post-mortem examination revealed that two of the cows were "not advanced" cases of tuberculosis, and no evidence of tuberculosis could be found in the udder. No evidence of tuberculosis could be found in the carcase or organs of the third cow, and it had to be regarded as "not affected."

**(b) A Statement of the Extent to which the Veterinary
Inspector has been able to overtake—**

**(1) THE STATUTORY INSPECTIONS OF CATTLE IN REGISTERED DAIRIES
AT THE INTERVALS PRESCRIBED IN THE REGULATIONS GOVERNING
HIS DUTIES.**

As indicated in my last report the triennial veterinary inspection of all registered herds in the County and the Burgh of Lanark began

on 1st January, 1931, and three complete inspections were duly carried out.

Pursuant to the accomplishment of this additional work, two whole-time temporary assistants were appointed, who commenced duty on 1st January and ceased on 15th May, 1931. Two temporary assistants were again employed from 1st November, 1931, in this connection.

This arrangement has proved satisfactory, one assistant being located in the Upper Ward, the other being on duty in the Middle and Lower Wards of the County. Both send their reports and milk samples by post or rail to Hamilton daily, except when it is practicable to bring them personally to the veterinary office.

As indicated in former reports, we regard the routine inspection of dairy herds during the grazing season as being more or less impracticable and uneconomical. Nevertheless, many herds are inspected by us in summer as time and opportunity afford, and during winter a considerable share of herd inspection is done in the course of our work under the Diseases of Animals Acts, &c.

A comparison of the tables submitted in this report with those in former reports indicates to what extent results have expanded under the triennial inspection.

Not only have many more cows been dealt with under the Tuberculosis Order but it has been possible to detect and eliminate many cases of udder tuberculosis in the early stages.

Indeed, compared with former years, when a "positive" report regarding a milk sample has been received from a City Authority we now find that it has become increasingly difficult to find the offending cow as the grosser cases have already been removed under the more often repeated inspection now carried out.

In many instances we have dealt with a "positive" case in the herd during the interval which has elapsed between the date of taking the sample by the City Authority and the maturing of their biological test.

Moreover, frequent visits enable a more intimate knowledge of the members of each herd and many cases of tuberculosis not amenable to the Tuberculosis Order at a prior visit are found to have matured at the next visit.

Again, our increased inspection is having the effect of making owners of herds report cases to us earlier than heretofore lest they should be regarded as being in default when we make our next expected visit. On the other hand, some owners seem to be under the misapprehension that the frequency of our inspections relieves them of all responsibility in this connection.

The routine clerical work of the Department is satisfactorily accomplished by a chief clerkess, assisted by a junior clerkess from the Public Health Department for seven months of the year. The periodical returns required by the Department are compiled by the Clerk to the Local Authority at Lanarkshire House, Glasgow.

(2) THE INSPECTION OF CATTLE ON PREMISES WHICH ARE NOT REGISTERED DAIRIES, BUT FROM WHICH MILK IS SOLD IN SMALL QUANTITIES.

So far as known, the examination of cows in such places, and also many others where milk is produced for the owner's household only, was carried out at least once a year.

The need for inspecting even the smallest herds was emphasised by what was found at a shepherd's premises where the milk of 4 cows was being used by a young family and for calf-rearing. Of 4 cows, 3 were found to have tuberculosis of the udder. The milk samples taken from 2 of them gave a positive microscopical result, while the sample taken from the third cow proved positive biologically. It is unlikely that the children or the calves could escape infection when consuming milk so grossly infected.

(c) Observations on—

(1) THE GENERAL CONDITIONS AND CLEANLINESS OF CATTLE IN THE DISTRICT.

As a result of increased inspections we are able to record an advance in the cleanliness of cattle and of premises more marked than in any other year.

We make judicious comment when improvement is evident by way of encouragement and when it is apparent that our advice has been disregarded we so mark our inspection sheet that the sanitary officials may follow us in the course of a few days to take such action as they deem necessary. This plan will be persisted in and will inevitably have the effect of correcting the methods of the slovenly and careless owner.

There are still, however, a fair number of byres with radical defects which greatly increase the difficulty of keeping milch cows reasonably clean, and the most immediate need in many of them is greater capacity in the manure channel. In others the unsuitability of the standings in length or breadth for the cows plays an important part in the soiling of the hind parts of the animals.

Mention was made in my last report that a few owners had installed devices for preventing cows from standing with their hind feet in the grip, and it is satisfactory to report that a few more have followed their example.

On the whole the dairy cows in the County continue to be well fed, and in many cases their condition of body is excellent.

In only one small herd did we find the bodily condition of the cows unreasonably low. We had to deal with 4 of them under the Tuberculosis Order, and regarded their emaciated state as due in some measure to their tuberculous condition, although we had reason to believe that the herd was under-fed, advising the owner accordingly.

(2) THE NATURE OF THE FODDER AND DIET AS AFFECTING THE QUALITY OF THE MILK.

No case has been brought to our notice during the year where the quality of the milk was affected by any article of food.

The installation of water-bowls is now standard procedure in every instance of new byre construction and any radical reconstruction of old byres. The dry feeding of dairy cows is consequently extending gradually.

(3) THE NUMBER OF DISEASED COWS FOUND (SPECIFYING THE DISEASE—EXCLUDING TUBERCULOSIS).

