# ANNUAL REPORT

ON THE

# HEALTH

OF THE

# COUNTY BOROUGH OF CARDIFF,

FOR THE YEAR 1894,

BY

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MEDICAL OFFICER OF HEALTH

Printed by Order of the Sanitary Authority.

CARDIFF:

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1895.

COUNTY BOROUGH OF CARDIFF.

# Health and Port Sanitary Committee

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# CARDIFF URBAN SANITARY AUTHORITY.

## Medical Officer of Health's Department.

*Medical Officer of Health :*

EDWARD WALFORD, M.D., D.P.H.

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,, ,, *2.*—A. P. PRESTON ,, ,, ,,
,, ,, *3.*—F. GLOVER ,, ,, ,,
,, ,, *4.*—T. W. WARREN ,, ,, ,,

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*Inspector of Common Lodging Houses :*

S. EVANS (Certif. Sanitary Institute).

*Inspector of Dairies Cowsheds and Milkshops, and under Sale of Food and Drugs Act :*

PHILIP DAVID (Certif. Sanitary Institute).

*Disinfector :*

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*Inspector Shop Hours Act :*

J. DAVIES.

*Senior Clerk :*

R. CHATTERTON.

*Junior Clerk :*

S. R. HENDERSON.

# Cardiff Urban Sanitary Authority.

TOWN HALL,

CARDIFF, *June, 1895.*

TO THE CHAIRMAN AND MEMBERS OF THE CARDIFF URBAN SANITARY AUTHORITY.

GENTLEMEN,

I have the honour of submitting to you my Report for the year 1894.

By a General Order of the Local Government Board, dated 23rd March, 1891, it is prescribed that every Medical Officer of Health shall :—

"Make an Annual Report to the Sanitary Authority up to the end of "December in each year, comprising a summary of the action taken, or which he "has advised the Sanitary Authority to take, during the year for preventing the "spread of disease, and an account of the sanitary state of his district generally at "the end of the year."

The Report, which is made in accordance with the above mentioned order, will deal with the vital statistics of the Borough for the year 1894, and will include a comparison between these statistics and those of former years and also a comparison between the vital statistics of Cardiff and those of other large cities and towns. The Report will also contain information as to the mortality in the Municipal Wards and as to the prevalence of certain diseases in particular localities.

It will contain an account of the sanitary condition of the district and a summary of the work done in the Medical Officer of Health's department, dealing especially with the results of the house to house inspection so far as it was carried out during the year. It will include an account of the inspection of common lodging houses, of factories and workshops, of slaughter houses, cowsheds and dairies, and an enumeration of the chief nuisances dealt with during the period to which the report refers. In the appendix will be found various tables and charts dealing with the mortality from special diseases and with the meteorology of the year.

The Report will show the general health of the town to have been good, as indicated by the extremely low death rate of 16·2 per thousand of the population, by far the lowest rate recorded since the first publication of local statistics in the year 1845. It will be found that this reduced mortality was most marked during the third quarter of the year, when the death rate was 13·9 per thousand and was 4·8 below the average for the corresponding quarter of the five preceding years, a result in great measure due to the unusually small fatality from diarrhœal diseases amongst children.

On referring to the text of this Report it will be seen that there exists a close relation between the temperature of the air and the prevalence of summer diarrhœa of infants, a high mean temperature invariably being connected with a high mortality for this disease. In the meteorological tables given in the appendix it will be seen that the mean temperature for August was 2°·6 below the average for the corresponding month of the past six years, and that in the month of September the mean temperature was 4°·2 below the average. Hence the low diarrhœal death rate (0·5 per thousand). During the first and second quarters of the year Whooping Cough prevailed somewhat extensively throughout the entire Urban District, the chief incidence falling on the Canton and Grangetown wards. Of the 123 deaths from this disease which occurred during the year, 52 were in the first quarter and 49 in the second quarter of the year, the number of fatal cases falling to 15 and 7 in the third and fourth quarters respectively. Next in order of fatality amongst the Zymotic class comes diphtheria. The number of deaths however showed a considerable decrease on that of the preceding year—59 as compared with 93 in the year 1893. I believe that the attendance at school of children suffering from this disease in a mild and unrecognised form played an important part in the dissemination of diphtheria. The spread of this disease is greatly influenced by the difficulty of distinguishing clinically the various forms of non-diphtheritic sore throat from real diphtheria. The diagnosis can frequently only be made by a careful bacteriological examination, for which, in general, few medical practitioners have either the time or the appliances. As sanitary authorities are responsible for the preventive measures in connection with infectious diseases, it follows that the bacteriological examination in such cases should form an important part of the duties of the Medical Officer of Health. But for this to be carried out efficiently, a properly equipped laboratory and competent bacteriological examiners, working under the direction of the Medical Officer of Health, are necessary.

A suggestion which has recently been made to your authority by the Senate of the University College of South Wales will, I think, if carried out, enable this work to be performed in a most satisfactory and economical manner.

