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**Contributors**

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RHYL URBAN DISTRICT COUNCIL

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# ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

*(E. HUGHES JONES, M.D., C.M., J.P.)*

TOGETHER WITH THE

# ANNUAL REPORT

OF THE

SENIOR SANITARY INSPECTOR

*(E. L. LLOYD JONES, M.S.I.A., M.R.S. Inst.)*

FOR THE YEAR

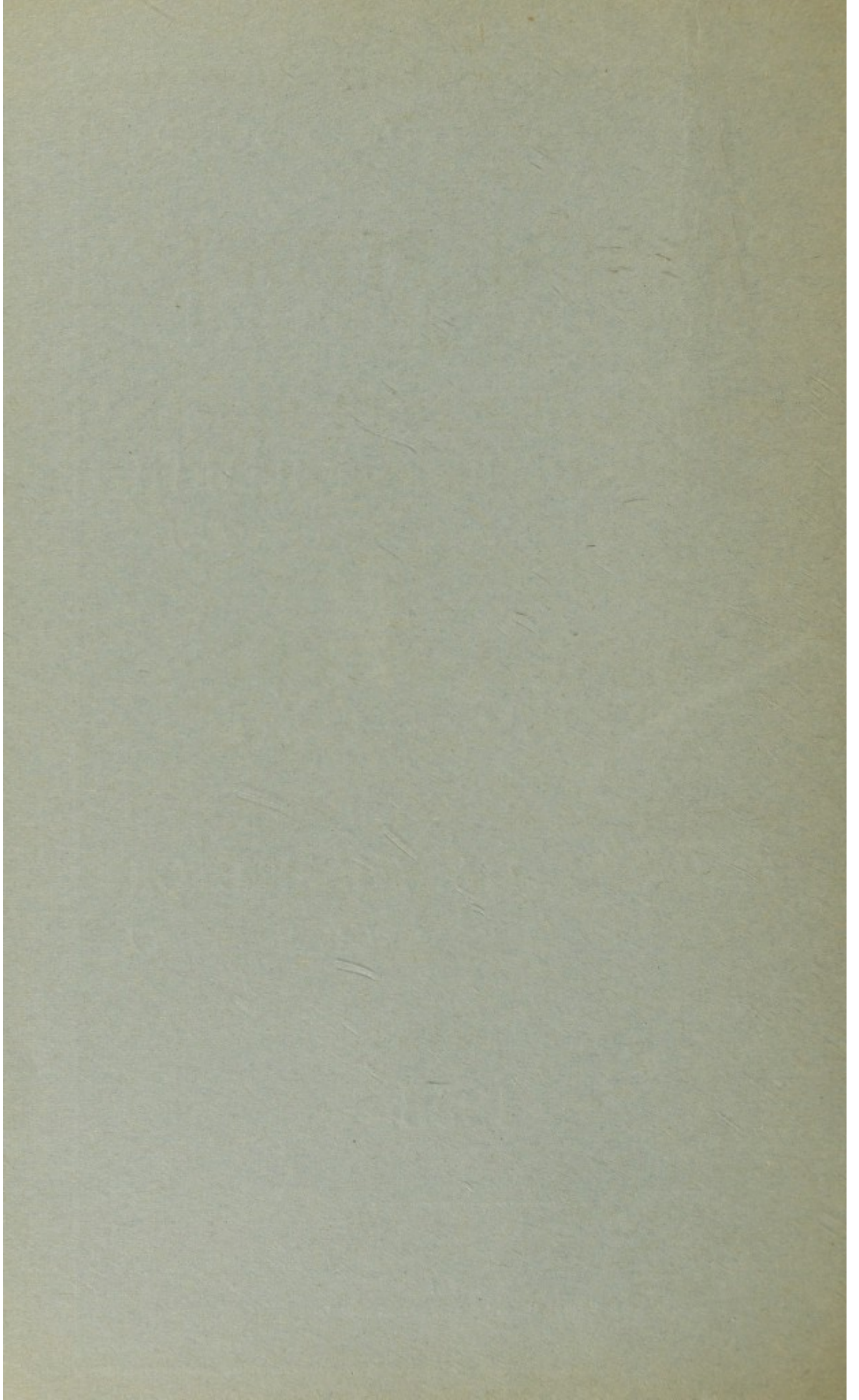
## 1938

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RHYL:

"Rhyl Times" Office, Sussex Street.





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# URBAN DISTRICT OF RHYL

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## Public Health Committee, 1938.

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Councillor D. W. Jones (Chairman of the Council).

Councillor S. Roose (Chairman).

Councillor Joseph Brookes.

Councillor E. George Evans.

„ G. Cain.

„ T. E. Roberts.

„ T. J. Hughes.

„ R. W. Williams.

„ E. Williams.

„ B. Wadsworth.

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## Public Health Staff.

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Medical Officer of Health:

E. HUGHES JONES, M.D., C.M., J.P.

Senior Sanitary Inspector:

E. L. LLOYD JONES, M.S.I.A., M.R.S.I.

Additional Sanitary Inspector:

I. G. GRIFFITH, M.S.I.A., A.R.S.I., M.R.I.P.H.

Senior Clerk and Meteorological Observer:

W A. FIELD.

Junior Clerk:

E. G. BLACK.

Matron of the Rhyl Isolation Hospital, Foryd Station:

Miss L. G. MORRIS, R.S.C.N., C.M.B.

Disinfecter:

S. JONES.

# Annual Report

OF THE

## Medical Officer of Health

### For the Year 1938

**To the Chairman and Members of the Rhyl Urban District Council.**

Gentlemen,

I have to present herewith my twenty-first Annual Report for the year 1938 on the health of the inhabitants of the Urban District.

The Report follows the form required by the Ministry of Health (Circular 1728 Wales).

I append herewith comparative statistics relating to the various health services in the district, which show that the Local Authority is alert and active in carrying out its various obligations.

#### FINANCIAL.

| Area<br>(Acres) | Popula-<br>tion<br>Mid-<br>1938 | R.V.<br>1st<br>April,<br>1939 | Prod.<br>1d. Rate<br>1939-40 | Rates<br>per<br>head | Rates<br>1939-40 |     | Loan Debt at<br>31st |              |
|-----------------|---------------------------------|-------------------------------|------------------------------|----------------------|------------------|-----|----------------------|--------------|
|                 |                                 |                               |                              |                      | Gen.             | Sp. | Water                | Hous-<br>ing |
| 1700            | 15680                           | 161305                        | 612                          | 10.6.0               | 13/11            | —   | 179883               | 143036       |

| March, 1939—Loan Debt |                              |        |        | Capital Sums spent to 31st March, 1939 |              |               |                              |        |
|-----------------------|------------------------------|--------|--------|--|--------------|---------------|------------------------------|--------|
| Sewer-<br>age         | Trading<br>Under-<br>takings | Others | Total  | Water                                  | Hous-<br>ing | Sewer-<br>age | Trading<br>Under-<br>takings | Total  |
| 633779                | 133560                       | 154118 | 674376 | 294197                                 | 164841       | 144891        | 317149                       | 921078 |



## HOUSING (to 31st December, 1938).

| General                  |                        |             |  |  | Slum Clearance                         |  |
|--------------------------|------------------------|-------------|--|--|--|--|
| Total Houses in District | New Houses since 1918  |             | Council houses built with 4 or more bedrooms | No. of new Council Houses proposed under all Schemes | Houses subject to order and demolished | Houses subject to order and not yet demolished |
|                          | (a) Private Enterprise | (b) Council |  |  |  |  |
| 4700                     | 2700                   | 284         | 4  | 78   | 34                                     | 5  |

| Slum Clearance              | Overcrowding              |                            |
|-----------------------------|---------------------------|----------------------------|
| Houses yet to be dealt with | No. of houses overcrowded | Council houses overcrowded |
| 70                          | 28                        | 3                          |

| No. of Houses not in all respects fit for habitation |      | Action taken                         |      | No. of Houses in respect of which notices under the Public Health Acts were served |      | No. of Houses where notices were complied with |      |
|--|------|--------------------------------------|------|--|------|--|------|
| 1937   | 1938 | 1937                                 | 1938 | 1937   | 1938 | 1937   | 1938 |
| 316  | 220  | Service of Notices to remedy defects |      | 274  | 170  | 247  | 138  |

## HOUSING—Continued.

| No. of cases in which legal proceedings have been taken in last two years |      | Analyses of water supply |      | No. of samples of milk taken |      |
|---|------|--------------------------|------|------------------------------|------|
| 1937  | 1938 | 1937                     | 1938 | 1937                         | 1938 |
| None  | 6    | 10                       | 64   | 90                           | 80   |

| No. of premises disinfected after Tuberculosis case |      | Provision for disinfection      | Practice in regard to payment for destroyed infected material | No. of cases where disinfected bedding and material destroyed |      |
|---|------|---------------------------------|---|---|------|
| 1937  | 1938 | Bedding steamed and disinfected | No payment  | 1937  | 1938 |
| 17  | 16   |                                 |   | 6   | 2    |

**Cases of Infectious Disease admitted to the Isolation Hospital.**

|                     |    |
|---------------------|----|
| Scarlet Fever ..... | 37 |
| Diphtheria .....    | 12 |

During the last ten years the number of cases of Infectious Diseases admitted and the Mortality Rate are as follows:—

| Year       | Cases admitted. | Deaths. | Mortality Rate per 1,000 |
|------------|-----------------|---------|--------------------------|
| 1929 ..... | 47              | 3       | 63·8                     |
| 1930 ..... | 65              | —       | —                        |
| 1931 ..... | 42              | —       | —                        |
| 1932 ..... | 36              | 1       | 27·7                     |
| 1933 ..... | 104             | 5       | 48·1                     |
| 1934 ..... | 87              | 5       | 57·5                     |
| 1935 ..... | 59              | 1       | 16·9                     |
| 1936 ..... | 26              | 1       | 38·4                     |
| 1937 ..... | 52              | 1       | 19·2                     |
| 1938 ..... | 49              | 1       | 20·4                     |



## WATER SUPPLY.

The water supply is abundant and excellent.

Sixty-four samples of water were taken during the year and a typical comment of the Bacteriologist is "This is an excellent water."

There is one private water supply in the district derived from a Borehole 250 feet deep.

The water from this borehole is not used for human consumption but for trade purposes.

Bacteriological examination of the water showed that its purity was satisfactory.

## DRAINAGE AND SEWERAGE.

Work has been commenced on the construction of a new high level storage reservoir and the provision of additional pumping plant at the main Pumping Station, which, when completed, it is hoped will obviate any flooding in the low level areas of the district due to sewers becoming surcharged with storm water.

## CAMPING.

1. The number of sites used for camping purposes during the year were 16—10 Licensed and 6 Organised Camps.

2. The number of Camping Sites in respect of which licences have been issued by the Local Authority under Section 269 of the Public Health Act, 1936: Nil.

Ten Licences were granted under the Rhyl Urban District Council Act, 1935, Section 141.

Two persons were refused Licences.

3. The estimated number of campers resident in the district at one time was approximately 2,750—3,000.

## SMOKE ABATEMENT.

Complaints were received of a smoke nuisance at the L.M. and S. Railway Engine Sheds and Sidings.

As a result of tests and interviews with representatives

of the Company the nuisance was reduced, but not completely abated.

### SEA WATER SWIMMING BATHS.

Samples were taken of the water in the Outdoor and Indoor Baths and the Bacteriological results were satisfactory.

### ERADICATION OF BED BUGS.

1. The number of houses found to be infested during the year were:—

4 Council and 20 Private Houses, which were disinfested.

2. The methods employed for freeing the houses from bed bugs were:—

(a) 4 Council and 19 Private Houses—Spraying with Vermicine insectide and the use of Sulphur Dioxide Gas.

(b) One Private House—H.C.N. Gas.

3. The bedding and beds of all successful applicants for Council Houses are examined and, if found to be infested, are disinfested by steam.

4. The work of disinfestation of dwellings was carried out by the Local Authority, with the exception of one Private House, which was carried out by a contractor.

5. Persons rehoused are regularly visited and advice given as to methods of cleansing and the prevention of reinfestation of premises.

## STATISTICS.

### POPULATION.

The Population of the District as given in the census returns for 1931 was 13,485. The Registrar General estimates the figure for last year as being 15,680, which I still consider to be a very low estimate, and naturally affects the statistics unfavourably.

My estimate would be about 16,500.