No attempt has been made during the year to determine the number of cows in dairy herds affected with contagious abortion, septic metritis, retention of foetal membranes, Johne's disease, dysentery, transient diarrhoea, ringworm, redwater, acetonæmia, suppurative conditions of the limbs, feet, &c.

As in the past, we advised the isolation of all noisome cases, but the almost complete lack of isolation premises for hospital cases in many farms is a serious drawback and many owners are reluctant

to improvise a place for their separation, despite their ulterior influence in spreading disease and polluting the atmosphere of the cowshed.

Contagious abortion seems to be as prevalent as ever in the County. There is always a certain number of herds found to be experiencing a severe outbreak of this disease, but very many more herds are not entirely free of it. It is perhaps true that this disease imposes a greater burden on the dairy industry in Lanarkshire than tuberculosis.

The declared culpability of the milk of aborting cows in causing undulant fever in man does not seem to find much corroboration in Lanarkshire.

One case of cow-pox was detected but, unfortunately, the outbreak was only discovered after it had run its course and at the time of our examination only two animals showed eruptions and these were in process of healing. It transpired that the owner of this large herd had bought a cow which was affected when she came to the herd, and he admitted that the infection spread rapidly to the other cows, causing considerable trouble in the carrying out of milking operations. In the course of the outbreak the farmer, the members of the family, and of his staff engaged in the dairy contracted infection by inoculation and experienced the characteristic eruption on their hands, with profound sickness. This outbreak was only discovered by accident when almost all the cattle and practically all the people infected had recovered. So far as we know, the milk which had been daily sent to market produced no untoward results amongst its consumers.

(4) THE MANNER IN WHICH MILK FROM DISEASED COWS IS DISPOSED OF.

As in the past, where a cow's produce is restricted under the Tuberculosis Order or is controlled by the Medical Officer of Health under the Milk and Dairies Act, we can only rely on the owner's sense of honour to carry out his obligations in regard to the disposal of the milk.

It is unfortunate that even now many owners fail to understand the distinction to be drawn between the terms of the Act and those of the Tuberculosis Order, and as soon as the produce of a cow is controlled under the Act which may be on account of a transient affection

of the udder, they hasten to dispose, for slaughter in some instances, of a valuable dairy cow that might have recovered in the course of a week or two.

(d) Observations in regard to—

(1) TUBERCULOSIS AMONG DAIRY COWS IN THE DISTRICT.

A comparison of Table IV in this Report with the same table in my last Report will show the considerable expansion that took place in work under the Tuberculosis Order as a result of our more frequent inspection of herds in the County.

This was predicted by me and, as was to be expected, the first inspection after the grazing period, during which comparatively few inspections are made, yielded a larger crop of cases to be dealt with than did the subsequent inspections.

The work now being done under the Tuberculosis Order has put a definite limit to the trade of dealing in emaciated cows in the County. It is true that dealers seek them elsewhere and bring them to the County abattoirs for slaughter to meet the demand for boneless beef in the County, but it would appear that such traders are now handling a heavier and better type of cast cow. Notable exceptions are occasionally seen.

We acknowledge with pleasure our indebtedness to the Inspectors of Meat at our various abattoirs for their unfailing help when we visit the abattoirs to examine the carcasses and organs of animals slaughtered under the Tuberculosis Order.

Our consultations on these occasions are mutually helpful and considered decisions are easily arrived at alike from the point of view of the Inspector of Meat and the Veterinary Inspector under the Tuberculosis Order.

(2) THE NUMBER OF COWS FOUND TUBERCULOUS ON CLINICAL EXAMINATION OF HERDS.

As in former Reports, Table IV sets out the number of cases of tuberculosis dealt with under the Tuberculosis Order and shows the number detected by us under herd inspection.

While in 1930 we dealt with only 64 cases of tuberculosis of the udder, our increased inspection of herds in 1931 raised the total of such cases to 132. Of the 64 cases in 1930, 47 were detected by us,

while of the 132 cases in 1931, 104 were detected by us, and 10 additional cases were slaughtered as "giving tuberculous milk." The latter designation applies to cases which are proved microscopically or biologically to be excreting tubercle bacilli in their milk, but in which no clinical evidence of disease can be detected in the udder. Most of these cases have come to light when, following on a complaint from Glasgow or Edinburgh, we have had to conduct a system of sampling of the whole herd, which normally is not undertaken in the course of our routine inspections. As stated elsewhere, four such cases were found to be "not affected" on autopsy.

Again, continuing the comparison, 4 cases of tuberculous emaciation and 60 cases of "chronic cough, &c." were detected by us on herd-examination in 1930, whereas the figures for 1931 are 13 and 118 respectively.

It has to be admitted that even triennial inspection is not ideal, but it at least marks considerable advancement, and, compared to a single annual inspection, it enables the detection of more diseased animals and their earlier elimination under the Tuberculosis Order. This is of greatest significance in cases of tuberculosis of the udder, and the result should be reflected in the provision of safer milk supplies for human consumption and for the rearing of calves.

(3) THE NUMBER OF COWS FOUND TUBERCULOUS AFTER TUBERCULIN TEST.

Fifty-five animals condemned under the Tuberculosis Order had been tested with tuberculin. We continue to make use of the ophthalmic as an additional tuberculin test in the case of febrile animals suspected to be suffering from acute phthisis where the clinical evidence is not conclusive.

(4) TOTAL NUMBER OF COWS TO WHICH THE TUBERCULIN TEST WAS APPLIED UNDER SECTION 22.