The proposal being that the Sanitary Authority should contribute towards the maintenance of a Laboratory which would form part of the Public Health Department of the Medical School of the University College. This arrangement would obviously be very much to the advantage of the Sanitary Authority and it is one which I advise the Authority to adopt.

During the year a communication was received from the London County Council inviting your Sanitary Authority to send delegates to attend a conference in London on the 19th of July and the following days in connection with the prevention of the spread of disease by vagrants.

About the same time also a letter was received from the Lord Mayor of London inviting the Corporation to appoint delegates to attend the Annual Congress of the British Institute of Public Health to be held in London on July 26th and following days. The Chairman of the Health Committee, the Borough Engineer and the Medical Officer of Health were appointed delegates to attend both these conferences.

The conference on Infectious Disease and Vagrancy was very largely attended by representatives from Metropolitan and Provincial Local Authorities, and the following resolutions were agreed to after a protracted discussion.

1. That common shelters, which are not subject to the law relating to Common Lodging Houses, should be made subject to such law.

2. That there should be power to Local Authorities to require Medical Examination of all persons entering Common Lodging Houses or Casual Wards, and that each inmate of a Common Lodging House or Casual Ward should, on admission have a bath of fresh water.

3. That Local Authorities should have power to order the keeper of a Common Lodging House in which there has been Infectious Disease, to refuse fresh admissions for such time as may be required by the Authority.

4. That the Local Authority should be empowered to require the temporary closing of any Common Lodging House in which Infectious Disease has occurred.

5. That Local Sanitary Authorities should have power to require the detention of any inmate of a Common Lodging House or Casual Ward who may reasonably be suspected of being liable to convey Infectious Disease.

6. That means should be provided for the detention and isolation of any vagrants found wandering in a public place if reasonably suspected of being liable to convey Infectious Disease.

7. That the Local Authority should have full power to require the disinfection of the person and the clothes of any person in a Common Lodging House or Casual Ward whether infected or exposed to infection.

8. That arrangements should be made by which the occurrence of Infectious Disease in Common Lodging Houses or Casual Wards should be made known by the Local Authority of the district to the Local Authorities of other districts.

9. That Local Authorities should be empowered to require the vaccination or the revaccination of persons in Common Lodging Houses or Casual Wards who are exposed to the infection of Small Pox.

At the congress of the British Institute of Public Health the following resolutions were adopted by the various sections.

1. That while the necessary provision of Block Dwellings for the Housing of the Working Classes is being pushed forward within the Metropolis and other large towns, it is desirable that every effort should also be made to increase the number of Cottage Dwellings in the most accessible suburbs of London and other large towns especially in connection with the railway systems.

2. That this Conference instructs the Executive of the British Institute of Public Health to impress upon the Government the necessity of making it compulsory on all Local Authorities to provide adequate and suitable Hospital Accommodation for Infectious Diseases including powers for compulsorily acquiring land.

3. That in the opinion of this Congress the Local Government Board is not justified in affording owners and occupiers of land in the vicinity of a site proposed to be purchased by a Public Authority for Infectious Hospital purposes, any protection beyond that given them by the action of the general law.

4. That Municipal Authorities should be empowered to establish and maintain Winter Gardens with wholesome Entertainments for the people.

5. That the Preventive Medicine Section of the Congress of the British Institute of Public Health now sitting in London would suggest to the Medical Officer of the Local Government Board the advantage that would accrue to the Public Health if his Department would collect and publish the salient points bearing upon the proof of the preventibility of Consumption and Tubercular Diseases generally (*i.e.* the summary of our present knowledge of causation of these diseases together with practical suggestions as to the details of precautionary measures to be observed by individuals or to be adopted by public bodies, and that such facts and recommendations be disseminated as widely as possible.)

6. That in the opinion of this joint conference of the Chemical, Municipal, and Parliamentary Sections of the British Institute of Public Health, amendment of the Sale of Food and Drugs Act is required in the following among other directions:—

*a*. The modification of the Warranty Defence in such a way as to ensure the punishment of the real offender.

*b.* The appointment of some adequate and efficient scientific Authority for the fixing of Milk and other standards and the investigation of analytical methods.

*c.* The registration of Itinerant Vendors, and further provision for sampling goods in transit.

*d.* The requirement of clear and legible Labelling of Mixtures and Impoverished Goods.

*e.* The clear inclusion in the term "Food" of such articles as Baking Powders which under the law as at present construed may be so made and sold as to injure the health of the public.

7. That the Local Government Board, the Metropolitan Asylums Board and the various County Councils have their attention called to the importance to the public of the early recognition and accurate diagnosis of Diphtheria, and that they be asked to afford medical men facilities for obtaining such bacteriological assistance as may lead to the prompt recognition of the disease.

8. That Municipal Authorities should be empowered to establish and maintain crematoria.

9. That Testators should be empowered to direct how their bodies are to be disposed of, and executors be compelled to observe such directions.