## BIRTH RATE.

During the year there were registered after inward and outward transfers, 218 births (R.G.R.), viz.: 107 males and 111 females. Out of this number 7 males and 11 females were illegitimate. The rate on the estimated population is 13.90 per 1,000 or 2.20 higher than that of 1937, 16.19 per 1,000 of the census population (13,485); and 13.21 per 1,000 of my estimated population (16,500). The birth rate for England and Wales for the same period is 15.1. The local Registrar's returns show that 210 births, viz., 105 males and 105 females were registered within the district—which is equal to the rate of 13.39 per 1,000 of the estimated population (15,680); 15.57 per 1,000 of the census population (13,485); and 12.73 per 1,000 of my estimated population (16,500).

## DEATH RATE.

The total deaths from all causes registered (R.G.R.) was 226, viz.: 117 males and 109 females, which gives a corrected death rate of 14.41 per 1,000 of the population, and is higher than that of 1937 by 0.32; a rate of 16.76 per 1,000 of the census population (13,485); and a rate of 13.76 per 1,000 of my estimated population (16,500). The local Registrar's returns show that 215 deaths were registered within the district—which is equal to a rate of 13.90 per 1,000 of the estimated population (15,680); 15.20 per 1,000 of the census population (13,485); and 13.05 per 1,000 of my estimated population (16,500)—but of that number (215) 32 were non-residents whose deaths were registered and transferred to their different localities. On the other hand 43 persons belonging to the district died outside its boundaries, and are to be added to the local deaths of residents, giving a true or "corrected" death rate of 14.41 of the estimated population (15,680); 16.76 of the census population (13,485); and 13.76 of my estimated population (16,500).

The adjusted Death Rate, i.e., the crude death rate (14.41 per 1,000 of the estimated resident population) multiplied by the Comparability Factor (0.92 supplied by the Registrar General): 13.26.

Rate amongst persons aged 65 years and upwards:—

At this age period 131 deaths occurred between the ages of 65 and 97, the average being 75 years, giving a rate of 8.42 per 1,000 of the estimated population (15,680); 9.79 per

1,000 of the census population (13,485); and 7.94 per 1,000 of my estimated population (16,500).

The 131 deaths equal 50.8 per cent. of the total deaths registered inside and outside the district, i.e., 215 local deaths plus 43 deaths of persons transferred to the district—258.

In the total of 131, 9 non-residents whose deaths were registered and transferred in their own districts and 17 belonging to this district, whose deaths were registered elsewhere, are included.

The total percentage of deaths aged 65 years and upwards actually belonging to the district, after inward and outward transfers, is equal to 54.

### ZYMOTIC MORTALITY.

No deaths occurred from the principal Zymotic Diseases.

### INFANTILE MORTALITY.

Amongst infants under one year there were 15 deaths (R.G.R.), or in the proportion of 68.8 per 1,000 registered births, as against 53 for England and Wales and 45.5 for the district in 1937.

### PULMONARY TUBERCULOSIS.

10 deaths were caused by Pulmonary Tuberculosis, equal to 0.64 per 1,000 of the estimated population (15,680), and 0.74 per 1,000 of the census population (13,485).

### OTHER TUBERCULOSIS DISEASES.

Under this heading four deaths occurred, equal to a rate of 0.26 per 1,000 of the estimated population (15,680), and 0.30 per 1,000 of the census population (13,485).

### OTHER RESPIRATORY DISEASES.

Under this heading three deaths occurred, equal to a rate of 0.19 per 1,000 of the estimated population (15,680); and 0.23 per 1,000 of the census population (13,485). Also Bronchitis 3, equal to a rate of 0.19 per 1,000 of the estimated



population (15,680) and 0.23 per 1,000 of the census population (13,485). Pneumonia 10, equal to a rate of 0.64 per 1,000 of the estimated population, and 0.74 per 1,000 of the census population.

### DEATH RATE FROM CANCER.

32 deaths were ascribed to Cancer, the rate being 2.04 per 1,000 of the estimated population (15,680), and 2.37 per 1,000 of the census population (13,485); an increase of 0.05 over that of 1937.

### VACCINATION RETURNS.

The local Registrar has supplied me with the following information:—

During the year 1938 the number of successful vaccinations were 40, whilst 91 exemptions were granted, and 13 died unvaccinated. The number of births were 218, showing that only 18.3 per cent. of the children born were vaccinated.

### NOTIFICATION OF BIRTHS.

#### MATERNITY AND CHILD WELFARE.

This section of Public Health Administration is entirely under the control of the Flintshire County Council and their Health Visitor. A Welfare Centre has been established at the Old Emmanuel School, Vale Road, at which local ladies also give voluntary assistance.

### VENEREAL DISEASES.

This Department is also under the control of the Flintshire County Council, the nearest station for treatment being Chester.

### ISOLATION HOSPITAL.

The number of cases of Infectious Diseases admitted into the Hospital was 49.

|                      |    |
|----------------------|----|
| Scarlet Fever ... .. | 37 |
| Diphtheria ... ..    | 12 |

## GENERAL STATISTICS.

|  |             |
|--|-------------|
| Area—Exclusive of Foreshore ... ..                         | 1,700 acres |
| Area—Inclusive of Foreshore... ..                          | 2,579 acres |
| Population at Census 1901 ... ..                           | 8,461       |
| Population at Census 1911 ... ..                           | 9,005       |
| Population at Census 1921 ... ..                           | 13,490      |
| Population at Census 1931 ... ..                           | 13,485      |
| Population R.G. Estimate 1938 ... ..                       | 15,680      |
| Number of inhabited houses at Census 1931 ... ..           | 3,013       |
| Number of families or separate occupiers 1931 ... ..       | 3,183       |
| Rateable Value ending March 31st, 1939 ... ..              | £162,000    |
| Sum represented by a Penny Rate ... ..                     | £613        |
| Number of Inhabited Houses, according to Rate Books ... .. | 4,900       |

## EXTRACTS FROM VITAL STATISTICS.

(Registrar-General's Returns).

|  | Total | M.     | F.  |   |
|--|-------|--------|-----|---|
| Live Births  |       |        |     | } Birth Rate per 1,000 of the estimated resident population ... 13.90 |
| Legitimate... ..   | 200   | 100    | 100 |   |
| Illegitimate... ..   | 18    | 7      | 11  |   |
| Still Births ... ..  | 6     | 4      | 2   | } Rate per 1,000 total (live and still) births 27.52                  |
| Deaths ... ..  | 226   | 117    | 109 |   |
|  |       |        |     | } Death Rate per 1,000 of the estimated resident population 14.41     |
|  |       |        |     |   |
| Deaths from puerperal causes:—                                 |       | Deaths |     | Rate per 1,000 total (live and still) births                          |
| Puerperal Sepsis ... ..  |       | 0      |     | ...   |
| Other Puerperal causes... ..                                   |       | 1      |     | 4.47  |
| Total... ..  |       | 1      |     | 4.47  |
| Death Rate of Infants under one year of age:—                  |       |        |     |   |
| All Infants per 1,000 live births ... ..                       |       |        |     | 68.8  |
| Legitimate Infants per 1,000 legitimate live births ... ..     |       |        |     | 65.0  |
| Illegitimate Infants per 1,000 illegitimate live births ... .. |       |        |     | 111.1   |
| Deaths from Whooping Cough (all ages)... ..                    |       |        |     | 0   |
| Deaths from Diarrhœa (under 2 years of age) ... ..             |       |        |     | 1   |
| Deaths from Measles (all ages) ... ..                          |       |        |     | 0   |
| Deaths from Cancer (all ages) ... ..                           |       |        |     | 32  |

## CAUSES OF SICKNESS.

The only noteworthy causes of sickness outside the notifiable or (epidemic) diseases were: Bronchial Colds, Influenza Colds and Catarrh.



## SUMMARY OF NURSING ARRANGEMENTS.

Hospitals and other Institutions available for the district.  
Professional Nursing in the Home.

(a) The District Nursing Association, which is affiliated to the Queen's Institute, employ two District Nurses to visit the poorer people in their homes, to the funds of which the Council contribute.

(b) There are nine Registered Nursing Homes in the district.

(c) There are no arrangements for the professional nursing of any class of Infectious Disease, outside the Isolation Hospital.

Midwives.—There are seven Midwives practising in the district, not including the Nurses from the R.A. Hospital, who are qualified but do not practice.

Maternity and Child Welfare.—There is a local centre at the Old Emmanuel School, Vale Road, Rhyl, under the control of the Flintshire County Council, the County M.Q.H. and Inspector of Midwives.

Institutional Provision.—No provision is made within the district for unmarried mothers or illegitimate infants. There is a small School for Blind Children, a Home for Waifs and Strays, and a Convalescent Home for poor children.

Hospitals.—No provision is made for the treatment of Tuberculosis, Maternity or Smallpox. The R.A. Children's Hospital and Convalescent Home is provided for women and children, the patients coming from all parts of England and Wales. It is supported by voluntary contributions, and a minimum fee per patient. This Hospital consists of:—

**(R.A. Hospital).****Hospital Block.**

|   | No. of Beds |
|---|-------------|
| 4 Large wards with balconies attached) ... .. | 69          |
| 6 Private wards ... ..                        | 6           |

**Convalescent Block.**

|                        |    |
|------------------------|----|
| 5 Private Rooms ... .. | 5  |
| 5 Large Wards ... ..   | 74 |
| 3 Double Rooms ... ..  | 6  |

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Total number of beds ... .. 160

The Prince Edward War Memorial Hospital is doing good service. This consisted of one block of buildings containing two wards of six beds each, four private wards of one bed each and the usual administrative rooms. Extensions have been recently carried out at this hospital at a cost of £11,000, increasing the bed accommodation to 42 in both Male and Female wards; also small Children's ward, several Private wards, and a new Nurses' Home have been erected. It is supported by voluntary contributions, and a minimum scale of fees.

Isolation Hospital.—Provision is made for the treatment of Infectious Diseases occurring within the district, viz.: Scarlet Fever, 4 adult beds; Diphtheria, 2 adult beds; Enteric Fever, 2 adult beds; total, 8 adult beds. There is also an annex building, consisting of two wards of 8 adult beds; and small nurses' room, which is intended for emergency purposes; also an Administrative Block, etc.

The Isolation Hospital is situated at Foryd Station, near Abergele, outside the district. There is no provision for the treatment of Smallpox beyond the possession of land at a site for a hospital.

Ambulance facilities:—

- (a) For Infectious Diseases, Motor and Horse Ambulances.
- (b) For Non-infectious Cases and Accident Cases a small push ambulance kept by the County Police. A motor ambulance, the property of a private firm, is used for general hospital cases.

### LABORATORY WORK.

Arrangements have been made with the Authorities of the Chester Royal Infirmary for Pathological and Bacteriological examination.

Diphtheria Anti-Toxin is supplied free to medical practitioners for use in cases of Diphtheria and all suspect cases.

### LIST OF NOTIFIABLE DISEASES IN RHYL DISTRICT.

Smallpox, Scarlet Fever, Diphtheria (including Membranous Croup), Enteric Fever (Typhoid and Paratyphoid), Pneumonia, Cholera, Plague, Puerperal Fever, Puerperal Pyrexia, Cerebro Spinal Fever, Acute Poliomyelitis, Acute



Polioencephalitis, Encephalitis, Lethargica, Typhus Fever, Dysentery, Erysipelas, Ophalamia Neonatorum, Tuberculosis, Pulmonary and other forms, Malaria (cases contracted in this country) and other cases.

#### LIST OF ADOPTIVE ACTS, ETC., IN FORCE.

Public Health Acts Amendment Act, 1890. Public Health Acts Amendment Act, 1907, Sections 19, 20, 22, 28, 30, 31, 51, 53, 54, 85 and 86.

Public Health Act, 1925.

Infectious Diseases Prevention Act, 1890.

Regulations—Dairies, Cowsheds and Milkshops.

Byelaws—Slaughterhouses, 1931.

Tents, Vans, Sheds and similar Structures, 1913.

Offensive Trades—Dealers in Rags and Bones, and Fish Friers, 1915, and Chip Potato Friers, 1931.

Registries for Female Domestic Servants, 1915.

Registries for Marine Stores, 1915.

Common Lodging Houses, 1877.

Nuisances, 1890.

Removal of Offensive Matters, 1896.

Sanitary Conveniences, 1897.

Rhyl Improvements Acts, 1852, 1872, and 1901.

Rhyl Water Act, 1932.

Rhyl Urban District Council Act, 1935.

#### SANITARY ADMINISTRATION.

It was not found necessary to take legal action against any persons for contraventions of Section 141 of the Rhyl Urban District Council Act, 1935, relating to Camping.

#### SCHOOL AND MEDICAL INSPECTION OF SCHOOLS.

The seven elementary schools and one secondary school within the district have received attention.

Epidemic sickness, viz.: Measles, Whooping Cough, Influenza Colds, and Mumps, were prevalent at varying periods, in consequence of which some of the schools were

closed for periods, as a preventative measure. All the schools were disinfected after closure and during the holiday periods. The Medical Inspection of the children attending the school is carried out by the County Medical Officer and Staff. There is a School Clinic at the Old Emmanuel School, Vale Road, which is open each Monday between 1.30 and 4 p.m., when a Doctor is present.