We applied the tuberculin test, with the consent of the owner, to a whole herd, regarding whose produce we had a complaint from Edinburgh, and which is referred to under (a) 2. The herd comprised 24 dairy cows, all well nourished and good-looking animals, but procured chiefly at the public mart. 18 animals gave a "positive" reaction, 2 were doubtful, and 4 young cows gave a "negative" reaction.

(5) AN ACCOUNT OF STEPS TAKEN TO SECURE A TUBERCLE-FREE MILK SUPPLY.

The economic conditions prevailing during 1931, by reducing the market for high-grade milk, removed the incentive which many owners had to qualify their herds and apply for licences under the Milk (Special Designations) Order (Scotland), 1930, and in many cases wholesale dealers required licensees to yield a varying proportion of their supplies at the price of ordinary milk. Indeed, during the whole year, over-production of all kinds of milk prevailed, and, owing to lack of organisation, the milk producer was continually at the mercy of the wholesale dairyman and had to accept an uneconomic price for that proportion of his supplies that the dealer thought fit to regard as "surplus milk."

(6) A LIST OF DAIRIES HOLDING MILK LICENCES IN RESPECT OF TUBERCLE-FREE HERDS.

CERTIFIED.

| Owner and Premises. | Average number of Herd. | Estimated number of gallons produced per annum. |
|---|-------------------------|---|
| James G. Gilchrist, Auchtygemmell, Lesmahagow. | 41 | 25,185 gallons. |
| Wm. Fleming, Auldtou, Dalserf. | 52 | 33,094 „ |
| Harry Roscoe, Boghead, Crawford. | 12 | 4,624 „ |
| Eben. More & Co., Brackenhirst, Airdrie. | 73 | 27,375 „ |
| James Hodge, Brownhill, Carnwath. | 29 | 13,688 „ |
| Rt. Hon. Lord Hamilton, Dalzell, Motherwell. | 37 | 25,550 „ |
| Corporation of Glasgow, Gartloch Home Farm, Gartcosh. | 110 | 54,142 „ |
| County Council of Lanark, Hairmyres, East Kilbride. | 57 | 26,889 „ |
| Lanarkshire Mental Hospitals, Joint Committee, Hartwood, Shotts. | 84 | 47,450 „ |
| J. & T. Blackwood, Hill of Kilncadzow, Carluke. | 50 | 21,900 „ |
| John Hamilton, Low Mains, East Kilbride. | 40 | 16,608 „ |
| Andrew Murdoch, Teaths, Lanark. | 37 | 18,007 „ |
| John Russell, Walston Mansion, Dunsyre. | 61 | 32,303 „ |
| John G. Lohoar, Wellshot, Cambuslang. | 49 | 22,265 „ |
| James Wilson, Westburn, Cambuslang. | 31 | 18,007 „ |
| | | <u>387,087 „</u> |

GRADE A (T.T.)

| Owner and Premises. | Average number of Herd. | Estimated number of gallons produced per annum. |
|---|----------------------------|---|
| John Struthers, Anston, Dunsyre. | 66 | 31,025 gallons. |
| Gavin Hamilton, Auldtoun, Lesmahagow. | 47 | 22,022 „ |
| Hugh C. Brown, Birkwood Mains, Lesmahagow. | 42 | 15,452 „ |
| Lindsay Steele, Blackhill, Crossford. | 45 | 17,980 „ |
| John Fairie, Low Blackwoodyards, Kirkmuirhill. | 52 | 24,455 „ |
| Donald Ian Brown, Bushelhead, Carluke. | 14 | 7,300 „ |
| Alex. Wilson, South Carnduff, Strathaven. | 34 | 15,209 „ |
| James A. Brown, Cormiston Towers, Biggar. | 68 | 26,037 „ |
| John Cadzow, Craighead, Carluke. | 48 | 23,360 „ |
| Thos. Pate, Jr., South Draffan, Kirkmuirhill. | 55 | 34,919 „ |
| John Bannatyne, Drumalbin, Thankerton. | 39 | 21,900 „ |
| A. & J. Gilchrist, Low Drumclog, Strathaven. | 44 | 16,060 „ |
| R. & T. Scott, Eastertown, Douglas Water. | 24 | 14,053 „ |
| S. A. Ballantyne, Eastwood, Lesmahagow. | 47 | 32,850 „ |
| Walter Adamson, Harleyholm, Thankerton. | 51 | 25,185 „ |
| John Speir, Ltd., Heatheryknowe, Bargeddie. | 75 | 28,592 „ |
| James Scott, Lawriesmuir, Lesmahagow. | 30 | 12,897 „ |
| Gavin Cullen, Leadloch, Fauldhouse. | 8 | 4,380 „ |
| T. B. McGregor, Lesserlinn, Lanark. | 63 | 22,448 „ |
| R. & W. Wallace, Linnhead, Sandilands. | 48 | 17,520 „ |
| Hugh Barr, Muirfoot, Carstairs. | 54 | 29,200 „ |
| Thos. Scott, Netherhall, Sandilands. | 34 | 22,387 „ |
| The Earl of Home, Newmains, Douglas. | 23 | 10,220 „ |
| John Kirkwood, Scorrieholm, Lesmahagow. | 40 | 14,053 „ |

| Owner and Premises. | Average number of Herd. | Estimated number gallons produced per annum. |
|---|----------------------------|--|
| Thos. C. Stewart, Southfield, Blackwood. | 70 | 25,915 ,, |
| Mrs. Murray, Stramolloch, Chapelton. | 40 | 14,235 ,, |
| John Strachan, Udstonhead, Strathaven. | 77 | 27,375 ,, |
| A. & E. Paul, Whitehill, Burnbank. | 13 | 8,274 ,, |
| James Barr, Whiteshaw, Carluke. | 53 | 25,429 ,, |
| T. A. Ballantyne, Woods, Auchenheath. | 35 | 15,209 ,, |
| | | <hr/> 605,941 <hr/> |