10. That it is desirable in the interests of Public Health that the present permissive action provided in the Public Health Act of 1875 :—To construct Public Slaughter Houses, be made compulsory, and that after the building of such houses, notice be given to owners of all private slaughter houses that after the expiration of two or three years, no further slaughtering can be permitted in any, but Public Slaughter Houses.

11. That it is desirable that a representation be made to Government, that the costs incurred in Port Sanitary Work in seeking to protect the Country from the invasion of Cholera should be paid in whole, or in part by the State.

The following were the recommendations of Engineering, &c. Sections :—

1. That the present want of uniformity in the Regulations and Bye-Laws of Local Authorities in relation to Sanitary Construction and Appliances is detrimental to sanitary progress and injurious to the health of the people, and should therefore, be amended. That it is desirable that the Local Government Board should after consultation, frame a model set of Rules and Regulations.

2. That it is important that every Sanitary Inspector should have a practical knowledge of building construction, for the reason that as his duty is to see the work properly carried out ; he cannot fulfil this duty unless he has the trade technical knowledge.

That this decision be communicated to the Local Government Board.

3. The want of uniformity is deeply regretted in the decisions given by Judges and Magistrates, and it is believed that the only remedy is the appointment by Government of a Special Tribunal which should deal with all the questions of building construction and sanitary appliances, and all cases which arise out of building.

This Court should consist of at most two experts sitting with an experienced barrister or one of the official referees.

That such Court should sit from day to day so that no delay may occur.

That such body should be appointed by the Local Government Board.

That while fully recognising the wise application by the Corporation and Authorities of the City of London of the funds in their hands, to the building of the Tower Bridge, this Congress cannot but express its hope that Municipal Baths should now engage their attention and thus remove this stigma from this great City. Such baths should be built on such a scale as to outvie any baths in any other town at home or abroad, and it is suggested that if funds are not at present available the baths might be built in sections extending over some years.

5. That the Congress desire to call the attention of the Board of Trade to the fact that while cattle trucks are bound to have periodical cleansings, yet carriages for human beings are outside its control.

Having regard to recent scientific investigations, the Congress suggests some rules should be framed to bring railway carriages under at least as much sanitary control as sheep and cattle now have.

6. That advantages will be attendant upon the adoption of certain standards of purity of Sewage Effluents framed to meet the various conditions under which these effluents are delivered, and that the Local Government Board be invited to fix such standards.

That being strongly of opinion that more information is required on all sanitary appliances, ventilators, and sewers, also on matters connected with building construction, the Engineering and Building Construction Section urgently recommend this Congress to appoint a small Standing Committee with power to act until the next Congress.

That such Committee by circular or otherwise appeal to all Local Authorities throughout Great Britain and Ireland to aid them in the work, and that they also appeal to the City Companies and to other bodies and individuals for funds for making the necessary scientific researches. That such Committee from time to time make reports of the work they are doing.

During the year the Medical Officer of Health made three representations under the Housing of the Working Classes Act in the case of Nos. 1, 2 and 3, Evans Court, Tredegar Street. The representations set out that these houses were in a state dangerous to health so as to be unfit for habitation. Proceedings were taken against the owner for the closure of the houses, and a closing order obtained. Subsequently the Sanitary Authority ordered the demolition of the premises.

During the past Session of Parliament the Cardiff Corporation Act of 1894 became Law.

Besides containing important provisions relating to the Cardiff Waterworks, to Street Improvements, to Police and to Finance, the Act confers on the Corporation certain fresh powers in connection with Sanitary matters. Section 37 gives the Authority power to construct and maintain Destructors for the disposal of house and trade refuse on certain lands in the parishes of Roath and Canton.

Section 57 provides that any dwelling without a proper and sufficient water supply shall be deemed to be unfit for human habitation and that no new building shall be occupied until a proper and sufficient water supply shall have been provided.

Section 59 prohibits the erection of dwellings on flat lands below the level of high water-mark, and Section 60 gives power to the Corporation to prohibit, in any part of the borough liable to be flooded, the construction of any cellar or underground storey in any dwelling house.

Section 71 gives the Corporation power to erect and maintain a Crematorium on certain land in their cemetery to be set apart for that purpose, and it provides for the cremation of human remains in such Crematorium and subject to such regulations as may be approved by a Secretary of State. The Act also gives power to the Cardiff Port Sanitary Authority to cremate in their Crematorium on the Flat Holms island the bodies of persons who may within their jurisdiction die of cholera without any other sanction than this Act but subject to the aforesaid regulations.

Section 72 gives power to the Sanitary Authority to require any dairyman to furnish to them a complete list of the names and addresses of his customers whenever in the opinion of the Medical Officer of Health the spread of infectious disease is attributable to the milk supplied by such dairyman. (For the purpose of this Section dairyman means any cow-keeper, purveyor of milk or occupier of a dairy, milk store, or milk shop.)