### PUBLIC HEALTH STAFF.

The staff consists of one Medical Officer of Health, M.D., C.M. (part time), one Senior Sanitary Inspector, C.S.I.B., C.M.I.L.U. (full time), one Additional Sanitary Inspector, C.S.I.B., Dip. R. Inst P.H., C.M.I.L.U. (full time) (Contributions are made to the salaries of each of these Officers by Exchequer Grants), a Senior Clerk and Junior Clerk, also a Matron and Staff at the Isolation Hospital.

### SANITARY INSPECTOR'S REPORT.

Herewith I append the Report and Statistics supplied to me by the Senior Sanitary Inspector, Mr. E. L. Lloyd Jones, also the usual statistics.

(Signed) E. HUGHES JONES, M.D.,

Medical Officer of Health.

June, 1939.

### OPHTHALMIA NEONATORUM.

| CASES    |         |                | Vision<br>Un-<br>impaired | Vision<br>Impaired | Total<br>Blindness | Deaths |
|----------|---------|----------------|---------------------------|--------------------|--------------------|--------|
| Notified | Treated |                |                           |                    |                    |        |
|          | At Home | In<br>Hospital |                           |                    |                    |        |
| Nil      | Nil     | Nil            | Nil                       | Nil                | Nil                | Nil    |



## TUBERCULOSIS.

New Cases and Mortality belonging to the District during 1938.

| Age<br>Periods | New Cases   |     |                 |     | Deaths      |     |                 |     |
|----------------|-------------|-----|-----------------|-----|-------------|-----|-----------------|-----|
|                | Respiratory |     | Non-Respiratory |     | Respiratory |     | Non-Respiratory |     |
|                | M           | F   | M               | F   | M           | F   | M               | F   |
| 0 ... ..       | ...         | ... | 1               | ... | ...         | ... | 1               | ... |
| 1 ... ..       | 1           | ... | 1               | ... | 1           | ... | ...             | ... |
| 5 ... ..       | ...         | ... | 1               | ... | ...         | ... | 1               | ... |
| 10 ... ..      | ...         | ... | ...             | ... | ...         | ... | ...             | ... |
| 15 ... ..      | 1           | ... | ...             | ... | ...         | 1   | ...             | ... |
| 20 ... ..      | ...         | ... | ...             | ... | 1           | ... | ...             | ... |
| 25 ... ..      | 3           | 1   | ...             | 1   | ...         | 1   | ...             | ... |
| 35 ... ..      | 1           | ... | ...             | ... | 1           | 2   | 1               | ... |
| 45 ... ..      | 1           | 1   | ...             | 1   | 1           | 1   | 1               | ... |
| 55 ... ..      | ...         | ... | ...             | ... | ...         | 1   | ...             | ... |
| 65 and upwds   | ...         | ... | ...             | ... | ...         | ... | ...             | ... |
| Totals ...     | 7           | 2   | 3               | 2   | 4           | 6   | 4               | ... |

The total number of deaths from Tuberculosis was 14

\*The number of non-notified Tuberculosis deaths was 2  
Ratio 1 to 7.

All cases of Tuberculosis notified locally are enquired into and forwarded on to the County Medical Officer and the Tuberculosis Officer. In any case of non-notified Tuberculosis deaths, enquiries are immediately made, and the replies forwarded to the County Medical Officer of Health.

\* Regarding the above two non-notified Tuberculosis deaths, one was notified after death and the other died the same day as the Doctor was called in, not having had any medical attention previously.

There is a local dispensary under the supervision of the County Tuberculosis Officer.

#### PUBLIC HEALTH (PREVENTION OF TUBERCULOSIS) REGULATIONS, 1925.

No action was taken under the above Regulations.

#### PUBLIC HEALTH ACT, 1925. SECTION 62.

No action was taken under Section 62 of the Public Health Act, 1925.

#### PUBLIC HEALTH ACT, 1936. SECTION 172.

No action was taken under Section 172 of the Public Health Act, 1936.

TABLE I.  
NOTIFIABLE DISEASES DURING THE YEAR.

| DISEASE.                              | At all Ages. | Under 1 year | 1—2 | 2—3 | 3—4 | 4—5 | 5—10 | 10—15 | 15—20 | 20—35 | 35—45 | 45—65 | Over 65 | Cases admitted to Hospital. | Total Deaths |
|---------------------------------------|--------------|--------------|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|---------|-----------------------------|--------------|
| Small Pox ...                         | ...          | ...          | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...     | ...                         | ...          |
| Diphtheria ...                        | 9            | ...          | ... | ... | ... | ... | 3    | 1     | 1     | 2     | 2     | ...   | ...     | 7                           | 1            |
| Scarlet Fever ...                     | 28           | 1            | ... | ... | ... | ... | 18   | 2     | 1     | 6     | ...   | ...   | ...     | 26                          | ...          |
| Enteric Fever (including Paratyphoid) | ...          | ...          | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...     | ...                         | ...          |
| Sub-Acute Poliomyelitis               | ...          | ...          | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...     | ...                         | ...          |
| Puerperal Pyrexia ...                 | 20           | ...          | ... | ... | ... | ... | 2    | 1     | 1     | 4     | 6     | 2     | 4       | ...                         | 8            |
| Pneumonia ...                         | ...          | ...          | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...     | ...                         | ...          |
| Encephalitis Lethargica               | 2            | ...          | ... | ... | ... | ... | ...  | ...   | ...   | 1     | 1     | ...   | ...     | ...                         | ...          |
| Erysipelas ...                        | ...          | ...          | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...     | ...                         | ...          |
| Cerebro Spinal Fever ...              | ...          | ...          | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...     | ...                         | ...          |
| Ophthalmia Neonatorum                 | ...          | ...          | ... | ... | ... | ... | ...  | ...   | ...   | ...   | ...   | ...   | ...     | ...                         | ...          |
| Total ...                             | 59           | ...          | 1   | ... | ... | ... | 23   | 4     | 3     | 13    | 9     | 2     | 4       | 33                          | 9            |
| Removal to Hospital                   | ...          | 1            | ... | ... | ... | ... | 19   | 3     | ...   | 8     | 2     | ...   | ...     | 33                          | ...          |



TABLE II.—BIRTH-RATES, DEATH-RATES and ANALYSIS of MORTALITY } { England & Wales, 126 County Boroughs  
in the year, 1938. } & Great Towns, & 148 Smaller Towns.

(Non-civilians included)

|  | RATE PER 1,000 TOTAL POPULATION |              | DEATH RATE PER 1,000 POPULATION. |                               |           |         |               |                |            |           |          | RATE PER 1,000 LIVE BIRTHS                |                             |
|--|---------------------------------|--------------|----------------------------------|-------------------------------|-----------|---------|---------------|----------------|------------|-----------|----------|---|-----------------------------|
|  | Live Births                     | Still-Births | All Causes                       | Typhoid and Paratyphoid Fever | Small-pox | Measles | Scarlet Fever | Whooping Cough | Diphtheria | Influenza | Violence | Diarrhoea and Enteritis (under Two Years) | Total Deaths under One Year |
| England and Wales  | 15.1                            | 0.60         | 11.6                             | 0.00                          | 0.00      | 0.04    | 0.01          | 0.03           | 0.07       | 0.12      | 0.55     | 5.3                                       | 53                          |
| 126 County Boroughs & Great Towns including London                                 | 15.0                            | 0.58         | 11.7                             | 0.00                          | —         | 0.05    | 0.01          | 0.03           | 0.07       | 0.10      | 0.53     | 7.3                                       | 57                          |
| 148 smaller towns (estimated resident populations 25,000 to 50,000 at Census 1931) | 15.5                            | 0.63         | 11.2                             | 0.00                          | 0.00      | 0.03    | 0.01          | 0.02           | 0.08       | 0.12      | 0.54     | 4.3                                       | 50                          |
| London   | 13.4                            | 0.42         | 11.4                             | 0.00                          | —         | 0.06    | 0.01          | 0.03           | 0.05       | 0.07      | 0.52     | 13.2                                      | 57                          |

TABLE III.

## Vital Statistics of Whole District during 1938 and previous years.

Name of District—RHYL URBAN.

| Year. | Population estimated to Middle of each Year. |       |     | Births. |       | Total Deaths Registered in the District. |       | Transferable Deaths.                         |  | Nett Deaths belonging to the District |                             |              |
|-------|--|-------|-----|---------|-------|--|-------|--|--|---------------------------------------|-----------------------------|--------------|
|       | 1  | 2     | 3   | Number. | Rate. | Number.                                  | Rate. | Of Non-residents registered in the District. | Of Residents not registered in the District. | Under 1 Year of Age.                  | Rate per 1,000 Nett Births. | At all Ages. |
|       |  |       |     | 4       | 5     | 6  | 7     | 8  | 9  | Number.                               |                             | Number.      |
|       |  |       |     |         |       |  |       |  |  |                                       |                             | Rate.        |
| 1     |  |       |     |         |       | 6  | 7     |  |  | 10                                    | 11                          | 12           |
|       |  |       |     |         |       |  |       |  |  |                                       |                             |              |
| 1927  |  | 11670 | ... | 165     | 14.13 | 152                                      | 13.0  | 33   | 22   | 11                                    | 66.66                       | 141          |
| 1928  |  | 12690 | ..  | 175     | 13.79 | 187                                      | 14.74 | 30   | 22   | 6                                     | 34.28                       | 179          |
| 1929  |  | 12810 | ... | 169     | 13.19 | 185                                      | 14.44 | 37   | 26   | 9                                     | 53.3                        | 174          |
| 1930  |  | 12810 | ... | 180     | 14.05 | 174                                      | 13.58 | 35   | 26   | 9                                     | 50.0                        | 165          |
| 1931  |  | 13100 | ... | 172     | 13.81 | 175                                      | 13.35 | 31   | 19   | 8                                     | 46.5                        | 163          |
| 1932  |  | 13530 | 179 | 171     | 12.64 | 198                                      | 14.63 | 37   | 26   | 10                                    | 58.5                        | 187          |
| 1933  |  | 13930 | ... | 162     | 11.63 | 187                                      | 13.42 | 43   | 35   | 5                                     | 30.9                        | 179          |
| 1934  |  | 14360 | 172 | 178     | 12.40 | 197                                      | 13.72 | 33   | 31   | 10                                    | 56.2                        | 195          |
| 1935  |  | 14760 | 195 | 203     | 13.75 | 224                                      | 15.18 | 33   | 29   | 10                                    | 49.3                        | 220          |
| 1936  |  | 15240 | ... | 190     | 12.47 | 186                                      | 12.20 | 32   | 51   | 11                                    | 57.9                        | 207          |
| 1937  |  | 15540 | 207 | 198     | 11.70 | 199                                      | 12.82 | 26   | 44   | 9                                     | 45.5                        | 219          |
| 1938  |  | 15680 | 210 | 218     | 13.90 | 215                                      | 13.90 | 32   | 43   | 15                                    | 68.8                        | 226          |
|       |  |       |     |         |       |  |       |  |  |                                       |                             | 14.41        |

Area of District in acres (land and inland water) : 1,700 (exclusive of foreshore) ; 2,579 (inclusive of foreshore).

Total population at all ages : 13,485. At Census, June, 1931.

Estimated population, 15,680.