(7) A NOTE OF THE NUMBER OF ANY OTHER DAIRIES KNOWN TO HAVE TUBERCLE-FREE HERDS, WITH THE AVERAGE NUMBER OF ANIMALS AND THE ESTIMATED NUMBER OF GALLONS PRODUCED PER ANNUM.

For reasons previously stated, it cannot be said that the figure (30) given in the reports of 1929 and 1930 should be put any higher for 1931. It was not considered necessary to estimate the number of cows in such herds or the quantity of milk which they produced annually.

With brighter prospects ahead it would be an easy matter to encourage successfully a large number of dairy farmers who have self-supporting herds to have their herds tested and qualify for grading. It is feared, however, that during 1931 some owners of herds, probably tubercle-free, with a view of conserving their resources, cut out to some extent the expense of tuberculin testing and they may have reason to regret this false step in the future.

(8) A NOTE OF ANY GENERAL DIFFICULTIES WHICH ARE FOUND BY PRODUCERS TO MILITATE AGAINST THE SUCCESSFUL MARKETING OF CERTIFIED AND GRADE A (TUBERCULIN-TESTED) MILK, WITH ANY SUGGESTIONS FOR MEETING SUCH DIFFICULTIES.

It can only be repeated that during 1931 supply was so much in excess of demand that producers of Grade A (T.T.) milk, and especially those sending their milk to Glasgow, had to be content with only a fraction of their supplies being paid for as milk of that quality. Producers in the Upper Ward who send their milk to Edinburgh were better off because the market for graded milk remained more stable in that city.

(e) Notes on any Samples taken for Examination in terms of Section 21 of the Act of 1914.

No such samples were taken during 1931.

(f) A Statement of the Extent to which Sections 13 and 14 of the Milk and Dairies (Scotland) Act are being complied with.

A reference should be made to Table IV for all cases of tuberculosis dealt with under the Tuberculosis Order.

The following notes from my last report apply for 1931:—

“There was no change in procedure during the year in regard to the cow that has suffered an attack of mastitis or weed of the udder. In this connection it is worthy of note that research workers during the past year have shown that there was not sufficient evidence that the streptococci of mastitis were pathogenic when ingested by animals or man, and that the ordinary streptococci of mastitis were entirely distinct from human streptococci biochemically and serologically.

“Notwithstanding the volume of work we have done in taking samples from the weeded quarters of the cows, such cases are seldom reported to us under the Milk and Dairies Act.

“We continue to take notes of defects in cowsheds on our herd sheets, and these are passed on to the Sanitary Department, whose duty it is in this County to control everything in regard to buildings, &c.

“In no case during the year was our advice asked in regard to plans for the construction of new or the reconstruction of old cowsheds.”

**WORK DONE UNDER THE MILK (SPECIAL DESIGNATIONS) ORDER
(SCOTLAND), 1930.**

Refer to list under (d) (6).

The number of herds within the County licensed for the production of graded milk at 31st December, 1931, was 15 Certified herds, and 30 Grade A (Tuberculin-tested) herds, a total of 45 tubercle-free herds. Grade A, 5 herds.

This shows, in comparison with the figures for 1930, an increase of 1 Certified herd; increase of 5 Grade A (T.T.) herds; and the same number of Grade A herds.

Of our 45 tubercle-free graded herds, 28 herds became eligible as at 31st December, 1931, to be tested only once a year. In terms of the Order, the other 17 herds will continue to be tested twice

per annum until, under two successive testings, no reactor has been disclosed.

During 1931 we tested 28 herds once and 17 herds twice, and the average number of animals tested per herd was 46·5.

The total number of reactors detected in graded herds during the year was 36, an average of ·8 per cent. per herd per annum. 1 herd had 8 reactors, 1 herd had 6 reactors, 2 herds had each 4 reactors, 1 herd had 3 reactors, 3 herds had each 2 reactors, and 5 herds had each 1 reactor.

It should be stated that, although it is competent under the Order to introduce into a tubercle-free graded herd an animal that has recently passed the "prescribed" tuberculin test, we always advise that such procedure is highly dangerous in the case of animals that have come from infected herds or that presumably have been exposed to infection.

SCORE-CARDS.

The official score-card in use for graded herds allows a maximum of 30 marks for equipment and 70 for methods.

The average score-card of 4 herds shows between 90 and 100 marks, 13 herds have between 80 and 89 marks, 17 herds have between 70 and 79 marks, and 16 herds have between 60 and 69 marks.

The average score-card marking of 50 graded herds was 75·8 per cent.

ANIMALS FROM TUBERCLE-FREE HERDS AT CATTLE SHOWS.

The exhibition of such animals at Cattle Shows is regulated by Foods Circular No. 22, 1930, issued by the Department of Health for Scotland under the Milk (Special Designations) Order (Scotland), 1930.