The New Hospital for the isolation and treatment of Infectious diseases is now rapidly approaching completion, and will probably be open for the reception of patients in the early part of next year. This building, including the structure now in use, will give accommodation for about eighty patients. At the same time the new disinfection station will come into use. This, together with the Steam Laundry (an essential part of a disinfection station) forms part of the hospital buildings and will be used for the disinfection of all infected articles from the town as well as from the hospital.

The complete series of the census reports for 1891 having now been issued it is possible to summarise the most important information contained in them which relates to the Borough of Cardiff. The following tables contain extracts from these reports.

The population of the Borough as enumerated at the last census was 138,915 being an increase of 56·0 per cent. since the census of 1881. The increase in the population of the 28 large towns in England and Wales since 1881 was at the rate of 11·2 per cent. as compared with 17·7 per cent. in the preceding decennium. This rate differed considerably in different towns ranging from 7·1 in Birmingham and Bristol to 56·0 per cent. in Cardiff.

TABLE I.—Distribution of the population in the Municipal Wards of the Borough (census 1891).

MUNICIPAL BOROUGH OF CARDIFF.

| Borough and Wards. | Houses. | | | Population (Census 1891). | | |
|---|---|---|---|---|---|---|
| | Inhabited. | Uninhabited. | Building. | Persons. | Males. | Females. |
| Ward—Adamsdown .... | 2,132 | 83 | .... | 16,234 | 9,398 | 6,836 |
| ,, Canton .... | 2,354 | 96 | 6 | 13,166 | 6,500 | 6,666 |
| ,, Cathays .... | 2,408 | 25 | 12 | 14,523 | 7,404 | 7,119 |
| ,, Central .... | 2,008 | 247 | 9 | 12,348 | 6,105 | 6,243 |
| ,, Grangetown .... | 1,809 | 45 | 97 | 11,734 | 5,975 | 5,759 |
| ,, Park .... | 2,587 | 110 | 109 | 14,289 | 6,754 | 7,535 |
| ,, Riverside .... | 2,373 | 77 | 20 | 14,897 | 7,359 | 7,538 |
| ,, Roath .... | 1,949 | 162 | 31 | 12,200 | 5,886 | 6,314 |
| ,, South .... | 1,554 | 156 | 13 | 10,719 | 5,824 | 4,895 |
| ,, Splott .... | 1,302 | 85 | 35 | 8,805 | 4,540 | 4,265 |
| Total .... .... | 20,476 | 1,086 | 332 | 128,915 | 65,745 | 63,170 |

The area of the Urban Sanitary District of Cardiff is as follows:

| | | | |
|---|---|---|---|
| Parish of St. Mary } | | | |
| ,, St. John } | .... | .... | 2,791 acres |
| ,, Roath | .... | .... | 3,348 ,, |
| ,, Canton | .... | .... | 2,270 ,, |
| Total | | .... | 8,409 |

According to the Census of April, 1891, the Population and the Number of Houses in each Parish were as follows:—

TABLE II.

| Borough and Constituent Parishes. | Houses. | | | Population 1891. | | | Population, 1881. |
|---|---|---|---|---|---|---|---|
| | Inhabited. | Uninhabited. | Building. | Males. | Females. | Persons. | |
| Canton .... | 5,484 | 180 | 85 | 16,425 | 16,380 | 32,805 | 14,797 |
| Roath .... | 6,552 | 367 | 175 | 19,884 | 19,773 | 39,657 | 23,096 |
| St. John .... | 4,386 | 218 | 29 | 13,060 | 14,098 | 27,158 | 16,614 |
| St. Mary .... | 4,054 | 321 | 43 | 16,376 | 12,919 | 29,295 | 28,254 |
| County Borough of Cardiff .... | 20,476 | 1,086 | 332 | 65,745 | 63,170 | 128,915 | 82,761 |

TABLE III shows the conditions under which the inhabitants of the Borough are housed, giving the number of tenements and the number of persons occupying tenements with less than five rooms. A tenement is defined in the census instructions as "any house or part of a house separately occupied either by the owner or by a tenant."

TABLE III.

| Total Number of Tenements in the Borough of Cardiff. (Census 1891.) | No. of Tenements with | No. of occupants of tenements. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 or more. |
| 25,353 | 1 room 570 | 303 | 183 | 55 | 19 | 3 | 5 | 2 | .... | .... | .... | .... | .... |
| | 2 rooms 3,576 | 482 | 1331 | 872 | 506 | 243 | 94 | 31 | 5 | 7 | 5 | .... | .... |
| | 3 rooms 1,943 | 45 | 408 | 404 | 345 | 286 | 230 | 128 | 56 | 28 | 7 | 4 | 2 |
| | 4 rooms 3,028 | 48 | 331 | 491 | 554 | 511 | 448 | 306 | 192 | 109 | 27 | 8 | 3 |

TABLE IV.—Condition as to marriage and ages of males and females in the Urban Sanitary District of Cardiff according to the census of 1891.