TABLE IV.  
REGISTRAR GENERAL'S RETURNS.  
Causes of Death in Rhyl Urban District, 1938.

| Causes of Death.  |  |  |  | Males. | Females |
|---|--|--|--|--------|---------|
| All causes ... ..                                       |  |  |  | 117    | 109     |
| 1   | Typhoid and paratyphoid fevers ... ..                            |  |  | ...    | ...     |
| 2   | Measles ... ..   |  |  | ...    | ...     |
| 3   | Scarlet fever ... ..   |  |  | ...    | ...     |
| 4   | Whooping cough ... ..  |  |  | ...    | ...     |
| 5   | Diphtheria ... ..  |  |  | ...    | ...     |
| 6   | Influenza ... ..   |  |  | 2      | 1       |
| 7   | Encephalitis lethargica ... ..                                   |  |  | ...    | ...     |
| 8   | Cerebro-spinal fever... ..                                       |  |  | ...    | ...     |
| 9   | Tuberculosis of respiratory system ... ..                        |  |  | 4      | 6       |
| 10  | Other tuberculous diseases ... ..                                |  |  | 4      | ...     |
| 11  | Syphilis ... ..  |  |  | ...    | ...     |
| 12  | General paralysis of the insane, tabes dorsalis ... ..           |  |  | ...    | ...     |
| 13  | Cancer, malignant disease ... ..                                 |  |  | 16     | 17      |
| 14  | Diabetes ... ..  |  |  | 1      | 1       |
| 15  | Cerebral Hæmorrhage, &c. ... ..                                  |  |  | 13     | 11      |
| 16  | Heart Disease ... ..   |  |  | 30     | 23      |
| 17  | Aneurysm... ..   |  |  | ...    | ...     |
| 18  | Other circulatory diseases ... ..                                |  |  | 7      | 8       |
| 19  | Bronchitis ... ..  |  |  | 1      | 3       |
| 20  | Pneumonia (all forms) ... ..                                     |  |  | 5      | 3       |
| 21  | Other respiratory diseases ... ..                                |  |  | 3      | 3       |
| 22  | Peptic Ulcer ... ..  |  |  | 1      | 1       |
| 23  | Diarrhœa, &c. (under 2 years) ... ..                             |  |  | ...    | 1       |
| 24  | Appendicitis ... ..  |  |  | 1      | ...     |
| 25  | Cirrhosis of liver ... ..  |  |  | ...    | 1       |
| 26  | Other diseases of liver, etc. ... ..                             |  |  | ...    | 1       |
| 27  | Other digestive diseases ... ..                                  |  |  | 3      | 3       |
| 28  | Acute and chronic nephritis ... ..                               |  |  | 6      | 2       |
| 29  | Puerperal sepsis ... ..  |  |  | ...    | ...     |
| 30  | Other puerperal causes ... ..                                    |  |  | ...    | 1       |
| 31  | Congenital debility, premature birth, malformations, etc. ... .. |  |  | 6      | 3       |
| 32  | Senility ... ..  |  |  | 3      | 6       |
| 33  | Suicide ... ..   |  |  | 1      | ...     |
| 34  | Other violence ... ..  |  |  | 4      | 7       |
| 35  | Other defined diseases ... ..                                    |  |  | 6      | 7       |
| 36  | Causes ill-defined or unknown ... ..                             |  |  | ...    | ...     |
| Special Causes (included in No. 35 above)               |  |  |  |        |         |
| Small-pox ... ..  |  |  |  | ...    | ...     |
| Poliomyelitis ... ..                                    |  |  |  | ...    | ...     |
| Polioencephalitis ... ..                                |  |  |  | ...    | ...     |
| Deaths of { Total ... ..                                |  |  |  | 10     | 5       |
| Infants under { Legitimate ... ..                       |  |  |  | 8      | 5       |
| 1 year { Illegitimate ... ..                            |  |  |  | 2      | ...     |
| Live Births { Total ... ..                              |  |  |  | 107    | 111     |
| { Legitimate ... ..                                     |  |  |  | 100    | 100     |
| { Illegitimate ... ..                                   |  |  |  | 7      | 11      |
| Still Births { Total ... ..                             |  |  |  | 4      | 2       |
| { Legitimate ... ..                                     |  |  |  | 4      | 2       |
| { Illegitimate ... ..                                   |  |  |  | ...    | ...     |
| Comparability Factor ... ..                             |  |  |  | 0.92   |         |
| Resident Population ... ..                              |  |  |  | 15,680 |         |
| General Register Office, Somerset House, London, W.C.2. |  |  |  |        |         |



TABLE IVa.  
Causes of and Ages at Death during Year 1938.  
Name of District—RHYL URBAN.  
LOCAL RETURNS—AGE PERIODS.

| Causes of Death.   | Deaths at the subjoined ages of Residents, whether occurring in or beyond the District. |                |                       |                        |                        |                        |                       | Total Deaths, whether of "Residents" or "Non-Residents" in Institutions in the District. |
|--|---|----------------|-----------------------|------------------------|------------------------|------------------------|-----------------------|--|
|  | All Ages.   | Under 5 years. | 5 and under 15 years. | 15 and under 25 years. | 25 and under 45 years. | 45 and under 65 years. | 65 years and upwards. |  |
| All Causes—Certified ...                                       | 224   | 19             | 3                     | 10                     | 16                     | 59                     | 117                   | 47   |
| Uncertified...   | 2   | ...            | ...                   | ...                    | ...                    | ...                    | 2                     | ...  |
| 1 Typhoid and paratyphoid fevers...                            | ...   | ...            | ...                   | ...                    | ...                    | ...                    | ...                   | ...  |
| 2 Measles ...  | ...   | ...            | ...                   | ...                    | ...                    | ...                    | ...                   | ...  |
| 3 Scarlet Fever ...  | ...   | ...            | ...                   | ...                    | ...                    | ...                    | ...                   | ...  |
| 4 Whooping Cough ...   | ...   | ...            | ...                   | ...                    | ...                    | ...                    | ...                   | ...  |
| 5 Diphtheria ...   | ...   | ...            | ...                   | ...                    | ...                    | ...                    | ...                   | 1  |
| 6 Influenza ...  | 3   | ...            | ...                   | ...                    | ...                    | 1                      | 2                     | ...  |
| 7 Encephalitis lethargica ...                                  | ...   | ...            | ...                   | ...                    | ...                    | ...                    | ...                   | ...  |
| 8 Cerebro-spinal fever ...                                     | ...   | ...            | ...                   | ...                    | ...                    | ...                    | ...                   | ...  |
| 9 Tuberculosis of respiratory system                           | 10  | 1              | ...                   | 2                      | 4                      | 3                      | ...                   | ...  |
| 10 Other Tuberculous Diseases ...                              | 4   | 1              | 1                     | ...                    | 1                      | 1                      | ...                   | 1  |
| 11 Syphilis ...  | ...   | ...            | ...                   | ...                    | ...                    | ...                    | ...                   | ...  |
| 12 General paralysis of the insane, tabes dorsalis ...         | ...   | ...            | ...                   | ...                    | ...                    | ...                    | ...                   | ...  |
| 13 Cancer, malignant disease ...                               | 32  | ...            | 1                     | ...                    | 3                      | 14                     | 14                    | 6  |
| 14 Diabetes ...  | 2   | ...            | ...                   | ...                    | ...                    | ...                    | 2                     | ...  |
| 15 Cerebral hæmorrhage, &c. ...                                | 24  | ...            | ...                   | ...                    | ...                    | 6                      | 18                    | 2  |
| 16 Heart Disease ...   | 58  | ...            | ...                   | ...                    | 2                      | 20                     | 36                    | 5  |
| 17 Aneurysm ...  | ...   | ...            | ...                   | ...                    | ...                    | ...                    | ...                   | ...  |
| 18 Other Circulatory Diseases ...                              | 14  | ...            | ...                   | ...                    | ...                    | 1                      | 13                    | 3  |
| 19 Bronchitis ...  | 3   | ...            | ...                   | ...                    | ...                    | 1                      | 2                     | ...  |
| 20 Pneumonia (all forms) ...                                   | 10  | 3              | ...                   | 2                      | ...                    | 2                      | 3                     | 3  |
| 21 Other respiratory diseases ...                              | 3   | ...            | ...                   | ...                    | ...                    | 2                      | 1                     | 2  |
| 22 Peptic Ulcer ...  | 1   | ...            | ...                   | ...                    | ...                    | ...                    | 1                     | ...  |
| 23 Diarrhœa, &c. (under 2 years) ...                           | 1   | 1              | ...                   | ...                    | ...                    | ...                    | ...                   | 1  |
| 24 Appendicitis ...  | 1   | ...            | ...                   | 1                      | ...                    | ...                    | ...                   | 1  |
| 25 Cirrhosis of Liver ...                                      | 1   | ...            | ...                   | ...                    | ...                    | ...                    | 1                     | 1  |
| 26 Other Diseases of Liver, etc. ...                           | 1   | ...            | ...                   | ...                    | ...                    | 1                      | ...                   | ...  |
| 27 Other Digestive Diseases ...                                | 6   | 1              | ...                   | ...                    | 2                      | ...                    | 3                     | 5  |
| 28 Acute and Chronic Nephritis ...                             | 6   | ...            | ...                   | ...                    | ...                    | ...                    | 6                     | 2  |
| 29 Puerperal sepsis ...  | ...   | ...            | ...                   | ...                    | ...                    | ...                    | ...                   | ...  |
| 30 Other Puerperal causes ...                                  | 2   | ...            | ...                   | 1                      | 1                      | ...                    | ...                   | 2  |
| 31 Congenital Debility, Premature birth, Malformation, &c. ... | 10  | 9              | ...                   | 1                      | ...                    | ...                    | ...                   | 2  |
| 32 Senility ...  | 7   | ...            | ...                   | ...                    | ...                    | ...                    | 7                     | ...  |
| 33 Suicide ...   | 1   | ...            | ...                   | ...                    | ...                    | 1                      | ...                   | 1  |
| 34 Other Violence ...  | 10  | 2              | ...                   | 3                      | ...                    | 2                      | 3                     | 7  |
| 35 Other defined disease ...                                   | 15  | 1              | 1                     | ...                    | 3                      | 4                      | 6                     | 1  |
| 36 Causes ill-defined or unknown ...                           | 1   | ...            | ...                   | ...                    | ...                    | ...                    | 1                     | 1  |
| Totals ...   | 226   | 19             | 3                     | 10                     | 16                     | 59                     | 119                   | 47   |



TABLE V.

## Infant Mortality during the Year 1938.

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

Name of District—RHYL URBAN.

| Causes of Death. |                                       | Under 4 weeks. | 4 weeks and under 6 months. | 6 months and under 12 months. | Total Deaths under 1 year. |
|------------------|---------------------------------------|----------------|-----------------------------|-------------------------------|----------------------------|
| All causes {     | Certified                             | 11             | 2                           | 2                             | 15                         |
|                  | Uncertified                           | ...            | ...                         | ...                           | ...                        |
| {                | Small-pox                             | ...            | ...                         | ...                           | ...                        |
|                  | Chicken-pox                           | ...            | ...                         | ...                           | ...                        |
|                  | Measles                               | ...            | ...                         | ...                           | ...                        |
|                  | Scarlet Fever                         | ...            | ...                         | ...                           | ...                        |
|                  | Whooping-Cough                        | ...            | ...                         | ...                           | ...                        |
|                  | Diphtheria and Croup                  | ...            | ...                         | ...                           | ...                        |
|                  | Erysipelas                            | ...            | ...                         | ...                           | ...                        |
| {                | Tuberculous Meningitis                | ...            | ...                         | 1                             | 1                          |
|                  | Abdominal Tuberculosis                | ...            | ...                         | ...                           | ...                        |
|                  | Other Tuberculous Diseases            | ...            | ...                         | ...                           | ...                        |
|                  | Meningitis ( <i>not Tuberculous</i> ) | ...            | ...                         | ...                           | ...                        |
|                  | Convulsions                           | ...            | ...                         | ...                           | ...                        |
|                  | Laryngitis                            | ...            | ...                         | ...                           | ...                        |
|                  | Bronchitis                            | ...            | ...                         | ...                           | ...                        |
|                  | Pneumonia (all forms)                 | ...            | 1                           | ...                           | 1                          |
| {                | Diarrhoea                             | ...            | ...                         | ...                           | ...                        |
|                  | Enteritis...                          | ...            | ...                         | 1                             | 1                          |
|                  | Gastritis                             | ...            | ...                         | ...                           | ...                        |
|                  | Syphilis                              | ...            | ...                         | ...                           | ...                        |
|                  | Rickets                               | ...            | ...                         | ...                           | ...                        |
|                  | Suffocation, overlying                | 1              | ...                         | ...                           | 1                          |
|                  | Injury at Birth                       | 1              | ...                         | ...                           | 1                          |
|                  | Atelectasis                           | ...            | ...                         | ...                           | ...                        |
| {                | Congenital Malformations              | 3              | ...                         | ...                           | 3                          |
|                  | Premature Birth                       | 3              | ...                         | ...                           | 3                          |
|                  | Atrophy, Debility & Marasmus          | 1              | ...                         | ...                           | 1                          |
|                  | Influenza                             | ...            | ...                         | ...                           | ...                        |
|                  | Other Causes                          | 2              | 1                           | ...                           | 3                          |
| Totals           |                                       | 11             | 2                           | 2                             | 15                         |

|  |   |                      |     |     |
|--|---|----------------------|-----|-----|
| Nett Births registered during<br>the calendar year 218 | { | Legitimate           | ... | 200 |
|  |   | Illegitimate         | ... | 18  |
| Nett Deaths registered during<br>the calendar year 15  | { | Legitimate Infants   | ... | 13  |
|  |   | Illegitimate Infants | ... | 2   |

