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**Contributors**

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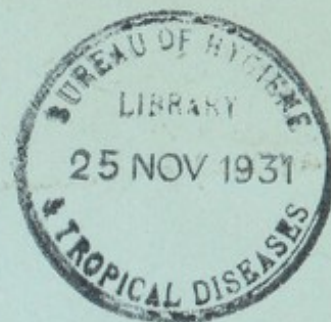
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AC 4491  
COUNTY COUNCIL OF SALOP.



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# ANNUAL REPORT

OF THE

County Medical Officer of Health.

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1930.

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SHREWSBURY,  
*September, 1931.*

WILLIAM TAYLOR, M.D., D.P.H.

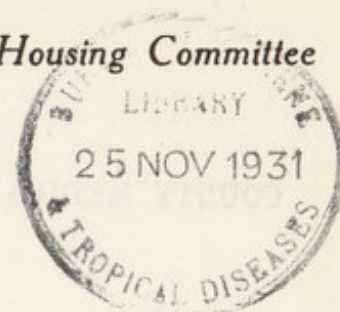


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*To the Chairman and Members of the Public Health and Housing Committee  
of the Salop County Council.*

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MR. CHAIRMAN, LADIES AND GENTLEMEN,

I have the honour to present the Annual Report for 1930, which has been drawn up in accordance with the memorandum issued by the Ministry of Health.

On the coming into force of the Local Government Act, 1929, on 1st April, 1930, the County Council became responsible for the discharge of the functions previously exercised by the Boards of Guardians. No declarations have been made under Section 5 of the Act in this County, but the Domiciliary Relief of the Blind has been delegated to the Public Health and Housing Committee under Section 6.

Exclusive of Children's Homes, fifteen Poor Law Institutions were automatically transferred to the County Council, and it is an unfortunate fact that most of these Institutions are, by reason of the administrative areas of the old Boards of Guardians, distributed round the borders of the County, just within the circumference instead of on the other side of it. Shropshire has, therefore, Poor Law Institutional Accommodation in excess of its needs, and it is difficult to see what useful purpose this surplus accommodation can be made to serve without a large expenditure of public money. The condition of these Institutions, one of which dates from the year of the French Revolution, is generally such that they cannot well be utilised in their present state for purposes other than those which in the past they have been made to serve. Various schemes are, however, under consideration, which are likely in the near future to lead to the greater utilisation of certain of them for Poor Law purposes and to the appropriation of others for Special Services.

I wish to express my indebtedness to the Tuberculosis Medical Officers for assistance in the preparation of that part of the report which deals with tuberculosis.

I am,

Your obedient Servant,

WILLIAM TAYLOR.

COUNTY HEALTH OFFICE,  
COLLEGE HILL,  
SHREWSBURY,

*September, 1931.*

**COUNTY MEDICAL OFFICER OF HEALTH AND SCHOOL MEDICAL OFFICER :**

WILLIAM TAYLOR, M.D., D.P.H.

**TUBERCULOSIS MEDICAL OFFICERS :**

A. C. WATKIN, M.R.C.S., L.R.C.P., D.P.H.

T. R. ELLIOTT, L.R.C.P.I., L.R.C.S.I.

**ASSISTANT SCHOOL AND CHILD WELFARE MEDICAL OFFICERS :**

†L. WILSON EVANS, M.C., M.B., B.S., D.P.H.

B. A. ASTLEY-WESTON, M.B., Ch.B., D.P.H.

\*W. H. HARRIS, M.B., Ch.B., D.P.H.

K. PRIESTLEY, L.S.A.

MABEL BLAKE, M.B., Ch.B.

JOSEPH I. E. McCORMACK, M.B., B.Ch.B.A.O., D.P.H. (resigned 31st Aug., 1930).

C. G. M. NICOL, M.B.B.S., D.P.H. (appointed 1st Nov., 1930).

**DENTAL SURGEONS :**

STEPHEN KEENAN, L.D.S.

FRANK H. BIRCH, H.D.D., L.D.S.

GERALD R. CATCHPOLE, L.D.S.

**ORGANISER OF PHYSICAL TRAINING :**

MRS. K. W. DAVEY, DIPLOMA OF THE COLLEGE OF PHYSICAL EDUCATION.

**INSPECTOR OF MIDWIVES AND COUNTY HEALTH LECTURER :**

MRS. E. M. HART, CERTIFICATE OF THE C.M.B. and SANITARY INSPECTOR'S CERTIFICATE.

**ASSISTANT INSPECTOR OF MIDWIVES :**

MISS G. C. COLLINS, HEALTH VISITORS CERTIFICATE and CERTIFICATE OF C.M.B.

**COUNTY ANALYST :**

HAROLD LOWE, M.Sc., F.I.C.

† *Also Medical Officer of Health for the Urban and Rural Districts of Oswestry.*\* *Also Medical Officer of Health for the Urban and Rural Districts of Ellesmere.*

**HEALTH VISITORS AND SCHOOL NURSES :**

|                         |                       |                         |
|-------------------------|-----------------------|-------------------------|
| *†Miss C. M. BINDLOSS.  | Miss E. M. GRIFFITHS. | *†Miss A. K. O'CONNELL. |
| *†Miss J. A. BRODERSEN. | *†Miss G. GILSENAN.   | ‡Miss G. L. THOMAS.     |
| *Miss B. CONNELLY.      | †Mrs. M. M. LOWRANCE. | *Miss E. DAVIES.        |
| *Miss M. DORRICOTT.     | *Miss E. Q. MASON.    | *Miss M. PARRY.         |
| *†Miss E. L. GRIFFITHS. | *Miss G. M. MORGAN.   |                         |

**OBSTETRICAL CONSULTANT AND CONSULTANT UNDER THE PUERPERAL FEVER AND PUERPERAL PYREXIA REGULATIONS, 1926.**

R. L. E. DOWNER, M.D., M.B.C.O.G.

**VENEREAL DISEASES MEDICAL OFFICER (part time).**

COLONEL J. GRECH, D.S.O., M.R.C.S., L.R.C.P.

**SISTER-IN-CHARGE V.D. CLINIC :**

Mrs. D. A. MURRAY, S.R.N., F.R.N.

**PRES HEATH SANATORIUM :**

MISS M. A. TREBLE, MATRON.

**COUNTY HOME FOR AILING BABIES.**

MISS M. L. CROWE, MATRON.

**BERRINGTON HOSPITAL.**

MISS J. P. COCHRAN, S.R.N. and C.M.B. Certificate, MATRON.

G. W. CURTIS, M.R.C.S., L.R.C.P., RESIDENT MEDICAL OFFICER.

**CLERICAL STAFF :**

W. H. JONES, CHIEF CLERK, and Ten Assistants.

\* Holds C.M.B. Certificate.

† Holds Health Visitors Certificate.

‡ Holds Certificate of London Obstetrical Society.

## District Medical Officers of Health.

| Name.                                                  | Address.        | District or Districts.                                            |                                                                                    |
|--------------------------------------------------------|-----------------|-------------------------------------------------------------------|------------------------------------------------------------------------------------|
|                                                        |                 | Urban.                                                            | Rural.                                                                             |
| J. DALLEWY, M.R.C.S., L.R.C.P.                         | Wem.            | Wem.                                                              | Wem.                                                                               |
| L. E. DICKSON, M.D., M.R.C.S.,<br>L.R.C.P.             | Bridgnorth.     | Bridgnorth.                                                       | Bridgnorth.                                                                        |
| L. WILSON EVANS, M.C., M.B., B.S.,<br>D.P.H.           | Oswestry.       | Oswestry.                                                         | Oswestry.                                                                          |
| M. GEPP, L.R.C.P., L.R.C.S., D.P.H.                    | Shrewsbury.     | { Bishop's Castle.<br>Church Stretton.<br>Wenlock.<br>Whitchurch. | { Atcham.<br>Chirbury.<br>Church Stretton.<br>Clun.<br>Whitchurch.                 |
| J. A. K. GRIFFITHS, M.B., M.R.C.S.,<br>L.R.C.P.        | Knighton.       | —                                                                 | Teme.                                                                              |
| W. H. HARRIS, M.B., CH.B., D.P.H.                      | Clive.          | Ellesmere.                                                        | Ellesmere.                                                                         |
| A. MACQUEEN, M.D.                                      | Market Drayton. | Market Drayton.                                                   | Drayton.                                                                           |
| A. D. SYMONS, M.D., D.P.H.                             | Shrewsbury.     | Shrewsbury.                                                       | —                                                                                  |
| A. E. WHITE, M.B., C.M., L.R.C.P.,<br>L.R.C.S., D.P.H. | Wellington.     | { Dawley.<br>Ludlow.<br>Newport.<br>Oakengates.<br>Wellington.    | { Burford.<br>Cleobury Mortimer.<br>Ludlow.<br>Newport.<br>Shifnal.<br>Wellington. |

# Poor Law Medical Out-Relief.

| Name of Area. | County Districts, comprised in Area.                                      | Acreage. | Population | No. of Relief Districts. | No. of Relieving Officers. | District Medical Officers.                                                                                                                                                                                       |
|---------------|---------------------------------------------------------------------------|----------|------------|--------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bridgnorth    | ..<br>Bridgnorth U. & R.<br>Cleobury Mortimer R.                          | 117,977  | 21,010     | 2                        | 2                          | Dr. G. W. C. Hodges, Dr. L. E. E. Dickson,<br>Dr. G. R. Kennedy, Dr. R. G. Adden-<br>brooke, Dr. W. A. N. Robinson, Dr.<br>F. Hall.                                                                              |
| Clun..        | ..<br>Bishop's Castle U. ..<br>Chirbury R. ..<br>Clun R. ..<br>Teme R. .. | 134,208  | 12,374     | 2                        | 2                          | Dr. G. Wheldale Stanley, Dr. R. E. G.<br>Phillips, Dr. L. Gameson, Dr. J. Adams,<br>Dr. E. A. Walker, Dr. D. M. Hunter,<br>Dr. J. A. K. Griffiths, Dr. W. B.<br>Darroll.                                         |
| Drayton       | ..<br>Drayton U. & R. ..<br>Wem U. & R. ..<br>Whitchurch U. & R.          | 120,320  | 30,289     | 2                        | 2                          | Dr. J. R. Mitchell, Dr. J. Dallewy, Dr.<br>H. G. P. Le Fanu, Dr. V. E. Somerset,<br>Dr. I. B. Richardson, Dr. A. H. Clough,<br>Dr. A. R. F. Exham, Dr. Frances<br>Lilian Lewis, Dr. A. Lees Low, Dr.<br>W. Hall. |
| Ludlow        | ..<br>Burford R. ..<br>Church Stretton<br>U. & R. ..<br>Ludlow U. & R.    | 120,650  | 22,108     | 3                        | 3                          | Dr. G. Higginson, Dr. J. McClintock,<br>Dr. F. W. Hudson-Bigley, Dr. C. H.<br>Flory, Dr. G. W. C. Hodges, Dr. C.<br>Fenwick, Dr. H. O. Watson, Dr. H. J.<br>Hetherington.                                        |
| Oswestry      | ..<br>Ellesmere U. & R. ..<br>Oswestry U. & R. ..                         | 114,574  | 36,025     | 3                        | 3                          | Dr. W. B. A. Lewis, Dr. J. H. Crofton,<br>Dr. H. S. O'Connor, Dr. D. J. Micah,<br>Dr. C. E. Salt, Dr. I. G. M. Frith,<br>Dr. C. D. Rogers, Dr. A. C. Heard.                                                      |
| Shrewsbury    | ..<br>Atcham R. ..<br>Shrewsbury U.                                       | 128,732  | 52,987     | 3                        | 3                          | Dr. W. E. Gemmell, Dr. J. H. Marshall,<br>Dr. J. G. Glynn-Pigott, Dr. G. H.<br>Westwood, Dr. C. W. Cassell, Dr. P.<br>A. Frazer, Dr. C. U. Whitney, Mr. H.<br>B. MacLeod for Berrington Hospital.                |
| Wellington    | ..<br>Newport U. & R. ..<br>Oakengates U. ..<br>Wellington U. & R.        | 60,077   | 39,497     | 2                        | 2                          | Dr. H. W. J. Hawthorn, Dr. D. L. Mac<br>Kenna, Dr. G. E. Elington, Dr. E. A.<br>Elkington.                                                                                                                       |
| Wenlock       | ..<br>Dawley U. ..<br>Shifnal R. ..<br>Wenlock U. ..                      | 65,362   | 28,772     | 3                        | 3                          | Dr. C. U. Whitney, Dr. H. C. Woodhouse,<br>Dr. R. S. Mitchell, Dr. J. G. Boon,<br>Dr. F. W. Hudson Bigley, Dr. S. B.<br>Legge, Dr. D. J. M. Legge.                                                               |
|               |                                                                           | 861,800  | 243,062    | 20                       | 20                         |                                                                                                                                                                                                                  |

## Public Vaccinators and Vaccination Officers on 31st December, 1930.

| Name of Vaccination District. | Name of Vaccination Officer. | Names of Public Vaccinators.                                                                                       |
|-------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Atcham .. ..                  | E. P. Everest, M.B.E.        | Dr. C. W. Cassell, Dr. W. E. Gemmell, Dr. P. A. Frazer, Dr. J. H. Marshall, Dr. H. B. MacLeod, Dr. G. H. Westwood. |
| Bridgnorth ..                 | A. H. Reynolds ..            | Dr. L. E. Dickson, Dr. G. R. Kennedy, Dr. G. W. C. Hodges.                                                         |
| Church Stretton ..            | A. Dillon Smith ..           | Dr. Geo. Higginson, Dr. Cyril Flory, Dr. F. W. Hudson Bigley, Dr. J. McClintock.                                   |
| Cleobury Mortimer.            | S. Whitehead ..              | Dr. W. A. N. Robinson, Dr. R. G. Addenbrooke.                                                                      |
| Clun .. ..                    | Frank E. King ..             | Dr. J. Adams, Dr. L. Gameson.                                                                                      |
|                               | Morgan George ..             | Dr. H. R. Cross, Dr. E. A. Walker.                                                                                 |
| Chirbury .. ..                | T. E. Stafford ..            | Dr. S. J. Stewart, Dr. G. W. Stanley.                                                                              |
| Ellesmere .. ..               | Joseph H. Butler ..          | Dr. A. C. Heard.                                                                                                   |
|                               | P. J. Whiston ..             | Dr. C. D. Rogers.                                                                                                  |
| Ludlow .. ..                  | R. G. Brookes ..             | Dr. C. Fenwick, Dr. H. O. Watson.                                                                                  |
|                               | Noel Williams ..             | Dr. C. Flory, Dr. C. Hodges.                                                                                       |
| Madeley .. ..                 | William Edge ..              | Dr. J. G. Boon, Dr. F. W. Hudson Bigley.                                                                           |
|                               | Miss M. L. Thomason          | Dr. J. B. Robertson.                                                                                               |
|                               | E. Patten Smith ..           | Dr. C. U. Whitney.                                                                                                 |
| Market Drayton ..             | George H. Newill ..          | Dr. W. Hall, Dr. W. King Hay, Dr. A. Lees Low, Dr. F. Lilian Lewis.                                                |
| Newport .. ..                 | G. G. Crickmer ..            | Dr. E. A. Elkington, Dr. G. E. Elkington, Dr. D. L. MacKenna.                                                      |
| Oswestry .. ..                | T. Pughe Jones ..            | Dr. J. H. Crofton, Dr. I. G. M. Firth, Dr. W. B. A. Lewis, Dr. H. S. O'Connor, Dr. C. E. Salt, Dr. E. H. Udall.    |
| Shifnal .. ..                 | F. Cooper .. ..              | Dr. D. J. Melville Legge, Dr. S. B. Legge, Dr. R. MacKenna.                                                        |
| Teme .. ..                    | W. J. Beavan ..              | Dr. W. B. Darroll, Dr. J. A. K. Griffiths, Dr. D. M. Hunter.                                                       |
| Tenbury (Salop pt)            | D. J. Morris ..              | Dr. A. Sanders Green.                                                                                              |
| Wellington .. ..              | R. Gwynne ..                 | Dr. D. L. MacKenna, Dr. H. W. J. Hawthorn.                                                                         |
| Wem .. ..                     | R. J. Clayton ..             | Dr. J. Dallewy, Dr. H. G. P. Le Fanu, Dr. I. B. Richardson, Dr. V. E. Somerset.                                    |
| Whitchurch ..                 | E. Jones .. ..               | Dr. A. H. Clough.                                                                                                  |

### Hospital Accommodation for Chronic Sick at Public Assistance Institutions.

| Name.               | Sick Wards.  |                           | Medical Officer. | Nursing Staff. |               |                                    |               |
|---------------------|--------------|---------------------------|------------------|----------------|---------------|------------------------------------|---------------|
|                     | No. of beds. | Average No. of beds used. |                  | Matron.        | Asst. Matron. | Sisters, Staff, Nurses and Nurses. | Prob. Nurses. |
| Berrington Hospital | 174          | 118                       | Resident*        | 1              | ..            | 6                                  | 25            |
| Bishop's Castle ..  | 61           | 42                        | Visiting ..      | 1              | 1             | 2                                  | ..            |
| Bridgnorth .. ..    | 48           | 33                        | Visiting ..      | 1              | ..            | 3                                  | ..            |
| Ironbridge .. ..    | 63           | 63                        | Visiting ..      | 1              | 1             | 6                                  | ..            |
| Ludlow .. ..        | 52           | 33                        | Visiting ..      | 1              | ..            | 4                                  | ..            |
| Market Drayton ..   | 44           | 24                        | Visiting ..      | 1              | 1             | 2                                  | ..            |
| Newport .. ..       | 34           | 27                        | Visiting ..      | 1              | 1             | 3                                  | ..            |
| Oswestry .. ..      | 91           | 61                        | Visiting ..      | 1              | 1             | 4                                  | 7             |
| Shifnal .. ..       | 27           | 20                        | Visiting ..      | 1              | ..            | 3                                  | ..            |
| Wellington .. ..    | 117          | 80                        | Visiting ..      | 1              | 1             | 5                                  | 8             |
| Wem .. ..           | 30           | 19                        | Visiting ..      | 1              | 1             | 1                                  | ..            |
| Whitchurch .. ..    | 30           | 14                        | Visiting ..      | 1              | 1             | 2                                  | ..            |
|                     | 771          | 534                       | ..               | 12             | 8             | 41                                 | 40            |

\* Also Consultant.

### Voluntary Hospital Accommodation.

| Name and Situation.                                                          | No. of beds including cots. | Remarks.                                                                                                                                  |
|------------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Bridgnorth and South Shropshire Infirmary, Bridgnorth.                       | 41                          | Includes 3 maternity beds. There is an X-Ray Dept., and a well-equipped operating theatre, and massage is provided by a trained masseuse. |
| St. Catherine's Cottage Hospital, Clun .. ..                                 | 6                           |                                                                                                                                           |
| Cottage Hospital, Ellesmere .. ..                                            | 12                          |                                                                                                                                           |
| Cottage Hospital, Ludlow .. ..                                               | 10                          |                                                                                                                                           |
| Cottage Hospital, Market Drayton .. ..                                       | 12                          |                                                                                                                                           |
| Lady Boughay Cottage Hospital, Newport ..                                    | 15                          |                                                                                                                                           |
| Cottage Hospital, Oswestry .. ..                                             | 21                          | Takes an occasional maternity case.                                                                                                       |
| Cottage Hospital, Shifnal .. ..                                              | 13                          | Includes 3 maternity beds.                                                                                                                |
| District Cottage Hospital, Wellington .. ..                                  | 12                          | Takes an occasional maternity case.                                                                                                       |
| Cottage Hospital, Whitchurch .. ..                                           | 15                          |                                                                                                                                           |
| Shropshire Orthopaedic Hospital and Agnes Hunt Surgical Home, Oswestry .. .. | 320                         | For Orthopaedic cases.                                                                                                                    |
| Royal Salop Infirmary, Shrewsbury .. ..                                      | 150                         | Includes 10 maternity beds. Facilities are available for operative surgery, X-Ray and dental work.                                        |
| Eye, Ear and Throat Hospital, Shrewsbury ..                                  | 47                          | For eye, ear, nose and throat cases.                                                                                                      |
| Lady Forester Hospitals—                                                     |                             |                                                                                                                                           |
| Broseley .. ..                                                               | 29                          | Includes six maternity beds.                                                                                                              |
| Much Wenlock .. ..                                                           | 23                          | Includes four maternity beds.                                                                                                             |
| King Edward VII Memorial Sanatorium, Shirlett .. ..                          | 62                          | For tuberculous patients.                                                                                                                 |

Hospitals used outside Salop include the Hereford General Hospital, Wolverhampton Royal Hospital, Stafford Infirmary, Wolverhampton Eye Hospital, and the Kidderminster Hospital.

**Hospital Beds available in the County of Salop Classified according to nature of Disease and as far as possible to Sex.**

| Type of Case.                         |    | Provided at                                      | Total. | No. of beds. |         | M. &/or F. |
|---------------------------------------|----|--------------------------------------------------|--------|--------------|---------|------------|
|                                       |    |                                                  |        | Male.        | Female. |            |
| General Medical                       | .. | Royal Salop Infirmary, Shrewsbury ..             | 52     | 26           | 26      |            |
|                                       |    | St. Catherine's Cottage Hospital, Clun ..        | 6      | 3            | 3       |            |
|                                       |    |                                                  | 58     | 29           | 29      |            |
| General Surgical                      | .. | Royal Salop Infirmary ..                         | 66     | 40           | 26      |            |
|                                       |    | Bridgnorth and South Shropshire Infirmary ..     | 35     | 15           | 15      | 5          |
| General Medical and Surgical          | {  | Lady Forester Memorial Hospital, Much Wenlock .. | 19     | 7            | 7       | 5          |
|                                       |    | Lady Forester Cottage Hospital, Broseley ..      | 23     | 7            | 7       | 9          |
|                                       |    | Ellesmere Cottage Hospital ..                    | 12     |              |         | 12         |
|                                       |    | Ludlow Cottage Hospital ..                       | 10     |              |         | 10         |
|                                       |    | Market Drayton Cottage Hospital ..               | 12     |              |         | 12         |
|                                       |    | Newport, Lady Boughay Cottage Hospital ..        | 15     |              |         | 15         |
|                                       |    | Oswestry Cottage Hospital ..                     | 21     |              |         | 21         |
|                                       |    | Shifnal Cottage Hospital ..                      | 10     |              |         | 10         |
|                                       |    | Wellington Cottage Hospital ..                   | 12     |              |         | 12         |
|                                       |    | Whitchurch Cottage Hospital ..                   | 15     |              |         | 15         |
|                                       |    | Berrington Hospital (P.A.I.) ..                  | 124    | 73           | 51      |            |
|                                       |    |                                                  | 308    | 102          | 80      | 126        |
| Children                              | {  | Royal Salop Infirmary ..                         | 22     |              |         | 22         |
|                                       |    | County Home for Ailing Babies, Wellington ..     | 16     |              |         | 16         |
|                                       |    | Public Assistance Institutions ..                | 91     |              |         | 91         |
|                                       |    | Bridgnorth and South Shropshire Infirmary ..     | 3      |              |         | 3          |
|                                       |    |                                                  | 132    |              |         | 132        |
| Maternity                             | {  | Lady Forester Cottage Hospital ..                | 6      |              | 6       |            |
|                                       |    | Lady Forester Memorial Hospital ..               | 4      |              | 4       |            |
|                                       |    | Royal Salop Infirmary ..                         | 10     |              | 10      |            |
|                                       |    | Bridgnorth and South Shropshire Infirmary ..     | 3      |              | 3       |            |
|                                       |    | Berrington Hospital (P.A.I.) ..                  | 13     |              | 13      |            |
|                                       |    | Other Public Assistance Institutions ..          | 24     |              | 24      |            |
|                                       |    | Shifnal Cottage Hospital ..                      | 3      |              | 3       |            |
|                                       |    |                                                  | 63     |              | 63      |            |
| Venereal Diseases                     | .. | V.D. Clinic, Shrewsbury ..                       | 4      | 2            | 2       |            |
| Tuberculosis                          | {  | Shirlett Sanatorium ..                           | 62     |              |         | 62         |
|                                       |    | Prees Heath Sanatorium ..                        | 11     |              |         | 11         |
|                                       |    | Public Assistance Institutions (shelters) ..     | 18     |              |         | 18         |
|                                       |    |                                                  | 91     |              |         | 91         |
| Chronic Sick..                        | .. | Public Assistance Institutions ..                | 464    | 245          | 219     |            |
| Mental                                | .. | Salop Mental Hospital ..                         | 896    | 436          | 460     |            |
| Mental Deficiency                     | {  | Church Stretton Public Assistance Institution .. | 5      |              | 5       |            |
|                                       |    | Madeley Public Assistance Institution ..         | 25     | 10           | 15      |            |
|                                       |    |                                                  | 30     | 10           | 20      |            |
| Orthopaedic                           | .. | Shropshire Orthopaedic Hospital ..               | 320    |              |         | 320        |
| Eye, Ear, Nose and Throat             | .. | Eye, Ear and Throat Hospital ..                  | 47     |              |         | 47         |
| Puerperal Fever and Puerperal Pyrexia | .. | Berrington Hospital (P.A.I.) ..                  | 12     |              | 12      |            |
| Small Pox                             | .. | See page 21 ..                                   | 28     |              |         | 28         |
| Other Infectious Diseases             | .. | See page 22 ..                                   | 87     |              |         | 87         |

In addition, the County Council has made arrangements with the Royal Hospital, Wolverhampton, and Cleveland House, Wolverhampton, for the treatment of persons suffering from venereal diseases, and with the Mrs. Legge Memorial Home, Wolverhampton, for the admission of unmarried mothers without homes.

TABLE I.  
CAUSES OF DEATH IN THE ADMINISTRATIVE AREAS IN THE COUNTY OF SALOP, 1930—URBAN DISTRICTS.