During the year we attended 3 Agricultural Shows and ensured in each case that the restrictive conditions of isolation, in respect of separation of the animals and the provision of separate food, food containers, and drinking vessels, were given effect to.

TABLE I.

STATEMENT SHOWING THE NUMBER OF HERDS INSPECTED AND THE
NUMBER OF COWS EXAMINED DURING THE YEAR 1931.

Under Triennial Inspection.

| | | | | | | |
|------------------|-----|-----|-----|-----|-----|--------|
| Herds inspected, | ... | ... | ... | ... | ... | 4,572 |
| Cows examined, | ... | ... | ... | ... | ... | 92,819 |

The number of cows examined by us at each triennial inspection was approximately 31,000, but in the course of twelve months the personnel of every herd changes within varying limits, a large proportion of the interchange being between herds within the County area. If on the other hand we estimate that the number of cows brought in from other areas, plus the number of first-calving cows bred on farms within the County, is about 7,000 per annum, we arrive at 38,000 as the total number of individual dairy cows inspected by us during the year. Most of them are examined three times, some twice, while some have only been seen at the last inspection of the year.

Calculated on that basis the percentage of cows found to be yielding tuberculous milk = .42.

TABLE II.

STATEMENT SHOWING THE NUMBER OF COWS FOUND TO HAVE
ABNORMAL CONDITIONS OF THE UDDER.

| | | | | | | |
|------------------------------|-----|-----|-----|-----|-----|-------|
| Tuberculosis, | ... | ... | ... | ... | ... | 158 |
| Atrophy, | ... | ... | ... | ... | ... | 3,530 |
| Mammitis, | ... | ... | ... | ... | ... | 397 |
| Induration, Non-Tuberculous, | ... | ... | ... | ... | ... | 1,014 |
| Eruption on Teats, | ... | ... | ... | ... | ... | 180 |

TABLE III.

STATEMENT SHOWING THE NUMBER OF SAMPLES TAKEN
AND THE RESULTS OF THEIR EXAMINATION.

| | | | | | |
|---|-----|-----|-----|-----|-------|
| Number of samples taken, | ... | ... | ... | ... | 1,776 |
| Number found to contain tubercle bacilli (including group and duplicate samples), | ... | ... | ... | ... | *175 |
| Number found to contain other infectious organisms, | ... | ... | ... | ... | †288 |
| Number negative, | ... | ... | ... | ... | 1,313 |

* 2 samples also contained other infectious organisms.

† Taken from 284 cows.

TABLE IV.

*STATEMENT SHOWING THE NUMBER OF ANIMALS SLAUGHTERED UNDER THE TUBERCULOSIS ORDER OF 1925.

| Tuberculosis of the Udder. | | | Giving Tuberculous Milk. | | | Tuberculous Emaciation. | | | Chronic Cough, &c. | | | Total. |
|-------------------------------|---------------------------------|------|--------------------------------|---------------------------------|-----|----------------------------|---------------------------------|------|-----------------------|---------------------------------|------|--------|
| Total No. | Found on Herd Inspection. | | Total No. | Found on Herd Inspection. | | Total No. | Found on Herd Inspection. | | Total No. | Found on Herd Inspection. | | |
| | No. | %. | | No. | %. | | No. | %. | | No. | %. | |
| 132 | 104 | 78·8 | 10 | 10 | 100 | 39 | 13 | 33·3 | 242 | 118 | 48·8 | 423 |

See Map (Appendix).

TABLE V.

STATEMENT SHOWING THE NUMBER OF CASES, BOTH NEGATIVE AND POSITIVE, REPORTED UNDER THE TUBERCULOSIS ORDER, OR DETECTED DURING THE ROUTINE INSPECTION OF DAIRY HERDS.

| Owner. | | Private Veterinary Surgeons. | | Veterinary Inspectors of other Local Authorities. | | Detected by County Veterinary Inspector. | | Totals. | |
|--------|------|------------------------------|------|---|------|--|------|---------|------|
| Pos. | Neg. | Pos. | Neg. | Pos. | Neg. | Pos. | Neg. | Pos. | Neg. |
| 98 | 133 | 76 | 33 | 1 | — | 248 | 149 | 423 | 315 |

TABLE VI.

STATEMENT SHOWING RESULT OF POST-MORTEM EXAMINATION OF ANIMALS SLAUGHTERED UNDER THE TUBERCULOSIS ORDER OF 1925.

| | Tuberculosis of the Udder. | Tuberculous Milk. | Tuberculous Emaciation. | Chronic Cough, &c. | Totals. | Approximate Average. |
|-----------------|----------------------------|-------------------|-------------------------|--------------------|---------|----------------------|
| "Advanced," | 78 | 1 | 27 | 128 | 234 | 55·3 |
| "Not Advanced," | 68 | 5 | 11 | 101 | 185 | 43·7 |
| "Not Affected," | — | 4 | — | — | 4 | 0·9 |
| | 146 | 10 | 38 | 229 | 423 | |

TABLE VII.

STATEMENT INDICATING THE FREQUENCY OF OCCURRENCE OF TUBERCULOSIS
IN EACH SEPARATE QUARTER OF THE UDDER AND IN A COMBINATION
OF TWO OR MORE QUARTERS.

| | |
|--|-------|
| In left hind quarter only, | 63 |
| „ right hind quarter only, | 53 |
| „ left fore quarter only, | 8 |
| „ right fore quarter only, | 4 |
| „ left hind and right hind quarters, | 10 |
| „ left hind and left fore quarters, | 3 |
| „ right hind and right fore quarters, | 2 |
| „ right hind and left fore quarters, | 1 |
| „ left fore and both hind quarters, | 1 |
| „ all four quarters, | 3 |
| | <hr/> |
| | 148 |
| | <hr/> |

Note. — 10 additional cows were slaughtered as “giving tuberculous milk.” See Section (d) (2).