| | | All ages. | Under 15 years. | 15— | 20— | 25— | 35— | 45— | 55— | 65 and upwards. |
|---|---|---|---|---|---|---|---|---|---|---|
| Unmarried | M. | 41,001 | 22,968 | 6,266 | 5,336 | 4,267 | 1,312 | 496 | 234 | 122 |
| | F. | 36,628 | 23,005 | 6,051 | 4,071 | 2,338 | 632 | 281 | 165 | 85 |
| Married | M. | 22,982 | .... | 27 | 1,308 | 7,575 | 6,792 | 4,348 | 2,105 | 827 |
| | F. | 22,672 | .... | 185 | 2,558 | 8,237 | 6,018 | 3,582 | 1,586 | 506 |
| Widowed | M. | 1,762 | .... | .... | 18 | 155 | 289 | 390 | 394 | 516 |
| | F. | 3,870 | .... | .... | 29 | 274 | 522 | 837 | 1,018 | 1,190 |

## VITAL STATISTICS, 1894.

POPULATION.—The Population of the Borough in the middle of the year 1894, as estimated by the Registrar General on the basis of Census enumeration, was 148,890, and the rates given in this Report have been calculated on this basis.

MARRIAGES.—The total number of marriages during the year 1894, as furnished by the District Registrar, was 1,480, corresponding to a rate of 9·9 per 1,000 of the population.

A return of marriages in the Borough of Cardiff during the past ten years, with marriage rate per 1,000, is given below.

TABLE V.

| Year. | Number of Marriages. | Rate per 1,000. |
|---|---|---|
| 1885 | 1,261 | 12·9 |
| 1886 | 1,244 | 12·3 |
| 1887 | 1,322 | 12·6 |
| 1888 | 1,259 | 11·5 |
| 1889 | 1,431 | 12·6 |
| 1890 | 1,440 | 12·3 |
| 1891 | 1,651 | 11·8 |
| 1892 | 1,526 | 11·2 |
| 1893 | 1,447 | 10·1 |
| 1894 | 1,480 | 9·9 |

BIRTHS.—During the year 1894, the births registered in the Borough were 5,100. Of these 2,657 were males and 2,443 females, giving a birth-rate of 34·2 per 1,000, compared with 30·7 the rate in thirty-three large towns.

TABLE VI.—Gives the number of legitimate and illegitimate births, male and female, in each ward.

| WARDS. | Legitimate. | | Illegitimate. | | Total. | | TOTAL. |
|---|---|---|---|---|---|---|---|
| | M. | F. | M. | F. | M. | F. | |
| Central Ward .... | 147 | 177 | 4 | 7 | 151 | 184 | 335 |
| South ,, .... | 180 | 144 | 1 | 2 | 181 | 146 | 327 |
| Cathays ,, .... | 288 | 268 | 4 | 7 | 292 | 275 | 567 |
| Park ,, .... | 338 | 297 | 2 | 3 | 340 | 300 | 640 |
| Adamsdown ,, .... | 256 | 202 | 1 | 3 | 257 | 205 | 462 |
| Riverside ,, .... | 238 | 228 | 13 | 29 | 251 | 257 | 508 |
| Canton ,, .... | 291 | 292 | 4 | 6 | 295 | 298 | 593 |
| Roath ,, .... | 240 | 230 | 5 | 2 | 245 | 232 | 477 |
| Grangetown ,, .... | 382 | 323 | 4 | 8 | 386 | 331 | 717 |
| Splott ,, .... | 254 | 210 | 5 | 5 | 259 | 215 | 474 |
| Total .... .... | 2,614 | 2,371 | 43 | 72 | 2,657 | 2,443 | 5,100 |

TABLE VII.—Annual birth-rate in Cardiff compared with that in the large towns during the ten years ending 1894.