| CAUSES OF DEATH IN THE ADMINISTRATIVE AREAS IN THE COUNTY OF SALOP, 1930—URBAN DISTRICTS |                                                    |     |                               |    |                          |    |                               |    |                      |    |                         |    |                      |    |                       |    |                          |    |                        |    |                          |    |                   |    |                       |     |                           |    |                              |    |                                                      |     |
|------------------------------------------------------------------------------------------|----------------------------------------------------|-----|-------------------------------|----|--------------------------|----|-------------------------------|----|----------------------|----|-------------------------|----|----------------------|----|-----------------------|----|--------------------------|----|------------------------|----|--------------------------|----|-------------------|----|-----------------------|-----|---------------------------|----|------------------------------|----|------------------------------------------------------|-----|
| Causes of Death.                                                                         | Shrewsbury<br>M.B.<br>02                           |     | Bishop's<br>Castle M.B.<br>04 |    | Bridgnorth<br>M.B.<br>05 |    | Church<br>Stretton U.D.<br>06 |    | Dawley<br>U.D.<br>07 |    | Ellesmere<br>U.D.<br>14 |    | Ludlow<br>M.B.<br>15 |    | Newport<br>U.D.<br>16 |    | Oakengates<br>U.D.<br>17 |    | Oswestry<br>M.B.<br>24 |    | Wellington<br>U.D.<br>25 |    | Wem<br>U.D.<br>26 |    | Wenlock<br>M.B.<br>27 |     | Whitechurch<br>U.D.<br>34 |    | Market<br>Drayton U.D.<br>35 |    | Total.                                               |     |
|                                                                                          | M.                                                 | F.  | M.                            | F. | M.                       | F. | M.                            | F. | M.                   | F. | M.                      | F. | M.                   | F. | M.                    | F. | M.                       | F. | M.                     | F. | M.                       | F. | M.                | F. | M.                    | F.  | M.                        | F. | M.                           | F. | M.                                                   | F.  |
| ALL CAUSES .. ..                                                                         | 187                                                | 181 | 2                             | 5  | 35                       | 39 | 11                            | 13 | 30                   | 41 | 13                      | 15 | 48                   | 34 | 14                    | 22 | 89                       | 56 | 73                     | 80 | 53                       | 38 | 13                | 11 | 102                   | 102 | 39                        | 40 | 29                           | 39 | 738                                                  | 716 |
| 1 Enteric fever .. ..                                                                    | ..                                                 | ..  | ..                            | .. | ..                       | .. | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                       | .. | ..                     | .. | ..                       | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | ..                                                   | ..  |
| 2 Small-pox .. ..                                                                        | ..                                                 | ..  | ..                            | .. | ..                       | .. | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                       | .. | ..                     | .. | ..                       | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | ..                                                   | ..  |
| 3 Measles .. ..                                                                          | 1                                                  | 3   | ..                            | .. | ..                       | .. | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                       | .. | 2                      | .. | ..                       | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | ..                                                   | ..  |
| 4 Scarlet fever .. ..                                                                    | ..                                                 | ..  | ..                            | .. | ..                       | .. | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                       | .. | ..                     | .. | ..                       | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | ..                                                   | ..  |
| 5 Whooping Cough .. ..                                                                   | ..                                                 | ..  | ..                            | .. | ..                       | .. | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                       | .. | ..                     | .. | ..                       | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | ..                                                   | ..  |
| 6 Diphtheria .. ..                                                                       | ..                                                 | 2   | ..                            | .. | ..                       | .. | 1                             | .. | 1                    | 1  | ..                      | .. | ..                   | 1  | ..                    | .. | ..                       | .. | 1                      | .. | ..                       | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | ..                                                   | 17  |
| 7 Influenza .. ..                                                                        | ..                                                 | ..  | ..                            | .. | ..                       | 1  | ..                            | 1  | ..                   | .. | ..                      | .. | ..                   | 1  | 2                     | 7  | 2                        | .. | 2                      | .. | 1                        | .. | ..                | .. | 5                     | 2   | 2                         | .. | ..                           | .. | 2                                                    | ..  |
| 8 Encephalitis lethargica .. ..                                                          | ..                                                 | ..  | ..                            | .. | ..                       | .. | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                       | .. | ..                     | .. | 1                        | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | ..                                                   | ..  |
| 9 Meningococcal meningitis .. ..                                                         | ..                                                 | ..  | ..                            | .. | ..                       | .. | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                       | .. | ..                     | 1  | ..                       | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | ..                                                   | ..  |
| 10 Tuberculosis of respiratory system .. ..                                              | 12                                                 | 7   | ..                            | .. | 4                        | 2  | 1                             | .. | ..                   | 1  | ..                      | .. | 2                    | 1  | 1                     | 2  | 3                        | 2  | 5                      | 2  | 2                        | .. | 2                 | .. | 4                     | 1   | ..                        | 2  | ..                           | .. | 36                                                   | 20  |
| 11 Other tuberculous diseases .. ..                                                      | 1                                                  | 3   | ..                            | .. | ..                       | 1  | ..                            | .. | ..                   | .. | 1                       | .. | 1                    | 1  | ..                    | 1  | ..                       | .. | 2                      | 1  | ..                       | .. | ..                | .. | 2                     | 1   | ..                        | .. | ..                           | .. | 7                                                    | 8   |
| 12 Cancer, malignant disease .. ..                                                       | 24                                                 | 19  | ..                            | .. | 8                        | 4  | 2                             | 2  | 4                    | 7  | 2                       | 6  | 4                    | 8  | ..                    | 5  | 6                        | 7  | 11                     | 14 | 4                        | 1  | 2                 | 2  | 8                     | 9   | 3                         | 7  | 3                            | 7  | 81                                                   | 98  |
| 13 Rheumatic fever .. ..                                                                 | ..                                                 | 1   | ..                            | .. | 1                        | .. | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                       | .. | ..                     | 1  | ..                       | .. | ..                | .. | 2                     | 1   | ..                        | .. | ..                           | .. | 10                                                   | 7   |
| 14 Diabetes .. ..                                                                        | 3                                                  | 1   | ..                            | .. | ..                       | 1  | ..                            | .. | ..                   | .. | 1                       | 1  | ..                   | .. | ..                    | .. | ..                       | .. | ..                     | 1  | 1                        | 2  | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | 11                                                   | 44  |
| 15 Cerebral haemorrhage, &c. .. ..                                                       | 5                                                  | 11  | ..                            | 2  | 2                        | 3  | ..                            | 2  | 4                    | 7  | ..                      | 6  | 1                    | .. | ..                    | .. | 1                        | 3  | 8                      | 4  | 4                        | 2  | 1                 | 1  | 11                    | 9   | 2                         | 3  | 5                            | 10 | 7                                                    | 144 |
| 16 Heart disease .. ..                                                                   | 45                                                 | 49  | 1                             | 1  | 4                        | 8  | 3                             | .. | 6                    | 8  | 3                       | 4  | 4                    | 3  | 1                     | 1  | 18                       | 9  | 12                     | 23 | 11                       | 10 | 1                 | 3  | 22                    | 25  | 3                         | 5  | 10                           | 7  | 144                                                  | 156 |
| 17 Arterio-sclerosis .. ..                                                               | 15                                                 | 6   | ..                            | .. | ..                       | 1  | 1                             | 1  | 2                    | 1  | ..                      | .. | 6                    | .. | ..                    | .. | 3                        | 1  | 4                      | .. | 3                        | 2  | ..                | .. | 8                     | 6   | 2                         | 1  | 1                            | 37 | 30                                                   |     |
| 18 Bronchitis .. ..                                                                      | 8                                                  | 6   | ..                            | .. | 2                        | .. | ..                            | .. | ..                   | 4  | 1                       | .. | 3                    | 2  | 2                     | 1  | 2                        | 3  | ..                     | 3  | 4                        | 2  | ..                | .. | 3                     | 1   | 2                         | .. | ..                           | .. | 45                                                   | 26  |
| 19 Pneumonia (all forms) .. ..                                                           | 11                                                 | 12  | ..                            | .. | 5                        | 2  | ..                            | .. | 2                    | .. | ..                      | 1  | 1                    | 3  | 1                     | .. | 11                       | 2  | 4                      | 1  | 2                        | .. | 1                 | .. | 3                     | 4   | 4                         | 1  | ..                           | .. | 7                                                    | 6   |
| 20 Other respiratory diseases .. ..                                                      | 1                                                  | 1   | ..                            | .. | ..                       | .. | ..                            | 1  | 1                    | .. | ..                      | .. | ..                   | 1  | ..                    | .. | 1                        | 2  | 1                      | 1  | ..                       | 1  | ..                | .. | 1                     | 1   | ..                        | .. | ..                           | .. | 8                                                    | 3   |
| 21 Ulcer of stomach or duodenum .. ..                                                    | 3                                                  | 1   | ..                            | .. | ..                       | .. | ..                            | .. | ..                   | .. | 1                       | 1  | ..                   | .. | ..                    | .. | ..                       | .. | ..                     | .. | ..                       | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | 1                                                    | 6   |
| 22 Diarrhoea, &c. (under 2 years) .. ..                                                  | 3                                                  | 1   | ..                            | .. | ..                       | .. | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | 1                     | 1  | ..                       | .. | ..                     | .. | 2                        | 2  | ..                | .. | ..                    | 1   | ..                        | .. | ..                           | .. | ..                                                   | 1   |
| 23 Appendicitis and typhilitis .. ..                                                     | ..                                                 | 3   | ..                            | .. | ..                       | .. | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | .. | 1                        | .. | ..                     | .. | ..                       | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | ..                                                   | 5   |
| 24 Cirrhosis of liver .. ..                                                              | ..                                                 | ..  | ..                            | .. | 1                        | 2  | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | 1  | ..                       | .. | ..                     | .. | ..                       | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | ..                                                   | ..  |
| 25 Acute and chronic nephritis .. ..                                                     | 3                                                  | 4   | ..                            | .. | 3                        | 1  | ..                            | .. | ..                   | .. | ..                      | .. | 1                    | 1  | 2                     | .. | 4                        | .. | 3                      | 8  | 2                        | 1  | ..                | .. | 3                     | 3   | 2                         | 6  | 3                            | 1  | 26                                                   | 26  |
| 26 Puerperal sepsis .. ..                                                                | ..                                                 | 1   | ..                            | .. | ..                       | .. | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                       | .. | ..                     | 1  | ..                       | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | ..                                                   | 2   |
| 27 Other accidents and diseases of pregnancy and parturition .. ..                       | ..                                                 | 1   | ..                            | .. | ..                       | 1  | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                       | 1  | ..                     | .. | 1                        | .. | ..                | .. | ..                    | 4   | ..                        | .. | ..                           | 1  | ..                                                   | 9   |
| 28 Congenital debility and malformation, premature birth .. ..                           | 10                                                 | 5   | ..                            | .. | 1                        | .. | ..                            | .. | 3                    | 1  | ..                      | .. | 2                    | .. | ..                    | .. | 6                        | 2  | 6                      | .. | 2                        | 3  | 2                 | 1  | 5                     | 2   | 3                         | .. | 2                            | .. | 42                                                   | 14  |
| 29 Suicide .. ..                                                                         | ..                                                 | 4   | ..                            | .. | ..                       | .. | 1                             | .. | ..                   | .. | ..                      | .. | 1                    | .. | ..                    | .. | 4                        | 1  | 1                      | .. | ..                       | 1  | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | 15                                                   | 6   |
| 30 Other deaths from violence .. ..                                                      | 10                                                 | 6   | ..                            | .. | ..                       | .. | ..                            | .. | 2                    | .. | 1                       | 1  | 3                    | 3  | 1                     | .. | 6                        | 1  | 1                      | .. | 2                        | 1  | ..                | .. | 5                     | 3   | 2                         | 1  | ..                           | 2  | 32                                                   | 17  |
| 31 Other defined diseases .. ..                                                          | 29                                                 | 33  | 1                             | 1  | 4                        | 11 | 2                             | 5  | 5                    | 7  | 3                       | 3  | 10                   | 10 | 4                     | 8  | 15                       | 17 | 8                      | 14 | 12                       | 11 | 1                 | 2  | 16                    | 23  | 6                         | 9  | 7                            | 7  | 123                                                  | 161 |
| 32 Causes ill-defined or unknown .. ..                                                   | 2                                                  | ..  | ..                            | .. | ..                       | .. | ..                            | 1  | ..                   | .. | ..                      | .. | ..                   | 1  | ..                    | .. | ..                       | .. | ..                     | 1  | ..                       | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | ..                                                   | 3   |
| Special Causes (included above):                                                         | ..                                                 | ..  | ..                            | .. | ..                       | .. | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                       | .. | ..                     | .. | ..                       | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | ..                                                   | ..  |
| Polio-myelitis .. ..                                                                     | ..                                                 | ..  | ..                            | .. | ..                       | .. | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                       | .. | ..                     | .. | ..                       | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | ..                                                   | ..  |
| Polio-encephalitis .. ..                                                                 | ..                                                 | ..  | ..                            | .. | ..                       | .. | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                       | .. | ..                     | .. | ..                       | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | ..                                                   | ..  |
| Deaths of infants under 1 year:                                                          | ..                                                 | ..  | ..                            | .. | ..                       | .. | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                       | .. | ..                     | .. | ..                       | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | ..                                                   | ..  |
| Total .. ..                                                                              | 26                                                 | 16  | ..                            | .. | 2                        | .. | ..                            | .. | 3                    | 2  | 1                       | .. | 2                    | .. | 1                     | 2  | 11                       | 5  | 8                      | 2  | 5                        | 3  | 2                 | 1  | 8                     | 4   | 7                         | .. | 5                            | 1  | 81                                                   | 36  |
| Illegitimate .. ..                                                                       | 3                                                  | 1   | ..                            | .. | ..                       | .. | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | 1  | ..                       | 2  | ..                     | .. | 1                        | .. | ..                | .. | 1                     | ..  | ..                        | .. | ..                           | 2  | 1                                                    | 8   |
| LIVE BIRTHS:                                                                             | ..                                                 | ..  | ..                            | .. | ..                       | .. | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                       | .. | ..                     | .. | ..                       | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | ..                                                   | ..  |
| Total .. ..                                                                              | 290                                                | 248 | 7                             | 10 | 41                       | 29 | 12                            | 10 | 75                   | 54 | 15                      | 10 | 51                   | 47 | 32                    | 27 | 97                       | 94 | 85                     | 65 | 56                       | 76 | 14                | 14 | 145                   | 95  | 52                        | 43 | 47                           | 42 | 1019                                                 | 864 |
| Legitimate .. ..                                                                         | 265                                                | 238 | 6                             | 10 | 39                       | 27 | 12                            | 9  | 70                   | 51 | 15                      | 9  | 49                   | 43 | 30                    | 25 | 96                       | 90 | 80                     | 64 | 50                       | 70 | 14                | 12 | 133                   | 89  | 50                        | 41 | 42                           | 35 | 951                                                  | 813 |
| Illegitimate .. ..                                                                       | 25                                                 | 10  | 1                             | .. | 2                        | 2  | ..                            | 1  | 5                    | 3  | ..                      | 1  | 2                    | 4  | 2                     | 2  | 1                        | 4  | 5                      | 1  | 6                        | 6  | ..                | 2  | 12                    | 6   | 2                         | 2  | 5                            | 7  | 68                                                   | 51  |
| STILL-BIRTHS:                                                                            | ..                                                 | ..  | ..                            | .. | ..                       | .. | ..                            | .. | ..                   | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                       | .. | ..                     | .. | ..                       | .. | ..                | .. | ..                    | ..  | ..                        | .. | ..                           | .. | ..                                                   | ..  |
| Total .. ..                                                                              | 7                                                  | 10  | ..                            | 1  | 2                        | 2  | ..                            | 1  | 4                    | 2  | ..                      | .. | 3                    | 3  | 1                     | 1  | 4                        | 2  | 5                      | .. | 3                        | 1  | 1                 | 1  | 10                    | 5   | ..                        | 2  | 3                            | 1  | 43                                                   | 32  |
| Legitimate .. ..                                                                         | 7                                                  | 10  | ..                            | 1  | 1                        | 2  | ..                            | 1  | 4                    | 2  | ..                      | .. | 2                    | 3  | 1                     | 1  | 3                        | 2  | 5                      | .. | 2                        | .. | 1                 | 1  | 9                     | 5   | ..                        | 2  | 3                            | 1  | 38                                                   | 31  |
| Illegitimate .. ..                                                                       | ..                                                 | ..  | ..                            | .. | 1                        | .. | ..                            | .. | ..                   | .. | ..                      | .. | 1                    | .. | ..                    | .. | 1                        | .. | ..                     | .. | 1                        | 1  | ..                | .. | 1                     | ..  | ..                        | .. | ..                           | .. | ..                                                   | 5   |
| POPULATION (mid 1929) .. ..                                                              | For birth-rate<br>32630<br>For death-rate<br>31990 |     | 1301                          |    | 4885                     |    | 1778                          |    | 7405                 |    | 1856                    |    | 5306                 |    | 3081                  |    | 11330                    |    | 9751                   |    | 8596                     |    | 2161              |    | 13900                 |     | 5613                      |    | 4647                         |    | For birth-rate<br>114240<br>For death-rate<br>113660 |     |
| BIRTH-RATES .. ..                                                                        | 16.4                                               |     | 13.0                          |    | 14.3                     |    | 12.3                          |    | 17.4                 |    | 13.4                    |    | 18.4                 |    | 19.1                  |    | 16.8                     |    | 15.3                   |    | 15.3                     |    | 12.9              |    | 17.2                  |     | 16.9                      |    | 19.1                         |    | 16.4                                                 |     |
| DEATH-RATES .. ..                                                                        | 11.5                                               |     | 5.3                           |    | 15.1                     |    | 13.4                          |    | 9.5                  |    | 15.0                    |    | 15.4                 |    | 11.6                  |    | 12.7                     |    | 15.6                   |    | 10.5                     |    | 11.1              |    | 14.6                  |     | 14.0                      |    | 14.6                         |    | 12.7                                                 |     |



TABLE I.  
CAUSES OF DEATH IN THE ADMINISTRATIVE AREAS IN THE COUNTY OF SALOP, 1930—RURAL DISTRICTS.

| Causes of Death.                                                   | Atcham<br>R.D.<br>08 |     | Bridgnorth<br>R.D.<br>09 |    | Burford<br>R.D.<br>18 |    | Chirbury<br>R.D.<br>19 |    | Church<br>Stretton<br>R.D.<br>28 |    | Clebury-Mo-<br>rtimer R.D.<br>29 |    | Clim<br>R.D.<br>38 |    | Drayton<br>R.D.<br>39 |    | Elmestree<br>R.D.<br>48 |    | Ludlow<br>R.D.<br>49 |    | Newport<br>R.D.<br>58 |    | Oswestry<br>R.D.<br>59 |     | Shifnal<br>R.D.<br>68 |    | Teme<br>R.D.<br>69 |    | Wellington<br>R.D.<br>78 |     | Wem<br>R.D.<br>79 |    | Whitchurch<br>R.D.<br>88 |    | Totals |      |
|--------------------------------------------------------------------|----------------------|-----|--------------------------|----|-----------------------|----|------------------------|----|----------------------------------|----|----------------------------------|----|--------------------|----|-----------------------|----|-------------------------|----|----------------------|----|-----------------------|----|------------------------|-----|-----------------------|----|--------------------|----|--------------------------|-----|-------------------|----|--------------------------|----|--------|------|
|                                                                    | M.                   | F.  | M.                       | F. | M.                    | F. | M.                     | F. | M.                               | F. | M.                               | F. | M.                 | F. | M.                    | F. | M.                      | F. | M.                   | F. | M.                    | F. | M.                     | F.  | M.                    | F. | M.                 | F. | M.                       | F.  | M.                | F. | M.                       | F. |        |      |
| All Causes .. ..                                                   | 131                  | 113 | 65                       | 40 | 8                     | 5  | 25                     | 18 | 24                               | 27 | 58                               | 37 | 34                 | 41 | 40                    | 46 | 37                      | 42 | 45                   | 47 | 36                    | 26 | 115                    | 98  | 49                    | 37 | 9                  | 10 | 62                       | 62  | 50                | 39 | 10                       | 9  | 798    | 697  |
| 1 Enteric fever .. ..                                              | ..                   | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | 1  | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | 1  | 3      |      |
| 2 Small-pox .. ..                                                  | ..                   | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 3 Measles .. ..                                                    | ..                   | 1   | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | 1   | 1                     | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | 2  | 3      |      |
| 4 Scarlet fever .. ..                                              | ..                   | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | 1   | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 5 Whooping Cough .. ..                                             | ..                   | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | 1  | 1                     | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 6 Diphtheria .. ..                                                 | ..                   | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 7 Typhus .. ..                                                     | ..                   | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | 2  | 2                  | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 8 Encephalitis lethargica .. ..                                    | ..                   | 2   | 3                        | .. | 1                     | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | 1                      | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | 1  | 5      |      |
| 9 Meningococcal meningitis .. ..                                   | ..                   | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | 2                      | ..  | 1                     | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | 13     | 8    |
| 10 Tuberculosis of respiratory system .. ..                        | ..                   | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | 1  | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | 1      |      |
| 11 Other tuberculous diseases .. ..                                | 5                    | 4   | 2                        | 1  | 1                     | 2  | 1                      | 1  | 2                                | 2  | 2                                | 5  | ..                 | 1  | ..                    | 2  | ..                      | 2  | 1                    | 2  | ..                    | 1  | 2                      | 2   | 1                     | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | 21     | 29   |
| 12 Cancer, malignant disease .. ..                                 | 14                   | 17  | 7                        | 6  | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | 1                       | .. | 1                    | 1  | ..                    | .. | 1                      | 2   | 1                     | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | 8      | 11   |
| 13 Rheumatic fever .. ..                                           | ..                   | 1   | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | 1      |      |
| 14 Diabetes .. ..                                                  | 6                    | 4   | 2                        | 2  | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 15 Cerebral haemorrhage, &c. .. ..                                 | 8                    | 13  | 3                        | 4  | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 16 Heart disease .. ..                                             | 21                   | 22  | 10                       | 6  | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 17 Arterio-sclerosis .. ..                                         | 4                    | 2   | 4                        | 1  | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 18 Bronchitis .. ..                                                | 5                    | 4   | 1                        | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 19 Pneumonia (all forms) .. ..                                     | 3                    | 5   | 2                        | 3  | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 20 Other respiratory diseases .. ..                                | 2                    | ..  | 1                        | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 21 Ulcer of stomach or duodenum .. ..                              | ..                   | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 22 Diarrhoea, &c. (under 2 years) .. ..                            | 1                    | ..  | 2                        | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 23 Appendicitis and typhilitis .. ..                               | ..                   | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 24 Carbuncles of liver .. ..                                       | ..                   | 1   | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 25 Acute and chronic nephritis .. ..                               | 2                    | 1   | 3                        | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 26 Purpural sepsis .. ..                                           | ..                   | 1   | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 27 Other accidents and diseases of pregnancy and parturition .. .. | ..                   | 2   | ..                       | 1  | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 28 Congenital debility and mal-formation, premature birth .. ..    | 9                    | 1   | 3                        | 4  | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 29 Suicide .. ..                                                   | 3                    | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 30 Other deaths from violence .. ..                                | 9                    | ..  | 5                        | 1  | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 31 Other defined diseases .. ..                                    | 32                   | 27  | 15                       | 7  | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| 32 Causes ill-defined or unknown .. ..                             | 1                    | 2   | 1                        | 1  | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| Special Causes (included above) :                                  | ..                   | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| Polio-myelitis .. ..                                               | ..                   | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| Polio-encephalitis .. ..                                           | ..                   | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| Deaths of infants under 1 year :                                   | 14                   | 4   | 8                        | 3  | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| Total .. ..                                                        | 1                    | 1   | 2                        | 1  | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| Legitimate .. ..                                                   | ..                   | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| Illegitimate .. ..                                                 | ..                   | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| Sex BIRTHS :                                                       | 186                  | 181 | 71                       | 61 | 7                     | 9  | 29                     | 28 | 45                               | 27 | 62                               | 65 | 48                 | 57 | 78                    | 52 | 71                      | 69 | 82                   | 65 | 52                    | 50 | 148                    | 123 | 77                    | 64 | 16                 | 18 | 102                      | 102 | 67                | 71 | 21                       | 17 | 1162   | 1050 |
| Total .. ..                                                        | 177                  | 168 | 64                       | 52 | 7                     | 9  | 26                     | 24 | 41                               | 26 | 56                               | 61 | 43                 | 49 | 73                    | 50 | 65                      | 56 | 80                   | 65 | 47                    | 48 | 139                    | 116 | 73                    | 57 | 15                 | 17 | 98                       | 97  | 65                | 70 | 21                       | 14 | 1090   | 979  |
| Legitimate .. ..                                                   | ..                   | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| Illegitimate .. ..                                                 | 9                    | 13  | 7                        | 9  | ..                    | .. | 3                      | 4  | 4                                | 1  | 6                                | 4  | 5                  | 8  | 5                     | 2  | 6                       | 4  | 2                    | .. | 5                     | 2  | 9                      | 7   | 4                     | 7  | 1                  | 1  | 4                        | 5   | 2                 | 1  | ..                       | 3  | 72     | 71   |
| SEX-BIRTHS :                                                       | 8                    | 5   | 2                        | 2  | ..                    | .. | 1                      | 4  | 1                                | 3  | 1                                | 2  | ..                 | 5  | 4                     | 2  | 3                       | 3  | 5                    | .. | 3                     | 5  | 4                      | 5   | 5                     | 4  | 4                  | .. | 1                        | 4   | 3                 | 3  | 6                        | 1  | ..     |      |
| Total .. ..                                                        | ..                   | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..                     | ..  | ..                    | .. | ..                 | .. | ..                       | ..  | ..                | .. | ..                       | .. | ..     |      |
| Legitimate .. ..                                                   | ..                   | ..  | ..                       | .. | ..                    | .. | ..                     | .. | ..                               | .. | ..                               | .. | ..                 | .. | ..                    | .. | ..                      | .. | ..                   | .. | ..                    | .. | ..</                   |     |                       |    |                    |    |                          |     |                   |    |                          |    |        |      |



TABLE II.  
CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF SALOP, 1930.

| CAUSES OF DEATH.                                                     | Sex.     | AGGREGATE OF URBAN DISTRICTS. |          |          |          |          |          |          |            |            |            | AGGREGATE OF RURAL DISTRICTS. |          |          |          |          |          |          |            |            |            |
|----------------------------------------------------------------------|----------|-------------------------------|----------|----------|----------|----------|----------|----------|------------|------------|------------|-------------------------------|----------|----------|----------|----------|----------|----------|------------|------------|------------|
|                                                                      |          | All Ages.                     | 0—       | 1—       | 2—       | 5—       | 15—      | 25—      | 45—        | 65—        | 75—        | All Ages.                     | 0—       | 1—       | 2—       | 5—       | 15—      | 25—      | 45—        | 65—        | 75—        |
| ALL CAUSES .. .. .                                                   | M.<br>F. | 738<br>716                    | 81<br>36 | 7<br>5   | 12<br>11 | 17<br>14 | 27<br>18 | 57<br>69 | 190<br>153 | 187<br>179 | 160<br>231 | 798<br>697                    | 87<br>31 | 10<br>8  | 15<br>9  | 8<br>15  | 28<br>25 | 40<br>55 | 178<br>147 | 182<br>147 | 250<br>260 |
| 1 Enteric Fever .. .. .                                              | M.<br>F. | ..<br>..                      | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   | 1<br>3                        | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>1   | ..<br>.. | ..<br>.. | 1<br>1     | 1<br>1     | ..<br>..   |
| 2 Small-pox .. .. .                                                  | M.<br>F. | ..<br>..                      | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   | ..<br>..                      | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   |
| 3 Measles .. .. .                                                    | M.<br>F. | 3<br>4                        | ..<br>2  | 2<br>1   | ..<br>.. | 1<br>1   | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   | 2<br>3                        | 1<br>1   | ..<br>1  | ..<br>1  | ..<br>.. | 1<br>..  | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   |
| 4 Scarlet Fever .. .. .                                              | M.<br>F. | ..<br>..                      | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   | 1<br>..                       | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>..  | ..<br>..   | ..<br>..   | ..<br>..   |
| 5 Whooping Cough .. .. .                                             | M.<br>F. | 1<br>3                        | 1<br>2   | ..<br>.. | ..<br>1  | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   | 1<br>1                        | ..<br>.. | 1<br>1   | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   |
| 6 Diphtheria .. .. .                                                 | M.<br>F. | 3<br>4                        | ..<br>.. | ..<br>.. | ..<br>1  | 3<br>2   | ..<br>1  | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   | 5<br>4                        | ..<br>.. | ..<br>1  | 3<br>2   | 2<br>3   | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   |
| 7 Influenza .. .. .                                                  | M.<br>F. | 17<br>12                      | 1<br>..  | ..<br>.. | ..<br>.. | 1<br>1   | ..<br>.. | 2<br>1   | 4<br>4     | 4<br>3     | 5<br>3     | 13<br>8                       | ..<br>.. | ..<br>.. | 1<br>..  | ..<br>.. | 1<br>..  | 2<br>..  | 5<br>3     | 2<br>2     | 2<br>3     |
| 8 Encephalitis lethargica .. .. .                                    | M.<br>F. | 2<br>..                       | ..<br>.. | 1<br>..  | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>..    | ..<br>..   | ..<br>..   | ..<br>2                       | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>1  | ..<br>1  | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   |
| 9 Meningococcal meningitis .. .. .                                   | M.<br>F. | ..<br>1                       | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>1  | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   | 1<br>1                        | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>..  | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   |
| 10 Tuberculosis of respiratory system .. .. .                        | M.<br>F. | 36<br>20                      | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>..  | 10<br>6  | 12<br>10 | 12<br>3    | 1<br>1     | ..<br>..   | 21<br>29                      | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>1  | 5<br>9   | 9<br>10  | 7<br>9     | ..<br>..   | ..<br>..   |
| 11 Other tuberculous diseases .. .. .                                | M.<br>F. | 7<br>8                        | 1<br>1   | ..<br>.. | 2<br>1   | 1<br>1   | 1<br>2   | 1<br>1   | 1<br>1     | ..<br>..   | ..<br>1    | 8<br>11                       | ..<br>1  | ..<br>1  | 3<br>2   | ..<br>4  | 2<br>1   | 3<br>2   | ..<br>..   | ..<br>..   | ..<br>..   |
| 12 Cancer, malignant disease .. .. .                                 | M.<br>F. | 81<br>98                      | ..<br>.. | ..<br>.. | 1<br>..  | ..<br>.. | ..<br>.. | 5<br>4   | 40<br>34   | 20<br>36   | 15<br>24   | 85<br>91                      | ..<br>.. | 1<br>..  | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>7  | 29<br>37   | 31<br>24   | 24<br>23   |
| 13 Rheumatic Fever .. .. .                                           | M.<br>F. | 1<br>2                        | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>1   | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   | 2<br>2                        | ..<br>.. | ..<br>.. | 1<br>..  | ..<br>2  | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | 1<br>..    |
| 14 Diabetes .. .. .                                                  | M.<br>F. | 10<br>7                       | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>..  | 2<br>1   | 1<br>1   | 2<br>1     | 2<br>2     | 2<br>2     | 13<br>16                      | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>1   | ..<br>.. | 1<br>2   | 5<br>4     | 4<br>5     | 2<br>4     |
| 15 Cerebral hæmorrhage, etc. .. .. .                                 | M.<br>F. | 44<br>59                      | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>4  | 9<br>18    | 22<br>14   | 13<br>23   | 47<br>54                      | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>14  | 8<br>14    | 10<br>10   | 25<br>29   |
| 16 Heart Disease .. .. .                                             | M.<br>F. | 144<br>156                    | ..<br>.. | ..<br>.. | ..<br>.. | 5<br>1   | 4<br>1   | 4<br>9   | 43<br>32   | 55<br>49   | 33<br>64   | 162<br>166                    | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>2   | 1<br>5   | 36<br>31   | 55<br>48   | 69<br>80   |
| 17 Arterio-sclerosis .. .. .                                         | M.<br>F. | 36<br>17                      | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>1  | 1<br>1     | 14<br>7    | 21<br>8    | 42<br>19                      | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 6<br>1     | 12<br>8    | 24<br>10   |
| 18 Bronchitis .. .. .                                                | M.<br>F. | 37<br>30                      | 4<br>..  | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 3<br>..  | 3<br>4     | 13<br>10   | 14<br>16   | 36<br>32                      | 3<br>1   | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 2<br>6     | 9<br>6     | 22<br>25   |
| 19 Pneumonia (all forms) .. .. .                                     | M.<br>F. | 45<br>26                      | 10<br>5  | 1<br>1   | 3<br>3   | 1<br>1   | 1<br>..  | 4<br>2   | 15<br>7    | 7<br>5     | 3<br>2     | 28<br>34                      | 6<br>3   | 2<br>3   | 1<br>2   | ..<br>1  | 2<br>..  | 1<br>6   | 7<br>6     | 3<br>5     | 6<br>8     |
| 20 Other respiratory diseases .. .. .                                | M.<br>F. | 7<br>6                        | ..<br>1  | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>1  | ..<br>1  | 2<br>1     | 2<br>..    | 3<br>2     | 9<br>3                        | ..<br>.. | ..<br>.. | 1<br>..  | 1<br>..  | ..<br>.. | 3<br>..  | 1<br>..    | ..<br>2    | 3<br>1     |
| 21 Ulcer of stomach or duodenum .. .. .                              | M.<br>F. | 8<br>3                        | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 4<br>..  | 3<br>2     | ..<br>1    | 1<br>..    | 8<br>2                        | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 3<br>2   | 4<br>..    | 1<br>..    | ..<br>..   |
| 22 Diarrhoea, etc... .. .                                            | M.<br>F. | 9<br>14                       | 6<br>6   | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>3  | ..<br>1    | 3<br>2     | ..<br>2    | 8<br>3                        | 3<br>..  | 1<br>1   | ..<br>1  | ..<br>.. | ..<br>.. | 1<br>1   | 1<br>1     | 1<br>..    | 1<br>..    |
| 23 Appendicitis and typhlitis .. .. .                                | M.<br>F. | 4<br>9                        | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>2   | ..<br>1  | ..<br>2  | 2<br>2     | ..<br>2    | 1<br>..    | 4<br>2                        | ..<br>.. | ..<br>.. | ..<br>1  | 1<br>..  | ..<br>.. | 1<br>..  | 2<br>..    | ..<br>1    | ..<br>..   |
| 24 Cirrhosis of liver .. .. .                                        | M.<br>F. | 5<br>6                        | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>1  | 2<br>..    | 3<br>3     | ..<br>2    | 3<br>4                        | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 3<br>1     | ..<br>2    | ..<br>1    |
| 25 Acute and chronic nephritis .. .. .                               | M.<br>F. | 26<br>26                      | 1<br>..  | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>1  | 1<br>3   | 13<br>8    | 10<br>7    | 1<br>7     | 33<br>23                      | 1<br>..  | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>2   | 13<br>7    | 11<br>8    | 7<br>6     |
| 26 Puerperal sepsis .. .. .                                          | M.<br>F. | ..<br>2                       | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>2  | ..<br>..   | ..<br>..   | ..<br>..   | ..<br>5                       | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 2<br>..  | 3<br>..  | ..<br>..   | ..<br>..   | ..<br>..   |
| 27 Other accidents and diseases of pregnancy and parturition .. .. . | M.<br>F. | ..<br>9                       | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>1  | ..<br>7  | ..<br>1    | ..<br>..   | ..<br>..   | ..<br>6                       | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>2  | ..<br>4  | ..<br>..   | ..<br>..   | ..<br>..   |
| 28 Congenital debility and malformation, premature birth .. .. .     | M.<br>F. | 42<br>14                      | 40<br>14 | 1<br>..  | 1<br>..  | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   | 55<br>20                      | 54<br>17 | 1<br>..  | ..<br>1  | ..<br>1  | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   |
| 29 Suicide .. .. .                                                   | M.<br>F. | 15<br>6                       | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>..  | ..<br>2  | 11<br>4    | 2<br>..    | 1<br>..    | 8<br>1                        | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>..  | 3<br>1   | 3<br>..    | 1<br>..    | ..<br>..   |
| 30 Other deaths from violence .. .. .                                | M.<br>F. | 32<br>17                      | 1<br>1   | ..<br>.. | 2<br>2   | 2<br>1   | 3<br>..  | 8<br>1   | 9<br>2     | 3<br>5     | 4<br>5     | 39<br>14                      | 4<br>..  | ..<br>.. | 1<br>1   | ..<br>.. | 12<br>2  | 4<br>1   | 12<br>2    | 1<br>2     | 5<br>6     |
| 31 Other defined diseases .. .. .                                    | M.<br>F. | 120<br>153                    | 16<br>4  | 1<br>3   | 3<br>3   | ..<br>3  | 4<br>1   | 12<br>13 | 16<br>26   | 25<br>30   | 43<br>70   | 159<br>133                    | 15<br>8  | 5<br>..  | 3<br>..  | 2<br>1   | 2<br>4   | 6<br>9   | 31<br>25   | 36<br>22   | 59<br>64   |
| 32 Causes ill-defined or unknown .. .. .                             | M.<br>F. | 3<br>4                        | ..<br>.. | 1<br>..  | ..<br>.. | ..<br>.. | ..<br>1  | ..<br>.. | 1<br>1     | 1<br>2     | ..<br>..   | 5<br>4                        | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>..  | 3<br>3     | 1<br>1     | ..<br>..   |