## RHYL ISOLATION HOSPITAL RETURNS.

## Patients Admitted.

| 1938.      | Scarlet<br>Fever. | Diph-<br>theria. | Typhoid | Suspect.<br>Dip. | Encephalitis<br>Lethargica |
|------------|-------------------|------------------|---------|------------------|----------------------------|
| January    | 2                 | 1                | ...     | ...              | ...                        |
| February   | 1                 | ...              | ...     | ...              | ...                        |
| March ...  | 2                 | 1                | ...     | ...              | ...                        |
| April ...  | 5                 | 4                | ...     | ...              | ...                        |
| May ...    | 10                | 1                | ...     | ...              | ...                        |
| June ...   | 2                 | ...              | ...     | 1                | ...                        |
| July ...   | 4                 | 1                | ...     | ...              | ...                        |
| August ..  | 2                 | 1                | ...     | ...              | ...                        |
| Sept. ...  | 2                 | 1                | ...     | 1                | ...                        |
| October .. | 2                 | ...              | ...     | ...              | ...                        |
| Nov. ...   | 5                 | ...              | ...     | ...              | ...                        |
| Dec. ...   | ...               | ...              | ...     | ...              | ...                        |
| Total...   | *37               | *10              | ...     | 2                | ...                        |

Remaining in Hospital December 31st, 1938 : ... Nil

## Admitted.

|  |     |     |     |    |
|--|-----|-----|-----|----|
| Under 5 years ...                      | ... | ... | ... | 6  |
| Over 5 years ...                       | ... | ... | ... | 43 |
| Patients in Hospital January 1st, 1938 | ... | ... | ... | 13 |
|  |     |     |     | —  |
|  |     |     |     | 62 |
| Males ...                              | ... | ... | ... | 16 |
| Females                                | ... | ... | ... | 33 |
|  |     |     |     | —  |
|  |     |     |     | 49 |

## Results.

|                                |     |     |     |     |
|--------------------------------|-----|-----|-----|-----|
| Patients Cured ...             | ... | ... | ... | 61  |
| Deaths                         | ... | ... | ... | 1   |
| Patients Remaining in Hospital | ... | ... | ... | ... |
|                                |     |     |     | —   |
|                                |     |     |     | 62  |

NOTE \* {13 cases of Scarlet Fever} Admitted to Rhyl Isolation  
 { 3 " " Diphtheria } Hospital from outside District

January, 1939.

L. G. MORRIS,  
MATRON.



**Annual Report of the Medical Officer of Health for the year 1938 for the Urban District of Rhyl** on the administration of the Factories and Workshops Act, 1901, Factories Act, 1937 (which superseded the Act of 1901 on 1st July, 1938).

**1—INSPECTIONS FOR THE PURPOSE OF PROVISIONS AS TO HEALTH.**

Including Inspections made by Sanitary Inspectors.

| Premises<br>(1)   | Number of          |                        |                             |
|---|--------------------|------------------------|-----------------------------|
|   | Inspections<br>(2) | Written Notices<br>(3) | Occupiers Prosecuted<br>(4) |
| Factories with mechanical power...  | 25                 | 4                      | ...                         |
| Factories without mechanical power ... ..   | 18                 | ...                    | ...                         |
| Other Premises under the Act ...<br>(Including works of Building and Engineering Construction, but not including Outworkers Premises. | ...                | ...                    | ...                         |
| Total ... ..  | 43                 | 4                      | ...                         |

**2—DEFECTS FOUND.**

| Particulars<br>(1)   | Number of Defects |                 |                                   | No. of defects in which prosecutions were instituted<br>(5) |
|--|-------------------|-----------------|-----------------------------------|---|
|  | Found<br>(2)      | Remedied<br>(3) | Referred to H.M. Inspector<br>(4) |   |
| Want of Cleanliness...   | ...               | ...             | ...                               | ...   |
| Overcrowding ... ..  | ...               | ...             | ...                               | ...   |
| Unreasonable temperature ... ..  | ...               | ...             | ...                               | ...   |
| Inadequate ventilation ... ..  | ...               | ...             | ...                               | ...   |
| Ineffective drainage of floors ... ..  | ...               | ...             | ...                               | ...   |
| Sanitary conveniences:   |                   |                 |                                   |   |
| insufficient ... ..  | 1                 | 1               | ...                               | ...   |
| unsuitable or defective ... ..   | 1                 | 1               | ...                               | ...   |
| not separate for sexes ... ..  | ...               | ...             | ...                               | ...   |
| Other offences ... ..  | 2                 | 1               | ...                               | ...   |
| (Not including offences relating to homework or offences mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order 1921 and re-enacted in the third Schedule of the Factories Act, 1937. ... .. |                   |                 |                                   |   |
| Total ... ..   | 4                 | 3               |                                   |   |

### 3—OUT-WORKERS (HOME WORK)—ONE RETURNED.

#### 4—REGISTERED WORKSHOPS.

Important classes of workshops, such as workshops, bakehouses, may be enumerated here.

| Workshops on the Register at the end of the year. | Number |
|---|--------|
| Dressmakers, etc. ... ..                          | 10     |
| Tailors ... ..                                    | 4      |
| Bakers and Confectioners ... ..                   | 24     |
| Boot Repairers ... ..                             | 9      |
| Joiners ... ..                                    | 8      |
| Cycle and Motor Workshops ... ..                  | 15     |
| Miscellaneous ... ..                              | 41     |
| Total number of Workshops on Register ... ..      | 111    |

#### 5—OTHER MATTERS.

Matters notified to H.M. Inspector of Factories:—

|   |      |
|---|------|
| Failure to affix Abstract of the Factories Act, 1937 (s. 128)   | Nil. |
| Action taken in matters referred to by H.M. Inspector as remediable under the Public Health Acts, but not under the Factories Act, 1937:— |      |
| Notified by H.M. Inspector... ..  | 4    |
| Reports (of action taken) sent to H.M. Inspector...   | 4    |
| Other ... ..  | Nil. |
| Underground Bakehouses (s 101) in use at the end of year  | Nil. |

E. HUGHES JONES, M.D.,

May, 1939.

Medical Officer of Health.

### FOOD AND DRUGS.

#### REPORT OF SAMPLES TAKEN, 1938.

A copy of the Report received from Mr. A. E. Lindsay, Supt. Flint. Constabulary, who is responsible to the County for samples taken in Rhyl and District as Inspector of Food and Drugs.

#### FOOD AND DRUG SAMPLES.

As desired, I append particulars of samples of Food and Drugs taken during the year of 1938, within the Rhyl Urban District by the Police.

| Description of Sample  | No. of Samples taken | Result of Analysis | Doubtful | Prosecutions  |
|------------------------|----------------------|--------------------|----------|---------------|
| New Milk... ..         | 12                   | Genuine            | 10       | 1 (Cautioned) |
| Beef Sausages ... ..   | 1                    | Genuine            | 1        |               |
| White Bread ... ..     | 1                    | Genuine            | 1        |               |
| Welsh Cream ... ..     | 1                    | Genuine            | 1        |               |
| Red Plum Jam ... ..    | 1                    | Genuine            | 1        |               |
| Cheshire Cheese ... .. | 1                    | Genuine            | 1        |               |
|                        | 17                   | Genuine            | 15       | 1             |

(Signed) A. E. LINDSAY,  
Superintendent.



# SANITARY INSPECTOR'S REPORT

## For the Year ending 31st December, 1938.

### TABLE I.—GENERAL SUMMARY.

|   |      |
|---|------|
| Number of Complaints Received ... ..  | 1211 |
| Number of Drains and W.C.'s Released and Cleansed<br>by Department ... ..           | 1197 |
| Number of Nuisances Found ... ..  | 522  |
| Number of Nuisances Abated ... ..   | 354  |
| Number of Nuisances Not Abated ... ..   | 168  |
| Number of Preliminary Notices Served ... ..   | 273  |
| Number of Statutory Notices Served ... ..   | 82   |
| Number of Reference to Officials ... ..   | 2    |
| Number of Visits to Infectious Diseases and Enquiries                               | 84   |
| Number of Visits re. Disinfection ... ..  | 35   |
| Number of Visits or Revisits ... ..   | 3897 |
| Number of Visits to Bakehouses, Factories and Work-<br>shops ... ..                 | 52   |
| Number of Visits to Cowsheds, Dairies and Milkshops                                 | 87   |
| Number of Visits to Shops and Stalls (Meat and Food,<br>etc.) ... ..                | 1088 |
| Number of Visits under Shops Act, 1934 ... ..                                       | 34   |
| Number of Visits to Slaughterhouses, Public Abattoir<br>and Offensive Trades ... .. | 460  |
| Number of Visits to Van Dwellers, Tents and Camps ...                               | 190  |
| Number of Visits to Marine Stores ... ..  | 4    |
| Number of Visits to Fried Fish Establishments ... ..                                | 19   |
| Number of Visits to Cinemas and Billiards Halls, etc....                            | 25   |
| Drainage Visits ... ..  | 150  |
| Milk Samples ... ..   | 80   |
| Drain Tests ... ..  | 12   |
| Rhyl Cut ... ..   | 8    |
| Smoke Observations ... ..   | 3    |
| Rats and Mice ... ..  | 12   |
| Stables and Piggeries ... ..  | 8    |
| Schools ... ..  | 10   |
| Ice Cream Premises ... ..   | 74   |
| Preserved Meat Premises ... ..  | 36   |

### TABLE II.—SANITARY DEFECTS.

|   |    |
|---|----|
| Damp Living and Bedrooms ... ..                 | 45 |
| Defective Chimney Pots, Flues and Stacks ... .. | 4  |
| Defective Roofs ... ..                          | 61 |

|   |    |
|---|----|
| Defective Floors, Living and Bedrooms ... ..      | 14 |
| Defective Gutters and Downspouting ... ..         | 17 |
| Defective Plaster, Wall and Ceilings ... ..       | 29 |
| Defective Window Frames, Casings and Doors ... .. | 14 |
| Brickwork and Outside Plaster ... ..              | 27 |
| Cords to Windows and Fastenings ... ..            | 49 |
| Defective Dustbins ... ..                         | 40 |
| Defective Kitchen Ranges and Grates ... ..        | 52 |
| Absence of Ventilated Food Store ... ..           | 2  |
| Piggeries ... ..                                  | 1  |
| Verminous Houses and Rooms ... ..                 | 2  |
| Caravans contrary to Byelaws ... ..               | 1  |
| Remove Accumulation ... ..                        | 14 |
| Defective Pavement ... ..                         | 2  |
| Filthy Houses and Rooms ... ..                    | 6  |
| Defective Stair Treads ... ..                     | 5  |
| Defective Skylight ... ..                         | 2  |
| Limewashing Overdue ... ..                        | 18 |
| Miscellaneous ... ..                              | 9  |

### Drainage and Water Closets.

|   |    |
|---|----|
| Choked Drains or W.C.s ... ..               | 8  |
| Defective Fittings, H.C. and Sinks ... ..   | 24 |
| Defective Drains ... ..                     | 12 |
| Defective W.C. Premises ... ..              | 10 |
| Defective Access Covers and Chambers ... .. | 5  |
| Boxed-in Water Closets ... ..               | 6  |
| Absence of Water Supply ... ..              | 9  |
| Defective Gully and Surrounds ... ..        | 8  |
| Defective Cesspools... ..                   | 5  |
| Defective Soil Pipe ... ..                  | 1  |
| Defective Sinkstone ... ..                  | 7  |
| Defective Flushing Cistern ... ..           | 10 |

---

 519

### FACTORIES.

|   |   |
|---|---|
| Sanitary Convenience Opening Direct Into Workroom | 2 |
| Absence of Sanitary Convenience ... ..            | 1 |

### TABLE III.—INFECTIOUS DISEASES.

|  |    |
|--|----|
| Number of Cases Reported by M.O.H. and Enquiries made ... .. | 72 |
| Number of Cases Removed to Isolation Hospital ... ..         | 33 |
| Number of Rooms Disinfected, Lamp and Spray ... ..           | 76 |



|  |     |
|--|-----|
| Number of Rooms Disinfected, Sulphur ... ..                  | 29  |
| Number of Houses Disinfected, Sulphur ... ..                 | 13  |
| Number of Houses Disinfected, Spray ... ..                   | 35  |
| Number of Houses Disinfected, Lamp and Spray ... ..          | 1   |
| Number of Rooms Disinfected, Spray only ... ..               | 60  |
| Number of Wards Disinfected ... ..                           | 49  |
| Number of Articles Disinfected by Steam ... ..               | 572 |
| Number of Articles Disinfected by Lamp only ... ..           | 59  |
| Number of Schools Disinfected ... ..                         | 10  |
| Number of Motor Ambulances, Taxis or Cars Disinfected ... .. | 216 |
| Number of Books Destroyed ... ..                             | 8   |
| Number of Articles Destroyed with Consent of Owner           | 31  |
| Disinfector Used (Steam) ... ..                              | 19  |

#### TABLE IV.—SCAVENGING.

|   |                         |
|---|-------------------------|
| Loads of Ashes to Refuse Destructor and Tip...    | 3242 $\frac{3}{4}$      |
| Loads of Trade Refuse to Destructor and Tip ...   | 1283 $\frac{1}{2}$      |
| Loads of Fish Refuse to Destructor and Tip ... .. | 125 $\frac{1}{4}$       |
| Loads of Pumping Station Refuse ... ..            | 38                      |
|   | ———— 1446 $\frac{3}{4}$ |

Total Loads: 4689—15.8 per working day.