Contraventions of the Tuberculosis Order of 1925.

Several contraventions of the Tuberculosis Order were reported to the Diseases of Animals Committee of the County Council and in each case suitable letters of warning were sent to the individuals concerned.

Burghs of Biggar and Lanark.

In the Burgh of Lanark 3 herds, comprising 30 cows, were examined. In no case did we find any evidence of tuberculosis of the udder, nor did our inspections reveal any case amenable to the Tuberculosis Order.

There are now no dairy cows kept in the Burgh of Biggar.

I have the Honour to be,

My Lords and Gentlemen,

Your obedient Servant,

HUGH BEGG, F.R.C.V.S.,
County Veterinary Inspector.

BURGH OF LANARK.

Report of the Medical Officer of Health,
1931.

Statistics.

The **Population** at the decennial census, 1931, was 6,178.

Births.—The number of births registered in the Burgh during the year was 101, an increase of 4 from last year—males, 46; females, 55—giving a birth-rate of 16·3 per 1,000 of the population.

Mortality.—The deaths registered during the year, after correction for transfers, numbered 72, giving a death-rate from all causes of 11·6 per 1,000 of the population. The deaths of infants under 1 year numbered 5, giving an infant mortality rate of 49·5 per 1,000 births.

Prevention of Infectious Diseases.

The number of cases of infectious diseases notified during the year was 93. The various diseases notified were:—Scarlet Fever, 7; Diphtheria, 35; Erysipelas, 3; Chickenpox, 16; Pneumonia, 16; Ophthalmia Neonatorum, 1; Pulmonary Tuberculosis, 6; and Non-Pulmonary Tuberculosis, 9.

Hospital Admissions.—The following cases were admitted to hospital:—Scarlet Fever, 6; Diphtheria, 28; Pneumonia, 9; and Ophthalmia Neonatorum, 1.

Tuberculosis.

Notifications.—During the year 15 notifications of the disease were received, 6 being of the Pulmonary type and 9 of the Non-pulmonary type.

Institutional Treatment.—10 cases received institutional treatment—6 Pulmonary and 4 Non-pulmonary.

Domiciliary Treatment.—3 cases received domiciliary assistance during the year.

Maternity and Child Welfare.

Notifications of Births.—The number of notifications of births received amounted to 97, all live-births.

Maternal Mortality.—3 deaths under this classification occurred during the year, 2 in hospital and 1 in a nursing home.

Puerperal Pyrexia.—No cases occurred during the year.

Ophthalmia Neonatorum.—1 case occurred during the year.

Hospital Admissions.—During the year 5 cases were admitted to the County Maternity Hospital, Bellshill.

Ear, Throat, and Nose Ailments.—2 children were admitted to the County Convalescent Home, Calderbank House, for the removal of tonsils and adenoids.

Midwives (Scotland) Act, 1915.

Practising Midwives.—1 certified midwife notified her intention to practise.

Notifications and Attendances at Confinements.—97 notifications were received, all being live-births. From the information received, it was found that in 27 cases a doctor was in attendance, in 20 cases a doctor and midwife, in 8 cases a doctor and handywoman, and in 17 cases a certified midwife. 25 cases were confined in hospital.

Inspection of Midwives.—4 routine inspections were carried out during the year. Records were kept in a satisfactory manner.

General Sanitation.

Water Supply.—During the year the Town Council made arrangements for an additional supply of water being obtained in the event of the prolonged droughts. Complaints were received regarding the distribution being defective, and arrangements were made to have all the pipes scraped in the area complained of.

Drainage and Sewage Disposal.—The septic tanks at the sewage purification works were cleaned out during the year, and considerable improvement was effected.

Housing.—49 houses were reported to the Town Council as being unfit for human habitation, and a recommendation was made that these should be made the subject of Demolition Orders whenever alternative accommodation was available.

The Town Council recommended the erection of 50 houses to replace the houses closed and demolished.

Milk and Dairies (Scotland) Act, 1914.

There are two registered producers and retailers of milk, and four registered retailers only of milk within the Burgh. On inspection, the premises were all found to be kept in a satisfactory condition.

J. HUME PATTERSON,
Medical Officer of Health.

BURGH OF BIGGAR.

(Area, 62 Acres)

Report of the Medical Officer of Health, 1931.

Statistics.

The **Population** at the decennial census, 1931, was 1,323.

The **Births** registered in the Burgh amounted to 13—males, 4; females, 9—giving a birth-rate of 9·5 per 1,000 of the population.

The net **Deaths** registered in the Burgh numbered 13, giving a death-rate of 9·8 per 1,000 of the population.

Prevalence of Infectious Disease.

Notifiable Diseases.—In all, 18 cases of Infectious disease were notified—Scarlet Fever, 11; Diphtheria, 5; Pneumonia, 1; and Chickenpox, 1. Of these, 11 cases of Scarlet Fever and 5 cases of Diphtheria were treated in hospital. Visits of inspection were made to the homes where the cases occurred, and disinfection carried out. All precautions to prevent the spread of the disease were taken.