| 33 LARGE TOWNS. | Annual Birth-rate per 1,000 living. | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1885 | 1886 | 1887 | 1888 | 1889 | 1890 | 1891 | 1892 | 1893 | 1894 |
| London .... | 32·5 | 32·3 | 31·6 | 30·7 | 30·3 | 29·1 | 31·8 | 30·9 | 31·0 | 30·1 |
| West Ham .... | .... | .... | .... | .... | .... | .... | .... | 37·0 | 35·6 | 34·0 |
| Croydon .... | .... | .... | .... | .... | .... | .... | .... | 26·5 | 26·2 | 25·0 |
| Brighton .... | 26·0 | 25·4 | 25·7 | 23·3 | 24·4 | 23·2 | 26·3 | 25·5 | 25·4 | 25·8 |
| Portsmouth .... | 34·5 | 36·2 | 36·8 | 35·8 | 35·1 | 33·6 | 30·1 | 28·0 | 28·2 | 27·6 |
| Plymouth .... | 30·5 | 31·6 | 31·5 | 31·7 | 31·9 | 31·2 | 29·8 | 29·1 | 29·9 | 28·8 |
| Bristol .... | 31·1 | 30·5 | 29·7 | 29·3 | 29·2 | 28·1 | 30·4 | 29·6 | 30·4 | 28·2 |
| Swansea .... | .... | .... | .... | .... | .... | .... | .... | 35·2 | 35·1 | 32·3 |
| Wolverhampton .... | 34·8 | 35·1 | 33·2 | 32·9 | 32·4 | 32·3 | 34·2 | 33·7 | 34·5 | 34·1 |
| Birmingham .... | 33·8 | 33·0 | 31·7 | 30·7 | 30·9 | 30·1 | 34·2 | 33·3 | 32·7 | 31·7 |
| Norwich .... | 33·5 | 34·7 | 33·9 | 34·6 | 33·8 | 33·0 | 31·9 | 30·5 | 30·9 | 29·8 |
| Leicester .... | 34·3 | 34·9 | 32·8 | 32·7 | 31·7 | 30·5 | 33·9 | 32·2 | 32·6 | 31·5 |
| Nottingham .... | 37·6 | 35.7 | 33·2 | 29·9 | 28·0 | 24·9 | 29·9 | 29·4 | 30·2 | 28·6 |
| Derby .... | 34·2 | 33·2 | 30·0 | 29·4 | 28·5 | 26·9 | 30·6 | 31·1 | 32·2 | 29·3 |
| Birkenhead .... | 34·6 | 33·7 | 32·4 | 30·7 | 31·2 | 31·4 | 33·0 | 33·4 | 33·1 | 30·6 |
| Liverpool .... | 33·6 | 33·5 | 31·1 | 29·7 | 29·2 | 28·8 | 34·6 | 34·7 | 36·0 | 35·4 |
| Bolton .... | 34·5 | 34·1 | 32·5 | 32·7 | 32·8 | 31·4 | 34·1 | 32·7 | 33·1 | 31·5 |
| Manchester .... | 36·3 | 36·2 | 35·8 | 35·3 | 35·3 | 34·9 | 34·1 | 33·7 | 33·6 | 32·0 |
| Salford .... | 34·3 | 34.3 | 31·9 | 31·6 | 29·9 | 28·8 | 36·4 | 35·9 | 34·7 | 34·3 |
| Oldham .... | 35·6 | 32.5 | 31·3 | 30·1 | 28·4 | 27·0 | 31·1 | 29·1 | 28·6 | 27·2 |
| Burnley .... | .... | .... | .... | .... | .... | .... | .... | 34·2 | 33·9 | 32·2 |
| Blackburn .... | 36·6 | 34·7 | 35·7 | 34·1 | 34·3 | 32·5 | 33·9 | 31·9 | 30·9 | 28·8 |
| Preston .... | 39·1 | 39·4 | 38·4 | 37·5 | 38·1 | 36·1 | 36·0 | 34·3 | 35·1 | 32·1 |
| Huddersfield .... | 29·1 | 27·0 | 27·7 | 24·6 | 24·5 | 22·6 | 24·4 | 23·0 | 23·8 | 20.2 |
| Halifax .... | 28·8 | 28·8 | 28·4 | 28·5 | 28·0 | 27·9 | 26·2 | 25·9 | 24·6 | 23·1 |
| Bradford .... | 29·1 | 28·7 | 27·7 | 27·4 | 26·7 | 25·6 | 28·7 | 27·2 | 27·7 | 26·7 |
| Leeds .... | 34·6 | 33·8 | 33·3 | 32·6 | 32·8 | 33·4 | 34·1 | 33·5 | 32·4 | 32·2 |
| Sheffield .... | 35·0 | 34·1 | 32·9 | 30·7 | 33·2 | 32·4 | 36·6 | 35·3 | 34·8 | 33·4 |
| Hull .... | 33·8 | 33·5 | 32·8 | 31·1 | 32·6 | 31·3 | 34·6 | 35·0 | 34·2 | 32·4 |
| Sunderland .... | 37·7 | 36·3 | 34·6 | 34·7 | 36·0 | 35·5 | 37.8 | 37·1 | 35·6 | 35·1 |
| Gateshead .... | .... | .... | .... | .... | .... | .... | .... | 35·3 | 36·5 | 34·2 |
| Newcastle-on-Tyne .... | 38·3 | 39·4 | 39·1 | 37·9 | 38·2 | 39·8 | 35·8 | 34·3 | 33·7 | 31·0 |
| Cardiff .... | 43·0 | 42·3 | 40·8 | 40·6 | 38·6 | 39·3 | 36·5 | 35·3 | 36·0 | 34·4 |
| 33 Large Towns .... | .... | .... | .... | .... | .... | .... | .... | 31·9 | 31·9 | 30·7 |

DEATHS.—During the year, 2,415 deaths were registered in the Borough of Cardiff, of these, 1,317 were males and 1,098 females.