#### UN SOUND FOOD.

During the year the following from Slaughterhouses and Tradesmen's Premises were condemned as being unfit for human consumption, and their use for such purpose prevented, same being voluntarily surrendered and destroyed:—

6 Pigs Heads.  
 9 Sheeps Livers.  
 1 Pigs Lungs.  
 1 Pigs Liver.  
 14 $\frac{1}{2}$  lbs. Beef.  
 28 lbs. Fillet Haddock.  
 117 Crabs.  
 8 lbs. Herrings.  
 3 Chickens.  
 7 Tinned Hams.  
 2 Tins Jellied Veal.  
 2 Tins Salmon.  
 2 12oz. Tins Sardines.  
 1 Tin Ox-Tongue.  
 1 Tin Apples.  
 480 Pears.

## DAIRIES, COWSHEDS AND MILKSHOPS.

The following table gives the number of dealers operating within the district:—

|  |    |
|--|----|
| Resident Retailers ... ..                    | 59 |
| Resident Cowkeepers and Retailers ... ..     | 3  |
| Resident and Non-Resident Wholesalers ... .. | 11 |
| Non-Resident Retailers... ..                 | 3  |
| Non-Resident Cowkeepers and Retailers ... .. | 10 |

The approximate number of Cows kept by Resident Cowkeepers is between 70 and 80, so that over 90 per cent. of the milk consumed in Rhyl is produced outside the district boundary.

## MILK SUPPLY.

During the year, 75 samples of milk were taken from the purveyors of milk who retailed in the district, for the purpose of bacteriological examination, viz. 45 Ordinary and 30 Designated samples. The samples were forwarded to the Agricultural Department of the Bangor University. The result of each sample taken was forwarded on to the purveyor along with a letter either pointing out the necessity of cleanliness in the handling of the milk, grooming of the cows, etc., or expressing satisfaction with all favourable results. The Retail Purveyor and his producer were interviewed in many cases, and instructed accordingly.

## OFFENSIVE TRADES.

There are 19 persons and places registered under the Offensive Trades Clauses of the Public Health Act and the Public Health Amendment Act, viz.: 15 Fish and Chip Potato Friers, 1 Tripe Dresser, etc., and 1 Gut Scraper (all these are subject to annual licence), and 2 Marine Stores, persons and places.

## SLAUGHTER HOUSES AND PUBLIC ABATTOIR.

There are 2 Private Slaughter Houses within the District, 1 Registered, 1 Licensed. Needless to say none of the above premises are up-to-date buildings.

One Slaughterhouse was closed during the year under the Rhyl Urban District Council Act, 1935.



## PUBLIC ABATTOIR.

The following are particulars and details of organs of animals found unfit for human consumption and, with the consent of the owners, destroyed, during the year 1938:—

|                     | Carcases |      |        |      | Heads |       |     | Lungs |       |     | Livers |       |     | Ox Spleen | Ox Stomach | Ox Mesentry | Calf Pluck | Beef Hind Qrs |
|---------------------|----------|------|--------|------|-------|-------|-----|-------|-------|-----|--------|-------|-----|-----------|------------|-------------|------------|---------------|
|                     | Beef     | Veal | Mutton | Pork | Ox    | Sheep | Pig | Ox    | Sheep | Pig | Ox     | Sheep | Pig |           |            |             |            |               |
| Emergency Slaughter | ...      | ...  | 1      | ...  | ...   | ...   | ... | ...   | ...   | ... | ...    | ...   | ... | ...       | ...        | ...         | ...        | ...           |
| Abscess ...         | ...      | ...  | ...    | ...  | ...   | ...   | ... | 2     | 1     | 9   | 9      | 4     | ... | ...       | ...        | ...         | ...        | ...           |
| Adhesions ...       | ...      | ...  | ...    | ...  | ...   | ...   | ... | 2     | 2     | 3   | ...    | ...   | ... | ...       | ...        | ...         | ...        | ...           |
| Actinomycosis...    | ...      | ...  | ...    | ...  | 1     | ...   | ... | ...   | ...   | ... | ...    | ...   | ... | ...       | ...        | ...         | ...        | ...           |
| Cirrhosis ...       | ...      | ...  | ...    | ...  | ...   | ...   | ... | ...   | ...   | ... | 3      | 2     | ... | ...       | ...        | ...         | ...        | ...           |
| Emphysema ...       | ...      | ...  | ...    | ...  | ...   | ...   | ... | 1     | ...   | ... | ...    | ...   | ... | ...       | ...        | ...         | ...        | ...           |
| Cysts ...           | ...      | ...  | ...    | ...  | ...   | ...   | ... | 4     | 5     | ... | 2      | 9     | 2   | ...       | ...        | ...         | ...        | ...           |
| Fluke ...           | ...      | ...  | ...    | ...  | ...   | ...   | ... | ...   | ...   | ... | 10     | 39    | ... | ...       | ...        | ...         | ...        | ...           |
| Emaciation ...      | ...      | ...  | 1      | ...  | ...   | ...   | ... | ...   | ...   | ... | ...    | ...   | ... | ...       | ...        | ...         | ...        | ...           |
| Septic Condition    | ...      | ...  | ...    | 1    | ...   | ...   | ... | ...   | ...   | ... | ...    | ...   | ... | ...       | ...        | ...         | ...        | ...           |
| Tuberculosis ...    | 1        | ...  | ...    | ...  | 19    | 31    | 46  | ...   | 15    | 10  | ...    | 8     | 2   | 1         | 7          | 1           | 5          | ...           |
| Total ...           | 1        | ...  | 2      | 1    | 20    | 31    | 53  | 9     | 19    | 34  | 57     | 16    | 2   | 1         | 7          | 1           | 5          | ...           |

No. of animals slaughtered during 1938: Beasts, 499; Calves, 148; Sheep and Lambs, 8014; Pigs, 904. Total, 9,565.

## Carcases Inspected and Killed at Public Abattoir, 1938.

|  | Cattle other than Cows | Cows | Calves | Sheep and Lambs | Pigs |
|--|------------------------|------|--------|-----------------|------|
| Number of Killed }<br>Number Inspected }                                     | 372                    | 127  | 148    | 8014            | 904  |
| All Diseases except Tuberculosis<br>Whole Carcases Condemned ...             | ...                    | ...  | ...    | 2               | 1    |
| Carcases of which some part or organ<br>was condemned ...                    | 26                     | 9    | ...    | 59              | 12   |
| Percentage of No. inspected affected<br>with disease other than Tuberculosis | 6·9                    | 7·1  | ...    | 0·76            | 1·44 |
| Tuberculosis only.<br>Whole carcasses condemned ...                          | ...                    | 1    | ...    | ...             | ...  |
| Carcases of which some part or organ<br>was condemned ...                    | 51                     | 35   | 1      | ...             | 46   |
| Percentage of number inspected<br>affected with Tuberculosis ...             | 13·7                   | 28·3 | ·68    | ...             | 5·09 |

## REFUSE COLLECTION.

The whole of the work of Collection of House Refuse is under the supervision of the Sanitary Inspectors. Two S. & D. Freighters and two Leyland Cub Refuse Collecting Vehicles and one Morris Commercial Vehicle are used. 90 per cent. of the refuse is conveyed and tipped under controlled tipping system; paper and trade refuse being baled, and that which is unsuitable for baling burnt at the Destructor Works once per week.

## REFUSE DESTROYER.

This consists of an 8-cell Destructor, four of which were erected in 1926, and four during 1931. The whole of the work of erection was carried out by Messrs. Heenan and Froude, of Worcester, a baling machine for scrap tins, etc., being also installed. The whole of the scrap has, as far as possible, been disposed of along with the clinker produced by the Destructor.

## HOUSING.

The approximate NUMBER OF DWELLING HOUSES for all classes number 4,903.

No houses were erected for the working class, but 203 other houses were built.

In course of erection, 55.

No Legal Action was taken under the Public Health Acts.

There are no really UNHEALTHY AREAS in the district.

The only staff engaged on Housing Inspections are the Sanitary Inspectors along with their other general duties.

## RAG FLOCK ACTS, 1911—1928.

There are no premises which are governed by the above Acts in the district.



## HOUSING CONDITIONS FOR YEAR ENDING DECEMBER, 1938.

### 1.—INSPECTION OF DWELLING HOUSES DURING THE YEAR.

|   |      |
|---|------|
| 1. (a) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts) ... ..   | 350  |
| (b) Number of Inspections made for the purpose...   | 450  |
| 2. (a) Number of dwelling houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 and 1932 ... .. | 96   |
| (b) Number of Inspections made for the purpose...   | 160  |
| 3. Number of dwelling houses found to be in a state so dangerous or injurious to Health as to be unfit for human habitation ... ..                                      | Nil. |
| 4. Number of dwelling houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation ... ..   | 170  |

### 2.—REMEDY OF DEFECTS DURING THE YEAR WITHOUT SERVICE OF FORMAL NOTICES.

|   |     |
|---|-----|
| Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their Officers... .. | 138 |
|---|-----|

### 3.—ACTION UNDER STATUTORY POWERS DURING THE YEAR.

#### A.—Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936:—

|   |      |
|---|------|
| 1. Number of dwelling houses in respect of which notices were served requiring repairs ... .. | Nil. |
| 2. Number of dwelling houses which were rendered fit after service of formal notices:—        |      |
| (a) By owners ... ..  | Nil. |
| (b) By Local Authority in default of owners ... ..  | Nil. |

## B.—PROCEEDINGS UNDER PUBLIC HEALTH ACTS.

1. Number of dwelling houses in respect of which notices were served requiring defects to be remedied ... .. 170
2. Number of dwelling houses in which defects were remedied after service of formal notices:—
  - (a) By Owners ... .. 23
  - (b) By Local Authority in default of owners ... .. Nil.

## C.—PROCEEDINGS UNDER SECTION 11 AND 13 OF THE HOUSING ACT, 1936.

1. Number of dwelling houses in respect of which Demolition Orders were made ... .. Nil
2. Number of dwelling houses demolished in pursuance of Demolition Orders ... .. 6

## D.—PROCEEDINGS UNDER SECTION 12 OF THE HOUSING ACT, 1936.

1. Number of separate tenements or underground rooms in respect of which closing orders made ... .. Nil.
2. Number of separate tenements or underground rooms in respect of which closing orders were determined, the tenements or room having been rendered fit ... .. Nil.
4. Housing Act, 1936. Part IV., Overcrowding:—
  - (a) (i) Number of dwellings overcrowded at the end of the year ... .. 28
  - (ii) Number of families dwelling therein ... .. 28
  - (iii) Number of persons dwelling therein ... .. 201
  - (b) Number of new cases of overcrowding reported during the year ... .. Nil.
  - (c) (i) Number of cases of overcrowding relieved during the year ... .. Nil.
  - (ii) Number of persons concerned in such cases ... .. Nil.

(Signed) E. L. LLOYD JONES,  
M.S.I.Assoc., M.R.San.Inst.



**TABLE X.—REFUSE.**  
**Showing Cost of Refuse Collection and Disposal, year ending March 31st, 1939.**

| Particulars.                                | Collection.            |                        | Disposal.              |                        | Total.                 |                        |
|---|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
|   | Including loan charges | Excluding loan charges | Including loan charges | Excluding loan charges | Including loan charges | Excluding loan charges |
| Gross expenditure ... ..                    | £ 4186                 | £ 3948                 | £ 2331                 | £ 1888                 | £ 6517                 | £ 5836                 |
| Gross income ... ..                         | 414                    | 414                    | 390                    | 390                    | 804                    | 804                    |
| Net cost ... ..                             | 3772                   | 3534                   | 1941                   | 1498                   | 5713                   | 5032                   |
| Unit costs—Gross expenditure per ton ... .. | 11/1·94                | 10/6·33                | 6/1·39                 | 4/6·0                  | 17/3·33                | 15/0·33                |
| Gross income per ton ... ..                 | 1/1·24                 | 1/1·24                 | 1/0·05                 | 1/0·05                 | 2/1·29                 | 2/1·29                 |
| Net cost per ton ... ..                     | 10/0·70                | 9/5·09                 | 5/1·34                 | 3/5·95                 | 15/2·04                | 12/11·04               |
| Net cost per 1,000 population ... ..        | £240·56                | £225·32                | £123·15                | £95·53                 | £363·71                | £320·85                |
| Net cost per 1,000 premises ... ..          | £654·99                | £613·59                | £357·16                | £260·08                | £1012·15               | £873·67                |
| Net cost, equivalent Rate in the £ ... ..   | 6·16d.                 | 5·76d.                 | 3·17d.                 | 2·44d.                 | 9·33d.                 | 8·20d.                 |

Refuse removed during the year (approximately) 7,500 tons.