| CAUSES OF DEATH.                                                     | Sex.     | AGGREGATE OF URBAN DISTRICTS. |          |          |          |          |          |          |            |            |            | AGGREGATE OF RURAL DISTRICTS. |          |          |          |          |          |          |            |            |            |
|----------------------------------------------------------------------|----------|-------------------------------|----------|----------|----------|----------|----------|----------|------------|------------|------------|-------------------------------|----------|----------|----------|----------|----------|----------|------------|------------|------------|
|                                                                      |          | All Ages.                     | 0—       | 1—       | 2—       | 5—       | 15—      | 25—      | 45—        | 65—        | 75—        | All Ages.                     | 0—       | 1—       | 2—       | 5—       | 15—      | 25—      | 45—        | 65—        | 75—        |
| ALL CAUSES .. .. .                                                   | M.<br>F. | 738<br>716                    | 81<br>36 | 7<br>5   | 12<br>11 | 17<br>14 | 27<br>18 | 57<br>69 | 190<br>153 | 187<br>179 | 160<br>231 | 798<br>697                    | 87<br>31 | 10<br>8  | 15<br>9  | 8<br>15  | 28<br>25 | 40<br>55 | 178<br>147 | 182<br>147 | 250<br>260 |
| 1 Enteric Fever .. .. .                                              | M.<br>F. | ..<br>..                      | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   | 1<br>3                        | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>1   | ..<br>.. | ..<br>.. | 1<br>1     | 1<br>1     | ..<br>..   |
| 2 Small-pox .. .. .                                                  | M.<br>F. | ..<br>..                      | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   | ..<br>..                      | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   |
| 3 Measles .. .. .                                                    | M.<br>F. | 3<br>4                        | ..<br>2  | 2<br>1   | ..<br>.. | 1<br>1   | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   | 2<br>3                        | 1<br>1   | ..<br>1  | ..<br>1  | ..<br>.. | 1<br>..  | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   |
| 4 Scarlet Fever .. .. .                                              | M.<br>F. | ..<br>..                      | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   | 1<br>..                       | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>..  | ..<br>..   | ..<br>..   | ..<br>..   |
| 5 Whooping Cough .. .. .                                             | M.<br>F. | 1<br>3                        | 1<br>2   | ..<br>.. | ..<br>1  | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   | 1<br>1                        | ..<br>.. | 1<br>1   | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   |
| 6 Diphtheria .. .. .                                                 | M.<br>F. | 3<br>4                        | ..<br>.. | ..<br>.. | ..<br>1  | 3<br>2   | ..<br>1  | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   | 5<br>4                        | ..<br>.. | ..<br>1  | 3<br>2   | 2<br>3   | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   |
| 7 Influenza .. .. .                                                  | M.<br>F. | 17<br>12                      | 1<br>..  | ..<br>.. | ..<br>.. | 1<br>1   | ..<br>.. | 2<br>1   | 4<br>4     | 4<br>3     | 5<br>3     | 13<br>8                       | ..<br>.. | ..<br>.. | 1<br>..  | ..<br>.. | 1<br>..  | 2<br>..  | 5<br>3     | 2<br>2     | 2<br>3     |
| 8 Encephalitis lethargica .. .. .                                    | M.<br>F. | 2<br>..                       | ..<br>.. | 1<br>..  | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>..    | ..<br>..   | ..<br>..   | ..<br>2                       | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>1  | ..<br>1  | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   |
| 9 Meningococcal meningitis .. .. .                                   | M.<br>F. | ..<br>1                       | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>1  | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   | 1<br>1                        | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>..  | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   |
| 10 Tuberculosis of respiratory system .. .. .                        | M.<br>F. | 36<br>20                      | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>..  | 10<br>6  | 12<br>10 | 12<br>3    | 1<br>1     | ..<br>..   | 21<br>29                      | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>1  | 5<br>9   | 9<br>10  | 7<br>9     | ..<br>..   | ..<br>..   |
| 11 Other tuberculous diseases .. .. .                                | M.<br>F. | 7<br>8                        | 1<br>1   | ..<br>.. | 2<br>1   | 1<br>1   | 1<br>2   | 1<br>1   | 1<br>1     | ..<br>..   | ..<br>1    | 8<br>11                       | ..<br>1  | ..<br>1  | 3<br>2   | ..<br>4  | 2<br>1   | 3<br>2   | ..<br>..   | ..<br>..   | ..<br>..   |
| 12 Cancer, malignant disease .. .. .                                 | M.<br>F. | 81<br>98                      | ..<br>.. | ..<br>.. | 1<br>..  | ..<br>.. | ..<br>.. | 5<br>4   | 40<br>34   | 20<br>36   | 15<br>24   | 85<br>91                      | ..<br>.. | 1<br>..  | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>7  | 29<br>37   | 31<br>24   | 24<br>23   |
| 13 Rheumatic Fever .. .. .                                           | M.<br>F. | 1<br>2                        | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>1   | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   | 2<br>2                        | ..<br>.. | ..<br>.. | 1<br>..  | ..<br>2  | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | 1<br>..    |
| 14 Diabetes .. .. .                                                  | M.<br>F. | 10<br>7                       | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>..  | 2<br>1   | 1<br>1   | 2<br>1     | 2<br>2     | 2<br>2     | 13<br>16                      | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>1   | ..<br>.. | 1<br>2   | 5<br>4     | 4<br>5     | 2<br>4     |
| 15 Cerebral hæmorrhage, etc. .. .. .                                 | M.<br>F. | 44<br>59                      | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>4  | 9<br>18    | 22<br>14   | 13<br>23   | 47<br>54                      | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>14  | 8<br>14    | 10<br>10   | 25<br>29   |
| 16 Heart Disease .. .. .                                             | M.<br>F. | 144<br>156                    | ..<br>.. | ..<br>.. | ..<br>.. | 5<br>1   | 4<br>1   | 4<br>9   | 43<br>32   | 55<br>49   | 33<br>64   | 162<br>166                    | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>2   | 1<br>5   | 36<br>31   | 55<br>48   | 69<br>80   |
| 17 Arterio-sclerosis .. .. .                                         | M.<br>F. | 36<br>17                      | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>1  | 1<br>1     | 14<br>7    | 21<br>8    | 42<br>19                      | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 6<br>1     | 12<br>8    | 24<br>10   |
| 18 Bronchitis .. .. .                                                | M.<br>F. | 37<br>30                      | 4<br>..  | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 3<br>..  | 3<br>4     | 13<br>10   | 14<br>16   | 36<br>32                      | 3<br>1   | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 2<br>6     | 9<br>6     | 22<br>25   |
| 19 Pneumonia (all forms) .. .. .                                     | M.<br>F. | 45<br>26                      | 10<br>5  | 1<br>1   | 3<br>3   | 1<br>1   | 1<br>..  | 4<br>2   | 15<br>7    | 7<br>5     | 3<br>2     | 28<br>34                      | 6<br>3   | 2<br>3   | 1<br>2   | ..<br>1  | 2<br>..  | 1<br>6   | 7<br>6     | 3<br>5     | 6<br>8     |
| 20 Other respiratory diseases .. .. .                                | M.<br>F. | 7<br>6                        | ..<br>1  | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>1  | ..<br>1  | 2<br>1     | 2<br>..    | 3<br>2     | 9<br>3                        | ..<br>.. | ..<br>.. | 1<br>..  | 1<br>..  | ..<br>.. | 3<br>..  | 1<br>..    | ..<br>2    | 3<br>1     |
| 21 Ulcer of stomach or duodenum .. .. .                              | M.<br>F. | 8<br>3                        | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 4<br>..  | 3<br>2     | ..<br>1    | 1<br>..    | 8<br>2                        | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 3<br>2   | 4<br>..    | 1<br>..    | ..<br>..   |
| 22 Diarrhoea, etc... .. .                                            | M.<br>F. | 9<br>14                       | 6<br>6   | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>3  | ..<br>1    | 3<br>2     | ..<br>2    | 8<br>3                        | 3<br>..  | 1<br>1   | ..<br>1  | ..<br>.. | ..<br>.. | 1<br>1   | 1<br>1     | 1<br>..    | 1<br>..    |
| 23 Appendicitis and typhlitis .. .. .                                | M.<br>F. | 4<br>9                        | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>2   | ..<br>1  | ..<br>2  | 2<br>2     | ..<br>2    | 1<br>..    | 4<br>2                        | ..<br>.. | ..<br>.. | ..<br>1  | 1<br>..  | ..<br>.. | 1<br>..  | 2<br>..    | ..<br>1    | ..<br>..   |
| 24 Cirrhosis of liver .. .. .                                        | M.<br>F. | 5<br>6                        | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>1  | 2<br>..    | 3<br>3     | ..<br>2    | 3<br>4                        | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 3<br>1     | ..<br>2    | ..<br>1    |
| 25 Acute and chronic nephritis .. .. .                               | M.<br>F. | 26<br>26                      | 1<br>..  | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>1  | 1<br>3   | 13<br>8    | 10<br>7    | 1<br>7     | 33<br>23                      | 1<br>..  | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>2   | 13<br>7    | 11<br>8    | 7<br>6     |
| 26 Puerperal sepsis .. .. .                                          | M.<br>F. | ..<br>2                       | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>2  | ..<br>..   | ..<br>..   | ..<br>..   | ..<br>5                       | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>2  | ..<br>3  | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   |
| 27 Other accidents and diseases of pregnancy and parturition .. .. . | M.<br>F. | ..<br>9                       | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>1  | ..<br>7  | ..<br>1    | ..<br>..   | ..<br>..   | ..<br>6                       | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>2  | ..<br>4  | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   |
| 28 Congenital debility and malformation, premature birth .. .. .     | M.<br>F. | 42<br>14                      | 40<br>14 | 1<br>..  | 1<br>..  | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   | 55<br>20                      | 54<br>17 | 1<br>..  | ..<br>1  | ..<br>1  | ..<br>.. | ..<br>.. | ..<br>..   | ..<br>..   | ..<br>..   |
| 29 Suicide .. .. .                                                   | M.<br>F. | 15<br>6                       | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>..  | ..<br>2  | 11<br>4    | 2<br>..    | 1<br>..    | 8<br>1                        | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>..  | 3<br>1   | 3<br>..    | 1<br>..    | ..<br>..   |
| 30 Other deaths from violence .. .. .                                | M.<br>F. | 32<br>17                      | 1<br>1   | ..<br>.. | 2<br>2   | 2<br>1   | 3<br>..  | 8<br>1   | 9<br>2     | 3<br>5     | 4<br>5     | 39<br>14                      | 4<br>..  | ..<br>.. | 1<br>1   | ..<br>.. | 12<br>2  | 4<br>1   | 12<br>2    | 1<br>2     | 5<br>6     |
| 31 Other defined diseases .. .. .                                    | M.<br>F. | 120<br>153                    | 16<br>4  | 1<br>3   | 3<br>3   | ..<br>3  | 4<br>1   | 12<br>13 | 16<br>26   | 25<br>30   | 43<br>70   | 159<br>133                    | 15<br>8  | 5<br>..  | 3<br>..  | 2<br>1   | 2<br>4   | 6<br>9   | 31<br>25   | 36<br>22   | 59<br>64   |
| 32 Causes ill-defined or unknown .. .. .                             | M.<br>F. | 3<br>4                        | ..<br>.. | 1<br>..  | ..<br>.. | ..<br>.. | ..<br>1  | ..<br>.. | 1<br>1     | 1<br>2     | ..<br>..   | 5<br>4                        | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | ..<br>.. | 1<br>3   | 3<br>3     | 1<br>1     | ..<br>..   |



# STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

|                                          |    |                                       |    |    |    |    |            |
|------------------------------------------|----|---------------------------------------|----|----|----|----|------------|
| Area (in acres) of Administrative County | .. | ..                                    | .. | .. | .. | .. | 861,800    |
| Population (Census 1921)                 | .. | ..                                    | .. | .. | .. | .. | 243,062    |
| *Estimated population<br>in 1929         | {  | for Birth-rates                       | .. | .. | .. | .. | 243,840    |
|                                          |    | for Death-rates                       | .. | .. | .. | .. | 243,200    |
|                                          |    | Urban { for Birth-rates               | .. | .. | .. | .. | 114,240    |
|                                          |    | for Death-rates                       | .. | .. | .. | .. | 113,600    |
|                                          |    | Rural for Birth-rates and Death-rates | .. | .. | .. | .. | 129,600    |
| Number of Inhabited Houses (1921)        | .. | ..                                    | .. | .. | .. | .. | 54,873     |
| Number of Families or separate Occupiers | .. | ..                                    | .. | .. | .. | .. | 55,878     |
| Rateable Value                           | .. | ..                                    | .. | .. | .. | .. | £1,067,684 |
| Sum represented by a penny rate          | .. | ..                                    | .. | .. | .. | .. | £4,088     |

In a rural County such as Shropshire, the occupations chiefly followed are naturally agricultural. There are, however, areas in the County where the chief industry is coal mining, and in certain of these a considerable amount of work in iron produce is carried on. It is these areas of the county which are chiefly affected by the present industrial depression, and it is probable that in them there is a lowering of the general health of the population, although it cannot be said that the vital statistics for the year lend conclusive support to this opinion. It is the part of the population which is of school age which is likely to be most adversely affected, and the work at the school clinics in those areas seems to indicate that this opinion is justified.

## EXTRACTS FROM VITAL STATISTICS OF REGISTRAR-GENERAL.

|                                                               |              | Male. |       | Female. |       | Male & Female. |       | Rates. |       |
|---------------------------------------------------------------|--------------|-------|-------|---------|-------|----------------|-------|--------|-------|
|                                                               |              | 1929  | 1930  | 1929    | 1930  | 1929           | 1930  | 1929   | 1930  |
| Births                                                        | Total        | 2,091 | 2,181 | 2,027   | 1,914 | 4,118          | 4,095 | 16.89  | 16.79 |
|                                                               | Legitimate   | 1,960 | 2,041 | 1,876   | 1,792 | 3,836          | 3,833 | 15.73  | 15.72 |
|                                                               | Illegitimate | 131   | 140   | 151     | 122   | 282            | 262   | 1.16   | 1.07  |
| Still-births .. ..                                            |              | ..    | ..    | ..      | ..    | 169            | 169   | 0.69   | 0.69  |
| Deaths: Total ..                                              |              | 1,705 | 1,454 | 1,649   | 1,495 | 3,354          | 2,949 | 13.79  | 12.12 |
| Infant mortality ..                                           |              | 171   | 168   | 99      | 67    | 270            | 235   | 65     | 57    |
| Legitimate Births                                             |              | 156   | 151   | 86      | 57    | 242            | 208   | 63     | 54    |
| Illegitimate do.                                              |              | 15    | 17    | 13      | 10    | 28             | 27    | 96     | 103   |
| Deaths of women dying in, or in consequence of, child-birth:— |              |       |       |         | 1926  | 1927           | 1928  | 1929   | 1930  |
| Total .. ..                                                   |              | ..    | ..    | ..      | 22    | 17             | 16    | 14     | 22    |
| From Sepsis .. ..                                             |              | ..    | ..    | ..      | 8     | 3              | 5     | 2      | 7     |
| From other causes .. ..                                       |              | ..    | ..    | ..      | 14    | 14             | 11    | 12     | 15    |
| Deaths from Measles (all ages) .. ..                          |              | ..    | ..    | ..      | 4     | 13             | 13    | 7      | 12    |
| ,, Whooping Cough (all ages) .. ..                            |              | ..    | ..    | ..      | 22    | 9              | 14    | 20     | 6     |
| ,, Diarrhoea (under 2 years of age) .. ..                     |              | ..    | ..    | ..      | 13    | 8              | 14    | 27     | 17    |

\* The Registrar-General's estimate of population in the middle of 1929 has been used throughout this report.

## POPULATION.

Below are given particulars of the population of the County at the time of the last three census returns, and the Registrar-General's estimate of the population at the middle of 1929 and the two preceding years :—

|               |    |    |         |                             |               |
|---------------|----|----|---------|-----------------------------|---------------|
| 1901 (Census) | .. | .. | 239,783 | 1927 (estimated population) | 244,300       |
| 1911          | .. | .. | 246,307 | 1928                        | .. .. 244,440 |
| 1921          | .. | .. | 243,062 | 1929                        | .. .. 243,840 |

The following are the particulars of the populations of the Urban and Rural Districts as estimated at the middle of 1929 by the Registrar-General. The census population for 1921 is given alongside for purposes of comparison :—

| URBAN DISTRICTS.        |                        |                    | RURAL DISTRICTS.     |                       |                    |
|-------------------------|------------------------|--------------------|----------------------|-----------------------|--------------------|
|                         | Estimated* Population. | Census Population. |                      | Estimated Population. | Census Population. |
|                         | 1929.                  | 1921.              |                      | 1929.                 | 1921.              |
| Bishop's Castle M.B. .. | 1301                   | 1267               | Atcham .. ..         | 22500                 | 21981              |
| Bridgnorth M.B. ..      | 4885                   | 5141               | Bridgnorth .. ..     | 8412                  | 8570               |
| Church Stretton ..      | 1778                   | 1669               | Burford .. ..        | 1285                  | 1268               |
| Dawley .. ..            | 7405                   | 7388               | Chirbury .. ..       | 3018                  | 3214               |
| Ellesmere .. ..         | 1856                   | 1832               | Church Stretton ..   | 4384                  | 4517               |
| Ludlow M.B. ..          | 5306                   | 5674               | Cleobury Mortimer .. | 7263                  | 7299               |
| Market Drayton ..       | 4647                   | 4714               | Clun .. ..           | 6236                  | 6244               |
| Newport .. ..           | 3081                   | 3054               | Drayton .. ..        | 7338                  | 7155               |
| Oakengates .. ..        | 11330                  | 11345              | Ellesmere .. ..      | 7742                  | 8009               |
| Oswestry M.B. ..        | 9751                   | 9785               | Ludlow .. ..         | 8516                  | 8980               |
| Shrewsbury M.B. ..      | 31990†                 | 31006              | Newport .. ..        | 5525                  | 5745               |
| Wellington .. ..        | 8596                   | 8146               | Oswestry .. ..       | 16350                 | 16399              |
| Wem .. ..               | 2161                   | 2172               | Shifnal .. ..        | 7626                  | 7670*              |
| Wenlock M.B. ..         | 13900                  | 13714              | Teme .. ..           | 1645                  | 1649               |
| Whitchurch .. ..        | 5613                   | 5653               | Wellington .. ..     | 11140                 | 11207              |
|                         |                        |                    | Wem .. ..            | 8583                  | 8583               |
|                         |                        |                    | Whitchurch .. ..     | 2037                  | 2012               |

† For birth-rate 32,630.

\* To this number must be added the population of the Staffordshire parishes of Blymhill and Weston administered by the Shifnal Rural District Council. The population of these parishes at the 1921 Census was 689, making a total of 8,355 for the Rural District.

## MARRIAGES.

The number of marriages in the Registration County during the year was 1,938, a fall of 27 as compared with 1929. The figures are as follows :—

| Year    | Marriages. | Year    | Marriages. |
|---------|------------|---------|------------|
| 1917 .. | 1496       | 1924 .. | 1930       |
| 1918 .. | 1718       | 1925 .. | 1895       |
| 1919 .. | 2387       | 1926 .. | 1814       |
| 1920 .. | 2440       | 1927 .. | 1994       |
| 1921 .. | 2050       | 1928 .. | 1803       |
| 1922 .. | 1879       | 1929 .. | 1965       |
| 1923 .. | 1883       | 1930 .. | 1938       |

### BIRTHS AND DEATHS.

The number of births and deaths, with birth-rates and death-rates, for each year since 1917 is as follows:—

| Year | Births. | Deaths. | Natural<br>increase of<br>population. | Birth-rates. | Death-rates. |
|------|---------|---------|---------------------------------------|--------------|--------------|
| 1917 | 4059    | 3232    | 827                                   | 16.63        | 14.12        |
| 1918 | 4283    | 3702    | 581                                   | 17.73        | 17.18        |
| 1919 | 4264    | 3441    | 823                                   | 17.73        | 14.91        |
| 1920 | 5943    | 2952    | 2991                                  | 24.73        | 12.3         |
| 1921 | 5318    | 3000    | 2318                                  | 21.88        | 12.34        |
| 1922 | 4904    | 3295    | 1609                                  | 20.1         | 13.5         |
| 1923 | 4900    | 3046    | 1854                                  | 19.95        | 12.4         |
| 1924 | 4622    | 3102    | 1520                                  | 18.7         | 12.5         |
| 1925 | 4469    | 2924    | 1545                                  | 18.1         | 11.8         |
| 1926 | 4479    | 2927    | 1552                                  | 18.27        | 11.98        |
| 1927 | 4179    | 3120    | 1059                                  | 17.06        | 12.77        |
| 1928 | 4121    | 2924    | 1197                                  | 16.8         | 12.0         |
| 1929 | 4118    | 3354    | 764                                   | 16.89        | 13.79        |
| 1930 | 4095    | 2949    | 1146                                  | 16.79        | 12.12        |

Details of the birth-rates and death-rates of each of the sanitary districts for the year 1930 are shown in the following table:—

| Urban Districts. |    |    | Birth-rates. | Death-rates. | Rural Districts.  |    |    | Birth-rates. | Death-rates. |
|------------------|----|----|--------------|--------------|-------------------|----|----|--------------|--------------|
| Bishop's Castle  | .. | .. | 13.0         | 5.3          | Atcham            | .. | .. | 16.3         | 10.8         |
| Bridgnorth       | .. | .. | 14.3         | 15.1         | Bridgnorth        | .. | .. | 15.6         | 12.4         |
| Church Stretton  | .. | .. | 12.3         | 13.4         | Burford           | .. | .. | 12.4         | 10.1         |
| Dawley           | .. | .. | 17.4         | 9.5          | Chirbury          | .. | .. | 18.8         | 14.2         |
| Ellesmere        | .. | .. | 13.4         | 15.0         | Church Stretton   | .. | .. | 16.4         | 11.6         |
| Ludlow           | .. | .. | 18.4         | 15.4         | Cleobury Mortimer | .. | .. | 17.4         | 13.0         |
| Market Drayton   | .. | .. | 19.1         | 14.6         | Clun..            | .. | .. | 16.8         | 12.0         |
| Newport          | .. | .. | 19.1         | 11.6         | Drayton           | .. | .. | 17.7         | 11.7         |
| Oakengates       | .. | .. | 16.8         | 12.7         | Ellesmere         | .. | .. | 16.9         | 10.2         |
| Oswestry         | .. | .. | 15.3         | 15.6         | Ludlow            | .. | .. | 17.2         | 10.8         |
| Shrewsbury       | .. | .. | 16.4         | 11.5         | Newport           | .. | .. | 18.4         | 11.2         |
| Wellington       | .. | .. | 15.3         | 10.5         | Oswestry          | .. | .. | 16.5         | 13.0         |
| Wem              | .. | .. | 12.9         | 11.1         | Shifnal           | .. | .. | 18.4         | 11.2         |
| Wenlock          | .. | .. | 17.2         | 14.6         | Teme              | .. | .. | 20.6         | 11.5         |
| Whitchurch       | .. | .. | 16.9         | 14.0         | Wellington        | .. | .. | 18.3         | 11.1         |
|                  |    |    |              |              | Wem               | .. | .. | 16.0         | 10.3         |
|                  |    |    |              |              | Whitchurch        | .. | .. | 18.6         | 9.3          |
| TOTAL .. ..      |    |    | 16.4         | 12.7         | TOTAL .. ..       |    |    | 17.0         | 11.5         |

The comparison with England and Wales is as follows :—

|                         | Birth-rate. |       |       | Death-rate. |       |       | Infant mortality. |      |      |
|-------------------------|-------------|-------|-------|-------------|-------|-------|-------------------|------|------|
|                         | 1928        | 1929  | 1930  | 1928        | 1929  | 1930  | 1928              | 1929 | 1930 |
| England and Wales .. .. | 16.7        | 16.3  | 16.3  | 11.7        | 13.4  | 11.4  | 65                | 74   | 60   |
| Shropshire .. ..        | 16.8        | 16.89 | 16.79 | 12.0        | 13.79 | 12.12 | 58                | 65   | 57   |

It will be observed that, while the death-rate for Shropshire is usually a little higher than that for England and Wales, this can be accounted for by the higher birth-rate in this County, as the number of deaths of infants under one year of age always contributes largely to the total death-rate. Comparing Urban and Rural Districts in this County, however, it is worthy of note that, while the birth-rate is lower in the Urban Districts, the death-rate, contrary to what one might therefore expect, is also higher. This may be considered as an indication of the healthier conditions of life, on the average, in the Rural as compared with the Urban Districts.

There were 4,095 births in Shropshire during 1930, which is 23 less than in the previous year and is the smallest number which has been recorded since 1917. There is, therefore, a decline of 0.1 in the birth-rate for the County, while that for England and Wales shows no change.

During 1930, there were 2,949 deaths in this County from all causes, 405 less than in the previous year. The principal causes of death have been summarised in the table below.

|                                   | 1926 | 1927 | 1928 | 1929 | 1930 |
|-----------------------------------|------|------|------|------|------|
| Heart Disease .. ..               | 499  | 482  | 562  | 623  | 628  |
| Arterio-sclerosis .. ..           | 129  | 133  | 152  | 125  | 114  |
| Cerebral Haemorrhage .. ..        | 250  | 253  | 209  | 212  | 204  |
| Congenital Debility .. ..         | 122  | 113  | 129  | 144  | 131  |
| Influenza .. ..                   | 70   | 181  | 65   | 234  | 50   |
| Bronchitis .. ..                  | 165  | 171  | 131  | 179  | 135  |
| Pneumonia .. ..                   | 153  | 165  | 139  | 194  | 133  |
| Pulmonary Tuberculosis .. ..      | 138  | 129  | 126  | 147  | 106  |
| Other forms of Tuberculosis .. .. | 37   | 44   | 41   | 33   | 34   |
| Cancer, Malignant Disease .. ..   | 362  | 402  | 379  | 385  | 355  |

It is to be observed that the decline in the number of deaths is attributable chiefly to a fall in the number due to influenza, of which there were only 50 as opposed to 234 in the previous year. Diseases of the respiratory system, exclusive of pulmonary tuberculosis, accounted for 268 deaths—a fall of 105.

During 1929 there were 147 deaths attributable to pulmonary tuberculosis, a somewhat sudden increase on previous years; but during the year 1930 there were only 106 deaths due to this condition, the smallest which has yet been recorded. The relationship between the number of deaths due to pulmonary tuberculosis and the prevalence of influenza is discussed on another part of the report; but this is a disease which always has a very injurious effect on patients suffering from tuberculosis of the lungs.

Although there was a fall of 30 in the number of deaths due to cancer, there were 355 deaths due to this cause and, with the exception of heart disease, it contributes most largely to the total number of deaths. Deaths due to diseases of the circulatory system and deaths due to cancer have this in common, that they take place chiefly in the later years of life; and, while one would probably be justified in concluding that the former could therefore be attributed to degenerative

changes, it would at the present time be difficult to substantiate any such general conclusion with regard to the latter. While the prevalence of cancer has become a matter for the anxious consideration of Public Health Authorities, no specific treatment has yet been discovered for this disease ; and chief reliance in order to combat it has to be placed on the provision of facilities for early diagnosis that the aid of the surgeon may be called in at the earliest possible moment. There is nevertheless satisfaction to be derived from the fact that the death-rate from cancer in the County in 1930 is the lowest which has been recorded since 1925. Free transit is provided by the County Council to the Royal Salop Infirmary for those in whose case the question of cancer has been raised, and who are unable to pay, that they may have the advantage of the increased facilities for diagnosis which this Institution affords.

### Death-rates from Cancer.

| Year      | County of Salop. | England and Wales. | Year | County of Salop. | England and Wales. |
|-----------|------------------|--------------------|------|------------------|--------------------|
| 1894-1905 | .978             | .816               | 1918 | 1.55             | *1.218             |
| 1906      | 1.019            | .917               | 1919 | 1.39             | *1.145             |
| 1907      | 1.013            | .909               | 1920 | 1.27             | 1.161              |
| 1908      | 1.082            | .909               | 1921 | 1.28             | 1.215              |
| 1909      | 1.159            | .952               | 1922 | 1.42             | 1.229              |
| 1910      | 1.195            | .967               | 1923 | 1.50             | 1.267              |
| 1911      | 1.07             | .993               | 1924 | 1.24             | 1.297              |
| 1912      | 1.08             | 1.019              | 1925 | 1.44             | 1.336              |
| 1913      | 1.18             | 1.064              | 1926 | 1.476            | 1.362              |
| 1914      | 1.22             | 1.069              | 1927 | 1.645            | 1.376              |
| 1915      | 1.23             | *1.121             | 1928 | 1.554            | 1.425              |
| 1916      | 1.35             | *1.166             | 1929 | 1.583            | 1.44               |
| 1917      | 1.35             | *1.210             | 1930 | 1.459            |                    |

\* *Civilians only.*

The following table shows the position with regard to the chief matters referred to for each five-year period from 1901 to 1925, each subsequent year being given separately :—

| Periods.     | Birth-rate. | Death-rate. | Infant Mortality Rate per 1,000 Births. | Death-rates from Phthisis. | Death-rates from Cancer. |
|--------------|-------------|-------------|-----------------------------------------|----------------------------|--------------------------|
| 1901—1905 .. | 26.34       | 15.2        | 102                                     | .938                       | 1.025                    |
| 1906—1910 .. | 23.98       | 14.64       | 92                                      | .948                       | 1.093                    |
| 1911—1915 .. | 21.21       | 13.832      | 82                                      | .804                       | 1.156                    |
| 1916—1920 .. | 19.162      | 14.554      | 71                                      | .808                       | 1.382                    |
| 1921—1925 .. | 19.716      | 12.488      | 60                                      | .614                       | 1.374                    |
| 1926 .. ..   | 18.27       | 11.98       | 54                                      | .563                       | 1.476                    |
| 1927 .. ..   | 17.06       | 12.77       | 48                                      | .528                       | 1.645                    |
| 1928 .. ..   | 16.8        | 12.0        | 58                                      | .517                       | 1.554                    |
| 1929 .. ..   | 16.89       | 13.79       | 65                                      | .604                       | 1.583                    |
| 1930 .. ..   | 16.79       | 12.12       | 57                                      | .435                       | 1.459                    |

**INFANT MORTALITY.**

There were 4,095 births in 1930, and 235 children died before reaching the age of one year, giving an infant mortality rate of 57 per thousand births.

Amongst illegitimate children, the infant mortality rate was 103, being as usual much higher than that for the legitimate, as the following figures show :—

| All Infants. |     |   |                    | Total. | Male. | Female. | Infant mortality Rates. |       |
|--------------|-----|---|--------------------|--------|-------|---------|-------------------------|-------|
| (1927)       | 200 | { | Legitimate .. ..   | 175    | 104   | 71      | 44.7                    | 47.86 |
|              |     | { | Illegitimate .. .. | 25     | 16    | 9       | 94.0                    |       |
| (1928)       | 239 | { | Legitimate .. ..   | 220    | 123   | 97      | 57.1                    | 58    |
|              |     | { | Illegitimate .. .. | 19     | 10    | 9       | 70.1                    |       |
| (1929)       | 270 | { | Legitimate .. ..   | 242    | 156   | 86      | 63                      | 65    |
|              |     | { | Illegitimate .. .. | 28     | 15    | 13      | 96                      |       |
| (1930)       | 235 | { | Legitimate .. ..   | 208    | 151   | 57      | 54                      | 57    |
|              |     | { | Illegitimate .. .. | 27     | 17    | 10      | 103                     |       |

There was a decline of 8 per thousand in the infant mortality rate as compared with the previous year, when the number of births was 4,118 and the number of deaths of children under one year of age was 270. With the exception of 1926 and 1927, when the infant mortality was respectively 54 and 48 per thousand births, the rate for 1930 is the lowest which has yet been recorded, and is 3 per thousand below that for England and Wales.

The table below gives particulars of the causes of infant mortality in this County since 1905. It will be observed that, of 235 deaths of infants in the year under consideration, no fewer than 125 (or 53 per cent.) were attributable to premature birth, congenital defects or malformations.

**Table giving particulars relating to Infant Mortality since 1905.**

|                                                                  | Average for years  |                    |                    |                    | Number for years. |      |      |      |      |      |
|------------------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|-------------------|------|------|------|------|------|
|                                                                  | 1905<br>to<br>1909 | 1910<br>to<br>1914 | 1915<br>to<br>1919 | 1920<br>to<br>1924 | 1925              | 1926 | 1927 | 1928 | 1929 | 1930 |
| Births .. .. .                                                   | 5955               | 5427               | 4441               | 5137               | 4469              | 4479 | 4197 | 4121 | 4118 | 4095 |
| Deaths from all causes<br>under one year ..                      | 561                | 444                | 335                | 319                | 271               | 242  | 200  | 239  | 270  | 235  |
| Deaths from—                                                     |                    |                    |                    |                    |                   |      |      |      |      |      |
| Measles and                                                      |                    |                    |                    |                    |                   |      |      |      |      |      |
| Whooping Cough ..                                                | 34                 | 22                 | 19                 | 13                 | 11                | 13   | 5    | 13   | 12   | 7    |
| Influenza .. ..                                                  | ..                 | ..                 | 11                 | 3                  | 5                 | 2    | 7    | 0    | 11   | 1    |
| Other Infectious Diseases                                        | 5                  | 1                  | .8                 | .2                 | ..                | 1    | ..   | ..   | 0    | 3    |
| Tuberculous Diseases ..                                          | 19                 | 12                 | 5.8                | 5.8                | 3                 | 4    | 2    | 4    | 5    | ..   |
| Convulsions and Men-<br>ingitis (not tuber-<br>culous) .. ..     | 60                 | 42                 | ..                 | ..                 | ..                | ..   | ..   | ..   | ..   | ..   |
| Bronchitis .. ..                                                 | 46                 | 33                 | 30.6               | 20.6               | 16                | 13   | 8    | 10   | 5    | 8    |
| Pneumonia .. ..                                                  | 65                 | 43                 | 34                 | 29.6               | 38                | 31   | 22   | 27   | 41   | 24   |
| Diarrhoea, Enteritis<br>and Gastritis ..                         | 61                 | 52                 | 18.6               | 18.2               | 14                | 11   | 7    | 10   | 12   | 15   |
| Premature Birth, Con-<br>genital defects and<br>Malformations .. | 128                | 119                | ..                 | ..                 | 127               | 121  | 106  | 126  | 141  | 125  |
| Atrophy, Debility and<br>Marasmus .. ..                          | 96                 | 74                 | ..                 | ..                 | ..                | ..   | ..   | ..   | ..   | ..   |
| Encephalitis Lethargica                                          | ..                 | ..                 | ..                 | ..                 | ..                | ..   | 1    | ..   | ..   | ..   |
| Other respiratory<br>diseases .. ..                              | ..                 | ..                 | ..                 | ..                 | ..                | ..   | 1    | 3    | ..   | 1    |
| Other defined diseases ..                                        | ..                 | ..                 | ..                 | ..                 | ..                | ..   | 37   | 39   | 40   | 43   |
| Death from violence ..                                           | ..                 | ..                 | ..                 | ..                 | ..                | ..   | 3    | 7    | 2    | 6    |
| Causes ill-defined or<br>unknown .. ..                           | ..                 | ..                 | ..                 | ..                 | ..                | ..   | 1    | ..   | 1    | ..   |

As long as these congenital conditions continue to contribute so largely to the infant mortality, the difficulty of reducing the infant death-rate below a certain level becomes apparent, since most congenital conditions are irremediable, and it is seldom that attention and advice on the part of the health visitors and medical attendants can alter what are already established facts at birth. It is probably true, however, that most congenital defects are preventable, and that with greater ante-natal care and more attention to the health of the mothers most of the conditions

which contribute so largely to the infant mortality could be prevented. While it is an accepted fact that the practically continuous fall in the infant mortality during the last thirty years has been due chiefly to increased knowledge of the nutritional requirements of the new-born child, and especially to a recognition of the importance of breast-feeding, it does not seem to have been appreciated that perhaps a part of almost equal importance remains to be played by attention to the nutritional requirements and health of the mother, before, during and after pregnancy. The child born of a mother who is living under unhygienic conditions and is herself not receiving proper nourishment is handicapped from birth; and if, for similar reasons, the mother proves incapable of feeding the child naturally, it labours under an additional disadvantage. Few mothers are physiologically incapable of feeding their own children, but a considerable number, as a result of improper nutrition or for other reasons, become unable to do so. We already have a Home in this County for Ailing Babies, but there is at least an equal need for a similar Home to promote the health of certain expectant and nursing mothers. The result of the establishment of such a Home would probably be reflected in a further reduction in the infant mortality rate.

The great importance of care in the early weeks and months of life is abundantly brought out by the following table, which shows that of 569 deaths of children under twelve months which took place in the last three years, concerning which accurate information is available, 62 per cent. died under the age of one month, and 74 per cent. under the age of three months, and that only 7.2 per cent. of the deaths of infants under one year took place after the age of nine months.