The death-rate was equal to 16·2 per 1,000 of the population as compared with 21·5 the average rate in the ten preceding years and with 18·1 the rate in the thirty-three large towns for 1894. In Cardiff, the male death-rate was 17·5 and the female 15·0 per 1,000 of the sexual divisions of the population.

According to the returns of the Registrar General, the death-rate for the whole of England and Wales in 1894 was 16·6 per 1,000, being not only the lowest ever recorded, but so much as 1·5 per 1,000 under the lowest previous rate, viz., 18·1 in 1888, and 2·6 below the mean annual rate in the preceding ten years.

In the large towns, the death-rate ranged from 13·2 in Croydon, 14·7 in Leicester, 15·2 in Portsmouth, 15·8 in Huddersfield to 20·4 in Manchester, 20·7 in Wolverhampton, 20·8 in Sunderland, 21·0 in Salford and 23·8 in Liverpool.

The number of deaths registered during the First Quarter of the year at all ages and from all causes, was 715, of these, 402 were males and 313 females. The 715 deaths corresponded to an annual death-rate of 19·2 per 1,000, persons living as compared with 21·6 the average rate in the First Quarter of the five preceding years, and with 21·0 the average rate in the thirty-three large towns. The lowest rates were 16·1 in Croydon, 16·4 in Portsmouth, 16·8 in Leicester and 16·9 in Derby, the rates in the other towns ranging upwards to 23·5 in Salford, 25·9 in Norwich and Liverpool, and 28·1 in Plymouth. The deaths from the chief Zymotic diseases during the First Quarter were 89, and were equal to an annual death-rate of 2·30 per 1,000 as compared with 2·04 the average rate in the First Quarter of the five preceding years, and with 2·42 the average rate in the large towns. The rate varied from 0·41 in Brighton, 0·56 in Halifax, 0·89 in Portsmouth, 0·96 in Blackburn to 3·19 in Liverpool, 3·20 in Burnley, 3·43 in Salford and 4·71 in Birkenhead.

During the Second Quarter the number of deaths registered was 598, of these, 306 were males and 292 females. The 598 deaths corresponded to an annual death-rate of 16·1 per 1,000 as compared with 18·5 the average rate in the Second Quarter of the five preceding years. The average rate in the thirty-three large towns was 17·4 per 1,000. The lowest rates in these towns were 11·5 in Croydon, 12·3 in Portsmouth, and 12·9 in Derby. The rates in the other towns ranging upwards to 19·6 in Manchester, 21·6 in Salford, 22·5 in Wolverhampton and 22·7 in Liverpool. The deaths from the chief Zymotic diseases during the Second Quarter were 76, corresponding to an annual rate of 2·0 per 1,000 as compared with 2·1 the average rate in the Second Quarters of the five preceding years, and with 2·5 the average rate in the thirty-three large towns. The rate varied from 0·6 per 1,000 in Brighton, 0.7 in Plymouth and 0·8 in Bolton to 3·1 per 1,000 in Liverpool, 3·3 in London and to 3·8 in West Ham.

During the Third Quarter of the year, the number of deaths registered was 519, of these, 296 were males and 223 females. The 519 deaths corresponded to an annual death-rate of 13·9 per 1,000 living as compared with 18·7 the average rate in the Third Quarters of the five preceding years. The average rate in the thirty-three large towns was 16·4 per 1,000. The lowest rates were 12·4 in Croydon, 13·3 in Bristol, 13·4 in Derby and Huddersfield, 13·5 in Plymouth and 13·9 in Cardiff. The rates in the other towns ranging upwards to 21·5 in Sunderland, 22·2 in Preston and 24·3 in Liverpool. The deaths from the chief Zymotic diseases during the Third Quarter were 54, and were equal to an annual death-rate of 1·4 per 1,000 living as compared with 3·4 the average rate the Third Quarters of the five preceding years, and with 2·8 the average rate in the thirty-three large towns. The rate varied from 1·0 per 1,000 in Halifax, 1·4 in Derby and Cardiff, 1·6 in Plymouth and 1·7 in Oldham to 4·3 in Wolverhampton, 5·0 in Liverpool and 5·6 in Preston and in Sunderland.

During the Fourth Quarter of the year, the number of deaths registered was 583, which corresponded to an annual death-rate of 15·7 per 1,000 living as compared with 20·8 the average rate in the Fourth Quarters of the five preceding years, and with 17·7 the average in the thirty-three large towns. The lowest rates

were 12·7 in Croydon, 14·6 in Leicester, 14·8 in Birkenhead, 15·5 in West Ham and 15·7 in Cardiff. The rates in the other towns ranging upwards to 20·7 in Oldham, 21·0 in Burnley, 22·0 in Preston, 22·5 in Liverpool and 23·4 in Sunderland.

The distribution of mortality amongst the several Wards of the Borough may be seen on reference to Table xi. From this it will be seen that the highest general death-rate (22·3 per 1,000 of the Ward population) occurred in the Riverside Ward, and the lowest (10·9) in the Park Ward. The highest death-rate from Zymotic diseases (3·8 per 1,000) was in the Grangetown Ward, and the lowest (0·8) in the Adamsdown Ward.