Tuberculosis.—2 notifications were received during the year, both Pulmonary cases.

Institutional Treatment.—3 cases received hospital treatment during the year.

Domiciliary Treatment.—No cases received domiciliary treatment during the year.

Maternity and Child Welfare.

Notifications of Birth.—16 notifications were received, of which 14 were live-births and 2 still-births, and the attendant at birth in each case was:—Doctor, 4; doctor and midwife, 10.

Hospital Treatment.—There were no admissions to hospital during the year.

Midwives (Scotland) Act, 1915.

Practising Midwives.—There are no practising midwives in the Burgh.

Attendances at Confinements.—16 notifications of birth were received, 2 being attended by doctor, 11 by doctor and midwife, and 3 by doctor and handywoman.

Still-births.—There were 2 still-births during the year.

Milk and Dairies (Scotland) Act, 1914.

There are retailers only within the Burgh.

General Sanitation.

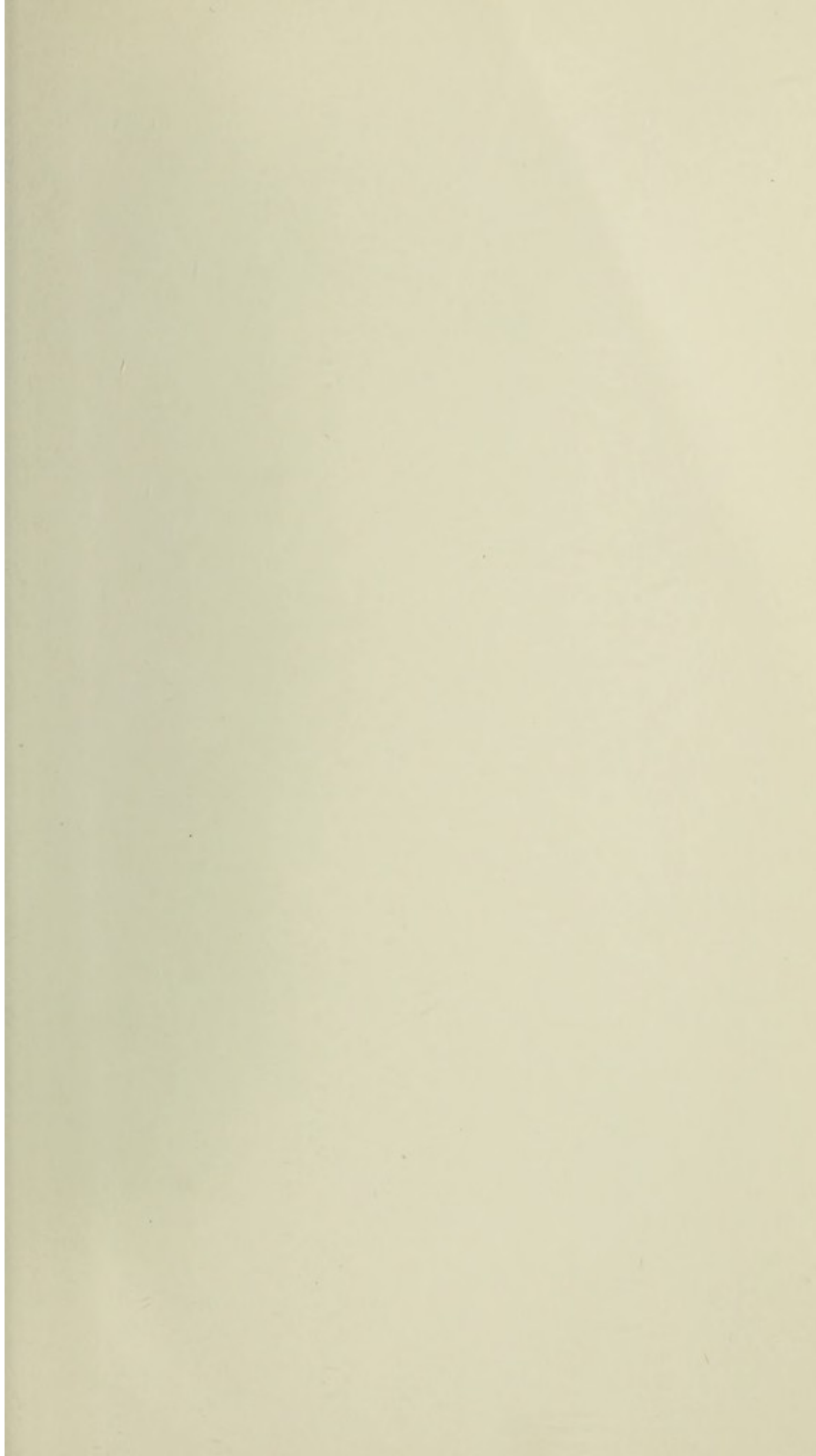
The **Water Supply** for the Burgh is obtained from King's Beck Burn, and the supply was adequate and satisfactory.

The **Drainage and Sewage Systems** of the Burgh are dealt with in two portions, east and west. The east portion goes through two settling tanks, and is run in channels and spread over about six acres of land owned by the Town Council. The west portion of the sewage goes through three settling tanks and then spreads over about ten acres of land, the property of the Town Council.