**Deaths of Infants under one year.**

| Age.                              | 1928           |              | 1929           |              | 1930           |              | 1928—1930      |              |
|-----------------------------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|
|                                   | No. of Deaths. | Per-centage. | No. of Deaths. | Per-centage. | No. of Deaths. | Per-centage. | No. of Deaths. | Per-centage. |
| Under 1 day .. ..                 | 30             | 16.6         | 42             | 19.0         | 28             | 16.7         | 100            | 17.5         |
| Over 1 day but under 1 week .. .. | 35             | 19.2         | 52             | 23.6         | 49             | 29.3         | 136            | 23.9         |
| 1 week—2 weeks ..                 | 18             | 9.9          | 13             | 5.9          | 12             | 7.2          | 43             | 7.5          |
| 2 weeks—1 month ..                | 27             | 14.8         | 24             | 10.9         | 23             | 13.8         | 74             | 13.3         |
| 1 month—3 months ..               | 22             | 12.0         | 26             | 11.9         | 19             | 11.4         | 67             | 11.7         |
| 3 months—6 months                 | 18             | 9.9          | 23             | 10.5         | 13             | 7.8          | 54             | 9.5          |
| 6 months—9 months                 | 20             | 11.0         | 22             | 10.0         | 12             | 7.2          | 54             | 9.5          |
| 9 months—12 months                | 12             | 6.6          | 18             | 8.2          | 11             | 6.6          | 41             | 7.2          |
| Total deaths .. ..                | 182            |              | 220            |              | 167            |              | 569            |              |

Below are given particulars of the infant mortality rate for each of the Sanitary Districts since 1901. The smallness of the numbers concerned make for wide variations from year to year, as, in a district in which the total number of births is small, a few deaths of children under one year of age makes a great difference to the infant mortality rate for that particular district.

| URBAN DISTRICTS.  | Average for years. |              |              |              | Rates for 1920 | Rates for 1921 | Rates for 1922 | Rates for 1923 | Rates for 1924 | Rates for 1925 | Rates for 1926 | Rates for 1927 | Rates for 1928 | Rates for 1929 | Rates for 1930 |
|-------------------|--------------------|--------------|--------------|--------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                   | 1901 to 1906       | 1907 to 1914 | 1915 to 1919 | 1920 to 1924 |                |                |                |                |                |                |                |                |                |                |                |
| Bishop's Castle   | 86                 | 100          | 105          | 34           | 33             | 32             | 0              | 182            | 0              | 34             | 50             | 38             | 40             | 53             | 0              |
| Bridgnorth ..     | 106                | 116          | 104          | 70           | 78             | 73             | 47             | 62             | 85             | 95             | 39             | 80             | 28             | 66             | 28             |
| Church Stretton   | 96                 | 99           | 67           | 39           | 85             | 48             | 32             | 0              | 0              | 105            | 133            | 100            | 0              | 0              | 0              |
| Dawley ..         | 112                | 97           | 77           | 64           | 78             | 93             | 43             | 41             | 62             | 85             | 51             | 37             | 34             | 88             | 38             |
| Ellesmere ..      | 103                | 65           | 74           | 61           | 58             | 86             | 69             | 47             | 26             | 33             | 0              | 30             | 250            | 111            | 40             |
| Ludlow ..         | 113                | 84           | 76           | 65           | 85             | 83             | 45             | 49             | 50             | 30             | 59             | 26             | 30             | 173            | 20             |
| Market Drayton .. | ..                 | ..           | 119          | 89           | 76             | 85             | 111            | 85             | 91             | 77             | 48             | 97             | 55             | 115            | 67             |
| Newport ..        | 117                | 80           | 81           | 50           | 69             | 66             | 31             | 34             | 41             | 18             | 41             | 19             | 43             | 66             | 50             |
| Oakengates ..     | 138                | 104          | 87           | 73           | 58             | 92             | 69             | 59             | 94             | 57             | 82             | 74             | 54             | 68             | 83             |
| Oswestry ..       | 102                | 101          | 96           | 65           | 54             | 74             | 22             | 74             | 95             | 46             | 68             | 36             | 34             | 82             | 66             |
| Shrewsbury ..     | 126                | 102          | 74           | 61           | 65             | 84             | 47             | 62             | 46             | 77             | 63             | 43             | 56             | 51             | 78             |
| Wellington ..     | 114                | 78           | 91           | 53           | 55             | 74             | 62             | 35             | 29             | 23             | 55             | 57             | 72             | 47             | 60             |
| Wem ..            | 93                 | 87           | 47           | 78           | 102            | 135            | 47             | 51             | 54             | 97             | 36             | 30             | 0              | 83             | 107            |
| Wenlock ..        | 102                | 85           | 71           | 58           | 69             | 52             | 74             | 33             | 55             | 65             | 55             | 21             | 80             | 85             | 50             |
| Whitchurch ..     | 103                | 104          | 82           | 39           | 30             | 55             | 10             | 44             | 62             | 56             | 21             | 33             | 88             | 30             | 52             |
| All Districts ..  | 112                | 96           | 82           | 63           | 65             | 78             | 52             | 54             | 59             | 62             | 58             | 45             | 56             | 70             | 62             |

| RURAL DISTRICTS.     | Average for years. |              |              |              | Rates for 1920 | Rates for 1921 | Rates for 1922 | Rates for 1923 | Rates for 1924 | Rates for 1925 | Rates for 1926 | Rates for 1927 | Rates for 1928 | Rates for 1929 | Rates for 1930 |
|----------------------|--------------------|--------------|--------------|--------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                      | 1901 to 1906       | 1907 to 1914 | 1915 to 1919 | 1920 to 1924 |                |                |                |                |                |                |                |                |                |                |                |
| Atcham ..            | 84                 | 77           | 56           | 62           | 71             | 48             | 57             | 56             | 75             | 80             | 56             | 28             | 67             | 66             | 49             |
| Bridgnorth ..        | 87                 | 67           | 65           | 68           | 73             | 64             | 73             | 66             | 64             | 82             | 45             | 62             | 78             | 59             | 83             |
| Burford ..           | 59                 | 68           | 35           | 46           | 34             | 0              | 0              | 95             | 143            | 150            | 0              | 62             | 71             | 83             | 0              |
| Chirbury ..          | 77                 | 60           | 51           | 74           | 123            | 92             | 40             | 53             | 47             | 0              | 41             | 120            | 0              | 123            | 87             |
| Church Stretton      | 97                 | 80           | 75           | 65           | 76             | 77             | 35             | 77             | 53             | 82             | 65             | 14             | 86             | 53             | 83             |
| Cleobury Mortimer .. | 92                 | 74           | 72           | 63           | 59             | 78             | 62             | 65             | 49             | 52             | 39             | 16             | 41             | 47             | 47             |
| Clun ..              | 100                | 72           | 95           | 57           | 33             | 52             | 78             | 78             | 48             | 32             | 36             | 59             | 45             | 82             | 57             |
| Drayton ..           | 115                | 84           | 77           | 54           | 25             | 60             | 67             | 71             | 49             | 92             | 76             | 65             | 77             | 49             | 76             |
| Ellesmere ..         | 92                 | 84           | 73           | 57           | 54             | 37             | 85             | 67             | 39             | 48             | 106            | 33             | 57             | 74             | 53             |
| Ludlow ..            | 91                 | 69           | 59           | 62           | 81             | 35             | 81             | 55             | 59             | 38             | 31             | 64             | 49             | 63             | 74             |
| Newport ..           | 106                | 96           | 97           | 79           | 96             | 79             | 88             | 48             | 73             | 80             | 19             | 76             | 53             | 33             | 29             |
| Oswestry ..          | 96                 | 87           | 83           | 68           | 76             | 70             | 62             | 69             | 57             | 58             | 45             | 81             | 61             | 46             | 66             |
| Shifnal ..           | 94                 | 76           | 52           | 40           | 36             | 21             | 49             | 42             | 49             | 9              | 33             | 22             | 28             | 89             | 14             |
| Teme ..              | 127                | 102          | 67           | 33           | 54             | 61             | 0              | 28             | 0              | 93             | 79             | 37             | 0              | 125            | 29             |
| Wellington ..        | 102                | 83           | 74           | 64           | 79             | 71             | 48             | 85             | 31             | 69             | 46             | 49             | 69             | 60             | 39             |
| Wem ..               | 69                 | 67           | 62           | 72           | 68             | 63             | 95             | 61             | 76             | 71             | 63             | 36             | 68             | 57             | 43             |
| Whitchurch ..        | 61                 | 58           | 69           | 48           | 76             | 22             | 62             | 29             | 42             | 29             | 77             | 40             | 29             | 26             | 52             |
| All Districts ..     | 93                 | 78           | 69           | 62           | 67             | 57             | 64             | 63             | 56             | 59             | 51             | 49             | 58             | 62             | 53             |

### LEGISLATION IN FORCE.

In addition to the Acts and Bye-laws in force in the various districts of the County, the County Council has acquired powers under the "County of Bedford, etc. (Prevention of Tuberculosis Order, 1926," and the "County of Salop (Prevention and Treatment of Small-pox) Regulations, 1920."

### INFECTIOUS DISEASE.

Exclusive of tuberculosis, which is considered separately, there was a general increase in the number of cases of notifiable infectious disease in the County during 1930, there having been 1,074 such cases as opposed to 664 during the previous year. Only *small-pox*, of which there was no case, and *cerebro-spinal fever*, of which there was one case, failed to become more prevalent. The increase in the number of cases of infectious disease can, however, be largely expressed in terms of *scarlet fever* and *diphtheria*, which accounted for 697 of the total number. Particulars of the cases of notifiable infectious disease are given in Table 3.

**Schick and Dick Tests.**—No attempt has been made to utilise the Schick and Dick Tests to find out the children who are susceptible to diphtheria or scarlet fever and to immunise them. Under present conditions in elementary schools anything like a general application of the test would probably be impossible, but in certain circumstances the protection afforded by tests and immunisation should be offered to the parents.

There is little justification for carrying out Schick and Dick tests on school children unless the procedure is to be adopted in the county as a whole ; and, in addition, it would be of little value unless followed by immunisation of the children who give a positive response. Even then the immunity secured against these diseases is not absolute, but merely relative, and of somewhat doubtful duration. While, however, the procedure would have a very definite protective effect in the case of those children exposed to infection, it would not prevent them from becoming "carriers" ; and it is the "carrier" who creates the problem of how to control outbreaks of scarlet fever and diphtheria. If the whole community of school children could be immunised, the mortality from these diseases would be definitely reduced ; but as the consent of the parents has to be obtained—and experience in other counties has shown that only a small proportion of parents will give it—a school community of partially protected and quite unprotected children is not a state of affairs which would seem to be of any real value in dealing with these diseases. It is generally too late to proceed with the process of immunisation after one of these diseases has broken out in a district, as the susceptibility is increased and the natural powers of resistance are lowered while active immunity is developing. In a children's home or residential school, however, when everyone could be dealt with, Schick and Dick testing followed by immunisation of susceptible individuals would have a very real protective value.

**Puerperal Fever and Puerperal Pyrexia.**—Arrangements have been made by the County Council whereby patients suffering from puerperal fever or puerperal pyrexia are admitted to Berrington Hospital for treatment ; or if the medical practitioner so desires it, a nurse is provided through the agency of the Shropshire Nursing Federation to look after the patient in her own home. In addition, if the benefit of a second medical opinion is required, an obstetrical specialist may be called in, the County Council accepting responsibility for payment in necessitous cases.

There were 65 cases during the year, as opposed to 45 during 1929. Of these, 19 were due to Puerperal Fever, and 46 due to Puerperal Pyrexia. All the cases in which a midwife was in attendance were carefully enquired into and reported upon by the Inspector of Midwives.

It was considered necessary or desirable to remove to hospital nine of the Puerperal Fever cases and 20 of the cases of Puerperal Pyrexia. The cases removed to hospital are as a rule the worst cases ; and of those admitted, three died from Puerperal Fever and four from Puerperal Pyrexia. All of the other cases made a satisfactory recovery.

# Return of Infectious Diseases for the year 1930.

| DISTRICTS.           | Population<br>Census<br>1921 | SMALLPOX. | SCARLET FEVER. | DIPHTHERIA<br>(including Membranous<br>Croup). | ENTERIC<br>(Typhoid and Para-<br>typhoid Fever). | PNEUMONIA. | PUERPERAL FEVER. | PUERPERAL PYREXIA. | CEREBRO-SPINAL<br>FEVER. | DYSENTERY. | ENCEPHALITIS<br>LETHARGICA. | MALARIA. | OPHTHALMIA<br>NEONATORUM. | ERYSIPELAS. | TUBER-<br>CULOSIS. |             |
|----------------------|------------------------------|-----------|----------------|------------------------------------------------|--------------------------------------------------|------------|------------------|--------------------|--------------------------|------------|-----------------------------|----------|---------------------------|-------------|--------------------|-------------|
|                      |                              |           |                |                                                |                                                  |            |                  |                    |                          |            |                             |          |                           |             | RESPIRATORY        | OTHER FORMS |
|                      |                              | 1         | 2              | 3                                              | 4                                                | 5          | 6                | 7                  | 8                        | 9          | 10                          | 11       | 12                        | 13          | 14                 | 15          |
| <b>RURAL.</b>        |                              |           |                |                                                |                                                  |            |                  |                    |                          |            |                             |          |                           |             |                    |             |
| Atcham ..            | 21978                        | ..        | 54             | 14                                             | 5                                                | 9          | 3                | 5                  | ..                       | 3          | 1                           | ..       | 1                         | 7           | 20                 | 8           |
| Bridgnorth ..        | 8569                         | ..        | 13             | 42                                             | ..                                               | 6          | ..               | 2                  | ..                       | ..         | 1                           | ..       | 1                         | 2           | 11                 | 1           |
| Burford ..           | 1268                         | ..        | ..             | ..                                             | ..                                               | ..         | ..               | ..                 | ..                       | ..         | ..                          | ..       | ..                        | ..          | 2                  | ..          |
| Chirbury ..          | 3193                         | ..        | ..             | ..                                             | ..                                               | 2          | ..               | 1                  | ..                       | ..         | ..                          | ..       | 2                         | 3           | 4                  | 3           |
| Church Stretton ..   | 4516                         | ..        | 5              | ..                                             | ..                                               | ..         | ..               | 1                  | ..                       | ..         | ..                          | ..       | ..                        | 1           | 3                  | ..          |
| Cleobury Mortimer .. | 7297                         | ..        | 12             | 19                                             | 2                                                | 13         | ..               | 1                  | ..                       | ..         | ..                          | ..       | ..                        | 1           | 6                  | 5           |
| Clun ..              | 6243                         | ..        | 14             | 2                                              | 1                                                | ..         | ..               | 1                  | ..                       | ..         | ..                          | ..       | ..                        | ..          | 3                  | 1           |
| Drayton ..           | 7156                         | ..        | 11             | 8                                              | ..                                               | 2          | ..               | 1                  | ..                       | ..         | ..                          | ..       | ..                        | ..          | 5                  | 2           |
| Ellesmere ..         | 8008                         | ..        | 10             | 7                                              | ..                                               | 1          | 1                | 2                  | ..                       | ..         | ..                          | ..       | ..                        | 3           | 1                  | ..          |
| Ludlow ..            | 8980                         | ..        | 7              | 1                                              | ..                                               | 5          | ..               | 3                  | ..                       | ..         | 1                           | ..       | 3                         | 4           | 9                  | 1           |
| Newport ..           | 5747                         | ..        | 17             | 3                                              | ..                                               | 4          | 1                | 1                  | ..                       | ..         | ..                          | ..       | 1                         | 1           | 3                  | 10          |
| Oswestry..           | 16313                        | ..        | 14             | 39                                             | 1                                                | 6          | 4                | 3                  | ..                       | ..         | ..                          | ..       | 3                         | 6           | 6                  | 6           |
| Shifnal ..           | 7666                         | ..        | 9              | 5                                              | ..                                               | 14         | 1                | 2                  | ..                       | ..         | 1                           | ..       | ..                        | 5           | 3                  | 2           |
| Teme ..              | 1649                         | ..        | 1              | 1                                              | ..                                               | 12         | ..               | 1                  | ..                       | ..         | ..                          | ..       | 1                         | 5           | ..                 | 2           |
| Wellington ..        | 11207                        | ..        | 13             | 24                                             | 7                                                | 17         | ..               | 2                  | ..                       | ..         | ..                          | 1        | 4                         | 1           | 10                 | 9           |
| Wem ..               | 8572                         | ..        | 5              | 1                                              | 1                                                | 3          | 1                | 1                  | 1                        | ..         | ..                          | ..       | 2                         | 1           | 4                  | 4           |
| Whitchurch ..        | 2011                         | ..        | 2              | 8                                              | ..                                               | 3          | ..               | ..                 | ..                       | ..         | ..                          | ..       | 1                         | ..          | 1                  | 1           |
| <b>URBAN.</b>        |                              |           |                |                                                |                                                  |            |                  |                    |                          |            |                             |          |                           |             |                    |             |
| Bishop's Castle ..   | 1268                         | ..        | ..             | 2                                              | 1                                                | ..         | ..               | 1                  | ..                       | ..         | ..                          | ..       | ..                        | ..          | ..                 | ..          |
| Bridgnorth ..        | 5143                         | ..        | 9              | 1                                              | 1                                                | 10         | ..               | 1                  | ..                       | ..         | ..                          | ..       | ..                        | ..          | 11                 | ..          |
| Church Stretton ..   | 1671                         | ..        | 1              | 3                                              | ..                                               | ..         | ..               | 1                  | ..                       | ..         | ..                          | ..       | ..                        | 1           | 2                  | ..          |
| Dawley ..            | 7386                         | ..        | 3              | 33                                             | ..                                               | 2          | ..               | 4                  | ..                       | 1          | ..                          | ..       | 1                         | 3           | 5                  | 7           |
| Ellesmere ..         | 1831                         | ..        | 2              | ..                                             | ..                                               | ..         | ..               | ..                 | ..                       | ..         | ..                          | ..       | ..                        | ..          | 1                  | 7           |
| Ludlow ..            | 5677                         | ..        | 5              | 14                                             | ..                                               | 7          | ..               | ..                 | ..                       | ..         | 1                           | ..       | ..                        | 6           | 6                  | 2           |
| Market Drayton ..    | 4710                         | ..        | 21             | 6                                              | ..                                               | 2          | ..               | ..                 | ..                       | ..         | ..                          | ..       | ..                        | 2           | 2                  | 1           |
| Newport ..           | 3056                         | ..        | 6              | 7                                              | ..                                               | 5          | ..               | 2                  | ..                       | ..         | ..                          | ..       | ..                        | 1           | 4                  | 4           |
| Oakengates ..        | 11349                        | ..        | 6              | 1                                              | ..                                               | ..         | ..               | ..                 | ..                       | ..         | ..                          | ..       | ..                        | 3           | 8                  | 7           |
| Oswestry..           | 9790                         | ..        | 24             | 34                                             | 2                                                | 8          | 1                | 4                  | ..                       | ..         | ..                          | ..       | 4                         | 2           | 15                 | 5           |
| Shrewsbury ..        | 31013                        | ..        | 63             | 51                                             | 2                                                | 11         | 4                | 7                  | ..                       | ..         | 1                           | ..       | 5                         | 10          | 30                 | 15          |
| Wellington ..        | 8148                         | ..        | 26             | 8                                              | 1                                                | 9          | 1                | 4                  | ..                       | ..         | ..                          | 3        | 3                         | 4           | 8                  | 6           |
| Wem ..               | 2176                         | ..        | 1              | 2                                              | ..                                               | 2          | ..               | ..                 | ..                       | ..         | ..                          | ..       | 1                         | ..          | 2                  | ..          |
| Wenlock ..           | 13712                        | ..        | 12             | 9                                              | ..                                               | 1          | 1                | ..                 | ..                       | ..         | 1                           | ..       | 1                         | 7           | 11                 | 7           |
| Whitchurch ..        | 5656                         | ..        | 6              | 23                                             | ..                                               | 3          | ..               | ..                 | ..                       | ..         | ..                          | ..       | ..                        | 3           | 4                  | 6           |
| <b>TOTAL ..</b>      | <b>242959</b>                | <b>..</b> | <b>372</b>     | <b>371</b>                                     | <b>24</b>                                        | <b>154</b> | <b>19</b>        | <b>49</b>          | <b>1</b>                 | <b>4</b>   | <b>7</b>                    | <b>4</b> | <b>35</b>                 | <b>82</b>   | <b>196</b>         | <b>122</b>  |

**Closure of Schools.**—During the year 25 schools were closed by the Education Authority to prevent the spread of infectious diseases. One of these schools was in the first instance closed by the Local Sanitary Authority, the closure being confirmed by the Education Authority. It is difficult to get the teachers to realise that, from the public health point of view, there is no justification for closing a school unless the spread of infection is thereby going to be prevented; and that the School Medical Officer has no authority to advise closure on account of poor attendance, notwithstanding the fact that the number of children present is sometimes so low that there seems little justification for keeping the school open. Below are given particulars of the closures of schools on account of outbreaks of infectious disease.

|                        |    |
|------------------------|----|
| Measles .. .. .        | 14 |
| Diphtheria .. .. .     | 7  |
| Scarlet Fever .. .. .  | 2  |
| Whooping Cough .. .. . | 2  |

*Measles.*—In thirteen instances attempts were made to prevent outbreaks of measles by closing the schools for about a week, six or seven days after the occurrence of the first case, with the following result :—

In 4 instances no further cases occurred. Closure in these cases must therefore be considered to have been without effect and, therefore, unnecessary.

In 3 instances no cases occurred during closure, but further cases developed on re-opening. The result, therefore, did not justify closure.

In 3 instances cases occurred during closure, and further cases developed on re-opening. Closure again proved to be without effect.

In 3 instances one or more cases occurred during the closure, and did not attend school till free from infection. There was no further outbreak, and it is justifiable to conclude that closure was effective in checking the spread of the disease.

It must be recognised that all the schools closed to prevent the spread of measles were very carefully selected, in that they were in sparsely populated country districts in which most of the homes of the children were widely separated. Yet in only three did the result justify the step. In numerous other schools no attempt was made to prevent the spread of infection by closure, as it was apparent from the commencement that its effect must be to prolong the outbreak and possibly intensify its severity.

### ISOLATION HOSPITAL ACCOMMODATION.

The accommodation available in order to secure the isolation and treatment of cases of infectious disease is in certain parts of the County quite inadequate. Section 63 of the Local Government Act, 1929, requires the County Council, as soon as may be, and within six months of being requested to do so by the Minister of Health, to prepare in consultation with the District Councils a scheme for securing adequate hospital accommodation for cases of infectious disease within the County, and this matter is at present receiving the careful consideration of the Public Health and Housing Committee.

It is usually considered that, for infectious diseases other than small-pox, one bed per thousand of the population should be provided in Urban Districts, and one bed per fifteen hundred of the population in Rural Districts; and that, for small-pox, one bed should be provided for every three thousand of the population. On this basis the hospital provision in this County falls

far short of requirements. In addition, much of the accommodation at present in being is extremely unsatisfactory. The hospital units are in most cases too small to make possible efficient treatment of the patients; and the hospitals themselves are often faulty in structure and arrangement, inadequately lighted and ventilated, and insufficiently provided with ordinary sanitary conveniences. On the basis of one per bed for every 144 sq. feet of floor space available (which is the standard set up by the Ministry of Health), there are in this County, in such hospitals as are at present in existence, 28 beds for small-pox cases and 87 beds for other cases of infectious disease.

#### Summary of Accommodation for Small-pox Cases.

The County Council is responsible for the isolation of small-pox for the whole county with the exception of the Boroughs of Shrewsbury and Wenlock, and the Rural District of Teme. This power was obtained by a Special Order of the Ministry of Health made under the Public Health (Prevention and Treatment of Diseases) Act, 1913. Three hospitals situated at Whitchurch, Wellington, and Ludlow, were taken over from the local authorities and were put in order for the immediate reception of patients. In the absence of small-pox in the County, the Whitchurch Hospital is used for advanced cases of consumption. The following is a summary of the Small-pox accommodation for the County:—

| <i>Hospital.</i>        |       | <i>No. of beds.</i> | <i>Provided by</i>     |
|-------------------------|-------|---------------------|------------------------|
| Prees Heath, Whitchurch | ..    | 8                   | County Council.        |
| Steeraway, Wellington   | .. .. | 4                   |                        |
| Ludlow                  | .. .. | 2                   |                        |
| Underdale, Shrewsbury   | .. .. | 8                   | Borough of Shrewsbury. |
| Broseley                | .. .. | 6                   | Borough of Wenlock.    |

**Summary of the Provision made in the County for Isolation Hospital Accommodation for Infectious Diseases other than Small-pox.**

| District.                  | Population<br>(1921 Census). | Provision of Hospital<br>accommodation.                                                                    | No. of beds (Allowing 144<br>sq. ft. per bed) and nature<br>of accommodation. |
|----------------------------|------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Shrewsbury Borough ..      | 31006                        | } Monkmoor Isolation Hospital,<br>Shrewsbury.                                                              | 40—Accommodation very good.                                                   |
| and Atcham R.D. ..         | 21981                        |                                                                                                            |                                                                               |
| Oswestry Borough ..        | 9785                         | } Oswestry and Chirk Isolation<br>Hospital.†                                                               | 17*—Accommodation moder-<br>ately satisfactory.                               |
| and Oswestry R.D. ..       | 16399                        |                                                                                                            |                                                                               |
| Market Drayton U.D. ..     | 4714                         | } Little Drayton Joint Isolation<br>Hospital.‡                                                             | 10*—Accommodation not good.                                                   |
| and Drayton R.D. ..        | 7155                         |                                                                                                            |                                                                               |
| Bridgnorth Borough ..      | 5141                         | Bridgnorth Isolation Hospital                                                                              | 5*—Accommodation not good.                                                    |
| Ludlow Borough ..          | 5674                         | Ludlow Isolation Hospital.                                                                                 | 9—Accommodation not good.                                                     |
| Newport U.D. ..            | 3054                         | } Newport Isolation Hospital.<br>(A number of cases are also<br>sent to Monkmoor Hospital,<br>Shrewsbury). | 4*—Accommodation extremely<br>unsatisfactory.                                 |
| and Newport R.D. ..        | 5745                         |                                                                                                            |                                                                               |
| Teme R.D. ..               | 1649                         | Knighton and Teme Isolation<br>Hospital.§                                                                  | 2*—Accommodation extremely<br>unsatisfactory.                                 |
| Bishop's Castle Borough .. | 1267                         | } No Hospital, but a number of<br>cases are sent to Monkmoor<br>Isolation Hospital, Shrews-<br>bury.       |                                                                               |
| Church Stretton U.D. ..    | 1669                         |                                                                                                            |                                                                               |
| Dawley U.D. ..             | 7388                         |                                                                                                            |                                                                               |
| Ellesmere U.D. ..          | 1832                         |                                                                                                            |                                                                               |
| Oakengates U.D. ..         | 11345                        |                                                                                                            |                                                                               |
| Wellington U.D. ..         | 8146                         |                                                                                                            |                                                                               |
| Wem U.D. ..                | 2172                         |                                                                                                            |                                                                               |
| Wenlock Borough ..         | 13714                        |                                                                                                            |                                                                               |
| Whitchurch U.D. ..         | 5653                         |                                                                                                            |                                                                               |
| Chirbury R.D. ..           | 3214                         |                                                                                                            |                                                                               |
| Church Stretton R.D. ..    | 4517                         |                                                                                                            |                                                                               |
| Clun R.D. ..               | 6244                         |                                                                                                            |                                                                               |
| Ellesmere R.D. ..          | 8009                         |                                                                                                            |                                                                               |
| Ludlow R.D. ..             | 8980                         |                                                                                                            |                                                                               |
| Shifnal R.D. ..            | 7670                         |                                                                                                            |                                                                               |
| Wellington R.D. ..         | 11207                        |                                                                                                            |                                                                               |
| Wem R.D. ..                | 8583                         |                                                                                                            |                                                                               |
| Whitchurch R.D. ..         | 2012                         |                                                                                                            |                                                                               |
| Bridgnorth R.D. ..         | 8570                         | } No provision whatever.                                                                                   |                                                                               |
| Burford R.D. ..            | 1268                         |                                                                                                            |                                                                               |
| Cleobury Mortimer R. D...  | 7299                         |                                                                                                            |                                                                               |

\* Slightly overestimated.

† Provides also for the Chirk R.D. of Denbighshire, which has a population of 4,599.

‡ " " " " Blore Heath R.D. of Staffordshire, which has a population of 2,283.

§ " " " " Knighton U.D. & R.D. of Radnorshire, which have a population of 5,770.

### MATERNITY AND CHILD WELFARE.

Under this scheme, each child, as soon as notification of birth is received, is put under a system of supervision by whole or part-time health visitors till school-age is reached, when any further necessary supervision is carried out by the school nurses till the age of fourteen is attained. The child is, therefore, under continual supervision to a greater or less extent from birth till the time of leaving school. The health visitor pays her first visit, as a rule, as soon as the midwife ceases to attend the mother, which is normally on the tenth day. The number and frequency of her visits is decided by the requirements and health of the child. Although each child is always visited at regular intervals, these visits are most frequent during the first year, when guidance and advice is most necessary for the mother. When any condition requiring medical advice develops, the mother is advised either to call in the services of her own doctor, or to take her child to the nearest welfare centre. By these means defects are treated from their commencement, thereby reducing to a minimum any damage to the health or physical fitness of the child which may ultimately develop. In addition, visits are paid regularly to expectant mothers, and they are encouraged either to consult their own doctor or to attend an ante-natal clinic at one of the welfare centres for examination and advice, especially if there is a history of still-births, difficult labour, or any other complication of pregnancy.

(1) **Notification of Births.**—Notifications of birth, with the exception of those occurring in the Borough of Shrewsbury, which is an independent Maternity and Child Welfare Authority, must be sent to the County Medical Officer of Health, by the midwife, doctor in attendance at the confinement, or other responsible person. The following are the particulars:—

|                                                                        | 1928  | 1929  | 1930  |
|------------------------------------------------------------------------|-------|-------|-------|
| Total registered births .. .. .                                        | 3,569 | 3,566 | 3,557 |
| Notifications by midwives .. .. .                                      | 3,020 | 2,982 | 3,014 |
| „ by medical practitioners .. .. .                                     | 409   | 409   | 435   |
| „ by parents .. .. .                                                   | 3     | 4     | 9     |
| Otherwise discovered .. .. .                                           | 49    | 59    | 46    |
| Excess of births registered over births notified or discovered .. .. . | 88    | 112   | 53    |

In the Borough of Shrewsbury, there were 579 notified births and 538 registered births, the difference being due to the excess of transfers out over the inward transfers.

(2) **Medical, Health Visiting and Nursing Services.**—The Assistant School Medical Officers are also the Medical Officers for Maternity and Child Welfare Work, to which they devote three-tenths of their time.

In addition to attendance at child welfare centres, where ante-natal clinics are also held, the medical officers are required to supervise in a general way the work of the health visitors, and to be available to give them advice when they are in need of guidance. It is at such times that the child welfare centres prove most valuable and useful, as the mother can attend these with the health visitor, when the case can be fully gone into. There are now twelve whole-time health visitors whose work includes attendance at child welfare centres, ophthalmia neonatorum nursing, tuberculosis visiting and attendance at tuberculosis dispensaries, measles visiting, and supervision of mental defectives. Since the passing of the Local Government Act, 1929, they have also been made Infant Protection Visitors. Ten of the whole-time health visitors are also engaged in school work and attend school medical inspections, school clinics, eye clinics, and visit physically defective school children. In addition, 71 district nurses are also part-time health visitors.

The visits paid by health visitors during 1930 were :—

|                 | Under one year. |       |       |        | Sub-sequent | 1 to 5 years. | Total. | Expectant mothers. |
|-----------------|-----------------|-------|-------|--------|-------------|---------------|--------|--------------------|
|                 | 1st             | 2nd   | 3rd   |        |             |               |        |                    |
| Whole-time (12) | .. 2,227        | 2,168 | 2,184 | 5,515  |             | 15,144        | 27,238 | 733                |
| Part-time (71)  | .. 1,401        | 1,482 | 1,700 | 5,747  |             | 11,511        | 21,841 | 5,538              |
| Visits for 1930 | .. 3,628        | 3,650 | 3,884 | 11,262 |             | 26,655        | 49,079 | 6,271              |
| Visits for 1929 | .. 3,400        | 3,388 | 3,558 | 9,883  |             | 25,625        | 45,854 | 5,784              |
| Visits for 1928 | .. 3,681        | 3,723 | 3,771 | 9,479  |             | 26,701        | 47,355 | 5,445              |

(3) **Feeding of Infants.**—The percentages of artificially and naturally fed infants are valuable indications of the efficiency of the health visiting services, as it is now generally accepted that practically all mothers are able to feed their own babies. It is a rule of the Central Midwives Board that “a midwife must forthwith notify the Local Supervising Authority of each case in which it is intended to substitute artificial for breast feeding.” On receipt of such notifications each case is inquired into, and such advice and pressure as are possible are used to persuade the mother and midwife to continue the natural method of feeding, where there seems to be no sufficient reason for substituting artificial food. During the year 46 such notifications were received, as opposed to 38 in 1929. The reasons given were :—

|                                          |    |    |    |    |    |    |    |
|------------------------------------------|----|----|----|----|----|----|----|
| Death of mother                          | .. | .. | .. | .. | .. | .. | 2  |
| Inability to breast feed                 | .. | .. | .. | .. | .. | .. | 14 |
| Refusal to breast feed                   | .. | .. | .. | .. | .. | .. | 17 |
| Poor health of mother (advice of doctor) | .. | .. | .. | .. | .. | .. | 12 |
| Weakly, delicate baby (spina bifida)     | .. | .. | .. | .. | .. | .. | 1  |

The percentages of infants being naturally and artificially fed on the first visit of the health visitor are given below :—

Percentage of children at first visit of health visitor on—

| Year | Breastfeeding. |    |      | Artificial feeding. |  | Mixed feeding. |  |
|------|----------------|----|------|---------------------|--|----------------|--|
| 1918 | ..             | .. | 82.5 | 13.5                |  | 3.8            |  |
| 1919 | ..             | .. | 85.8 | 9.7                 |  | 4.4            |  |
| 1920 | ..             | .. | 84.0 | 11.9                |  | 3.9            |  |
| 1921 | ..             | .. | 86.6 | 9.6                 |  | 3.7            |  |
| 1922 | ..             | .. | 85.6 | 11.0                |  | 3.2            |  |
| 1923 | ..             | .. | 88.7 | 8.4                 |  | 2.7            |  |
| 1924 | ..             | .. | 88.6 | 8.6                 |  | 2.8            |  |
| 1925 | ..             | .. | 88.8 | 8.5                 |  | 2.6            |  |
| 1926 | ..             | .. | 89.4 | 7.6                 |  | 3.0            |  |
| 1927 | ..             | .. | 88.9 | 7.4                 |  | 3.7            |  |
| 1928 | ..             | .. | 88.4 | 7.8                 |  | 3.8            |  |
| 1929 | ..             | .. | 88.4 | 8.4                 |  | 3.2            |  |
| 1930 | ..             | .. | 89.7 | 7.1                 |  | 3.2            |  |

It may be taken that practically all babies receiving mixed feeding will very soon be entirely artificially fed, unless the artificial part of the feeds is almost immediately eliminated.

While it is true that a certain proportion of mothers, as a result of economic circumstances, become unable to continue to breast-feed their infants during the whole period of nine months, it is probably also true that if they took only half the quantity of extra milk which it is necessary to have in order to artificially feed the baby, they would be able to do so naturally. It is not only unhygienic and unphysiological, but definitely uneconomical, to feed artificially a baby which can be naturally fed. The percentage, therefore, of naturally-fed infants is much too low, especially in the later months, as the following figures show :—

|                                                           |    |    |      |
|-----------------------------------------------------------|----|----|------|
| Percentage naturally fed at first visit of health visitor | .. | .. | 89.7 |
| “ “ “ three months                                        | .. | .. | 58.9 |
| “ “ “ six months                                          | .. | .. | 38.5 |

(4) **Ophthalmia Neonatorum.**—On receipt of notification of a case of ophthalmia neonatorum the doctor in attendance is immediately communicated with, in order to place at his disposal all facilities for having the necessary treatment carried out.

An arrangement has been made with the Salop Eye, Ear and Throat Hospital whereby the mother and child can be immediately admitted for treatment. An effort is made to get all cases treated in this way, and an ambulance is always available to convey them to hospital. If the mother refuses to be removed, or to allow the child to go to hospital, the services of a health visitor, who will remain in attendance on the case till cured, are offered to the doctor.

During the year 37 cases of ophthalmia neonatorum were notified, of which 34 recovered with apparently no injury to the eyesight. A recent inquiry was made into the condition of the other three whose eyesight had suffered as a result of the ophthalmia, and it was found that in the case of one baby there was impairment of vision in one eye only, and that in the case of another there were opacities in the cornea of both eyes. This child, although not blind, has probably suffered serious impairment of vision. The third baby has left the County and cannot be traced, but when it left the Hospital it had a nebula on one eye, the other eye being apparently unaffected.