Estimated Population (R.G.R.—Mid-year, 1938) ... 15,680

No. of rated premises ... ..

Total Rates in the £ ... ..

Product of a 1d. Rate. ... ..

*Signed,*

*E. L. LLOYD JONES, Senior Sanitary Inspector.*

## RHYL METEOROLOGY FOR THE YEAR 1938.

Supt. Observer: Dr. E. HUGHES JONES.

Observer: W. A. FIELD.

Health Department,

Council Offices, Rhyl.

### BRIGHT SUNSHINE.

The total bright sunshine recorded during the year 1938 was 1,451 hours 24 minutes and was 103 hours 6 minutes more than that of 1937. This total, though, was very favourable with the other local resorts which forwarded regular monthly returns to the Meteorological Office.: Colwyn Bay, 1,344 hours 48 minutes; Llandudno, 1,470 hours 42 minutes; and Prestatyn, 1,363 hours.

The sunshine averages and comparisons for the past ten years will be seen in the table on page 40. It will also be observed from the report for 1938 on page 39 that the sunniest months were April (216 hours, May (171 hours), June (171 hours) and August (161 hours), and the duller December (51 hours), January (51 hours), and February (58 hours). There was a very sunny spell from April 8th to April 20th, when 133 hours was recorded on the 13 days. The sunniest day in the year at Rhyl was June 17th with 14 hours 18 minutes, compared with 15 hours 24 minutes on June 21st, 1937. Bright sunshine was registered on 322 days, leaving 43 sunless days, of which 22 occurred during the months of January and December. February, September and November had 13 sunless days. Thus the other seven months had only 8 sunless days between them. Comparisons of the sunshine value of each of the 12 months for the past ten years on page 42 is interesting, and, from the extremes, which are in bold type, it will be observed that May proves to be the best month for sunshine on the average, June next, and then July. The month of December averages the least sunshine.

In 1938 Rhyl had 61 days on which 8 hours or more bright sunshine was recorded, as against 58 like days in 1937. On 78 days there was 7 hours or more recorded sunshine against 76 in 1937, and 100 days had 6 hours or more against 97 in 1937.

During May, June, July and August there were 11 days with 12 hours or more bright sunshine, as compared with 12 like days during the same months in 1937. From April 1st to September 30th there were 31 days with 10 hours or more as against 33 during the same period in 1937.



## RAINFALL.

The total rainfall for the year 1938 with its 28.31 inches was 2.80 inches higher than that of 1937. A glance at the averages for the past twenty years on page 40 shows the year's total as 1.05 inches above the average. Rain was recorded on 187 days, as against 178 in 1937. The average number of days rain fell for the past twenty years is 185, so that this year was 2 days above. The wettest month was January with 3.54 inches, as against February with 4.24 inches in 1937. Five months recorded over 3 inches.

The highest amount recorded at one period only during the year was on the 1st June, registering at 9 a.m. on the 2nd 1.43 inches. It is interesting to note that on 4 days only rain was recorded during the month of April, and the total fall of 0.17 inches was the lowest for this month since 1876 (53 years) when records were first taken.

April recorded the lowest monthly amount of any month since 1925, when June recorded only 0.1 inch on 1 day (the only day of rain); as against July, with 1.04 inches on 18 days in 1937.

The past ten years show that October and November are the wettest months, whilst March is the driest, with February a close second.

Again during May, June, July, August and September (the holiday months) of the year 1938, the total amount of rain recorded was 12.78 inches. During the same months of the year 1937, the total was only 8.23 inches—an increase of 4.55 inches.

The longest period without rain during 1938 occurred from April 7th to April 21st—15 days.

## TEMPERATURES.

The hottest days of the year were August 2nd, 3rd and 9th, which registered 76 deg. F. in the shade, and the coldest night December 20th, with 23.5 deg. F. in the screen. The lowest reading on the grass during 1938 was 17.0 deg. F. on December 20th. The number of ground frosts (30.4 deg. F. or less) registered during the year was 48, but in the screen there were only 16 frosts. The latest spring frost in the screen (air) occurred on May 6th and on the grass on May 20th. The first Autumn frost on the ground occurred on November 21st, and in the screen (air) on December 18th.

Other features were that the month of March was 5.6 deg. F. above, and July 2.5 deg. F. below the average temperature of their respective months during the past nine years.



March, 1937, was 3.5 deg. F. lower than the average. November was 4.6 deg. F. above the average for the past nine years, whereas in 1937 it was 1.3 deg. F. below the average. Further interesting particulars can be seen in the Mean Temperatures and Extreme Table on page 41.

### MISCELLANEOUS.

The Instruments used are by Negretti and Zambra, and are situate in Westbourne Avenue (opposite the Pumping Station). They include a Maximum, Minimum, Dry and Wet Bulb Thermometers in a Stevenson Screen, a Grass Minimum Thermometer, Rain Gauge and Measure and a Campbell-Stokes Sunshine Recorder. A Hyetograph, giving the rate and duration of rainfall, is also situate outside the Pumping Station. The Barometer (Kew pattern) and Thermometer attached is at the Council Offices.

At the Meteorological Kiosk on the East Promenade, a Self recording Barograph, Maximum and Minimum Thermometer, Tide Table, Greenwich Time, previous day's Sun Card, Daily weather forecast from Negretti and Zambra Forecaster, Ultra Violet Ray Record, Daily Weather Report of the Air Ministry and combined weather charts and records are exhibited for public information. A Wind Vane is also on the top of the Kiosk.

Observations are taken at 9 a.m. and 5 p.m. Greenwich Mean Time each day. Code Weather Telegrams are despatched every day throughout each year to the Meteorological Office at 5 p.m. Greenwich Mean Time and these are supplemented during the summer season by an additional telegram on week days at 9 a.m. Greenwich Mean Time for certain evening papers served (through the Meteorological Office) by the Press Association.

Weekly, Monthly and Annual Reports are prepared, and are furnished to the local papers, and supplied to any enquiries, advertisement or private. Full reports monthly are forwarded to the Meteorological Office.

The station was officially inspected and the instruments tested, on behalf of the Meteorological Office, by one of their Officers on July 20th, 1938.

### NOTES.

The Station is situate 31 feet above sea level. Latitude  $53^{\circ} 19' N$ . Longitude  $3^{\circ} 29' W$ . The Sunshine Recorder is 11 feet above the ground on which it is situate, and the Rain Gauge is one foot above the ground.



Humidity is calculated with Hyrometrical Tables, published by the Meteorological Office (Saturation: 100 per cent.)

The percentage of possible duration of sunshine is calculated by the Meteorological Office, with reference to the maximum duration theoretically possible in the latitude. The percentage of normal figures represent the mean daily duration for the year  $\times 100 \div$  the average for the year (the past 30 years ending 1930 being the figure taken = 4.33 hours for Rhyl). The average rainfall for the years 1881—1915 (35 years) is 25.79 inches, and is the figure used by the Meteorological Office.

A fall of one inch (25.4 millimeters) is equivalent to nearly 101 tons of water to the acre. One ton of water equals 224 gallons or nearly 36 cubic feet. An inch of rain implies 64.640 tons or 14,479,360 gallons of rain per square mile.

### HUMIDITY.

The Mean Monthly Humidity of the Air and Bright Sunshine Percentages at Rhyl for the year 1938 was as follows:—

| 1938             | Humidity                            | Bright Sunshine |                             |                              |
|------------------|-------------------------------------|-----------------|-----------------------------|------------------------------|
|                  | 9 Hours<br>Observatn's<br>Per cent. | Total<br>Hours. | Percentage<br>of<br>Average | Percentage<br>of<br>Possible |
| January ... ..   | 77                                  | 51.7            | 88                          | 21                           |
| February... ..   | 76                                  | 58.5            | 78                          | 21                           |
| March ... ..     | 81                                  | 131.1           | 107                         | 36                           |
| April... ..      | 71                                  | 216.2           | 131                         | 52                           |
| May ... ..       | 67                                  | 171.1           | 84                          | 35                           |
| June ... ..      | 72                                  | 171.7           | 81                          | 34                           |
| July ... ..      | 75                                  | 147.3           | 74                          | 29                           |
| August ... ..    | 71                                  | 161.3           | 93                          | 35                           |
| September ... .. | 76                                  | 93.1            | 64                          | 24                           |
| October ... ..   | 74                                  | 101.5           | 103                         | 31                           |
| November ... ..  | 76                                  | 96.8            | 153                         | 37                           |
| December ... ..  | 82                                  | 51.2            | 118                         | 22                           |
| Mean of the Year | 75                                  | 121.0           | 93*                         | 32*                          |

The relative humidity of the air is always expressed as the percentage of total saturation (100 per cent.) and is an inverse measure of the drying effects of air. See the above figures.

\* Calculated on mean **daily** average for the year. (See Miscellaneous Notes).

TABLE I.  
METEOROLOGICAL REPORT FOR 1938.

| Month.             | Air Temperature in Degrees Fahrenheit. |               |                       |                     |       |                    | Rainfall. |             |       |                           |                        | Wind. | Bright Sunshine. |      |  |              |
|--------------------|--|---------------|-----------------------|---------------------|-------|--------------------|-----------|-------------|-------|---------------------------|------------------------|-------|------------------|------|--|--------------|
|                    | Means of                               |               | Means of<br>A. and B. | Highest<br>Maximum. | Date. | Lowest<br>Minimum. | Date.     | Total Fall. |       | No. of days<br>Rain Fell. | Most in a Day.<br>—Mm. |       | Imm. or<br>More. |      | Days on which Bright<br>Sunshine was recorded. | Total Hours. |
|                    | A.<br>Maximum                          | B.<br>Minimum |                       |                     |       |                    |           | Inches.     | Mm.   |                           |                        | Days. | Nights.          |      |  |              |
|                    |  |               |                       |                     |       |                    |           |             |       |                           |                        |       |                  |      |  |              |
| January ... ..     | 49.1                                   | 39.3          | 44.2                  | 56                  | 22    | 27                 | 3         | 3.54        | 89.8  | 21                        | 18.6                   | 5     | 15               | 20   | 51.7   |              |
| February ... ..    | 48.0                                   | 39.1          | 43.5                  | 57                  | 25    | 31                 | 4         | 0.64        | 16.2  | 10                        | 5.9                    | 1     | 4                | 24   | 58.5   |              |
| March ... ..       | 54.9                                   | 43.2          | 49.1                  | 63                  | 13    | 32                 | 23        | 1.15        | 29.1  | 9                         | 10.5                   | 2     | 4                | 29   | 131.1  |              |
| April... ..        | 53.1                                   | 39.3          | 46.2                  | 60                  | 1     | 26                 | 18        | 0.17        | 4.3   | 4                         | 3.2                    | 1     | 1                | 30   | 216.2  |              |
| May ... ..         | 58.5                                   | 44.9          | 51.7                  | 67                  | 11    | 32                 | 6         | 2.06        | 52.3  | 15                        | 18.6                   | 6     | 3                | 28   | 171.1  |              |
| June ... ..        | 62.1                                   | 51.2          | 56.7                  | 70                  | 18    | 44                 | 17        | 2.69        | 68.2  | 15                        | 36.2                   | 5     | 7                | 29   | 171.7  |              |
| July ... ..        | 64.2                                   | 52.3          | 58.3                  | 69                  | 24/27 | 46                 | 2/5/15    | 2.25        | 57.1  | 16                        | 13.7                   | 4     | 10               | 30   | 147.3  |              |
| August ... ..      | 66.9                                   | 53.9          | 60.4                  | 76                  | 2/3/9 | 42                 | 31        | 3.46        | 88.0  | 18                        | 31.0                   | 3     | 11               | 31   | 161.3  |              |
| September ... ..   | 62.4                                   | 50.9          | 56.7                  | 70                  | 23    | 38                 | 1         | 2.32        | 58.9  | 16                        | 20.9                   | 3     | 7                | 26   | 93.1   |              |
| October ... ..     | 57.7                                   | 48.3          | 53.0                  | 68                  | 13    | 42                 | 24/26/28  | 3.51        | 89.2  | 22                        | 13.2                   | 7     | 18               | 28   | 101.5  |              |
| November... ..     | 55.0                                   | 45.6          | 50.3                  | 65                  | 5     | 35                 | 27        | 3.17        | 80.5  | 22                        | 13.8                   | 4     | 15               | 27   | 96.8   |              |
| December ... ..    | 46.6                                   | 38.3          | 42.5                  | 55                  | 4     | 24                 | 20        | 3.35        | 85.1  | 19                        | 15.0                   | 6     | 9                | 20   | 51.1   |              |
| Total for year ... | ...                                    | ...           | ...                   | ...                 | ...   | ...                | ...       | 28.31       | 718.7 | 187                       | ...                    | 47    | 104              | 322  | 1451.4   |              |
| Monthly Average    | 56.5                                   | 45.5          | 51.0                  | ...                 | ...   | ...                | ...       | 2.36        | 59.9  | 15.6                      | ...                    | 4.0   | 8.7              | 26.8 | 121.0  |              |
| Total for 1937 ... | ...                                    | ...           | ...                   | ...                 | ...   | ...                | ...       | 25.51       | 647.9 | 178                       | ...                    | 54    | 85               | 303  | 1348.3   |              |
| Monthly Average    | 55.8                                   | 44.0          | 49.9                  | ...                 | ...   | ...                | ...       | 2.13        | 54.0  | 14.8                      | ...                    | 4.5   | 7.1              | 25.3 | 112.4  |              |