Scavenging System.—The ashes and night soil from dry closets are removed on alternate days—that is on Monday, Wednesday, and Friday from the east end of the Burgh, and on Tuesday, Thursday, and Saturday from the west end of the Burgh. On Friday there is a general collection of all rubbish, &c., which is burned in a coup situated about two miles outside the Burgh.

Housing.—30 houses were reported to the Town Council as being considered unfit for human habitation, and a recommendation was made that they should become the subject of Demolition Orders whenever alternative accommodation was available.

J. HUME PATTERSON,
Medical Officer of Health.



THE HISTORY OF THE

REIGN OF KING CHARLES THE FIRST

IN WHICH ARE CONTAINED THE
CAUSES AND CONSEQUENCES OF THE
REBELLION

AND THE DEATH OF THE KING

BY SAMUEL JOHNSON

LONDON: Printed by A. MILLAR, in Pall-mall.

MDCCLXXII.

AND SOLD BY J. DODD, at the Sign of the Crown, in St. Paul's Church-yard.

THE AUTHOR'S ADDRESS IS, AT THE SIGN OF THE CROWN, IN ST. PAUL'S CHURCH-YARD.

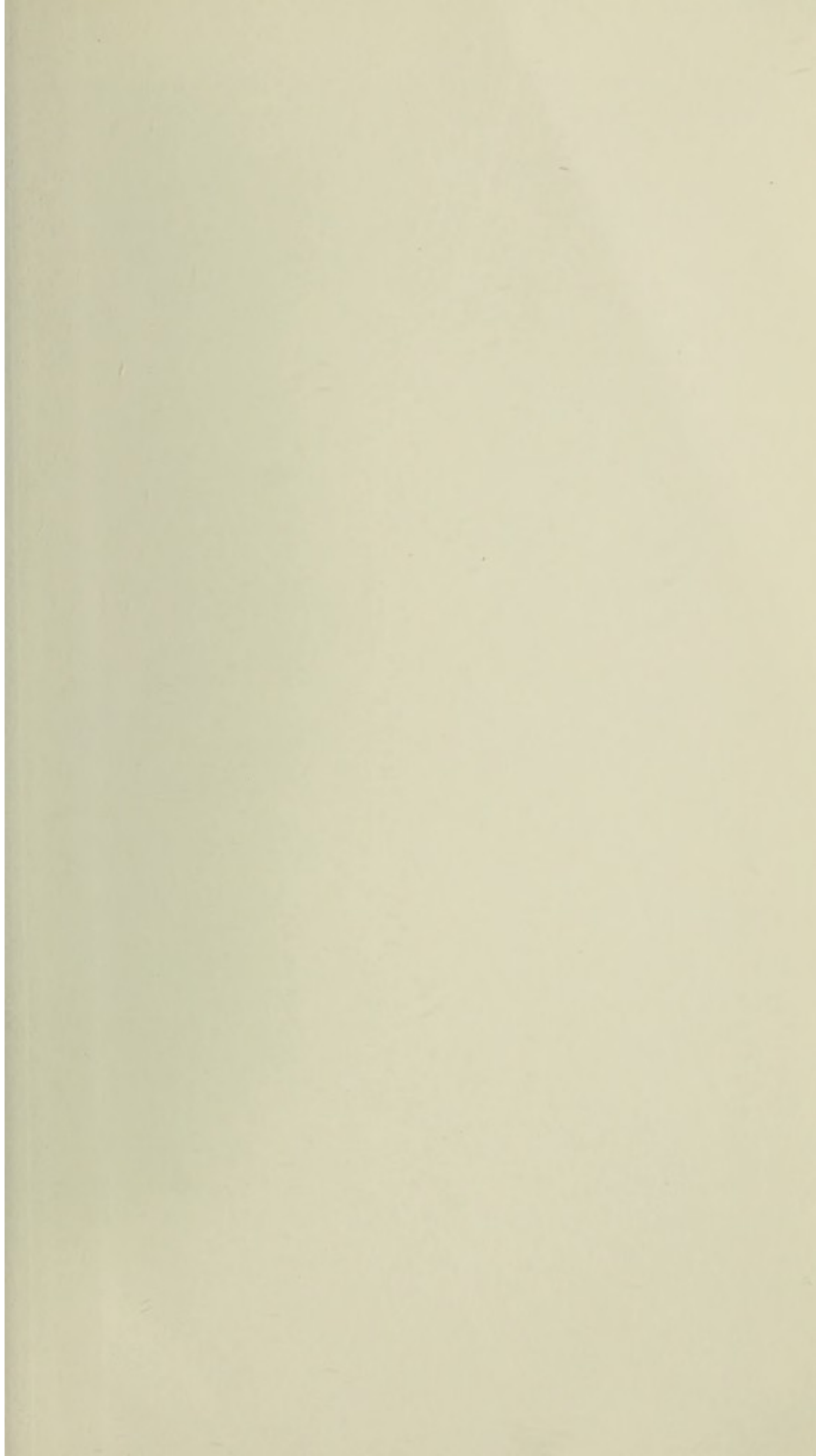
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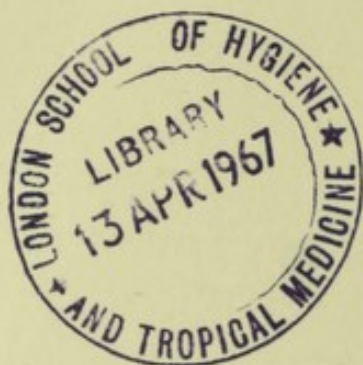
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