It is difficult to bring home to the parents the seriousness of ophthalmia neonatorum, and to get them to realise that, unless constant and careful treatment is carried out, there is a very great risk of serious damage to the eyesight. In a very virulent case even a few hours' neglect may make all the difference between complete recovery and permanent impairment of vision. If ophthalmia neonatorum is notified immediately, and if immediate advantage is taken of the scheme in this County for providing free treatment, it can be stated that there would be one hundred per cent. of complete recoveries. Only when removal to the Eye Hospital has been refused, or consent has not been given till it has been obvious to the parents that the condition was really serious, has the treatment of the Hospital failed to save the sight unimpaired. No cases are refused at the Hospital, however slight the condition may apparently be, and any case will be accepted at the shortest notice. It may confidently be stated that the willingness with which cases are accepted by the Hospital and the efficiency with which treatment is afterwards carried out have been effective in preventing injury to the eyesight in numerous cases, and in preventing actual blindness in others. This, it may be added, ultimately results in the saving of probably thousands of pounds to the County Council, as not only has the Education Authority to make provision for the education of blind children in Special Schools, but later it has to send for training in occupations suitable for blind persons those over the age of sixteen who will benefit by it. On completion of training, they are included in the Home Workers' Scheme under the Public Health and Housing Committee which supplements their weekly wages according to their earnings. Those who, for some reasons, are not found suitable for training and yet are in need of assistance come under the scheme for the domiciliary relief of the blind.

(5) **Maternity and Child Welfare Centres.**—There are now thirteen Welfare Centres in the County, nine of which are held weekly, those at Church Stretton, Ellesmere, Newport and Highley being held fortnightly.

When time and opportunity allow, addresses on subjects of importance to health are given at the Welfare Centres by doctors, health visitors, dentists, and voluntary workers.

The following are the particulars for the years 1928, 1929 and 1930 :—

|                    |    |    | No. of Addresses. |      |      | Average attendance. |      |      |
|--------------------|----|----|-------------------|------|------|---------------------|------|------|
|                    |    |    | 1928              | 1929 | 1930 | 1928                | 1929 | 1930 |
| Bridgnorth .. ..   | .. | .. | 17                | 19   | 15   | 10                  | 17   | 11   |
| Church Stretton .. | .. | .. | 4                 | 5    | 5    | 26                  | 25   | 23   |
| Dawley .. ..       | .. | .. | 42                | 45   | 39   | 30                  | 37   | 34   |
| Ellesmere .. ..    | .. | .. | 0                 | 0    | 0    | 0                   | 0    | 0    |
| Highley .. ..      | .. | .. | 3                 | 0    | 4    | 7                   | 0    | 11   |
| Ironbridge .. ..   | .. | .. | 28                | 22   | 8    | 8                   | 8    | 8    |
| Ludlow .. ..       | .. | .. | 23                | 1    | 0    | 19                  | 16   | 0    |
| Market Drayton ..  | .. | .. | 45                | 51   | 48   | 25                  | 23   | 19   |
| Newport .. ..      | .. | .. | 0                 | 0    | 3    | 0                   | 0    | 15   |
| Oakengates .. ..   | .. | .. | 40                | 35   | 36   | 10                  | 11   | 13   |
| Oswestry .. ..     | .. | .. | 0                 | 6    | 9    | 0                   | 12   | 14   |
| Wellington .. ..   | .. | .. | 50                | 48   | 43   | 26                  | 37   | 31   |
| Whitchurch .. ..   | .. | .. | 26                | 25   | 21   | 14                  | 15   | 14   |
| Totals             |    |    | 278               | 257  | 231  | 18                  | 17   | 21   |

#### ATTENDANCES AT MATERNITY AND CHILD WELFARE CENTRES IN 1929 AND 1930.

|                    | CHILDREN.     |      |              |      |                    |       |                        |      |              |      |                    |       | EXPECTANT MOTHERS. |      |              |      |                    |      |
|--------------------|---------------|------|--------------|------|--------------------|-------|------------------------|------|--------------|------|--------------------|-------|--------------------|------|--------------|------|--------------------|------|
|                    | Under 1 year. |      |              |      |                    |       | Between 1 and 5 years. |      |              |      |                    |       |                    |      |              |      |                    |      |
|                    | New Cases.    |      | Total Cases. |      | Total Attendances. |       | New Cases.             |      | Total Cases. |      | Total Attendances. |       | New Cases.         |      | Total Cases. |      | Total Attendances. |      |
|                    | 1929          | 1930 | 1929         | 1930 | 1929               | 1930  | 1929                   | 1930 | 1929         | 1930 | 1929               | 1930  | 1929               | 1930 | 1929         | 1930 | 1929               | 1930 |
| Bridgnorth ..      | 96            | 86   | 128          | 136  | 990                | 1090  | 40                     | 50   | 150          | 167  | 2382               | 2798  | 50                 | 39   | 54           | 49   | 144                | 136  |
| Church Stretton .. | 15            | 18   | 18           | 20   | 95                 | 149   | 21                     | 25   | 131          | 143  | 442                | 580   | 3                  | 3    | 3            | 3    | 7                  | 22   |
| Dawley ..          | 92            | 105  | 186          | 130  | 1336               | 1244  | 53                     | 66   | 200          | 199  | 4770               | 3783  | 37                 | 52   | 40           | 59   | 50                 | 129  |
| Ellesmere ..       | 35            | 46   | 58           | 75   | 353                | 395   | 13                     | 10   | 26           | 85   | 297                | 390   | 6                  | 14   | 9            | 2    | 14                 | 27   |
| Highley ..         | 23            | 34   | 140          | 215  | 140                | 249   | 4                      | 6    | 112          | 151  | 112                | 157   | 0                  | 0    | 0            | 0    | 0                  | 0    |
| Ironbridge ..      | 99            | 112  | 83           | 124  | 1153               | 1126  | 55                     | 58   | 361          | 254  | 3348               | 2036  | 48                 | 36   | 48           | 42   | 68                 | 83   |
| Ludlow ..          | 73            | 78   | 84           | 88   | 672                | 754   | 55                     | 48   | 385          | 345  | 1404               | 1667  | 17                 | 21   | 25           | 35   | 52                 | 60   |
| Market Drayton ..  | 109           | 90   | 107          | 147  | 1078               | 1326  | 56                     | 39   | 201          | 195  | 2044               | 2741  | 43                 | 52   | 50           | 61   | 136                | 143  |
| Newport ..         | 62            | 93   | 98           | 134  | 518                | 529   | 15                     | 27   | 215          | 178  | 502                | 456   | 26                 | 57   | 27           | 60   | 37                 | 87   |
| Oakengates ..      | 114           | 145  | 184          | 219  | 1173               | 1023  | 63                     | 54   | 209          | 270  | 1551               | 1158  | 36                 | 37   | 48           | 51   | 121                | 153  |
| Oswestry ..        | 190           | 192  | 355          | 382  | 1316               | 1373  | 62                     | 82   | 425          | 507  | 1413               | 1594  | 38                 | 57   | 45           | 76   | 102                | 177  |
| Wellington ..      | 160           | 153  | 159          | 197  | 1605               | 753   | 81                     | 68   | 373          | 263  | 3736               | 3643  | 34                 | 55   | 35           | 59   | 49                 | 128  |
| Whitchurch ..      | 84            | 89   | 133          | 151  | 1159               | 1532  | 32                     | 24   | 159          | 162  | 1155               | 1239  | 26                 | 21   | 36           | 26   | 58                 | 51   |
| Totals ..          | 1152          | 1241 | 1733         | 2018 | 11588              | 11543 | 550                    | 557  | 2947         | 2919 | 23156              | 22242 | 364                | 444  | 420          | 523  | 838                | 1196 |

As compared with 1929 there has been a decrease of 45 in the attendances of children under one year of age, and a decrease of 941 in the attendances of children between the ages of one and five years.

Although the ante-natal work is capable of much further development, progress in this very important branch of the maternity services continues to be made. During the year there was an increase of 103 in the number of expectant mothers attending the welfare centres, and there was an increase of 358 in the total number of attendances.

Under an arrangement with the Borough of Shrewsbury, by which the County Council makes a small payment per case attending the Shrewsbury Welfare Centre or Ante-natal Clinic, sixty-three expectant mothers made 86 attendances, and forty-four children under five years of age made 110 attendances.

This arrangement proves very helpful with County Council cases resident near Shrewsbury and not, therefore, near any other Welfare Centre.

*Measles Visiting.*—Houses in which infants were suffering from measles were visited by the whole-time health visitors, and the cases dealt with were as follows:—

|      |    |    | Houses<br>visited. | Cases<br>visited. | Cases without<br>doctor. | Cases advised<br>doctor. |
|------|----|----|--------------------|-------------------|--------------------------|--------------------------|
| 1930 | .. | .. | 77                 | 134               | 95                       | 10                       |
| 1929 | .. | .. | 9                  | 15                | 15                       | 1                        |
| 1928 | .. | .. | 471                | 699               | 505                      | 72                       |
| 1927 | .. | .. | 324                | 540               | 266                      | 38                       |
| 1926 | .. | .. | 1,239              | 1,755             | 580                      | 50                       |

*Orthopaedic Cases.*—See under Orthopaedic Section, page 34.

*Dental Treatment.*—Nursing and expectant mothers receive treatment by the School Dental Officers at the Welfare Centres, if they are not in a position to pay for treatment privately. During the year 120 such patients received treatment. In addition, 29 children under school age received treatment by the Dentists.

*Insanitary Conditions.*—The following insanitary conditions were reported by the health visitors and forwarded to the Sanitary Authorities for their attention.

|                                 |                         |                |           |               |            |
|---------------------------------|-------------------------|----------------|-----------|---------------|------------|
| Unsatisfactory<br>Water Supply. | Want of<br>Ventilation. | Uncleanliness. | Dampness. | Overcrowding. | Nuisances. |
| 22                              | 33                      | 91             | 44        | 92            | 8          |

(6) **Infant Life Protection.**—On the coming into force of the Local Government Act, 1929, Maternity and Child Welfare Authorities became responsible for the administration of Part I of the Children Act, 1908, which deals with Infant Life Protection, and the County Council appointed the whole-time Health Visitors as Infant Protection Visitors under this Act.

Every person accepting for reward the care of a child under seven years of age has now to notify the fact within 48 hours to the Authority responsible for the Maternity and Child Welfare Services of the area. These children are then put under the supervision of the Health Visitors, who are required to visit them at least once a quarter, or more frequently should the home conditions or health of the child not be found quite satisfactory. All unsatisfactory conditions, which the foster-parent cannot or will not remedy with the advice of the Infant Protection Visitor, are immediately reported and the necessary action taken.

In one case it was found that a woman who had charge of three children was not giving them satisfactory attention. One of the children was removed to another home, and rigorous supervision paid in respect of the other two, with the result that the conditions were so vastly improved as to be quite satisfactory.

The following are the particulars of the cases supervised from 1st April, 1930, to the end of the year :—

|                                                   |   |                                              |         |       |     |
|---------------------------------------------------|---|----------------------------------------------|---------|-------|-----|
| Number of cases transferred by the Guardians      |   |                                              |         | 136   |     |
| Number of cases added during the year             |   |                                              |         | 35    |     |
|                                                   |   |                                              |         | <hr/> | 171 |
| Number of cases                                   | { | reached seven years of age                   | .. .. . | 5     |     |
|                                                   |   | legally adopted                              | .. .. . | 6     |     |
|                                                   |   | left County                                  | .. .. . | 14    |     |
|                                                   |   | removed to relatives                         | .. .. . | 11    |     |
|                                                   |   | died                                         | .. .. . | 1     |     |
|                                                   |   | found not to be Infant Life Protection cases | .. .. . | 2     |     |
|                                                   |   |                                              |         | <hr/> | 39  |
| Number of cases supervised at 31st December, 1930 |   |                                              |         | <hr/> | 132 |

(7) **Supply of Free Milk.**—There is no doubt that the commonest condition from which children suffer during the first few years of life is rickets. It is true to say that the majority of them, when old enough to attend school, show to a greater or less degree evidence of having been subject to this condition, which, it is important to remember, is a systemic disease. The evidence is usually very slight, but it is none the less significant.

The presence of rickety deformity is very significant in that it shows that the child, for one reason or another, has been unable to assimilate the necessary minerals in sufficient quantities for sound body construction ; and as lime, to mention only one and at the same time the chief of these, enters into the composition of every cell of the body, the effect on the general health can readily be imagined when there is an inadequate assimilation of this important constituent.

It is for this reason that an adequate supply of milk for the growing child and nursing mother is so very necessary, as it is one of the few foods which contains all the materials necessary for health in a suitable form for assimilation, and in such quantities as to meet the requirements of the growing child.

The importance of the part played by vitamins, by sunlight, and by fresh air and exercise in the prevention of rickets has been abundantly shown ; but it is also necessary to remember that, even with an adequate quantity of all these necessities, unless the raw material required for growth is found in the food, rickets cannot be prevented. It is the big, rapidly growing child who requires most constructive material, and it is in this particular type of child that rickets is most likely to develop.

While, therefore, the importance of sunlight and the part played by cod liver oil in the prevention of rickets is very important, it is equally necessary to stress the part played by the consumption of milk both by the expectant mother and the growing child.

Milk is supplied free in necessitous cases, and before the necessary order is given, each case is carefully inquired into by the Medical Officer of the centre and one of the lady helpers ; or where there is no centre, by the health visitor and a local responsible person. The opinion of the Relieving Officer is obtained in all cases, and the reports are all carefully scrutinised at the central office. Notwithstanding this careful supervision there has been a gradual increase in the amount of free milk supplied, no doubt chiefly as a result of the prevailing industrial depression, which is bringing a larger number of families within the scope of the scheme. Although

the sum of £1,201 was spent on free milk in the year ending March, 1931, it must be recognised that this is undoubtedly preventive work of great value, because, if a considerable proportion of the poorer people go short of important vitamins and necessary constructive materials, as seems probable, the provision of milk should greatly improve the health of the children, lessen the amount of rickets, and diminish the number of infectious illnesses which are so frequently associated with this condition.

(8) **County Home for Ailing Babies.**—The County Council works through a local committee which includes representatives from the Public Health Committee. A monthly report, including a complete financial statement, is furnished to the County Council.

The Home is chiefly intended for babies under one year of age who are obviously suffering from malnutrition due to one cause or another. Infants of mothers suffering from tuberculosis in a highly infectious state, however, are now admitted to the Home, with the object of getting immediate removal from the source of infection and afterwards, if possible, of arranging for some means of boarding the children away from their mothers (see page 46). The Home is particularly suitable for this type of case, as almost all the infants are treated entirely in the open air with very beneficial results.

The success of the Home depends more than anything upon the selection of the proper cases for admission, and this to a great extent rests with the Medical Officers of the Clinics and the Health Visitors throughout the County, in consultation with the medical practitioner if one is in attendance.

The educational side of the work, however, is not its least important aspect, and to the benefits which the individual infants derive from treatment at the Home must be added the advantages which are derived from the increased knowledge spread by the mothers whose babies are treated there. They see weakly infants, who were admitted because they were steadily losing ground, thriving under the open air conditions which are sometimes very severe in the winter. This practical demonstration of the advantages of fresh air and sunlight, combined with the information they receive on proper methods of infant feeding, gives them an understanding of the elementary requirements for the promotion of health in young children, which no doubt they have in most instances ample opportunity of turning to their own advantage and also of imparting to others.

The number of babies admitted during the year was 83, five more than in 1929; five babies died, and 74 were discharged. Prematurity was the cause of death in three cases, and broncho-pneumonia in the other two. Of the infants discharged, 69 were sent out in good health, whilst in the remaining five cases, no improvement was shown. The average duration of stay was 55 days—seven less than in the previous year. The average duration of stay was shorter, but the number of babies admitted was larger.

(9) **Midwifery Services.**—In 1929 there were 249 midwives practising in the County, 10 of whom were untrained; and in the year under consideration, of the 246 registered midwives engaged in midwifery practice in Shropshire, 236 were trained, 10 being untrained.

One midwife was brought before the Local Supervising Authority during the year. The charges against her were found proved, and she was censured.

Under the Maternity and Child Welfare Act, 1918, the duty is placed on the County Council of making provision for midwifery services, and its obligations in this respect it discharges through the agency of the Shropshire Nursing Federation and the affiliated District Nursing Associations. There were 100 District Nursing Associations in being during the year.

By an arrangement with the County Council, the Shropshire Nursing Federation sends suitable candidates for training as midwives, three-fourths of the expense being borne by the County Council, the remainder being met by the Shropshire Nursing Federation. The number of midwives sent for training under the arrangement since 1921 is as follows :—

|      |                                  |      |                                   |
|------|----------------------------------|------|-----------------------------------|
| 1921 | 14                               | 1926 | 3                                 |
| 1922 | 13                               | 1927 | 11 (1 did not complete training). |
| 1923 | 14                               | 1928 | 10                                |
| 1924 | 4                                | 1929 | 9                                 |
| 1925 | 8 (2 did not complete training). | 1930 | 9 (1 did not complete training).  |

*Medical Help sought by Midwives.*—There was a slight increase in the number of cases for which medical help was sought by midwives, there being 1,192 during the year as opposed to 1,066 in 1929. Five hundred and eighty-four claims for payment were sent in by medical practitioners, and fees amounting to £1,010 were paid to them.

During the previous year, the number of claims was 574, and the payments in respect of these amounted to £970. When the family is in a position to pay, the whole or part of the fee is re-claimed by the County Council.

An analysis of the reasons for sending for medical help is given in the following statement :—

|                                           |    |    |    |     |
|-------------------------------------------|----|----|----|-----|
| On account of a complication of pregnancy | .. | .. | .. | 221 |
| " " " " " labour                          | .. | .. | .. | 733 |
| " " " " " the puerperium                  | .. | .. | .. | 68  |
| " " of the health of the child            | .. | .. | .. | 170 |

*Still-births.*—Notifications of 57 still-births were received from midwives during the year. There was evidence that death had occurred during or shortly before labour in 38 of them, and some time previously in 15, while in four cases this point remained undecided.

In one of the cases the sex was not mentioned, but of the others 33 were males, and 23 were females.

(10) **Maternal Deaths.**—The question of maternal mortality is one which continues to receive the careful consideration of health authorities. Notwithstanding the progress which has been made in recent years in other branches of public health work, an example of which is the decline in the infant mortality, the same progress is not reflected in the maternal mortality statistics. Midwifery services have been improved and developed, but we continue to lose approximately one in every 250 mothers in confinement. As child-birth ought to be a normal physiological process, uncomplicated by disease, a Maternal Mortality Committee has been set up by the Ministry of Health to enquire into and ascertain the factors which contribute towards the maintenance of the maternal death rate. Every maternal death is now carefully enquired into and a report on it submitted to this Committee. It is hoped that the large amount of valuable information which is now becoming available in this way will contribute towards the solution of this problem, the urgency of which is indicated by the yearly return of maternal mortality statistics.

In 1930 there were in Shropshire 21 maternal deaths directly or indirectly due to pregnancy, or due to a condition complicated by pregnancy, the average for the previous five years being 18. Of the deaths which took place during the year under consideration, in ten of the cases a doctor had been engaged previous to confinement. The large proportion of cases in which a doctor had been engaged would seem to indicate either that the health of the mother had required attention during pregnancy, or that difficulty had been anticipated at the confinement.

Of the maternal deaths which took place during the years 1928 to 1930, particulars of the pregnancies and of the causes from which the deaths resulted are given in the following Table ; and it will be observed that no less than 33 out of the total of 62 were the result of a first pregnancy. Of this total, 7 were due to puerperal fever, 12 to eclampsia, 13 to pulmonary embolism, and no less than 16 were due to causes which came within the legal definition of puerperal pyrexia.

PARTICULARS OF MATERNAL DEATHS FOR THE THREE YEARS 1928 TO 1930.

| Cause of Death.                                  | Total Deaths. | Number of Pregnancy. |     |     |     |     |     |     |     |     | Total for years |      |      |      |
|--------------------------------------------------|---------------|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|------|------|------|
|                                                  |               | 1st                  | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | Un-known.       | 1928 | 1929 | 1930 |
| Puerperal Fever .. ..                            | 7             | 5                    | ..  | ..  | ..  | 1   | ..  | ..  | ..  | ..  | 1               | 2    | 2    | 3    |
| Caesarian Section and Peritonitis                | 1             | 1                    | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..              | 1    | ..   | ..   |
| Caesarian Section and Grave's Disease .. ..      | 1             | ..                   | ..  | ..  | ..  | 1   | ..  | ..  | ..  | ..  | ..              | ..   | ..   | 1    |
| White Leg .. ..                                  | 1             | 1                    | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..              | ..   | ..   | ..   |
| Pneumonia .. ..                                  | 5             | 2                    | 1   | ..  | 1   | ..  | ..  | ..  | ..  | ..  | ..              | 3    | 1    | 1    |
| Eclampsia .. ..                                  | 12            | 9                    | 2   | ..  | ..  | ..  | ..  | ..  | 1   | ..  | ..              | 5    | 5    | 2    |
| Nephritis .. ..                                  | 1             | ..                   | ..  | ..  | ..  | ..  | ..  | 1   | ..  | ..  | ..              | ..   | 1    | ..   |
| Perforated Gastric Ulcer ..                      | 1             | ..                   | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 1   | ..              | ..   | 1    | ..   |
| Pulmonary Embolism ..                            | 12            | 5                    | 3   | ..  | 1   | 1   | ..  | 1   | ..  | 1   | ..              | 4    | 1    | 5    |
| Heart Disease and Embolism                       | 1             | 1                    | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..              | ..   | 3    | 1    |
| Heart Disease and Bronchitis                     | 1             | ..                   | 1   | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..              | ..   | 1    | ..   |
| Heart Failure { Prolonged Labour                 | 3             | 2                    | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 1   | ..              | ..   | 2    | 1    |
| Heart Failure { Under Anaesthetic and Haematuria | 1             | 1                    | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..              | ..   | 1    | ..   |
| Acute Otitis Media .. ..                         | 1             | ..                   | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | 1               | ..   | 1    | ..   |
| Post-partum Haemorrhage ..                       | 1             | 1                    | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..              | ..   | 1    | ..   |
| Miscarriage { and Measles                        | 1             | ..                   | ..  | ..  | ..  | ..  | ..  | 1   | ..  | ..  | ..              | ..   | 1    | ..   |
| Miscarriage { and Appendicitis                   | 1             | 1                    | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..              | ..   | 1    | ..   |
| Intestinal Obstruction ..                        | 1             | ..                   | ..  | ..  | ..  | ..  | 1   | ..  | ..  | ..  | ..              | ..   | ..   | 1    |
| Pelvic Injuries and Peritonitis                  | 1             | 1                    | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..              | ..   | ..   | 1    |
| Perforation of Uterus ..                         | 1             | ..                   | ..  | ..  | 1   | ..  | ..  | ..  | ..  | ..  | ..              | ..   | ..   | 1    |
| Placenta Praevia .. ..                           | 1             | ..                   | ..  | ..  | ..  | ..  | ..  | ..  | 1   | ..  | ..              | ..   | ..   | 1    |
| Heart Disease .. ..                              | 4             | 1                    | ..  | ..  | 1   | ..  | ..  | 1   | ..  | 1   | ..              | 1    | 2    | 1    |
| Septic Abortion .. ..                            | 2             | 1                    | ..  | 1   | ..  | ..  | ..  | ..  | ..  | ..  | ..              | ..   | 1    | 1    |
| Inanition and Puerperal Insanity                 | 1             | 1                    | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..  | ..              | ..   | ..   | 1    |
| TOTALS .. ..                                     | 62            | 33                   | 7   | 1   | 4   | 4   | 1   | 4   | 2   | 4   | 2               | 17   | 24   | 21   |

## STATISTICS RELATING TO WORK UNDER MIDWIVES ACTS.

| Year. | Number of Midwives practising in the County in June of each year. | Number of Visits paid. | Notifica-<br>tions of having<br>sent for<br>medical<br>help. | Notifications of<br>Still-births | Notifications<br>of death of<br>mother or<br>child with no<br>medical man in<br>attendance. | Notifica-<br>tions<br>of<br>Artificial<br>Feeding<br>by<br>Midwives. | Notifica-<br>tions<br>of<br>Midwives'<br>Liability<br>to be a<br>source of<br>Infection. | Notifica-<br>tions<br>by<br>Midwives<br>of having<br>laid out a<br>Dead<br>Body. |
|-------|-------------------------------------------------------------------|------------------------|--------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|       |                                                                   |                        |                                                              | By<br>Midwives.                  |                                                                                             |                                                                      |                                                                                          |                                                                                  |
| 1924  | 227                                                               | 752                    | 721                                                          | 51                               | 5                                                                                           | 57                                                                   | 19                                                                                       | 38                                                                               |
| 1925  | 255                                                               | 694                    | 882                                                          | 48                               | 3                                                                                           | 51                                                                   | 28                                                                                       | 22                                                                               |
| 1926  | 247                                                               | 846                    | 895                                                          | 52                               | 5                                                                                           | 46                                                                   | 25                                                                                       | 42                                                                               |
| 1927  | 236                                                               | 854                    | 898                                                          | 55                               | 3                                                                                           | 36                                                                   | 37                                                                                       | 28                                                                               |
| 1928  | 235                                                               | 847                    | 1056                                                         | 50                               | 2                                                                                           | 44                                                                   | 32                                                                                       | 32                                                                               |
| 1929  | 249                                                               | 796                    | 1066                                                         | 41                               | 4                                                                                           | 38                                                                   | 45                                                                                       | 38                                                                               |
| 1930  | 246                                                               | 845                    | 1192                                                         | 57                               | 8                                                                                           | 47                                                                   | 59                                                                                       | 38                                                                               |

(II) **Provision of Maternity Beds.**—The following are the arrangements made for the provision of maternity beds by the County Council :—

*Berrington Hospital.*—Ordinary maternity cases are taken into this hospital at a fee of £2 2s. per week, and septic cases at a fee of £3 3s. a week. The number of cases admitted during the year was fifty-one (20 septic and 31 ordinary). The County Council undertakes responsibility for payment in cases unable to afford the fee.

*Newport Nursing Home.*—Two beds are always available here. The County Council pays an annual fee of £10 per bed towards their maintenance.

*The Lady Forester Hospitals, Broseley and Much Wenlock.*—There are six maternity beds at Broseley hospital and four beds at Much Wenlock hospital. Occasionally other beds have been used. The County Council has agreed to pay £1 1s. a week towards the cost of any case recommended that cannot afford the fee.

*Hostels for unmarried mothers and their infants.*—An arrangement is in force with the Mrs. Legge Memorial Home, Wolverhampton, by which patients are admitted for six months, the County Council paying £2 a week for the first six weeks, the expense of the remainder of the period being borne by the Home. One case was sent during the year.

*Institutional Treatment of expectant and nursing mothers and their infants suffering from Venereal Diseases* is carried out under the Venereal Diseases Scheme at Cleveland House, Wolverhampton. Nine mothers were sent during the year (see page 52).

### NURSING HOMES REGISTRATION ACT, 1927.

The inspection of Nursing Homes is carried out by the Inspector of Midwives, who submits a report on each once a quarter, and more frequently should it be necessary.

During the year two registered Nursing Homes were voluntarily closed and applications for registration were received from six others, all of which were granted. On 31st December, 1930, the particulars of Nursing Homes registered under the Nursing Homes Registration Act, 1927, were as follows :—

| Nursing Home.                                            | No. of Beds.   | Date of Registration. | Cases accepted.        |
|----------------------------------------------------------|----------------|-----------------------|------------------------|
| Nurses' Home, Oswestry .. .. .                           | 2              | 13/6/28               | Maternity and General. |
| 3, Edgeley Road, Whitchurch.. ..                         | 3              | 25/10/28              | "                      |
| Wrekin Nursing Home, Wellington .. ..                    | 4              | 25/10/28              | "                      |
| Salop Nursing Institution, Shrewsbury .. ..              | 22             | 25/10/28              | "                      |
| Park Cottage Nursing Home, Clun .. ..                    | 2              | 25/10/28              | "                      |
| Clifton Villa Nursing Home, Ludlow .. ..                 | 2              | 25/10/28              | "                      |
| Newport Nursing Home, Newport .. ..                      | 4              | 25/10/28              | "                      |
| Ardmillan, Oswestry .. .. .                              | 5              | 25/10/28              | "                      |
| The Limes Nursing Home, Shrewsbury .. ..                 | 12 and 1 cot.  | 14/11/28              | "                      |
| Bridgnorth and South Shropshire Infirmary .. ..          | 29             | 14/11/28              | "                      |
| Shifnal Cottage Hospital .. .. .                         | 11 and 2 cots. | 14/11/28              | "                      |
| Oswestry Cottage Hospital .. .. .                        | 19 and 2 cots. | 23/2/29               | "                      |
| Wellington Cottage Hospital .. .. .                      | 11 and 1 cot.  | 26/2/29               | "                      |
| Clifton Nursing Home, Dodington, Whit-<br>church .. .. . | 5              | 22/3/30               | "                      |
| The Manse, Dovaston .. .. .                              | 2              | 7/4/30                | "                      |
| Caynham, Port Hill Drive, Shrewsbury .. ..               | 1              | 16/4/30               | "                      |
| Brynantur, All Stretton .. .. .                          | 1              | 26/6/30               | "                      |
| Haybridge Nursing Home, Wellington .. ..                 | 5              | 13/11/30              | "                      |
| Market Drayton Cottage Hospital .. ..                    | 10 and 2 cots. | 24/1/29               | General only.          |
| Ludlow Cottage Hospital .. .. .                          | 10             | 24/4/29               | "                      |
| Ellesmere Cottage Hospital .. .. .                       | 12             | 20/6/29               | "                      |
| Whitchurch Cottage Hospital .. .. .                      | 14 and 1 cot.  | 4/11/30               | "                      |
| Newport, Lady Boughey Cottage Hospital .. ..             | 14 and 1 cot.  | 15/11/30              | "                      |
| 34, Jennings Road, Oswestry .. .. .                      | 1              | 21/6/27               | Maternity only.        |
| 3, Glanabér Terrace, Weston Rhyn .. ..                   | 1              | 21/6/27               | "                      |
| 11, Burton Street, Shrewsbury .. .. .                    | 1              | 21/6/27               | "                      |
| 4, Hordley Road, Tetchill .. .. .                        | 1              | 7/11/27               | "                      |
| 3, Woodbine Terrace, Bishop's Castle .. ..               | 2              | 3/3/28                | "                      |
| Church Street, Shawbury .. .. .                          | 2              | 14/4/28               | "                      |
| Hampton Bank, Welshampton .. .. .                        | 1              | 25/10/28              | "                      |
| 27, Broadway, Shifnal .. .. .                            | 1              | 4/5/29                | "                      |
| 81, Canon Street, Shrewsbury .. .. .                     | 2              | 4/7/29                | "                      |
| West Farm, Ruckley .. .. .                               | 2              | 22/7/29               | "                      |

The following Institutions have been granted exemption from registration :—

Eye, Ear and Throat Hospital, Shrewsbury.  
 King Edward VII Memorial Sanatorium, Shirlett.  
 Lady Forester Hospitals, Broseley and Much Wenlock.  
 Royal Salop Infirmary, Shrewsbury.  
 Shropshire Orthopaedic Hospital and Agnes Hunt Surgical Home, Oswestry.

### ORTHOPAEDIC SCHEME.

There is a central hospital at Park Hall, Oswestry, and after-care centres are held at Bridgnorth, Cleobury Mortimer, Craven Arms, Dawley, Ellesmere, Ironbridge, Ludlow, Market Drayton, Newport, Oakengates, Oswestry, Shifnal, Shrewsbury, Wellington, Wem, Whitchurch.

The Orthopaedic Centres are visited at regular intervals by a Medical Officer of the Hospital, and ten of the Centres are visited weekly by specially trained nurses, the remainder being visited fortnightly. All the Orthopaedic Centres, except that at Ellesmere, are held on the same day as the Child Welfare Centres, an arrangement which makes for that co-operation between the two branches of the work which is so essential, as the early discovery of orthopaedic conditions in children under five depends almost entirely on the health visitors. The early discovery of cases amongst school children is largely in the hands of the School Medical Officers, who are also the Medical Officers in attendance at the Child Welfare Centres. By these means the Orthopaedic work is closely linked up with the School and Child Welfare work.

In order to ensure early treatment in cases of poliomyelitis and tuberculosis, a circular letter was drawn up and sent to all the medical practitioners in the County in which the facilities for diagnosis and treatment provided by the Orthopaedic Hospital were pointed out. Attention was also drawn to the unsatisfactory results and lengthened period of treatment necessary, with ultimately a corresponding increase in cost to the County Council, when these cases did not receive the special treatment required at the earliest possible moment.

The importance of early treatment of poliomyelitis is so great that arrangements have been made with the Orthopaedic Hospital for a specially trained nurse to be sent to help the medical practitioner, and afterwards to get the patient to hospital if necessary. Unfortunately a very small proportion of cases of poliomyelitis is notified, the majority being overlooked until paralysis or weakness is noticed.

The difficulty with cases of poliomyelitis is to recognise the disease at its commencement, for it resembles nothing so much as an attack of influenza or a " feverish cold " in a young child. Immediate removal of the patient to the Hospital can be obtained by wiring or telephoning to the Public Health Department.

The delay in the case of lesions due to tuberculosis is chiefly on account of the insidious nature of the disease and the failure of the patients to recognise the seriousness of the comparatively mild symptoms which manifest themselves at its commencement. Many of the tuberculous cases come under notice only after considerable damage has been done, the cause of the trouble not having been recognised in the early stages. The opinion of an orthopaedic surgeon, who has X-rays and every facility for diagnosis at his disposal, can be obtained at the Orthopaedic Hospital.

So far as we are aware all the cases really needing treatment have been dealt with, and the following statement, which was supplied from the Orthopaedic Hospital, giving the numbers treated at the After-Care Centres during the year, includes all the tuberculous cases as well as school children and child welfare cases. Conditions and defects of such a nature that they could not be adequately dealt with at the After-Care Centres, were admitted for treatment to the Orthopaedic Hospital.