TABLE II.  
10 YEARS AVERAGES—SUNSHINE, RAINFALL AND HUMIDITY.

| Year                | RAINFALL. |                               |                  |                                   |                                 | SUNSHINE. |               |                |                           |                                 |                                |                         |              | Humid-<br>ity. |
|---------------------|-----------|-------------------------------|------------------|-----------------------------------|---------------------------------|-----------|---------------|----------------|---------------------------|---------------------------------|--------------------------------|-------------------------|--------------|----------------|
|                     | Inches.   | Monthly Aver-<br>age.—Inches. | Total Rain Days. | Month's Greatest<br>Fall.—Inches. | Month's Lowest<br>Fall.—Inches. | Hours.    | Sunless Days. | Sunshine Days. | Daily Average.<br>—Hours. | Highest in One<br>Month.—Hours. | Lowest in One<br>Month.—Hours. | Duration<br>Percentage. |              |                |
|                     |           |                               |                  |                                   |                                 |           |               |                |                           |                                 |                                | Of Average.             | Of Possible. |                |
| 1929                | 26.23     | 2.19                          | 179              | 5.38                              | 0.08                            | 1894.4    | 47            | 318            | 5.19                      | 276.4                           | 47.1                           | 116                     | 43           | 74             |
| 1930                | 32.62     | 2.72                          | 194              | 4.01                              | 0.30                            | 1411.1    | 64            | 301            | 3.86                      | 230.0                           | 32.7                           | 86                      | 32           | 78             |
| 1931                | 27.85     | 2.32                          | 197              | 4.42                              | 0.45                            | 1351.4    | 75            | 290            | 3.69                      | 194.7                           | 35.9                           | 82                      | 30           | 78             |
| 1932                | 26.79     | 2.23                          | 194              | 4.52                              | 0.13                            | 1342.9    | 60            | 306            | 3.72                      | 252.3                           | 45.2                           | 82                      | 30           | 79             |
| 1933                | 18.10     | 1.51                          | 146              | 4.35                              | 0.60                            | 1612.0    | 44            | 321            | 4.42                      | 205.6                           | 50.7                           | 92                      | 36           | 76             |
| 1934                | 21.48     | 1.79                          | 186              | 3.94                              | 0.13                            | 1494.7    | 63            | 302            | 4.10                      | 249.6                           | 34.5                           | 95                      | 34           | 77             |
| 1935                | 27.43     | 2.29                          | 188              | 5.28                              | 0.47                            | 1540.0    | 46            | 319            | 4.22                      | 247.1                           | 34.6                           | 97                      | 34           | 76             |
| 1936                | 30.42     | 2.54                          | 190              | 4.11                              | 0.85                            | 1327.5    | 62            | 304            | 3.63                      | 197.2                           | 43.6                           | 84                      | 30           | 79             |
| 1937                | 25.51     | 2.13                          | 178              | 4.24                              | 1.04                            | 1348.3    | 62            | 303            | 3.69                      | 204.9                           | 42.3                           | 87                      | 30           | 77             |
| 1938                | 28.31     | 2.36                          | 187              | 3.54                              | 0.17                            | 1451.4    | 43            | 322            | 3.97                      | 216.2                           | 51.1                           | 93                      | 32           | 75             |
| Totals...           | 264.74    | ...                           | 1839             | ...                               | ...                             | 14773.7   | 566           | 3086           | ...                       | ...                             | ...                            | 914                     | 331          | 769            |
| Average 10 years... | 26.47     | 2.21                          | 184              | ...                               | ...                             | 1477.4    | 57            | 309            | 4.05                      | ...                             | ...                            | 91                      | 33           | 77             |
| Average 20 years... | 27.26     | 2.27                          | 185              | ...                               | ...                             | 1421.1    | 57            | 309            | 4.08                      | ...                             | ...                            | ...                     | ...          | 77             |

TABLE III.  
**MEAN TEMPERATURES AND EXTREMES. 1930—1938 (9 YEARS).**

| Month.          | Maximum<br>°F. | Minimum<br>°F. | Mean<br>°F. | 1938<br>Difference<br>°F. | Highest Daily Temperature |           | Lowest Daily Temperature |       |
|-----------------|----------------|----------------|-------------|---------------------------|---------------------------|-----------|--------------------------|-------|
|                 |                |                |             |                           | Year                      | Date      | Year                     | ° Ft. |
| January... ..   | 47.6           | 37.0           | 42.3        | +1.9                      | 1930                      | 14        | 1933                     | 20    |
| February ... .. | 45.8           | 36.2           | 41.0        | +2.5                      | 1933                      | 1/2       | 1930                     | 23    |
| March ... ..    | 49.4           | 37.5           | 43.5        | +5.6                      | 1933}                     | 12}       | 1932                     | 20    |
| April... ..     | 52.2           | 40.8           | 46.5        | -0.3                      | 1938}                     | 13}       | 1938                     | 26    |
|                 |                |                |             |                           | 1934                      | 15        | 1932                     | 8}    |
| May... ..       | 58.7           | 45.2           | 52.0        | -0.3                      | 1936                      | 18        | 1938                     | 6}    |
| June... ..      | 64.6           | 51.0           | 57.8        | -1.1                      | 1933                      | 4/7       | 1932                     | 5     |
| July... ..      | 67.0           | 54.6           | 60.8        | -2.5                      | 1934                      | 8/9/10/11 | 1935                     | 31    |
| August... ..    | 67.4           | 54.0           | 60.7        | -0.3                      | 1930                      | 27        | 1935                     | 28    |
|                 |                |                |             |                           |                           |           | 1931                     | 13}   |
| September... .. | 63.4           | 50.8           | 57.1        | -0.4                      | 1934                      | 14        | 1932                     | 29}   |
|                 |                |                |             |                           |                           |           | 1936                     | 30}   |
| October... ..   | 56.8           | 45.9           | 51.3        | +1.7                      | 1937                      | 19        | 1931                     | 26    |
|                 |                |                |             |                           |                           |           | 1930                     | 6/17  |
| November ... .. | 50.8           | 40.6           | 45.7        | +4.6                      | 1938                      | 5         | 1933                     | 26}   |
|                 |                |                |             |                           |                           |           | 1935                     | 24}   |
|                 |                |                |             |                           |                           |           | 1936                     | 23}   |
|                 |                |                |             |                           |                           |           | 1937                     | 10}   |
| December ... .. | 47.1           | 37.7           | 42.4        | +0.1                      | 1930                      | 18}       | 1938                     | 20}   |
|                 |                |                |             |                           | 1931                      | 4}        |                          |       |
| Average... ..   | 55.9           | 44.3           | 50.1        |                           | ...                       | ...       | ...                      | ...   |



TABLE IV.

## 10 YEARS' MONTHLY SUNSHINE AND RAINFALL TOTALS.

| Month                                | SUNSHINE (Hours). |       |       |       |       |       |       |       |       |       | RAINFALL (Inches). |      |      |      |      |      |      |      |      |      |
|--------------------------------------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|------|------|------|------|------|------|------|------|------|
|                                      | 1928              | 1929  | 1930  | 1931  | 1932  | 1933  | 1934  | 1935  | 1936  | 1937  | 1928               | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 |
| January ... ..                       | 56.7              | 54.4  | 70.5  | 67.9  | 64.3  | 78.0  | 76.8  | 34.6  | 43.6  | 43.1  | 4.05               | 0.85 | 3.90 | 1.81 | 3.39 | 2.26 | 1.71 | 1.65 | 3.83 | 1.69 |
| February... ..                       | 86.1              | 67.4  | 66.1  | 60.4  | 65.3  | 89.9  | 90.0  | 53.9  | 75.0  | 53.6  | 2.60               | 0.91 | 0.30 | 2.60 | 0.13 | 1.65 | 0.13 | 2.17 | 1.84 | 4.24 |
| March... ..                          | 96.1              | 230.7 | 112.6 | 140.2 | 103.1 | 159.7 | 106.4 | 113.4 | 52.3  | 108.2 | 0.77               | 0.08 | 3.42 | 0.45 | 1.55 | 1.55 | 1.78 | 0.50 | 2.24 | 1.84 |
| April ... ..                         | 156.2             | 209.7 | 114.4 | 111.8 | 124.2 | 160.8 | 137.6 | 170.8 | 177.1 | 120.4 | 0.89               | 0.76 | 2.96 | 2.49 | 2.96 | 0.60 | 1.49 | 2.00 | 1.04 | 2.50 |
| May ... ..                           | 191.5             | 259.9 | 174.7 | 194.7 | 132.0 | 158.7 | 150.1 | 247.1 | 197.2 | 204.9 | 2.21               | 1.25 | 1.22 | 2.41 | 2.99 | 1.06 | 2.02 | 1.63 | 2.40 | 2.13 |
| June... ..                           | 195.0             | 276.4 | 230.0 | 154.0 | 252.3 | 205.6 | 219.2 | 179.9 | 172.6 | 170.0 | 3.77               | 1.30 | 0.92 | 2.84 | 0.46 | 1.14 | 1.11 | 3.34 | 3.58 | 1.43 |
| July... ..                           | 254.3             | 213.7 | 157.1 | 144.0 | 135.7 | 205.2 | 249.6 | 224.1 | 132.6 | 150.6 | 0.93               | 2.05 | 2.76 | 1.06 | 3.04 | 0.67 | 0.56 | 0.47 | 3.31 | 1.04 |
| August... ..                         | 177.7             | 161.2 | 164.0 | 166.1 | 171.0 | 178.7 | 163.1 | 184.3 | 177.7 | 172.9 | 2.17               | 2.63 | 3.34 | 3.68 | 1.48 | 1.63 | 2.19 | 0.81 | 0.85 | 1.45 |
| September ... ..                     | 165.2             | 174.7 | 117.8 | 99.4  | 124.1 | 186.0 | 156.4 | 147.7 | 94.6  | 138.9 | 1.42               | 2.03 | 2.13 | 3.54 | 2.74 | 1.00 | 1.46 | 5.28 | 4.11 | 2.18 |
| October ... ..                       | 91.0              | 118.8 | 106.8 | 129.8 | 75.2  | 79.1  | 68.2  | 73.3  | 97.8  | 82.9  | 3.35               | 4.06 | 4.01 | 1.35 | 4.52 | 4.35 | 3.94 | 4.57 | 1.22 | 2.23 |
| November... ..                       | 55.6              | 47.1  | 64.4  | 47.2  | 45.2  | 59.6  | 42.8  | 69.3  | 56.1  | 60.5  | 3.26               | 5.38 | 3.88 | 4.42 | 2.21 | 1.33 | 1.30 | 2.51 | 2.56 | 1.57 |
| December... ..                       | 31.8              | 80.4  | 32.7  | 35.9  | 50.5  | 50.7  | 34.5  | 41.6  | 50.9  | 42.3  | 2.06               | 4.93 | 3.78 | 1.20 | 1.32 | 0.86 | 3.79 | 2.50 | 3.44 | 3.21 |
| Difference from Average for the Year | —                 | +     | —     | —     | —     | +     | —     | —     | —     | —     | +                  | +    | +    | +    | +    | —    | —    | +    | +    | —    |
|                                      | 0.08              | 0.86  | 0.47  | 0.64  | 0.61  | 0.09  | 0.23  | 0.11  | 0.70  | 0.64  | 1.69               | 0.44 | 6.83 | 2.06 | 1.00 | 7.69 | 4.31 | 1.64 | 4.63 | 0.28 |