## ATTENDANCES AT ORTHOPAEDIC CENTRES.

|                 | Cases beginning of year 1930. | Cases admitted during 1930. | Number of Attendances. | Number Discharged. | Condition on discharge. |           |            | Other particulars. |              |                    |                    |                      |
|-----------------|-------------------------------|-----------------------------|------------------------|--------------------|-------------------------|-----------|------------|--------------------|--------------|--------------------|--------------------|----------------------|
|                 |                               |                             |                        |                    | Remedied.               | Improved. | Unaltered. | Dead.              | Left County. | Refused to Attend. | Treated elsewhere. | Still in Attendance. |
| Under 5 years   | 170                           | 162                         | 2353                   | 107                | 36                      | 8         | ..         | 3                  | 11           | 47                 | 2                  | 225                  |
| 5—16 years      | 647                           | 417                         | 7259                   | 416                | 160                     | 37        | 1          | 2                  | 22           | 179                | 15                 | 648                  |
| Over 16 years   | 347                           | 277                         | 3261                   | 255                | 65                      | 92        | 5          | 3                  | 19           | 49                 | 22                 | 369                  |
| Totals for 1930 | 1164                          | 856                         | 12873                  | 778                | 261                     | 137       | 6          | 8                  | 52           | 275                | 39                 | 1242                 |
| Totals for 1929 | 1058                          | 745                         | 10184                  | 639                | 153                     | 143       | 7          | 8                  | 25           | 252                | 51                 | 1164                 |
| Totals for 1928 | 1285                          | 661                         | 11347                  | 888                | 115                     | 325       | 5          | 10                 | 24           | 395                | 14                 | 1058                 |

## PARTICULARS OF THE CASES TREATED AT THE ORTHOPAEDIC HOSPITAL.

The number of cases treated at the Orthopaedic Hospital and paid for by the County Council was 177, as compared with 156 in the previous year. The average number of beds occupied was, however, only 40, as compared with 44 during 1929.

An analysis of the cases according to causation is as follows :—

|       |       |           |             |                                      |
|-------|-------|-----------|-------------|--------------------------------------|
| 73 or | 41.24 | per cent. | were due to | tuberculosis.                        |
| 23 "  | 12.99 | "         | "           | diseases and injuries of the nerves. |
| 14 "  | 7.91  | "         | "           | fractures and dislocations.          |
| 8 "   | 4.52  | "         | "           | flat foot.                           |
| 7 "   | 3.96  | "         | "           | osteomyelitis.                       |
| 6 "   | 3.39  | "         | "           | spinal curvatures—non-tubercular.    |
| 6 "   | 3.39  | "         | "           | claw foot.                           |
| 5 "   | 2.83  | "         | "           | torticollis.                         |
| 5 "   | 2.83  | "         | "           | arthritis (septic and rheumatoid).   |
| 4 "   | 2.26  | "         | "           | club foot.                           |
| 8 "   | 4.52  | "         | "           | rickets.                             |
| 9 "   | 5.08  | "         | "           | congenital deformities.              |
| 3 "   | 1.69  | "         | "           | conditions due to faulty footwear.   |
| 3 "   | 1.69  | "         | "           | injuries to hands.                   |
| 2 "   | 1.13  | "         | "           | bony tumours—non-malignant.          |
| 1 "   | .57   | "         | "           | periostitis.                         |

| Disease.                            |    |    |    | Under 5 years<br>of age. | 5—16 years<br>of age. | Over 16 years<br>of age. |
|-------------------------------------|----|----|----|--------------------------|-----------------------|--------------------------|
| Tuberculosis of Bones and Joints    | .. | .. | .. | 9                        | 22††                  | 42*                      |
| Diseases and Injuries of the Nerves | .. | .. | .. | 4                        | 19                    | ..                       |
| Fractures and Dislocations          | .. | .. | .. | 2                        | 12                    | ..                       |
| Flat Foot                           | .. | .. | .. | ..                       | 8                     | ..                       |
| Osteomyelitis                       | .. | .. | .. | ..                       | 7                     | ..                       |
| Spinal Curvature—Non-tubercular     | .. | .. | .. | ..                       | 6                     | ..                       |
| Claw Foot                           | .. | .. | .. | ..                       | 6                     | ..                       |
| Torticollis                         | .. | .. | .. | ..                       | 5                     | ..                       |
| Arthritis (Septic and Rheumatoid)   | .. | .. | .. | ..                       | 5                     | ..                       |
| Club Foot                           | .. | .. | .. | 4                        | ..                    | ..                       |
| Rickets                             | .. | .. | .. | 4                        | 4                     | ..                       |
| Congenital Deformities              | .. | .. | .. | 6                        | 3                     | ..                       |
| Conditions due to faulty footwear   | .. | .. | .. | ..                       | 3                     | ..                       |
| Injuries to hands                   | .. | .. | .. | ..                       | 3                     | ..                       |
| Bony Tumours—Non-malignant          | .. | .. | .. | ..                       | 2                     | ..                       |
| Periostitis                         | .. | .. | .. | 1                        | ..                    | ..                       |
| Total for 1930                      |    |    |    | 30                       | 105                   | 42                       |
| Total for 1929                      |    |    |    | 32                       | 84                    | 40                       |

† Includes 4 Shrewsbury Borough School Children.

† 1 case afterwards re-diagnosed as "Strain of Hip."

\* 2 cases afterwards re-diagnosed as "Non-tubercular," and 1 case afterwards re-diagnosed as "Toxic Arthritis."

*County Council Cases.*—Of the 177 cases—21 more than in the previous year—73 were due to tuberculosis and were dealt with under the Tuberculosis Scheme. Of the non-tuberculous cases 21 were under five years of age and were dealt with under the Child Welfare Scheme, while 83 were of school age and were dealt with under the Scheme for the treatment of School Children.

Of the 73 cases dealt with under the Tuberculosis Scheme, 22 were diagnosed as suffering from affections of the hip, 25 of the spine, and 13 of the knee, while in 13 cases other bones and joints were affected. On further observation, however, it was later decided that four of the cases were non-tubercular. The average length of stay was 110 days. In the previous year, 75 tuberculous cases were admitted, the average length of stay being 143 days.



# PULMONARY TUBERCULOSIS NOTIFICATIONS AND DEATH RATES, 1907 TO 1930.



| Year of Notification | Percentages of Patients known to be alive at end of :— |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----------------------|--------------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                      | The Year of Notification                               |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                      | 1st                                                    | 2nd  | 3rd  | 4th  | 5th  | 6th  | 7th  | 8th  | 9th  | 10th | 11th | 12th | 13th | 14th | 15th | 16th | 17th | 18th |
| 1912                 | 72.3                                                   | 63.5 | 53.1 | 49.3 | 47.3 | 46.4 | 44.4 | 44.2 | 43.8 | 43.1 | 42.8 | 42.7 | 42.3 | 24.2 | 22.5 | 22.3 | 22.3 | 21.5 |
| 1913                 | 82.5                                                   | 64.4 | 59.6 | 56.7 | 55.9 | 52.3 | 50.7 | 49.6 | 48.7 | 48.3 | 47.8 | 46.5 | 38.8 | 36.9 | 36.6 | 36.6 | 36.4 | 36.4 |
| 1914                 | 72.8                                                   | 58.2 | 53.5 | 51.1 | 48.0 | 45.5 | 44.6 | 43.6 | 43.2 | 42.2 | 42.2 | 33.9 | 32.1 | 31.6 | 31.6 | 31.6 | 31.6 | 31.6 |
| 1915                 | 76.2                                                   | 61.9 | 57.0 | 52.8 | 49.0 | 46.7 | 46.4 | 45.2 | 45.1 | 44.9 | 43.2 | 29.2 | 28.9 | 28.3 | 27.8 | 27.8 | 27.8 | 27.8 |
| 1916                 | 78.5                                                   | 65.8 | 59.9 | 56.5 | 55.3 | 53.6 | 51.9 | 50.1 | 48.2 | 48.2 | 38.0 | 35.9 | 35.9 | 35.7 | 34.4 | 34.4 | 34.4 | 34.4 |
| 1917                 | 76.6                                                   | 64.3 | 56.8 | 54.3 | 52.9 | 50.8 | 48.6 | 48.1 | 48.1 | 39.2 | 36.5 | 35.7 | 35.2 | 34.7 | 34.7 | 34.7 | 34.7 | 34.7 |
| 1918                 | 76.7                                                   | 67.1 | 63.0 | 60.1 | 59.3 | 57.7 | 55.9 | 49.9 | 46.7 | 45.6 | 44.3 | 43.0 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 |
| 1919                 | 78.9                                                   | 72.2 | 65.5 | 61.3 | 57.9 | 55.5 | 50.3 | 48.7 | 47.5 | 45.4 | 44.3 | 42.8 | 42.8 | 42.8 | 42.8 | 42.8 | 42.8 | 42.8 |
| 1920                 | 71.2                                                   | 60.7 | 53.8 | 50.3 | 47.7 | 46.8 | 44.7 | 43.3 | 43.0 | 42.1 | 41.5 | 41.5 | 41.5 | 41.5 | 41.5 | 41.5 | 41.5 | 41.5 |
| 1921                 | 78.2                                                   | 63.4 | 55.6 | 50.8 | 45.3 | 43.5 | 41.8 | 40.7 | 40.2 | 39.9 | 39.9 | 39.9 | 39.9 | 39.9 | 39.9 | 39.9 | 39.9 | 39.9 |
| 1922                 | 66.9                                                   | 47.1 | 40.7 | 36.4 | 33.0 | 29.5 | 27.6 | 25.5 | 24.6 | 24.6 | 24.6 | 24.6 | 24.6 | 24.6 | 24.6 | 24.6 | 24.6 | 24.6 |
| 1923                 | 75.4                                                   | 61.2 | 53.1 | 47.6 | 44.1 | 41.5 | 39.7 | 37.6 | 37.6 | 37.6 | 37.6 | 37.6 | 37.6 | 37.6 | 37.6 | 37.6 | 37.6 | 37.6 |
| 1924                 | 74.9                                                   | 62.5 | 57.1 | 51.6 | 48.3 | 47.2 | 47.2 | 47.2 | 47.2 | 47.2 | 47.2 | 47.2 | 47.2 | 47.2 | 47.2 | 47.2 | 47.2 | 47.2 |
| 1925                 | 78.5                                                   | 65.4 | 56.4 | 50.0 | 42.8 | 39.0 | 37.8 | 37.8 | 37.8 | 37.8 | 37.8 | 37.8 | 37.8 | 37.8 | 37.8 | 37.8 | 37.8 | 37.8 |
| 1926                 | 74.1                                                   | 55.4 | 44.5 | 36.8 | 36.8 | 36.8 | 36.8 | 36.8 | 36.8 | 36.8 | 36.8 | 36.8 | 36.8 | 36.8 | 36.8 | 36.8 | 36.8 | 36.8 |
| 1927                 | 74.1                                                   | 56.1 | 44.4 | 40.2 | 40.2 | 40.2 | 40.2 | 40.2 | 40.2 | 40.2 | 40.2 | 40.2 | 40.2 | 40.2 | 40.2 | 40.2 | 40.2 | 40.2 |
| 1928                 | 75.0                                                   | 53.2 | 46.3 | 46.3 | 46.3 | 46.3 | 46.3 | 46.3 | 46.3 | 46.3 | 46.3 | 46.3 | 46.3 | 46.3 | 46.3 | 46.3 | 46.3 | 46.3 |
| 1929                 | 77.7                                                   | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 |
| 1930                 | 77.2                                                   | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 | 61.7 |

For the purpose of this table those cases that have left the County or in which the diagnosis was wrong have been excluded.

#### After-History of notified cases since 1912.

| Year | No. of cases notified in year | Number of cases that died in years |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|-------------------------------|------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|      |                               | Known to be alive at end of years  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|      |                               | 1912                               | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 |
| 1912 | 439                           | 117                                | 36   | 43   | 15   | 8    | 4    | 8    | 1    | 1    | 3    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 306  | 266  | 222  | 205  | 197  | 193  | 185  | 182  | 179  |
| 1913 | 290                           | 50                                 | 51   | 12   | 8    | 2    | 9    | 4    | 3    | 2    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 236  | 183  | 167  | 159  | 156  | 145  | 140  | 137  | 134  |
| 1914 | 267                           | 73                                 | 34   | 12   | 6    | 8    | 6    | 1    | 2    | 1    | 2    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 188  | 149  | 137  | 131  | 123  | 116  | 113  | 110  | 109  |
| 1915 | 381                           | 89                                 | 49   | 17   | 14   | 12   | 7    | 1    | 2    | 1    | 2    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 280  | 225  | 206  | 189  | 174  | 165  | 164  | 158  | 157  |
| 1916 | 392                           | 81                                 | 44   | 20   | 11   | 4    | 6    | 4    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 297  | 298  | 243  | 209  | 160  | 193  | 185  | 176  | 174  |
| 1917 | 403                           | 90                                 | 44   | 20   | 11   | 4    | 6    | 4    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 297  | 298  | 243  | 209  | 160  | 193  | 185  | 176  | 174  |
| 1918 | 425                           | 93                                 | 42   | 20   | 11   | 4    | 6    | 4    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 297  | 298  | 243  | 209  | 160  | 193  | 185  | 176  | 174  |
| 1919 | 341                           | 67                                 | 21   | 19   | 11   | 10   | 5    | 1    | 3    | 3    | 4    | 3    | 4    | 2    | 1    | 1    | 1    | 1    | 1    | 1    | 225  | 225  | 206  | 189  | 174  | 165  | 164  | 158  | 157  |
| 1920 | 325                           | 90                                 | 30   | 18   | 10   | 6    | 3    | 5    | 4    | 1    | 2    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 225  | 225  | 206  | 189  | 174  | 165  | 164  | 158  | 157  |
| 1921 | 318                           | 66                                 | 44   | 22   | 12   | 10   | 3    | 3    | 3    | 2    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 225  | 225  | 206  | 189  | 174  | 165  | 164  | 158  | 157  |
| 1922 | 274                           | 85                                 | 44   | 22   | 12   | 10   | 3    | 3    | 3    | 2    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 225  | 225  | 206  | 189  | 174  | 165  | 164  | 158  | 157  |
| 1923 | 273                           | 62                                 | 34   | 18   | 7    | 7    | 3    | 4    | 3    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 225  | 225  | 206  | 189  | 174  | 165  | 164  | 158  | 157  |
| 1924 | 287                           | 69                                 | 24   | 13   | 11   | 4    | 2    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 225  | 225  | 206  | 189  | 174  | 165  | 164  | 158  | 157  |
| 1925 | 243                           | 47                                 | 27   | 15   | 9    | 9    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 225  | 225  | 206  | 189  | 174  | 165  | 164  | 158  | 157  |
| 1926 | 208                           | 52                                 | 34   | 16   | 14   | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 225  | 225  | 206  | 189  | 174  | 165  | 164  | 158  | 157  |
| 1927 | 162                           | 38                                 | 23   | 14   | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 225  | 225  | 206  | 189  | 174  | 165  | 164  | 158  | 157  |
| 1928 | 214                           | 50                                 | 39   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 225  | 225  | 206  | 189  | 174  | 165  | 164  | 158  | 157  |
| 1929 | 194                           | 41                                 | 26   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 225  | 225  | 206  | 189  | 174  | 165  | 164  | 158  | 157  |
| 1930 | 184                           | 39                                 | 26   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 225  | 225  | 206  | 189  | 174  | 165  | 164  | 158  | 157  |

| Left County, cured, or wrongly diagnosed, 1930. | Unaccounted for. |
|-------------------------------------------------|------------------|
| 99                                              | 17               |
| 51                                              | 3                |
| 46                                              | 3                |
| 106                                             | 5                |
| 103                                             | 4                |
| 97                                              | 1                |
| 110                                             | 0                |
| 77                                              | 0                |
| 36                                              | 0                |
| 47                                              | 0                |
| 42                                              | 0                |
| 51                                              | 0                |
| 82                                              | 0                |
| 66                                              | 0                |
| 27                                              | 0                |
| 30                                              | 0                |
| 24                                              | 0                |
| 101                                             | 0                |
| 143                                             | 0                |
| 132                                             | 0                |



During the year, the average number of beds occupied by cases paid for by the County Council was 4 less than in 1929—seven less under the tuberculosis scheme, five more under the School scheme and two less under the child welfare scheme. The particulars are as follow:—

|                         | 1930 | 1929 | 1928 | 1927 | 1926 | 1925 | 1924 | 1923 | 1922 | 1921 |
|-------------------------|------|------|------|------|------|------|------|------|------|------|
| Tuberculosis Scheme ..  | 23   | 30   | 39   | 40   | 31   | 37   | 40   | 37   | 42   | 44   |
| Child Welfare Scheme .. | 4    | 6    | 2    | 9    | 5    | 9    | 7    | 6    | 8    | 10   |
| School Scheme ..        | 13   | 8    | 14   | 15   | 15   | 14   | 13   | 11   | 11   | 21   |
|                         | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    |
| Total ..                | 40   | 44   | 55   | 64   | 51   | 60   | 60   | 54   | 61   | 75   |
|                         | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    |

It is worthy of note that the average number of beds occupied by County Council cases during 1930 is the smallest since the Orthopaedic Hospital at Park Hall, Oswestry, was opened in 1921. While it is probable that there will be variations in this respect from year to year, it is hoped and expected that there will be a still further decline in the number and seriousness of the cases requiring orthopaedic treatment. This is to be attributed to the excellent scheme of After-care which was organised in this County in the year 1917.

There are now few patients with serious crippling conditions in Shropshire, and the Orthopaedic Clinics are being attended less by patients requiring "After-care" proper, and to a greater extent by children requiring "preventive treatment" for crippling conditions which they are showing signs of developing. These are discovered chiefly through the Child Welfare and School Medical Services, and are dealt with at their commencement. The great bulk of these cases do not require, therefore, to be sent for hospital treatment, and the duration of stay of those who ultimately have to be admitted is correspondingly shortened. Most of the patients who attend the Orthopaedic Clinics do so on account of trifling deformities which are remediable by special exercises and other simple forms of treatment.

### TUBERCULOSIS.

The incidence of tuberculosis in 1930 compared with the two previous years is as follows:—

| Pulmonary Tuberculosis. |     |       | Other Forms of Tuberculosis |         | Total.         |         |
|-------------------------|-----|-------|-----------------------------|---------|----------------|---------|
| Notifications. Deaths.  |     |       | Notifications.              | Deaths. | Notifications. | Deaths. |
| 1928 ..                 | 214 | 126   | 129                         | 41      | 343            | 167     |
| 1929 ..                 | 194 | 147   | 138                         | 33      | 332            | 180     |
| 1930 ..                 | 184 | 106   | 119                         | 34      | 303            | 140     |
| <hr/>                   |     |       |                             |         |                |         |
| Average for             |     |       |                             |         |                |         |
| 1929 & 1930             | 189 | 126.5 | 128.5                       | 33.5    | 317.5          | 160     |

Comparing the figures for the year 1930 with those of the previous year, it will be observed that the number of deaths from pulmonary tuberculosis decreased by 41, while the number of notifications decreased by 10. The deaths from non-pulmonary tuberculosis on the other hand increased by 1, while the notifications decreased by 19.

There has been, therefore, a decrease of 29 in the total number of notifications and a decrease of 40 in the total number of deaths.

## NOTIFICATIONS OF, AND DEATHS FROM, TUBERCULOSIS.

|                |    |    | New Cases. |    |                |    | Deaths.    |    |                |    |
|----------------|----|----|------------|----|----------------|----|------------|----|----------------|----|
|                |    |    | Pulmonary. |    | Non-pulmonary. |    | Pulmonary. |    | Non-pulmonary. |    |
|                |    |    | M.         | F. | M.             | F. | M.         | F. | M.             | F. |
| 0—1            | .. | .. | 0          | 1  | 0              | 0  | 0          | 0  | 1              | 2  |
| 1—5            | .. | .. | 2          | 0  | 15             | 5  | 0          | 0  | 5              | 4  |
| 5—10           | .. | .. | 1          | 2  | 16             | 15 | 1          | 1  | 1              | 5  |
| 10—15          | .. | .. | 0          | 2  | 11             | 8  |            |    |                |    |
| 15—20          | .. | .. | 8          | 13 | 8              | 11 | 15         | 15 | 3              | 3  |
| 20—25          | .. | .. | 21         | 18 | 7              | 7  |            |    |                |    |
| 25—35          | .. | .. | 22         | 16 | 3              | 4  | 21         | 20 | 4              | 3  |
| 35—45          | .. | .. | 21         | 15 | 3              | 4  |            |    |                |    |
| 45—55          | .. | .. | 9          | 8  | 2              | 0  | 19         | 12 | 1              | 1  |
| 55—65          | .. | .. | 8          | 5  | 0              | 0  |            |    |                |    |
| 65 and upwards | .. | .. | 8          | 4  | 0              | 0  | 1          | 1  | 0              | 1  |
|                |    |    | 100        | 84 | 65             | 54 | 57         | 49 | 15             | 19 |
| TOTALS         | .. | .. | 184        |    | 119            |    | 106        |    | 34             |    |

Of the 184 cases of pulmonary tuberculosis notified in 1930, five were inmates of the Salop Mental Hospital and were not seen; six cases were notified by the military authorities; and there was objection to interference by the Tuberculosis Medical Officers in four cases. It should be noted that, after making these deductions, 71 per cent. of the cases notified were seen by the Tuberculosis Medical Officers before notification.

It will be observed from the table given above that our greatest death-rate from pulmonary tuberculosis is between the ages of 15 and 45.

The high death-rate in the young adult is one of the most baffling facts in the tuberculosis problem of to-day, and in an answer to the question—*Why does the young adult succumb to Tuberculosis*—lies the solution of one of the most difficult problems in anti-tuberculosis work; and it would therefore appear that concentrated research on this point would be amply repaid.

In the first fifteen years of life there were two deaths from pulmonary tuberculosis as against eighteen deaths from other forms of the disease. Infection through milk by the bovine type of tubercle bacillus causes a large proportion of the cases of non-pulmonary tuberculosis, whilst pulmonary tuberculosis is nearly always due to the human type of bacillus. A higher incidence of non-pulmonary tuberculosis would, consequently, be expected in the earlier years of life when opportunities for infection are greater owing to this being the great milk-drinking age. The difference, however, is not quite so great as that shown by the figures, as 9 deaths from tubercular meningitis are included in the eighteen non-pulmonary deaths, and many of these meningitis cases are undoubtedly due to the human type of infection.

There is, however, a high morbidity in the cattle type of infection, as there were seventy cases of non-pulmonary tuberculosis notified, as opposed to eight cases of the pulmonary type.

It will be seen that there is still a great danger from infection by milk. The ideal is, of course, a tubercle-free milk for our children but, as this is neither practicable nor possible at present, it would appear that the only method of dealing with this type of infection is to insist on all milk given to young children being boiled. Pasteurized milk has not been definitely proved as safe and, even if it were, pasteurization is not applicable to a scattered county area like Shropshire.

In the table below is given the average annual number of deaths for the Urban and Rural Districts, classified in Age Periods and Sex, during five-yearly periods from 1916 to 1930.

*Urban Districts.*

*Rural Districts.*

|                 | Urban Districts. |    |    |    |     |    | Rural Districts. |    |     |    |     |    |           |    |    |    |     |    |     |    |     |    |     |    |
|-----------------|------------------|----|----|----|-----|----|------------------|----|-----|----|-----|----|-----------|----|----|----|-----|----|-----|----|-----|----|-----|----|
|                 | All ages.        |    | 0— |    | 15— |    | 25—              |    | 45— |    | 65— |    | All ages. |    | 0— |    | 15— |    | 25— |    | 45— |    | 65— |    |
|                 | M.               | F. | M. | F. | M.  | F. | M.               | F. | M.  | F. | M.  | F. | M.        | F. | M. | F. | M.  | F. | M.  | F. | M.  | F. | M.  | F. |
| Average 1916—20 | 53               | 46 | 4  | 5  | 7   | 10 | 24               | 21 | 14  | 8  | 4   | 2  | 43        | 46 | 1  | 3  | 8   | 13 | 19  | 22 | 13  | 7  | 3   | 1  |
| Average 1921—25 | 45               | 40 | 1  | 2  | 7   | 11 | 20               | 19 | 15  | 7  | 2   | 1  | 33        | 36 | 1  | 1  | 6   | 11 | 14  | 14 | 10  | 8  | 2   | 1  |
| Average 1926—30 | 36               | 32 | 1  | 2  | 7   | 9  | 15               | 15 | 12  | 5  | 1   | 1  | 31        | 29 | 1  | 1  | 5   | 7  | 16  | 14 | 7   | 6  | 2   | 1  |

TABLE GIVING PARTICULARS OF NOTIFICATIONS AND DEATHS FROM PULMONARY AND OTHER FORMS OF TUBERCULOSIS IN EACH OF THE SANITARY DISTRICTS DURING THE YEAR 1930.

| Urban Districts. | Pulmonary           |         | Other forms         |        | Rural Districts.   | Pulmonary           |         | Other forms         |         |
|------------------|---------------------|---------|---------------------|--------|--------------------|---------------------|---------|---------------------|---------|
|                  | Notifi-<br>cations. | Deaths. | Notifi-<br>cations. | Deaths |                    | Notifi-<br>cations. | Deaths. | Notifi-<br>cations. | Deaths. |
| Bishop's Castle  | 0                   | 0       | 0                   | 0      | Atcham .. ..       | 17                  | 9       | 8                   | 3       |
| Bridgnorth ..    | 8                   | 6       | 0                   | 1      | Bridgnorth ..      | 10                  | 3       | 1                   | 1       |
| Church Stretton  | 2                   | 1       | 0                   | 0      | Burford .. ..      | 1                   | 3       | 0                   | 0       |
| Dawley .. ..     | 5                   | 1       | 6                   | 0      | Chirbury .. ..     | 3                   | 2       | 3                   | 0       |
| Ellesmere ..     | 1                   | 0       | 7                   | 0      | Church Stretton .. | 3                   | 4       | 0                   | 1       |
| Ludlow .. ..     | 5                   | 3       | 2                   | 2      | Cleobury Mortimer  | 7                   | 7       | 5                   | 0       |
| Market Drayton   | 2                   | 0       | 1                   | 0      | Clun .. ..         | 3                   | 1       | 1                   | 0       |
| Newport .. ..    | 0                   | 3       | 2                   | 1      | Drayton .. ..      | 4                   | 2       | 1                   | 2       |
| Oakengates ..    | 5                   | 5       | 5                   | 1      | Ellesmere .. ..    | 3                   | 2       | 1                   | 1       |
| Oswestry .. ..   | 15                  | 7       | 6                   | 3      | Ludlow .. ..       | 10                  | 3       | 2                   | 1       |
| Shrewsbury ..    | 29                  | 19      | 11                  | 4      | Newport .. ..      | 3                   | 1       | 12                  | 1       |
| Wellington ..    | 8                   | 2       | 5                   | 0      | Oswestry .. ..     | 6                   | 4       | 7                   | 3       |
| Wem .. ..        | 2                   | 2       | 0                   | 0      | Shifnal .. ..      | 3                   | 1       | 1                   | 1       |
| Wenlock .. ..    | 11                  | 5       | 6                   | 3      | Teme .. ..         | 0                   | 0       | 2                   | 0       |
| Whitchurch ..    | 5                   | 2       | 7                   | 0      | Wellington ..      | 9                   | 6       | 11                  | 3       |
|                  |                     |         |                     |        | Wem .. ..          | 3                   | 2       | 5                   | 2       |
|                  |                     |         |                     |        | Whitchurch ..      | 1                   | 0       | 1                   | 0       |
| Totals ..        | 98                  | 56      | 58                  | 15     |                    | 86                  | 50      | 61                  | 19      |



It will be noticed that the death-rates in the Urban Districts have been higher than those in the Rural, but that there has been a very definite fall in the death-rates in both Urban and Rural Districts; and, in the last ten-yearly period 1921-1930, Burford is the only Sanitary District with a death-rate from pulmonary tuberculosis above one per thousand of the population. Burford is, however, a very small district where even one death makes a considerable difference in the death-rate for any particular year; and the average for the past thirty years for this District is .743. The rate of decline in the Urban and Rural Districts for the past thirty years is approximately equal, being 40 per cent. in the Urban and 37 per cent. in the Rural.

In the ten-yearly periods, the death-rate in the manufacturing districts of the County is as low as, if not lower than, the death-rate in the other Urban areas where there is no factory life; and from this it would seem that infection does not take place in the work-rooms as much as one might imagine, but rather that it occurs in the homes of the people. It would appear necessary, therefore, to concentrate more and more on the improvement in the home conditions, especially on those homes in which there are infectious cases with a positive sputum.

#### NUMBER OF CASES OF TUBERCULOSIS ON THE REGISTER AT THE END OF THE YEAR.

| Pulmonary. |          |        | Non-Pulmonary. |          |        | Total Cases |
|------------|----------|--------|----------------|----------|--------|-------------|
| Males.     | Females. | Total. | Males.         | Females. | Total. |             |
| 840        | 791      | 1631   | 571            | 655      | 1226   | 2857        |

A study of the chart opposite page 37 will show that in those years in which influenza was prevalent, there was an increased death-rate from pulmonary tuberculosis. This is shown in the high death-rate from pulmonary tuberculosis in the years 1918, 1922, 1929, which coincided with severe epidemics of influenza. The death-rate in 1930 is the lowest on record, but in 1930 there were only 50 deaths from influenza in the County, as compared with 234 in 1929.

The average number of deaths from pulmonary tuberculosis for the years 1929 and 1930 is found to be 126, the same as the total number of deaths from this cause in 1928, and three less than in 1927. Although, therefore, there were only 106 deaths from pulmonary tuberculosis in 1930,—the lowest on record for any one year,—it would be advisable to accept the average for the two years 1929—1930, namely, 126, as the more accurate index, as some of the deaths which would normally have occurred in 1930 were accelerated by influenza, and took place in 1929, thus causing the high figure of 147 in that year, and resulting in the fall to the phenomenally low figure of 106 in 1930.

Whilst this big decrease in the number of deaths from pulmonary tuberculosis is very satisfactory, it is generally found that a sudden fall is often succeeded by a slight rise. An average taken over a ten-yearly period is, therefore, a much truer index of the position.

The figures for the three ten-yearly periods 1901—1930, show that there has been a very consistent and satisfactory decline. They are:—

|                |    |                               |
|----------------|----|-------------------------------|
| 1901 to 1910 : | .. | .961 per 1,000 of population. |
| 1911 to 1920 : | .. | .816 per 1,000 of population. |
| 1921 to 1930 : | .. | .580 per 1,000 of population. |

The figures show that there has been a very definite decrease, which has been most marked in the last decade. This, however, has to be discounted by the fact that, in the decade 1911 to 1920, the War years intervened with consequent added stress and strain and depleted food supplies, all of which are conducive to the development of tuberculosis.

The Tuberculosis Problem is very definitely a Public Health one, and will not be solved by any single measure solely directed against tuberculosis, but by the combined effect of all schemes designed to promote the general health of the community. The big drop in the death-rate in the last ten years cannot be attributed to the Tuberculosis Scheme alone. The rapid development of School Medical Inspection and of Maternity and Child Welfare Schemes has played a very important part in the decline.

In the absence of a specific cure, it is felt that pulmonary tuberculosis can most effectively be dealt with by adopting those measures which will result in the dilution of infection and in raising the resistance of the individual. Education is perhaps the most important factor, and by education is meant not specialised education in the prevention of tuberculosis alone, but a sound general education of the public to enable it to appreciate and take advantage of teaching in matters of general health.

Tuberculosis is primarily a disease of the home, and therefore the most important education in the prevention of tuberculosis must be done in the homes of the people. This work will largely have to be done by health visitors and tuberculosis nurses and, if their efforts are to be a real success, they must possess not only tact, but also the gift of imparting their knowledge to others. Their knowledge of tuberculosis can be kept up to date by periodic lectures given by the tuberculosis officers. However good health visitors may be, it is well to remind them of the importance of the teaching of the prevention of infection, as it is only human nature to give one's sympathy to the sufferer and perhaps neglect the more important side—the health of the “contacts.”

Next in an education scheme is the work of medical superintendents and nurses in sanatoria. Patients are often in these Institutions for long periods, and the medical superintendent has ample opportunity of judging of the character of his patients. He knows who are likely to take precautions against the spread of infection and who are not, and he can do invaluable work by quiet individual talks which are much more effective than general lectures to the whole of the patients. There are patients who will only take precautions against spreading infection if they think they are carrying out treatment for the benefit of themselves, so that in these cases treatment must be the lever towards prevention. The person who is carrying out sanatorium treatment at home is the one who is, often unconsciously, taking precautions against the spread of infection. The education of patients whilst in sanatoria is therefore work of the utmost importance in the prevention of tuberculosis.

In the matter of the education of the general public, very excellent work has been done by the National Association for the Prevention of Tuberculosis by means of its caravan tours throughout the country. It has called to the minds of the people the fact that there is a tuberculosis problem, and has done splendid work in the teaching of the prevention of tuberculosis in many towns and villages which have been visited. Perhaps its most useful work has been the showing of health films and the giving of lectures to school children during those tours, as lessons and habits learnt in childhood often carry their influence throughout the whole of life.

Another useful means of education of the general public may be found through the medium of women's institutes, which are excellently organised all over the county, and it is suggested that they should include a few health lectures in their winter syllabus. As tuberculosis is a disease of the home, the lessons learnt by these women at the lectures would have a big influence in the prevention of infection.

The words of Krause—"These children are the unlucky heirs of accident and ignorance, of which ignorance is perhaps the more prolific breeder"—are not only applicable to childhood tuberculosis, but to adult tuberculosis as well, and it is probable that the Tuberculosis Problem can best be dealt with by those measures which will prevent continued or massed infection taking place, combined with those which aim at raising the general standard of health of the community.

This can best be done by :—

- (1) Education in general healthy living, in food values and the special food requirements of growing children, and education in the early symptoms and the causes and prevention of tuberculosis.
- (2) Better housing of the population generally and, more particularly, better housing of the infectious cases in order to dilute infection as much as possible.
- (3) A more general use of open-air shelters, and especially the use of these for the child contacts, to get children out of the house where gross infection takes place.
- (4) Boarding out of children in those cases which cannot be dealt with by other means. (This is especially applicable to chronic infectious cases who are able to do a certain amount of work and do not feel ill enough for hospitalization.)
- (5) Segregation of advanced cases of pulmonary tuberculosis.
- (6) A thorough search for the source of infection among the contacts of all children dying from acute generalised tuberculosis or tubercular meningitis. (This will often reveal an unsuspected case amongst the adults and, by instituting preventive measures as soon as possible, further massed infection amongst the remaining children may be prevented.)
- (7) The segregation of babies born of infectious tubercular mothers.
- (8) The regular supervision of the health of the contacts, especially the contacts of those cases which have a positive sputum.
- (9) The most intimate co-ordination of all health schemes in raising the general health of the community.

**Work under the Scheme.**—One of the Tuberculosis Officers (Dr. Elliott) has superintendent duties in connection with the Shirlett Sanatorium and the Prees Heath Hospital for advanced cases of consumption. Dr. Watkin visits the Orthopaedic Hospital at regular intervals, so as to be able to consult with the Medical Superintendent with regard to the discharge of the patients and their proper after-care.

**Scheme for Contact Examination.**—On notification of each case of pulmonary tuberculosis the health visitor makes a report on the health of all the contacts in the home, and visits the family at regular intervals. Every case of ill-health is immediately reported to the Tuberculosis Officer, who examines the case as soon as possible. With regard to "contacts" of school age, the Assistant School Medical Officer examines these cases at his routine inspection of the school. After examination, every doubtful case is referred to the Tuberculosis Officer.

Results of all sputum examinations are sent to the health visitors, who are instructed to pay particular attention to all cases in which there is a positive sputum, as these are, of course, the cases which are most infectious.

Contact visiting is continued after the death of the patient, and owing to the tact of the health visitors, we rarely get an objection to their visits. The system adopted in this county of having the health visitors employed on school inspection, child welfare and tuberculosis visiting is to be preferred to having them employed on one particular branch of the work. They are persons specially trained in all aspects of health work, and as the tuberculosis problem largely depends on the co-ordination of all the health services, their work must be more valuable than that of those trained and concentrating on one aspect only of the problem.

In 1930, 549 contacts were examined and 28 cases of tuberculosis discovered among them. On the other hand, of the 184 cases of pulmonary tuberculosis notified, 53 had a definite history of contact with a case of tuberculosis.

*Pneumothorax or Collapse Therapy.*—This is undoubtedly one of the greatest advances in the treatment of pulmonary tuberculosis in the last half century. The principle is that by introducing air between the layers of the pleura the lung collapses and is kept at rest. The lung is kept collapsed for at least three years, and as the air becomes absorbed refills are necessary at intervals of two weeks to a month. A great extension of this form of treatment is expected and, in order to enable this to be done satisfactorily, the County has been divided into three areas. The West and the North-West cases are treated at the Tuberculosis Dispensary, Shrewsbury; the East and North-East cases at the County Public Assistance Institution, Wellington, and those from the Southern part at Shirlett Sanatorium.

*Shropshire Orthopaedic Hospital.*—See page 34.

*Prees Heath Sanatorium.*—This hospital has proved of great use during the year, and there are now 11 beds available in it, but additional accommodation is required. Fifteen patients were admitted, seven were discharged, and six died.

*Dental Treatment.*—Twenty-four patients received dental treatment, which consisted of extractions of 40 teeth, eight fillings and four other operations.

*Shelters.*—Twenty new shelters constructed in accordance with our new design, have been provided, and 7 have been scrapped.

There are at present over 154 shelters in the County. The County Council have provided 140, Shrewsbury Borough 4, Whitchurch Urban District Council 2, Drayton Rural and Urban District Councils 2, Chirbury Rural District Council 1, the Ludlow Care Committee 5, and, in addition, several have been provided by private individuals.

Of the 140 shelters provided by the County Council, five have been in continual use for 18 years; twenty-two for 17 years; eleven for 16 years and twenty-six for 15 years. These old shelters continually need expensive repairs, and it is probable that a number of these will have to be scrapped during the next few years.

In the treatment and prevention of tuberculosis shelters should be used—(1) to provide for the sleeping out of children in crowded phthisical homes; (2) for the accommodation of early cases to aid in their recovery; (3) for the accommodation of advanced cases to prevent infection.

The principle of providing shelters for the healthy children in a crowded phthisical home has been approved. This is probably the most important use of shelters, and considerably more will be required in the near future.

Shelters are also to be provided for cases of surgical tuberculosis to allow of them being treated at home under proper conditions, and consequently discharged from the hospital at an earlier date.

The education of the people with regard to living in the open air has now advanced so much that we are prepared for a great extension of shelter treatment, and the provision of shelters in the near future should be greatly increased.

*Care Scheme.*—There is a Central Care Committee, and there are also local Care Committees covering the whole County. Broadly speaking, the object of these Committees is to keep in touch with the cases of phthisis throughout the County, and by means of advice and help to enable the patients to live as far as possible a "sanatorium life." Unfavourable conditions that they cannot remedy are reported to the Tuberculosis Officers.

It is not the duty of members of the Care Committee to systematically visit the cases or to attempt to give professional advice. Apart from occasional visits, they should rely on the reports of the Health Visitors.

Reference should be made to the Report for 1920 for details of the reorganised scheme.

*Examination of Sputum.*—It is recognised as of the utmost importance that sputum, if present, should be examined in every case of phthisis, and that the examination should be repeated as often as may be necessary to determine the progress of the case or its infectiousness. The County Council has for many years provided facilities for examination of sputum, and practitioners are urged to make the fullest use of these facilities in every case.

Arrangements have now been made so that, with the consent of the practitioners, the health visitor takes specimens when required. In this way specimens should be obtained in all cases where there is any sputum to examine.

| Cases notified. | Cases examined. |           | Not Examined. | Cases in which there was no sputum. | In Institutions. |
|-----------------|-----------------|-----------|---------------|-------------------------------------|------------------|
|                 | Positive.       | Negative. |               |                                     |                  |
| 184             | 98              | 48        | 4*            | 29                                  | 5                |

\*Of the 4 cases not examined, there was objection by the Private Practitioner or Patient concerned in each case.

#### ATTENDANCES AT TUBERCULOSIS DISPENSARIES IN 1930.

| No. of Cases. | DISPENSARIES.                                       | Notified Cases. |              |                 | Non-Notified Cases. |          |          |          | Total. |
|---------------|-----------------------------------------------------|-----------------|--------------|-----------------|---------------------|----------|----------|----------|--------|
|               |                                                     | Insured.        | Non-Insured. | School Children | School.             |          | Other    |          |        |
|               |                                                     |                 |              |                 | Contact.            | Suspect. | Contact. | Suspect. |        |
| 386           | SHREWSBURY.                                         |                 |              |                 |                     |          |          |          |        |
|               | No. of new cases .. ..                              | 11              | 11           | 5               | 21                  | 36       | 36       | 59       | 179    |
|               | Total attendances .. ..                             | 361             | 291          | 364             | 100                 | 141      | 83       | 118      | 1458   |
| 212           | OSWESTRY.                                           |                 |              |                 |                     |          |          |          |        |
|               | No. of new cases .. ..                              | 3               | ..           | ..              | 11                  | 19       | 13       | 34       | 80     |
|               | Total attendances .. ..                             | 314             | 99           | 180             | 62                  | 38       | 44       | 59       | 796    |
| 637           | WELLINGTON.                                         |                 |              |                 |                     |          |          |          |        |
|               | No. of new cases .. ..                              | 16              | 1            | 4               | 12                  | 105      | 27       | 118      | 283    |
|               | Total attendances .. ..                             | 604             | 729          | 1378            | 102                 | 374      | 106      | 300      | 3593   |
|               | <i>Examination Centres<br/>(open once a month).</i> |                 |              |                 |                     |          |          |          |        |
| 53            | WHITCHURCH.                                         |                 |              |                 |                     |          |          |          |        |
|               | No. of new cases .. ..                              | 2               | ..           | 1               | 8                   | 3        | 2        | 5        | 21     |
|               | Total attendances .. ..                             | 37              | 15           | 32              | 20                  | 19       | 3        | 11       | 137    |
| 92            | LUDLOW.                                             |                 |              |                 |                     |          |          |          |        |
|               | No. of new cases .. ..                              | 2               | 1            | ..              | 3                   | 3        | 3        | 5        | 17     |
|               | Total attendances .. ..                             | 12              | 20           | 2               | 12                  | 7        | 6        | 7        | 66     |
| 88            | BRIDGNORTH.                                         |                 |              |                 |                     |          |          |          |        |
|               | No. of new cases .. ..                              | 9               | 2            | ..              | 8                   | 12       | 10       | 10       | 51     |
|               | Total attendances .. ..                             | 71              | 8            | 21              | 17                  | 23       | 17       | 17       | 174    |

An arrangement was made in 1928 by the Church Stretton Care Committee, to obtain the use of a room at the Institute for the examination of contacts once every three months, at no expense to the County Council. Three sessions were held in 1930, the total attendances being 20.

## VISITS BY THE TUBERCULOSIS MEDICAL OFFICERS FOR 1930.

| To Insured Patients. |            |            |                                |                     | To Non-Insured Patients. |            |            |                                |                     | To School Children. |            |            |                                |                     |
|----------------------|------------|------------|--------------------------------|---------------------|--------------------------|------------|------------|--------------------------------|---------------------|---------------------|------------|------------|--------------------------------|---------------------|
| On notification.     | Con-tacts. | Sus-pects. | On discharge from Sana-torium. | On other occasions. | On notification.         | Con-tacts. | Sus-pects. | On discharge from Sana-torium. | On other occasions. | On notification.    | Con-tacts. | Sus-pects. | On discharge from Sana-torium. | On other occasions. |
| 35                   | 22         | 63         | 21                             | 264                 | 24                       | 90         | 51         | 10                             | 185                 | 3                   | 74         | 73         | 3                              | 31                  |
| 405                  |            |            |                                |                     | 360                      |            |            |                                |                     | 184                 |            |            |                                |                     |
| 949                  |            |            |                                |                     |                          |            |            |                                |                     |                     |            |            |                                |                     |

## VISITS BY HEALTH VISITORS TO PHTHISIS HOMES.

| To Insured Patients. |      | To Non-insured Patients. |      | To School children. |      | Total. |      |
|----------------------|------|--------------------------|------|---------------------|------|--------|------|
| 1929                 | 1930 | 1929                     | 1930 | 1929                | 1930 | 1929   | 1930 |
| 1869                 | 2031 | 1289                     | 1230 | 356                 | 368  | 3514   | 3629 |

An analysis of the home conditions of the 184 patients notified during the year shows that at the time of notification—

103 had separate bedrooms.

50 shared bedrooms but had a separate bed.

22 shared beds, and

9 objected to the health visitor making inquiries.

When one considers the smallness, bad ventilation and bad construction of many of these bedrooms, it is obvious that the chances of the spread of the disease are great.

Latest information regarding the 22 cases who shared beds showed the position to be as follows :—

| Cases have separate beds. | Shelter supplied. | Dead. | Not infectious. | In Sanatorium. | No change. |
|---------------------------|-------------------|-------|-----------------|----------------|------------|
| 11                        | 2                 | 2     | 2               | 2              | 3          |

*Babies Home Scheme.*—When a pregnant woman is found to be suffering from pulmonary tuberculosis, she is sent to the sanatorium until her confinement is due. She then enters a nursing institution, and as soon as the baby is born it is sent to the Wellington Babies Home, where it is kept for twelve months. In the meantime the mother is sent back to the sanatorium to complete her treatment. If there is doubt as to the danger of infection at the end of twelve months, an attempt is made to persuade the parents to allow the child to go to relatives or to be boarded out. The results so far have been very satisfactory.

Since the scheme commenced in 1923, 33 cases have been dealt with. Up to the present no baby has developed tuberculosis.

In 1929, there were in England and Wales 2,564 deaths from tuberculosis of the nervous system, and 328, or approximately one-eighth, occurred during the first year of life. This shows the great liability of the infant to this form of the disease, and the danger therefore of allowing it to remain in contact with a mother suffering from open tuberculosis.

*Sanatorium (Shirlett).*—The number of patients admitted to the Sanatorium in 1930 was 113, and consisted of :—

|                            |    |    |    |    |
|----------------------------|----|----|----|----|
| Insured patients—Males     | .. | .. | .. | 50 |
| Females                    | .. | .. | .. | 31 |
| Non-insured patients—Males | .. | .. | .. | 6  |
| Females                    | .. | .. | .. | 26 |

## ANALYSIS OF THE CASES ADMITTED TO SHIRLETT SANATORIUM SINCE ITS OPENING IN 1911.

| Year | Patients treated. | Known to be Alive. | Known to be Dead. | Left County. | Unaccounted for. | Cured. | Non-Tubercular. |
|------|-------------------|--------------------|-------------------|--------------|------------------|--------|-----------------|
| 1911 | 38                | 10                 | 20                | 7            | 1                | ..     | ..              |
| 1912 | 74                | 29                 | 29                | 11           | 3                | 2      | ..              |
| 1913 | 80                | 28                 | 40                | 9            | 1                | 2      | ..              |
| 1914 | 114               | 34                 | 61                | 13           | 1                | 5      | ..              |
| 1915 | 133               | 41                 | 56                | 24           | 1                | 10     | 1               |
| 1916 | 158               | 46                 | 69                | 27           | ..               | 15     | 1               |
| 1917 | 164               | 66                 | 66                | 19           | ..               | 11     | 2               |
| 1918 | 124               | 37                 | 42                | 35           | ..               | 10     | ..              |
| 1919 | 123               | 50                 | 43                | 23           | ..               | 7      | ..              |
| 1920 | 120               | 55                 | 45                | 16           | ..               | 4      | ..              |
| 1921 | 121               | 53                 | 52                | 14           | ..               | 2      | ..              |
| 1922 | 107               | 36                 | 59                | 12           | ..               | *      | ..              |
| 1923 | 109               | 47                 | 45                | 16           | ..               | 1      | ..              |
| 1924 | 151               | 80                 | 52                | 19           | ..               | *      | ..              |
| 1925 | 130               | 66                 | 48                | 16           | ..               | *      | ..              |
| 1926 | 110               | 47                 | 47                | 16           | ..               | *      | ..              |
| 1927 | 86                | 50                 | 31                | 5            | ..               | *      | ..              |
| 1928 | 111               | 71                 | 33                | 7            | ..               | *      | ..              |
| 1929 | 113               | 84                 | 23                | 5            | ..               | *      | 1               |
| 1930 | 113               | 102                | 8                 | 3            | ..               | *      | ..              |

\* Cases are not described as cured until after the lapse of at least 5 years.

**Public Health (Tuberculosis) Regulations, 1930.**—These Regulations, which took effect on 1st January, 1931, rescinded, consolidated, and amended the Public Health (Tuberculosis) Regulations, 1912, 1921, and 1924. The chief points of difference between them and those previously in force are as follows :—

*Article 6.*—When a patient, who has been previously notified to be suffering from tuberculosis, is discharged from a Poor Law Institution or Sanatorium, the Medical Officer of the Institution is required at the end of the week to notify the Medical Officer of Health of the district within which the place of destination of the patient is situate. When the place of destination is not the place of residence of the patient, and these places are in different districts, the Medical Officer of Health of each district is to be notified.

*Article 10.*—(6) When a Medical Officer of Health becomes aware that a person suffering from tuberculosis, who has been resident in his district, has permanently changed his place of residence to another district, he is required forthwith to send particulars to the Medical Officer of Health of that district.

(8) At the end of each quarter he is required to send to the County Medical Officer of Health a statement showing—

- (a) The number of cases of tuberculosis on his register at the commencement of the quarter ;
- (b) The number of cases notified to him for the first time during the quarter ;
- (c) The number of cases which, having been removed from the register during a preceding quarter, have been restored to the register ;
- (d) The number of cases added to the register which have been brought to his notice otherwise than by notification ;
- (e) The number of cases removed from the register during the quarter ; and
- (f) The number of cases remaining on the register at the end of the quarter.

*Article 11.*—(1) Upon receipt of a notification, the Medical Officer of Health is required to make such inquiries and take such steps as are necessary or desirable for investigating the source and for preventing the spread of infection, and for eliminating conditions favourable to it.

*Article 12.*—(1) A local authority, on the advice of their Medical Officer of Health, may supply all such medical or other reasonable assistance as may be necessary to detect or prevent the spread of tuberculosis.

**Poor Law Act, 1930.—Detention of Inmate suffering from Disease.**—Under Section 34 of the Poor Law Act of 1930, an inmate of an Institution suffering from bodily disease of an infectious or contagious character may be detained in the Institution until the Medical Officer certifies in writing that he may be safely discharged. When, therefore, a casual or other inmate of a Poor Law Institution is found to be suffering from tuberculosis of an infectious nature, the County Council has the authority to insist upon his detention.

**Public Health (Prevention of Tuberculosis) Regulations, 1925, and the Public Health Act, 1925 (Section 62).**—No action was necessary during the year.

### MENTAL DEFICIENCY.

This branch of the work is being gradually extended and is taking up an increasing amount of the time of the medical officers, health visitors and clerical staff.

The fact that in this county no real provision has been made for mental defectives has added greatly to the difficulties of the work and has entailed an immense amount of correspondence, chiefly in endeavouring to find accommodation for patients for whom institutional accommodation was considered necessary. The only accommodation in the County for mental defectives is in two of the Poor Law Institutions, namely, Madeley (which is a certified institution for 10 male and 15 female defectives), and Church Stretton Institution (which is certified for five female defectives). All other mental defectives for whom institutional accommodation has been found are in institutions situated in various parts of the country, from Northumberland to Cornwall. The difficulty of the position is further added to by the fact that other Authorities, who have accepted Shropshire cases, are bringing pressure to bear on the County Council to have them removed, as the accommodation is now required for their own patients. The defectives for whom it is most difficult to find accommodation are the troublesome cases, as those defectives which Institutions outside the County will accept are, as a rule, comparatively easily managed, and are capable of doing a moderate amount of useful work. Certain of the cases, therefore, for whom accommodation is most urgently required are those which no Institution which can select its patients will willingly accept, and the question of the provision of accommodation for mental defectives in this County has been receiving the careful and anxious consideration of the Mental Deficiency Committee.

Whatever may be the value of the arguments for and against sterilization, and to whatever extent it may ultimately be considered justifiable and practicable to employ this as one of the methods of dealing with certain cases of mental defect, it is certain that chief reliance will have to be placed on the provision of institutional accommodation and of home supervision for mental defectives.

It can of course with great truth be argued that the provision of accommodation for these people will be very costly, and will also be very uneconomical. Against this has to be set the fact, however, that they are already a great burden to the country, and that their actual cost to the community is concealed in the returns of various forms of relief. Many of them are in receipt of charity of one kind or another; many are in Poor Law Institutions; some are "casuals"; a certain proportion are potential or actual criminals, populating gaols and other houses of correction; and the great majority of them are unemployables. In addition, as a mental defective tends to beget mental defectives, the fact that they are roaming at large without proper care and control is only adding to what is already a social problem of immense magnitude.

The figures relating to the number of mental defectives in the County of Salop show a very considerable increase on the previous year. These figures, however, bear little relationship to the believed increase in the number of mental defectives in the country as a whole, but represent rather the completeness with which the ascertainment of these cases is being carried out in this County. There is no definite line of demarcation between the various grades of mental defectives, or between the highest grade and the normal person, the one shading gradually into the other; but the passage of the Mental Deficiency Acts, containing definitions of the various degrees of mental defect, has made possible the ascertainment of the number of persons who come within the legal definitions, and has also presented local authorities with the problem of making the necessary provision for them.

*Ascertainment of Mental Defectives.*—Mental defectives under 16 years of age, in whom the degree of defect is not so great as to make them uneducable in Special Schools, are dealt with under the Education Act. All mental defectives over 16 years of age, and all uneducable mentally defective children under this age, are dealt with under the Mental Deficiency Acts. The position at the end of the year may be summarised as follows :—

REPORTED UNDER MENTAL DEFICIENCY ACTS.

| Age.                 | Moral Defectives. |    | Feeble-Minded. |     | Imbeciles. |     | Idiots. |    | Unclassified. |     | Totals. |     |
|----------------------|-------------------|----|----------------|-----|------------|-----|---------|----|---------------|-----|---------|-----|
|                      | M.                | F. | M.             | F.  | M.         | F.  | M.      | F. | M.            | F.  | M.      | F.  |
| Under 16 ..          | ..                | .. | 6              | 9   | 31         | 32  | 8       | 10 | 20            | 15  | 65      | 66  |
| Between 16 and 40 .. | 2                 | 2  | 200            | 187 | 50         | 33  | 12      | 11 | 54            | 60  | 318     | 293 |
| Over 40 ..           | ..                | .. | 36             | 53  | 9          | 16  | 2       | 0  | 17            | 11  | 64      | 80  |
| Age unknown ..       | ..                | .. | 14             | 16  | 9          | 31  | ..      | .. | 21            | 41  | 44      | 88  |
| Totals for 1930      | 2                 | 2  | 256            | 265 | 99         | 112 | 22      | 21 | 112           | 127 | 491     | 527 |
| Totals for 1929      | ..                | .. | 81             | 97  | 58         | 45  | 10      | 11 | 207           | 185 | 356     | 338 |

These cases are being dealt with in the following ways :—

|                                               | Males. | Females. | Totals. |      |
|-----------------------------------------------|--------|----------|---------|------|
|                                               |        |          | 1930    | 1929 |
| In Institutions for Mental Defectives ..      | 55     | 75       | 130     | 118  |
| On licence out of Institutions .. ..          | 2      | 0        | 2       | 2    |
| Under Guardianship .. ..                      | 0      | 2        | 2       | 1    |
| In Salop Mental Hospital .. ..                | 70     | 37       | 107     | 68   |
| Under Supervision by Health Visitors ..       | 111    | 84       | 195     | 181  |
| Ascertained, but not medically examined       | 206    | 249      | 455     | 324  |
| In Poor Law Institutions .. ..                | 43     | 74       | 117     | —†   |
| In Certified Institutions (sent by Guardians) | 4      | 6        | 10      | —*   |
|                                               | 491    | 527      | 1018    | 694  |

† Included under "ascertained."

\* Not known.

MENTALLY DEFECTIVE CHILDREN (EDUCABLE) UNDER THE EDUCATION COMMITTEE.

|                                        | Males. | Females. | Totals. |      |
|----------------------------------------|--------|----------|---------|------|
|                                        |        |          | 1930    | 1929 |
| In Special Schools .. ..               | 6      | 10       | 16      | 13   |
| Awaiting admission to a Special School | ..     | ..       | ..      | 1    |
| Under supervision of School Nurses ..  | 88     | 59       | 147     | 129  |
|                                        | 94     | 69       | 163     | 143  |

**CHILDREN WHO ARE PROBABLY MENTALLY DEFECTIVE, INCLUDING THOSE "ASCERTAINED"  
BUT NOT MEDICALLY EXAMINED, AND THOSE IN WHOSE CASE A FINAL DECISION  
HAS NOT YET BEEN ARRIVED AT.**

| Males. | Females. | Totals. |      |
|--------|----------|---------|------|
|        |          | 1930    | 1929 |
| 95     | 63       | 158     | 157  |

The gross total of mentally defective persons and alleged mentally defective persons under the Local Authority is 1,018, and under the Education Authority is 321.

### **MENTAL TREATMENT ACT, 1930.**

The responsibility for carrying out the provisions of this Act has been placed upon the Mental Deficiency Committee, which has at present got it under consideration.

The provisions of this Act which are of chief interest are as follows :—

Section 1 (1).—Any person, who desires voluntarily to submit himself to treatment for mental illness, may be received as a voluntary patient *without a reception order* into any institution, hospital or nursing home approved by the Board of Control, and may take his discharge at any time on giving seventy-two hours notice in writing to the person in charge.

Section 5 (1).—Any person, who is suffering from mental illness and is likely to benefit by temporary treatment, but who is incapable of expressing himself as willing or unwilling to undergo that treatment, may be received as a temporary patient *without a reception order* into an institution maintained by a local authority, into a registered hospital, or into any other institution or nursing home approved by the Board of Control, if an application is made on the appropriate form by the husband or wife or by a near relative of the patient.

Section 6 (1).—It shall be the duty of every local authority to investigate the needs of their area and to take such steps as they consider necessary to provide suitable accommodation for the reception of temporary patients.

Section 6 (3).—A local authority shall have power to make arrangements for treatment as out-patients of persons suffering from mental illness, and to make provision for the after-care of any persons who have undergone such treatment.

### **VENEREAL DISEASE.**

The scheme for the treatment of Venereal Disease consists of :—

- (1) Provision of facilities for diagnosis in connection with the Birmingham and Bristol Universities and at the County Clinic.
- (2) Provision of treatment at—
  - (a) The County Council Clinic, Belmont, Shrewsbury.
  - (b) Wolverhampton and Staffordshire General Hospital.
  - (c) Arrangements with the surrounding hospitals.
  - (d) Arrangements by which girls without homes and suffering from venereal disease can be sent to a Home at Wolverhampton provided by the Lichfield Diocesan Society, for treatment and training. The Home also provides treatment for pregnant women suffering from venereal disease.
- (3) Arrangements for supplying Salvarsan substitutes to Medical Practitioners.

The School Medical Service and the Child Welfare Centres are utilised for finding out cases of venereal disease, particularly congenital syphilis, and following them up. Twelve such cases have been referred for treatment during the year.

## CASES OF VENEREAL DISEASE TREATED IN 1930.

| Shrewsbury Clinic. |       |        |     |              |     | Wolverhampton and Staffordshire<br>General Hospital.<br>Shropshire Patients. |              |
|--------------------|-------|--------|-----|--------------|-----|------------------------------------------------------------------------------|--------------|
|                    |       |        |     |              |     | *Cases.                                                                      | Attendances. |
|                    |       | Cases. |     | Attendances. |     |                                                                              |              |
|                    |       | M.     | F.  | M.           | F.  |                                                                              |              |
| Syphilis           | .. .. | 74     | 59  | 390          | 362 | 8                                                                            | ..           |
| Soft Chancre       | .. .. | 2      | 0   | 6            | 0   | 0                                                                            | ..           |
| Gonorrhoea         | .. .. | 153    | 58  | 1638         | 447 | 19                                                                           | ..           |
| Other conditions   | .. .. | 41     | 36  | 52           | 58  | 15                                                                           | ..           |
| Total for 1930     | .. .. | 270    | 153 | 2086         | 867 | 42                                                                           | 1276         |
| Total for 1929     | .. .. | 249    | 142 | 2317         | 974 | 53                                                                           | 1332         |

\* These numbers only refer to cases attending for the first time in 1930.

There has been little variation in the number of cases of venereal disease receiving treatment under the County Council Scheme as compared with the previous year. In view of the fact, however, that it is not yet notifiable, it is impossible to say to what extent the problem is being met, and there is no doubt that much avoidable ill-health is due to failure to take advantage of the facilities provided for obtaining treatment.

*Cleveland House, Wolverhampton.*—This Hostel is now available for girls and women suffering from venereal disease, whether pregnant or not, who cannot receive proper treatment in their own homes. It has proved most useful, and the work, particularly in the treatment of pregnant women in order to save the infants from disease, is of fundamental importance. During the year 12 cases were admitted from the County, 9 being pregnant women. Six patients were suffering from gonorrhoea, one from syphilis, four from gonorrhoea and syphilis, and one patient was later found not to be suffering from venereal disease.

## EXAMINATIONS OF PATHOLOGICAL SPECIMENS.

| Nature of Test.                                  | Number of tests.       |                           |                       |                                                            |
|--------------------------------------------------|------------------------|---------------------------|-----------------------|------------------------------------------------------------|
|                                                  | Bristol<br>University. | Birmingham<br>University. | Shrewsbury<br>Clinic. | Wolverhampton and<br>Staffordshire<br>General<br>Hospital. |
| For detection of gonococci ..                    | 5                      | 20                        | 210                   | 103                                                        |
| For detection of spirochetes ..                  | ..                     | ..                        | ..                    | ..                                                         |
| For Wassermann reaction ..                       | 231                    | 221                       | ..                    | 115                                                        |
| For Gonococcal Complement<br>Fixation Test .. .. | ..                     | ..                        | ..                    | ..                                                         |

### BACTERIOLOGICAL DIAGNOSIS OF DISEASE.

Examinations are made by the Birmingham University under an agreement with the County Council.

In addition to the work done in connection with Venereal Disease, referred to on page 52, the following examinations were made :—

|                                            |    |    |    | Total. | Positive. | Negative. |
|--------------------------------------------|----|----|----|--------|-----------|-----------|
| Tubercle Bacilli (Sputum)                  | .. | .. | .. | 307    | 46        | 261       |
| " (Pleuritic fluid)                        | .. | .. | .. | 1      | 1         | 0         |
| " (Urine)                                  | .. | .. | .. | 2      | 2         | 0         |
| " (Cerebro-spinal fluid)                   | .. | .. | .. | 1      | 1         | 0         |
| Diphtheria Bacilli (Secretion from throat) | .. | .. | .. | 3082   | 842       | 2240      |
| Paratyphoid " (Faeces)                     | .. | .. | .. | 19     | 1         | 18        |
| " " (Urine)                                | .. | .. | .. | 9      | 0         | 9         |
| Typhoid " (Faeces)                         | .. | .. | .. | 29     | 3         | 26        |
| " " (Urine)                                | .. | .. | .. | 9      | 0         | 9         |
| Blood for Widal's Reaction                 | .. | .. | .. | 136    | 22        | 114       |
| Dysentery (Faeces)                         | .. | .. | .. | 1      | 0         | 1         |
| Total for 1930                             | .. | .. | .. | 3596   | 918       | 2678      |
| Total for 1929                             | .. | .. | .. | 3537   | 714       | 2823      |

The question of establishing a Bacteriological Laboratory in this county is one which has from time to time been before the Public Health Committee, but considerations of expense have so far prevented any definite action in the matter. The advantages of a centrally situated laboratory for bacteriological work in Shropshire would be very great from the point of view of increasing the efficiency of public health work. The results of examinations of certain pathological specimens, such as diphtheria swabs, would be known in about half the time which is required at present, a matter of great importance in controlling an outbreak of infectious disease ; and it would also be possible to extend the scope and thoroughness of the work which is at present being carried on. Schick and Dick testing of school children, in order to protect those susceptible to attacks of scarlet fever and diphtheria, is preventive work of the utmost importance which would be greatly facilitated if a trained Bacteriologist were employed by the County Council ; and investigations could be undertaken which are not at present carried out.

At the present time, when the question of more adequate provision for cases of infectious disease is under consideration, the possibility of establishing a bacteriological laboratory in connection with an isolation hospital should also be taken into consideration.

### BLIND PERSONS ACT, 1920.

The following are the particulars of the blind persons in this County as supplied by the Secretary for the Shropshire Association for the Blind on 31st March, 1931 :—

| Age periods.      | Male. | Female. |
|-------------------|-------|---------|
| 0—5 .. ..         | 0     | 1       |
| 5—16 .. ..        | 18    | 8       |
| 16—21 .. ..       | 2     | 2       |
| 21—50 .. ..       | 51    | 21      |
| 50—70 .. ..       | 62    | 49      |
| 70 and over .. .. | 54    | 63      |
|                   | 187   | 144     |
|                   | 331   |         |

The cause of blindness in these cases has not been investigated, but, speaking generally, blindness under one year of age is either due to ophthalmia neonatorum or to congenital defects. Blindness commencing over 50 years of age is to a large extent due to degenerative causes such as cataract, whereas in the intermediate ages a considerable proportion of the blindness has probably been due to accident. The excess of blindness in males over females between the ages of 21 and 50 (males 51, females 21), is strong evidence of this.

The blind may be considered as falling into three classes—those under 5 years of age, those between 5 and 16, and those over 16 years of age.

Those under 5 years of age come automatically under the supervision of the Health Visitors, who visit them regularly under the Maternity and Child Welfare Scheme. Children between 5 and 16 years of age come under the care of the Elementary Education Authority, who make provision for them by sending them to a Special School for the Blind. As regards those over 16 years of age, the Higher Education Committee arrange for the training of such as are capable of benefiting from special instruction and of learning an occupation which is likely to enable them partly or wholly to support themselves. On completion of training, they come under the care of the Public Health Committee, which provides for them under the Home Workers' Scheme of the Birmingham Royal Institution for the Blind, which arranges for their supervision by Home Teachers and supplies them with materials, assists them with their work, and helps them to dispose of the articles for which they are unable to find a sale. In addition their wages are supplemented according to their earnings. Those who cannot be provided for in these ways come under the County Council Scheme for the Domiciliary Relief of the Blind, and are also assisted by the Shropshire Association for the Blind, to which the County Council make a grant of £800 per annum. A Home Teacher has been appointed by this Association who visits all the blind persons in the County, teaches them Moon and Braille, arranges for them to be supplied with books, and reports to the Secretary of the Association, who draws the attention of the County Council to those blind persons who are in need of assistance under one or other of the Schemes.

The following statement is from the report of the Shropshire Association for the Blind for the year ended March 31st, 1931:—

|                                    |    |    |    |    |    |     |
|------------------------------------|----|----|----|----|----|-----|
| No. on Register, 31/3/30           | .. | .. | .. | .. | .. | 316 |
| Added during the year:—Discovered  | .. | .. | .. | 42 |    |     |
| Came to Salop                      | .. | .. | .. | 4  |    |     |
|                                    |    |    |    | —  |    | 46  |
| Being trained and at school        | .. | .. | .. | .. | .. | 23  |
| Home workers..                     | .. | .. | .. | .. | .. | 19  |
| Old Age Pensions secured for       | .. | .. | .. | .. | .. | 8   |
| Number of weekly grants awarded    | .. | .. | .. | .. | .. | 86  |
| Patients taken to Hospital         | .. | .. | .. | .. | .. | 30  |
| Deaths ..                          | .. | .. | .. | .. | .. | 20  |
| Transferred                        | .. | .. | .. | .. | .. | 7   |
| Taken off Register                 | .. | .. | .. | .. | .. | 4   |
| Total on Register 31st March, 1931 | .. | .. | .. | .. | .. | 331 |

**FOOD AND DRUGS ACTS.**

Return of Samples taken by Members of the Shropshire Constabulary for Analysis during the year 1930.

| Nature of Sample. | Number taken. | Genuine. | Adulterated. | Remarks.                                                  |
|-------------------|---------------|----------|--------------|-----------------------------------------------------------|
| Milk .. ..        | 178           | 167      | 11           | 9 'Cautioned.'<br>1 Fined £1 and £1 costs.<br>1 Fined £5. |
| Potted Meat .. .. | 5             | 5        | ..           |                                                           |
| Jam .. ..         | 10            | 10       | ..           |                                                           |
| Oatmeal .. ..     | 3             | 3        | ..           |                                                           |
| Lard .. ..        | 7             | 7        | ..           |                                                           |
| Sausage .. ..     | 4             | 4        | ..           |                                                           |
| Pepper .. ..      | 1             | 1        | ..           |                                                           |
| Flour .. ..       | 3             | 3        | ..           |                                                           |
| Butter .. ..      | 1             | 1        | ..           |                                                           |
| Brawn .. ..       | 2             | 2        | ..           |                                                           |
| Total .. ..       | 214           | 203      | 11           |                                                           |

**EDUCATION IN HEALTH.**

Although education in matters pertaining to health is of the utmost importance, pressure of other duties is the great limiting factor in health propaganda work. During the year, 106 lectures were given in schools at the close of medical inspections by the Assistant School Medical Officers. In the Child Welfare Centres 231 were given by the Medical Officers and Health Visitors in attendance. The Inspector of Midwives, who also holds the position of County Health Lecturer, gave 27 lectures at various Institutes and other centres. Five lectures were also given by the Tuberculosis Medical Officers.

A Health Week was organised by Dr. Evans, Medical Officer of Health of the Oswestry Urban and Rural District Councils. Nine public lectures were given at villages in Oswestry Rural District by Miss G. F. Turner, Health Lecturer to the Health and Cleanliness Council. Each lecture was preceded or followed by a health play given by the local school children. Lectures to adult audiences were also given by Dame Agnes Hunt, Dr. Owen Morris and Mr. Druce, in Oswestry. In addition, lectures for school children were given in Oswestry at which nearly 2,000 children from Urban and Rural Schools attended, where a special feature was the showing of Health Films.

Ten lectures on meat inspection have been given by Mr. T. Speake, Chief Sanitary Inspector for the Borough of Shrewsbury, assisted by Mr. Farrell, Abattoir Superintendent and Meat Inspector for the Borough, the average attendance being 12. The course was greatly appreciated by those who attended, but it is regretted that more authorities did not avail themselves of the opportunity of sending their inspectors, as meat inspection is an important part of their duties, and the lectures were specially arranged in order to give the inspectors additional training in detecting unsound meat.

An Advanced Course dealing with Clean Milk Production was given to Sanitary Inspectors between September and November. In addition to the following lectures, visits were made to farms of interest and to the Harper Adams Agricultural College :—

|                                                    |                                  |
|----------------------------------------------------|----------------------------------|
| Chemistry and Food Value of Milk .. ..             | Chas. Crowther, M.A., PH.D.      |
| Construction of Cow Sheds and Farm Buildings ..    | T. Speake, F.S.I.A.              |
| Dairy Legislation .. .. .                          | A. L. Provan, PH.D.              |
| Dairy Bacteriology and Sampling Methods ..         | A. L. Provan, PH.D.              |
| Veterinary Science in relation to Public Health .. | W. R. Kerr, M.R.C.V.S., D.V.S.M. |
| Production and Distribution of Milk .. ..          | Miss Erskine.                    |

Eighteen Sanitary Inspectors were present at different lectures, and there was a good average attendance.

### MILK.

**Milk and Dairies (Consolidation) Act, 1915.**—Procedure under this Act has so far been limited to the investigation of all cases of tuberculous milk reported by outside authorities, and of suspected cases that have otherwise been brought to the notice of the County Medical Officer. On these occasions the farms are visited by Veterinary Surgeons, all the cows examined, and milk from the suspected cows submitted for bacteriological examination, a bulk sample of the milk of the cows passed as sound by the veterinary surgeon also being sent to ensure that no cows giving tubercle infected milk have been overlooked. On receipt of the result of the bacteriological examination, the cows giving tuberculous milk are dealt with under the Tuberculosis Order.

During the year 34 notifications were received, 1,011 cows were examined, and 189 samples of milk taken. Twenty-four samples from individual cows proved positive and the animals were destroyed. As ten of the bulk samples submitted also showed the presence of living tubercle bacilli, the re-visiting of the farms at which they were obtained was necessitated, and 121 cows were re-examined. In addition, two cows were dealt with under the Tuberculosis Order by the Veterinary Surgeons at sight.

There was some difficulty in tracing the source of tubercle found in milk provided by a Milk Depot, which obtained about 2,000 gallons daily from 103 farms. By taking a sample from a tank used at the Depot each time it was filled, and by keeping a record of the farms from which the milk was obtained (the tank being completely emptied and sterilised before being filled again), the source of infection was eventually limited to twenty-seven farms. A bulk sample of milk was sent from each of the farms which came under suspicion in this way, and two farms whose milk was tubercle-infected were ascertained, and finally two tuberculous animals were discovered.

In view of the occurrence of tuberculous conditions in young children in one district of the County, an enquiry was made into the milk supply of the cases. Three farms were involved and a bulk sample was taken from each, one of which proved positive. The Veterinary Surgeon thereupon visited the farm and eventually a tuberculous cow was located.

In addition, there were five notifications that milk from this County was being produced under unclean conditions. The producers were communicated with and the Agricultural (Education) Department and the District Medical Officer of Health were informed with a view to suitable action being taken to bring about an improvement in the methods of production of clean milk.

**Milk (Special Designations) Order, 1923.**—The position at the end of the year under this Order as compared with that for the previous year was as follows :—

|                     |                |                     |    | No. of Producers. |      |
|---------------------|----------------|---------------------|----|-------------------|------|
|                     |                |                     |    | 1929              | 1930 |
| Licensed to produce | Certified Milk | ..                  | .. | 1                 | 1    |
| "                   | "              | Grade A (T.T.) Milk | .. | 3                 | 4    |
| "                   | "              | Grade A Milk        | .. | 9                 | 9    |
|                     |                |                     |    | —                 | —    |
|                     |                |                     |    | 13                | 14   |
|                     |                |                     |    | —                 | —    |

In addition, three licences for bottling Grade A Milk were granted—two in 1929 and one in 1930.

### AMBULANCES.

Two motor ambulances are owned by the County Council, one by the Public Health Committee and stationed at a garage in Shrewsbury ; the other by the Public Assistance Committee and kept at Berrington Hospital. The Public Health Ambulance is generally available for patients being removed to or from any house or hospital in Shropshire, and is utilised both for infectious and ordinary cases. Whenever the Ambulance is used for an infectious case, the Sanitary Inspector of the District is responsible for taking the necessary steps for its disinfection afterwards.

The Public Assistance Ambulance is utilised almost entirely for the purposes of Berrington Hospital.

Other motor ambulances are owned by the Borough of Bridgnorth, Urban District of Ludlow, the Oswestry and Chirk Joint Hospital Committee, and the Wellington Urban District Council. These ambulances are chiefly used for the removal of cases of infectious disease to their respective hospitals.

### VACCINATION.

The Local Government Act, 1929, made the County Council the authority responsible for carrying out the provisions of the various Vaccination Acts from 1st April, 1930. The Vaccination Order, 1930, was issued by the Minister of Health with a view chiefly to the consolidation of the previous Orders issued under the Vaccination Acts. There is very little in this Order which is not contained in those previously issued. Under the Third Schedule, however, it states that the public vaccinator should vaccinate in one insertion, preferably by a linear incision or scratch a quarter of an inch long, merely through the epidermis. In cases in which the public vaccinator, the vaccinee or parent, desires to obtain additional protection, the public vaccinator may, if he considers it desirable, increase the number of such insertions, but these should not exceed four.

The following table shows the work done in 1929 and 1930 as far as information is available :—

| VACCINATION OF INFANTS BORN IN 1929.    |         |                                 |                                            |                                                          |                            |                                     |                                |                          |                                                                                                 | VACCINATION OF<br>CHILDREN <i>under</i> 14<br>DURING YEAR 1930                                          |
|-----------------------------------------|---------|---------------------------------|--------------------------------------------|----------------------------------------------------------|----------------------------|-------------------------------------|--------------------------------|--------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Vaccination<br>Districts.               | Births. | Success-<br>fully<br>Vaccinated | Insuscep-<br>tible of<br>Vaccina-<br>tion. | Declara-<br>tions of<br>Conscien-<br>tious<br>Objection. | Died<br>Unvac-<br>cinated. | Vaccina-<br>tion<br>post-<br>poned. | Removed<br>out of<br>District. | Unac-<br>counted<br>for. | Total<br>No. of<br>Certificates<br>of<br>successful<br>Primary<br>Vaccina-<br>tion<br>received. | No. of<br>Statutory<br>Declara-<br>tions of<br>Conscien-<br>tious<br>Objection<br>actually<br>received. |
| Atcham ..                               | 955     | 561                             | 1                                          | 269                                                      | 48                         | 1                                   | 19                             | 56                       | 630                                                                                             | 307                                                                                                     |
| Bridgnorth ..                           | 221     | 87                              | 1                                          | 105                                                      | 14                         | ..                                  | 3                              | 11                       | 99                                                                                              | 83                                                                                                      |
| Church Stretton ..                      | 73      | 52                              | ..                                         | 18                                                       | 3                          | ..                                  | ..                             | ..                       | 60                                                                                              | 17                                                                                                      |
| Cleobury Motmer                         | 144     | 66                              | 1                                          | 69                                                       | 6                          | ..                                  | 2                              | ..                       | 55                                                                                              | 57                                                                                                      |
| Clun.. ..                               | 110     | 50                              | ..                                         | 47                                                       | 4                          | 2                                   | 2                              | 5                        | 66                                                                                              | 42                                                                                                      |
| Chirbury ..                             | 65      | 44                              | 1                                          | 12                                                       | 7                          | ..                                  | 1                              | ..                       | 25                                                                                              | 14                                                                                                      |
| Ellesmere ..                            | 159     | 104                             | ..                                         | 38                                                       | 9                          | 1                                   | 4                              | 3                        | 119                                                                                             | 27                                                                                                      |
| Ludlow ..                               | 245     | 133                             | ..                                         | 95                                                       | 13                         | ..                                  | ..                             | 4                        | 110                                                                                             | 113                                                                                                     |
| Madeley ..                              | 343     | 139                             | 4                                          | 157                                                      | 22                         | 6                                   | 9                              | 6                        | 148                                                                                             | 198                                                                                                     |
| Market Drayton                          | 212     | 149                             | ..                                         | 50                                                       | 11                         | ..                                  | 2                              | ..                       | 161                                                                                             | 56                                                                                                      |
| Newport ..                              | 161     | 61                              | ..                                         | 65                                                       | 4                          | ..                                  | 2                              | 29                       | 79                                                                                              | 76                                                                                                      |
| Oswestry ..                             | 404     | 115                             | ..                                         | 216                                                      | 18                         | 2                                   | 1                              | 52                       | 67                                                                                              | 195                                                                                                     |
| Shifnal ..                              | 190     | 71                              | ..                                         | 94                                                       | 11                         | ..                                  | 11                             | 3                        | 69                                                                                              | 96                                                                                                      |
| Teme ..                                 | 32      | 20                              | ..                                         | 9                                                        | 1                          | ..                                  | ..                             | 2                        | 19                                                                                              | 10                                                                                                      |
| Tenbury (Salop pt)                      | 8       | 4                               | ..                                         | 3                                                        | ..                         | ..                                  | 1                              | ..                       | 7                                                                                               | 2                                                                                                       |
| Wellington ..                           | 458     | 114                             | 1                                          | 297                                                      | 17                         | ..                                  | 2                              | 27                       | 179                                                                                             | 255                                                                                                     |
| Wem ..                                  | 153     | 80                              | ..                                         | 62                                                       | 7                          | 1                                   | 1                              | 2                        | 97                                                                                              | 67                                                                                                      |
| Whitchurch ..                           | 139     | 56                              | ..                                         | 72                                                       | 2                          | ..                                  | 2                              | 7                        | 71                                                                                              | 53                                                                                                      |
|                                         | 4072    | 1906                            | 9                                          | 1678                                                     | 197                        | 13                                  | 62                             | 207                      | 2061                                                                                            | 1668                                                                                                    |
| Percentage of Total<br>No. of Births .. |         | 46.81%                          | .22%                                       | 41.21%                                                   | 4.84%                      | .32%                                | 1.52%                          | 5.08%                    |                                                                                                 |                                                                                                         |

TABLE IV.  
RETURN BY RURAL DISTRICT COUNCILS UNDER HOUSING ACT, 1930.

| RURAL DISTRICTS.                                                                                                                                                                                                      | Atcham. | Bridgnorth. | Burford. | Chirbury. | Church Stretton. | Clebury Mortimer. | Clun. | Drayton. | Ellesmere. | Ludlow. | Newport. | Oswestry. | Shifnal. | Teme. | Wellington. | Wem.  | Whitchurch. | Totals. |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------|----------|-----------|------------------|-------------------|-------|----------|------------|---------|----------|-----------|----------|-------|-------------|-------|-------------|---------|
| Estimated Population, 1929 .. ..                                                                                                                                                                                      | 22,500  | 8,412       | 1,285    | 3,018     | 4,384            | 7,263             | 6,236 | 7,338    | 7,742      | 8,516   | 5,525    | 16,350    | 7,626    | 1,645 | 11,140      | 8,583 | 2,037       | 129,600 |
| <b>Houses requiring repair to make them fit for human habitation.</b>                                                                                                                                                 |         |             |          |           |                  |                   |       |          |            |         |          |           |          |       |             |       |             |         |
| (1) No. requiring repair .. ..                                                                                                                                                                                        | 115     | ..          | 40       | 20        | 3                | 126               | 500   | 100      | ..         | 150     | 50       | 100       | 20       | ..    | 1,081       | 120   | 30          | 2,455   |
| (2) No. of these—                                                                                                                                                                                                     |         |             |          |           |                  |                   |       |          |            |         |          |           |          |       |             |       |             |         |
| (a) in which it is proposed to execute repairs .. ..                                                                                                                                                                  | ..      | ..          | 37       | 0         | 1                | 18                | 15    | 77       | ..         | 0       | 50       | 0         | 8        | ..    | 502         | 0     | 0           | 708     |
| (b) in which repairs are being carried out .. ..                                                                                                                                                                      | 27      | 0           | 3        | 9         | 2                | 4                 | 20    | 23       | ..         | 20      | 0        | 0         | ..       | ..    | 232         | 0     | 0           | 340     |
| <b>Temporary Dwellings.</b>                                                                                                                                                                                           |         |             |          |           |                  |                   |       |          |            |         |          |           |          |       |             |       |             |         |
| (1) No. occupied .. ..                                                                                                                                                                                                | 2       | 0           | 0        | 0         | 0                | 8                 | 0     | 0        | 0          | 12      | 0        | 52        | 0        | ..    | 18          | 3     | 0           | 95      |
| (2) No. of families affected .. ..                                                                                                                                                                                    | 2       | 0           | 0        | 0         | 0                | 9                 | 0     | 0        | 0          | 12      | 0        | 56        | 0        | ..    | 19          | 3     | 0           | 101     |
| No. of new houses required—                                                                                                                                                                                           |         |             |          |           |                  |                   |       |          |            |         |          |           |          |       |             |       |             |         |
| (a) for agricultural population .. ..                                                                                                                                                                                 | 0       | 0           | 0        | 0         | 0                | 10                | 0     | 0        | 0          | ..      | 0        | 0         | 0        | ..    | 19          | 2     | 0           | 31      |
| (b) for others .. ..                                                                                                                                                                                                  | 2       | 0           | 0        | 0         | 0                | 0                 | 0     | 0        | 0          | ..      | 0        | 6         | 0        | ..    | 0           | 1     | 0           | 9       |
| <b>Overcrowded Houses.</b>                                                                                                                                                                                            |         |             |          |           |                  |                   |       |          |            |         |          |           |          |       |             |       |             |         |
| (1) No. occupied .. ..                                                                                                                                                                                                | 5       | 24          | 0        | 0         | 0                | 250               | 50    | 0        | 0          | ..      | 100      | 108       | 2        | ..    | 161         | 30    | 1           | 731     |
| (2) No. of families affected .. ..                                                                                                                                                                                    | 5       | 26          | 0        | 0         | 0                | 250               | 55    | 0        | 0          | ..      | 100      | 49        | 3        | ..    | 184         | 40    | 2           | 714     |
| No. of new houses required—                                                                                                                                                                                           |         |             |          |           |                  |                   |       |          |            |         |          |           |          |       |             |       |             |         |
| (a) for agricultural population .. ..                                                                                                                                                                                 | 0       | 0           | 0        | 0         | 0                | 50                | 20    | 0        | 0          | ..      | 40       | 8         | 0        | ..    | 184         | 20    | 0           | 322     |
| (b) for others .. ..                                                                                                                                                                                                  | 4       | 0           | 0        | 0         | 0                | 50                | 5     | 0        | 0          | ..      | 60       | ..        | 3        | ..    | 0           | 20    | 0           | 142     |
| <b>Houses requiring demolition or in part requiring to be closed.</b>                                                                                                                                                 |         |             |          |           |                  |                   |       |          |            |         |          |           |          |       |             |       |             |         |
| (1) No. occupied .. ..                                                                                                                                                                                                | 12      | 0           | 0        | 0         | 0                | 50                | 200   | 2        | 0          | ..      | 75       | 30        | 12       | ..    | 53          | 10    | 0           | 444     |
| (2) No. of families affected .. ..                                                                                                                                                                                    | 12      | 0           | 0        | 0         | 0                | 50                | 200   | 2        | 0          | ..      | 75       | 30        | 9        | ..    | 53          | 10    | 0           | 441     |
| No. of new houses required—                                                                                                                                                                                           |         |             |          |           |                  |                   |       |          |            |         |          |           |          |       |             |       |             |         |
| (a) for agricultural population .. ..                                                                                                                                                                                 | 0       | 0           | 0        | 0         | 0                | 50                | 160   | 2        | 0          | ..      | 20       | 15        | 2        | ..    | 53          | 10    | 0           | 312     |
| (b) for others .. ..                                                                                                                                                                                                  | 12      | 0           | 0        | 0         | 0                | 0                 | 40    | 0        | 0          | ..      | 55       | 15        | 7        | ..    | 0           | 0     | 0           | 129     |
| <b>Houses being built, or the building of which is contemplated, to provide for families now in temporary dwellings, in overcrowded houses, and in houses requiring demolition or in part requiring to be closed.</b> |         |             |          |           |                  |                   |       |          |            |         |          |           |          |       |             |       |             |         |
| For members of the agricultural population .. ..                                                                                                                                                                      | 0       | 0           | 0        | 0         | 0                | 0                 | 33    | 2        | 0          | 0       | 20       | 0         | 6        | ..    | 58          | 18    | 0           | 137     |
| For others .. ..                                                                                                                                                                                                      | 0       | 0           | 0        | 0         | 0                | 12                | 15    | 0        | 0          | 0       | 10       | 0         | 14       | ..    | 176         | 12    | 0           | 239     |



## HOUSING.

**The Housing Act, 1930**, has placed definite duties on the County Councils in connection with housing. The provisions of the Act which are of chief interest to the Public Health Committee are contained in Part IV, which deals with houses in Rural Districts. The County Council are required to have constant regard to the housing conditions of people of the working classes in Rural Districts, and of the sufficiency of the steps which the Rural District Councils are taking to remedy unsatisfactory housing conditions. To carry out the provisions of this part of the Act the County Councils should make a complete survey of housing conditions in Rural Districts, noting specially the question of overcrowding, the relationship of the number of inhabited houses to the population of the district, the condition of repair in which the houses are maintained, and the degree to which the ordinary sanitary requirements are being met to make the houses fit for human habitation. No accurate information is available concerning these matters, and, although Rural District Councils are required under this Act to furnish from time to time, but not oftener than once a year, such reasonable information as the County Council consider necessary, there is good reason to believe that this information could not at present be obtained, for the County as a whole. A questionnaire was issued by the County Council to obtain particulars of the housing conditions in the areas of the various Rural District Councils, a summary of which is given in table IV. This table can at best be regarded as merely an approximation to the truth as, when the information required was not available, the District Councils were asked to return the closest possible estimate, which in many instances is the nature of the reply received.

If the new duties in connection with housing placed upon the County Council, and likely still further to be placed upon them in the near future, are to be carried out efficiently, the appointment of a County Housing and Sanitary Inspector would seem to be a necessity.

**Housing (Rural Workers) Act, 1926.**—In the County of Shropshire the probability is that, while there is an urgent need for new houses, there is even a greater need for the carrying out of repairs in order to make houses already occupied fit for human habitation, and for this purpose the Rural District Councils have been urged by the County Council to take full advantage of the provisions of the Housing (Rural Workers) Act of 1926.

## RIVER POLLUTION.

Although a comparatively small area of the north-eastern part of the County drains into the River Dee, the chief concern of the County Council in connection with Rivers Pollution Prevention is the River Severn. While there is no serious gross pollution of the River, in view of the volume of water which flows down it, the effect of a certain number of trade effluents will have to be carefully watched and investigated. Certain minor tributaries of the Severn show at parts rather gross pollution, but although these will have to be dealt with, they do not seriously affect the purity of the main river. From January to September, 1930, weekly observations at Ironbridge, carried out by Dr. B. A. Astley Weston, showed that, although there were at times rather wide variations in the dissolved oxygen content, the condition of oxygenation of the River was on the whole good, and that such local pollution as existed did not as a rule seriously tax the natural processes of self-purification of the River as a whole. If a Joint Committee of Local Authorities under the Rivers Pollution Prevention Act, 1876 (which the Technical Advisers to the Board of Agriculture and Fisheries wish to see established) is set up, its chief concern in this County will probably be to take such steps as will prevent further pollutions of the River and its tributaries, although it would be misleading to suggest that those at present taking place will not be dealt with.

**Land Drainage Act, 1930.**—There are two chief points of interest to the Public Health Committee in connection with this Act. In the First Schedule, it defines "Catchment Areas" as "areas the drainage of which is directed to the following rivers," and the Severn and Dee are amongst the rivers named. In Section 56, it states that the Minister of Health may, on his own initiative and without any application from a County Council or County Borough Council, set up by order a Joint Committee for a catchment area, or combination of catchment areas, having the powers of a Sanitary Authority under the Rivers Pollution Prevention Act, 1876.

### WATER SUPPLY.

*The following are the more important matters referred to in the Reports of the District Medical Officers of Health :—*

**Burford Rural.**—"No progress was made in getting a supply to the Knowle."

**Chirbury Rural.**—*Brockton and Worthen.*—"A scheme of water supply for these parishes, approved in 1914 but held up owing to the War, was again under consideration at the end of the year. Dr. Gepp states :—"There can be no question as to the advantage, from the public health, and convenience and amenity, points of view, which such a scheme if feasible would secure.'"

**Church Stretton Rural.**—*All Stretton.*—"This village is supplied with water by a local company, which during the year considered steps for the further improvement of the supply, and decided to remove the intake of the reservoir further up the stream, and the laying of the necessary pipes was begun in the present year. Dr. Gepp states :—"This step will no doubt be found to improve considerably the general cleanliness of the supply, but I would still repeat that in my opinion, if all risk of contamination of sewage or manurial origin is to be prevented, the removal of the intake to a point above the two dwellings in the valley with their farm buildings, and occupied land is desirable."

*Soudley and Hope Bowdler.*—"The suggestion of the Medical Officer of Health to supply the village of Soudley (whose present supplies are deficient or inconvenient of access) by extending the supply from a strong upland spring at Hope Bowdler was considered, but the acquisition of the supply was not found practicable, and the matter lapsed.

*Cardington.*—"No public or private action has so far resulted from my recommendation as to bringing the water of St. James's well to a more central point in the village."

**Cleobury Mortimer Rural.**—"A report was submitted to the Council during the year on the existing supplies to houses on the *Clee Hill*, which consist of open streams liable to contamination by cattle and sheep. The collection of the water at the springs and the piping of it to stand pipes is suggested, but the scattered position of the cottages and their low rateable value prevent the adoption of the scheme at present."

**Clun Rural.**—*More.*—"A bore hole was sunk to a depth of 40 feet to provide water for four cottages which the Council proposes to erect at the More."

**Drayton Rural District.**—"A scheme is in course of preparation for the sinking of a bore and the laying of mains to supply the village of Hodnet.

"It is also proposed to extend the Cheswardine Water Supply to Sowdley, Little Sowdley and Hopshort, provided sufficient supply is available. Measures are now being taken to ascertain the available supply."

**Ludlow Rural.**—"Beyond ascertaining that the Clee Hill Village could be supplied from the Birmingham Pipe Track by pumping water to a reservoir on the Hill, no progress has been made in meeting the urgent need of this area. The request of the Quarry Companies for a number of houses for their workmen, has of necessity been postponed until a water supply can be guaranteed.

"A duplicate engine was installed during the year at Craven Arms Pumping Station to provide against a breakdown and enable a constant supply to be maintained."

**Newport Urban.**—"Considerable progress was made during the year in augmenting the water supply for the town. The new 18-inch borehole is being sunk, and a new 8-inch rising main laid and 400 yards of new main to link up the existing mains to enable smaller areas to be shut off."

**Oswestry Rural.**—*Maesbury.*—"This village is badly off for water. About half the houses have no supply of their own and their occupants have to carry water from neighbours' houses, some of them going as far as 150 to 200 yards. In the case of about 20 houses the sole supply is from a shallow dip well."

*Rhosygadfa.*—"Half the houses have an unsatisfactory water supply both on grounds of shortage and impurity. There is evidence of surface pollution in several cases, and some of the inhabitants have to go a considerable distance for water."

*The Moors, St. Martin's.*—"The water supply for this district is very unsatisfactory, most of the houses have no supply, having to carry the water from a dip well, which in a good many cases is a long way from the house. There are about 30 houses affected."

*Nantycaws.*—"Some thirty houses have no private supply, the water being obtained from a shallow well and a dip well on the side of the road."

"The work of building up the walls and covering in the reservoir at Bath Pool; the laying of 6ins. main from Mardy Reservoir to Hengoed; 3ins. main from Lower Hengoed to Orthopaedic Hospital; 3ins. and 2ins. mains at St. Martin's and Little Common, have been completed."

**Shifnal Rural.**—"The *Shifnal* mains were extended to Blythbury (3,000 yards) to supply a farm and group of cottages, to Decker Hill (500 yards), and to Curriers Lane (20 yards) to serve the new Council houses. The supply during the year was constant and satisfactory in regard to both quality and quantity."

"The *Albrighton* supply was laid on to a number of cottages at Grindle by the Hatton Estate and extended 120 yards in Albrighton to serve further houses erected during the year. The water has been the subject of complaints owing to the occasional discolouration and sand and dirt in suspension. It is said to be due to imperfect filtration of the brook water in times of flood, and improvement will follow the completion of the new water works in the course of construction by the Wolverhampton Corporation."

**Teme Rural.**—"Bucknell is still without a satisfactory supply of water."

**Wellington Rural.**—"The main from Dawley was extended 300 yards to supply the new Council houses at Mannerley Lane, and a number of connections to existing cottages were also made."

**Bishop's Castle Urban.**—"The questions of provision of additional filtration plant at the service reservoir, and of a supplementary reservoir to increase storage of the raw water, remained under consideration during the year."

**Church Stretton Urban.**—"New mains, of a total length of 429 yards, were laid in Beaumont Road and Lutwyche Road in view of future development of the adjoining land for building purposes."

**Ludlow Urban.**—"The water was well maintained during the year, and the negotiations with the Birmingham Corporation for a permanent agreement to be able to take water from their supply in emergency are being continued. There is no doubt that if the Borough get an extension of their boundary towards Bromfield and Rocks Green, the further erection of villa residences is highly probable, and additional Council houses will be needed."

**Oakengates Urban.**—"The district has now an excellent water service, that should be adequate for a large increase in the number of Council houses that are so urgently required, and efforts should be made to increase the head at the reservoir to enable Ketley Bank to be supplied from this source."

"Six hundred yards of 3-inch main was laid at New Street, St. George's, during the year."

**Wellington Urban.**—"Sanction was received during the year for the purchase of a small holding at Longwood, about three miles to the north of the town, for the purpose of sinking the new bore-well, and this work has been completed and a fourteen days trial made of the yield. The engineer, Mr. Sandeman, has expressed his satisfaction in regard to both the quality and the quantity, and the Council are proceeding to get sanction to borrow £37,000 for engines, pumps, rising main and reservoirs. Provision is being made for the requirements of the district for a period of twenty years to include the proposed extension."

**Wenlock Urban.**—*Little Wenlock.*—"The question of improving the water supply of this village by means of a public supply scheme was under the consideration of the Barrow Ward Sanitary Committee during the year. Investigation was made of various possible sources in the neighbourhood, but no decision had been reached at the end of the year."

**Whitchurch Urban.**—"The Council continued during the year its investigations into possible sources for augmentation of the water supply, in view of the development of building and increasing consumption, and has decided to purchase a field in the Redbrook Valley, for the purpose of developing the supply, and a firm of Consulting Engineers has been engaged to advise further on the scheme, and also to report in general as to what is necessary to improve the supply as a whole."

Dr. Gepp states :—"I give the opinion definitely that under present circumstances chlorination, with at least quarterly bacteriological examinations, should be maintained."

### SEWERAGE AND DRAINAGE.

*The following are the more important matters referred to in the Reports of the District Medical Officers of Health :—*

**Atcham Rural.**—*Bicton Heath (Oxon).*—"The increasing inadequacy of the outfall works at Shelton Gardens was under consideration, together with the question of an alternative scheme of disposal."

**Drayton Rural District.**—"A new sewer has been laid for the village of Cheswardine and filter beds remodelled and distributor installed at a cost of approximately £820. This will be a great improvement, and will deal with 51 houses and Cheswardine School."

**Ellesmere Rural.**—"There is evidence of pollution of the Tetchill Brook, and in its present state it constitutes a nuisance. Crude sewage from Ellesmere Urban District and from St. Oswald's College passes into this stream. Steps are being taken to remedy this. Ellesmere Urban District has drawn up a scheme for sewage disposal and St. Oswald's College has promised to instal efficient plant."

**Oswestry Rural.**—*St. Martin's Sewage Outfall Works.*—"Owing to the 100 houses recently constructed at St. Martin's, it was found that the sludge beds were inadequate to properly treat the sludge. New beds have been constructed and are working satisfactorily."

"A new length of services is to be laid on the Overton Road to pick up the cottages at Llangollen Terrace."

**Shifnal Rural.**—"The only extensions of the public sewers were for the purpose of making connections to the new Council houses at Shifnal (420 yards) and Albrighton (120 yards)."

**Whitchurch Rural.**—"Complaint was received of farm and household drainage from three farms at Broughall, discharging untreated into a small stream and said to affect a private sheet of ornamental water some distance below. The Council has had the matter under consideration, and the Inspector made informal representations to the owner tenants of the farms, and advised alternative methods of disposal of the drainage. No action has been taken at the end of the year. The matter was not one requiring provision of sewers by the Council."

**Bishop's Castle Urban.**—"Owing to difficulties experienced from overcharging of the hydraulic main at the bottom of the town, and the filter beds, the Council called in Messrs. Wilcox and Raikes to inspect and report."

**Dawley Urban.**—"The scheme for the treatment of the sewage at the two principal outfalls has progressed during the year, and the Engineers, Messrs. Wilcox and Raikes, have prepared plans for the necessary sewers and outfall works, which have been before the Council, and the necessary land has been provisionally purchased. The sanction of the Ministry is to be sought, and also a grant from the Unemployment Grants Committee applied for."

**Ellesmere Urban.**—"Steps are being taken to prevent pollution of the Tetchill Brook, into which most of the sewage of Ellesmere passes in a crude state."

"A scheme has been formulated for efficient sewage disposal for all the area. The plans have been lodged with the Ministry of Health, and the Local Inquiry will be held in January, 1931. The estimated cost of this scheme, which includes new sewers as well as sewage disposal works, is £25,000."

**Oakengates Urban District.**—"Two hundred and fifty yards of 9-inch sewer was laid at Ketley Bank to take the sewage from a group of houses which hitherto had drained into cesspits or overflowed on to land of other owners. The Old Vicarage was connected to a new Prior's Lee sewer, and the cesspits done away with. Two outstanding nuisances for a long period have thus been abolished."

**Oswestry Urban.**—"Negotiations are in progress for the purchase of a small area of land adjacent to the Disposal Works for the purpose of dealing with the sludge from the settling and storm water tanks."

**Shrewsbury Urban.**—"During the year there has been an extension of the main sewer along the valley of the Rad Brook from a point 300 yards south of the Hanwood Road to a point 400 yards north of the same road."

**Wenlock Urban.**—"Sewers were laid in connection with the Council's Housing Schemes :— Much Wenlock, 145 yards of 6-inch sewer : Madeley, 150 yards of 6-inch sewer ; Coalbrookdale, 445 yards of 9-inch sewer.

"A further improvement in Broseley sewerage was made by the laying of 120 yards of 6-inch sewer at Harris's Green, 8 houses being connected to it."

**Whitchurch Urban.**—"The Surveyor reports :—

'The 9-inch main in Alkington Road has been extended to the end of the possible building area some 540 yards in length, and the owners of several of the houses in the Road now draining into cess pools have asked for their houses to be connected to the new sewer, this work is now being carried out.

'The Council have also approved of the necessary plans, estimates, etc., for the extension of the sewer and water main from Dodington up to the Prees Heath Road, for the purpose of taking the drainage and supplying the Town water to the proposed new Grammar School to be erected on the Mossfields Estate.'"

#### OTHER EXTRACTS.

**Bridgnorth Rural.**—"Attention is drawn by the Sanitary Inspector to the unsatisfactory manner in which refuse is disposed of in Alveley. This constitutes a menace to the health of the village."

**Ellesmere Urban.**—"The slaughterhouses are old and dilapidated, and because of their structure it is impossible to keep them clean. In their present state they are unfit for slaughterhouses, new premises are desirable, preferably a public slaughterhouse."

**Wellington Urban.**—"The question of an Incinerator for the destruction of diseased meat that has been condemned by the Inspector has been under discussion by the Council during the year. The present method of consuming it in the boiler fire at the Baths is generally acknowledged to be very unsatisfactory. The responsibility which is on the Meat Inspector to see that it is destroyed can only be properly discharged by the provision of a thoroughly efficient and up to date incinerator at some convenient place in the town."

"The Slaughter-house at Bennett's Bank has been the subject of further complaints. There is no doubt that the large amount of diseased meat dressed in the place where, and at the same time meat is, prepared for human food is open to very grave objections. It is very difficult to see how contamination can be avoided. It is also very evident that the boiling of the meat and offal, and the extraction of the fat, etc., cannot be carried on on this site without being the cause of constant complaint."

**Wenlock Urban.**—"Complaint was received of offensive smell from a tipping site at Madeley. Attention was at once given by more efficient covering. I would recommend that the Committees adopt a system of disposal known as "Controlled Tipping," and recommended by the Ministry of Health as specially applicable to the smaller urban areas."