TABLE VIII.—Comparison of births and deaths in Cardiff in successive years.

| Years. | Births. | Birth-rate per 1,000 Inhabitants. | Deaths from all causes. | Death-rate per 1,000 Inhabitants. | Death-rate from the seven Chief Infectious Diseases per 1,000 Inhabitants | Deaths under one year per 1,000 births registered. |
|---|---|---|---|---|---|---|
| 1885 | 4,164 | 43·0 | 2,481 | 25·5 | 5·3 | 189 |
| 1886 | 4,270 | 42·3 | 2,269 | 22·5 | 3·2 | 168 |
| 1887 | 4,277 | 40·8 | 2,280 | 21·8 | 2·6 | 172 |
| 1888 | 4,409 | 40·6 | 2,212 | 20·3 | 2·9 | 143 |
| 1889 | 4,361 | 38·6 | 2,190 | 19·4 | 2·1 | 156 |
| 1890 | 4,600 | 39·3 | 2,469 | 21·1 | 2·4 | 165 |
| 1891 | 4,739 | 36·5 | 2,873 | 22·0 | 2·1 | 153 |
| 1892 | 4,776 | 35·0 | 2,560 | 18·7 | 2·7 | 157 |
| 1893 | 5,110 | 36·0 | 2,794 | 19·6 | 2·8 | 171 |
| 1894 | 5,100 | 34·2 | 2,415 | 16·2 | 1·7 | 137 |

## Table IX.

Births, Deaths, and Natural Increase of Population for Fifty years, 1845—1894.

| Year. | Population. | Births. | Deaths. | Excess of Deaths over Births. | Excess of Births over Deaths. |
|---|---|---|---|---|---|
| 1845 | 13,385 | 320 | 324 | 4 | .... |
| 1846 | 14,212 | 381 | 321 | .... | 60 |
| 1847 | 15,039 | 331 | 484 | 153 | .... |
| 1848 | 15,866 | 428 | 579 | 151 | .... |
| 1849 | 16,693 | 466 | 864 | 395 | .... |
| 1850 | 17,520 | 504 | 485 | .... | 19 |
| 1851 | 18,354 | 575 | 585 | .... | 50 |
| 1852 | 19,724 | 696 | 620 | .... | 76 |
| 1853 | 21,094 | 865 | 644 | .... | 221 |
| 1854 | 22,464 | 950 | 925 | .... | 25 |
| 1855 | 23,834 | 1,079 | 641 | .... | 438 |
| 1856 | 25,204 | 1,227 | 772 | .... | 455 |
| 1857 | 26,574 | 1,367 | 883 | .... | 484 |
| 1858 | 27,944 | 1,356 | 753 | .... | 603 |
| 1859 | 29,314 | 1,336 | 826 | .... | 510 |
| 1860 | 30,684 | 1,346 | 662 | .... | 584 |
| 1861 | 32,054 | 1,223 | 837 | .... | 386 |
| 1862 | 32,804 | 1,267 | 695 | .... | 373 |
| 1863 | 33,552 | 1,302 | 862 | .... | 440 |
| 1864 | 34,300 | 1,369 | 932 | .... | 467 |
| 1865 | 35,048 | 1,382 | 867 | .... | 515 |
| 1866 | 35,796 | 1,331 | 882 | .... | 449 |
| 1867 | 36,544 | 1,397 | 873 | .... | 524 |
| 1868 | 37,292 | 1,387 | 843 | .... | 544 |
| 1869 | 38,640 | 1,414 | 1,005 | .... | 409 |
| 1870 | 38,788 | 1,406 | 903 | .... | 503 |
| 1871 | 59,494 | 1,391 | 891 | .... | 500 |
| 1872 | 62,086 | 1,358 | 916 | .... | 442 |
| 1873 | 64,674 | 1,430 | 995 | .... | 435 |
| 1874 | 67,262 | 1,550 | 885 | .... | 665 |
| 1875 | 69,850 | 2,716 | 1,547 | .... | 1,169 |
| 1876 | 72,438 | 2,707 | 1,455 | .... | 1,252 |
| 1877 | 75,026 | 2,772 | 1,475 | .... | 1,297 |
| 1878 | 77,614 | 2,795 | 1,468 | .... | 1,327 |
| 1879 | 80,202 | 2,969 | 1,428 | .... | 1,541 |
| 1880 | 82,790 | 2,893 | 1,634 | .... | 1,295 |
| 1881 | 85,378 | 3,145 | 1,556 | .... | 1,598 |
| 1882 | 88,603 | 3,399 | 1,724 | .... | 1,675 |
| 1883 | 91,204 | 3,526 | 1,807 | .... | 1,719 |
| 1884 | 93,468 | 3,920 | 2,250 | .... | 1,670 |
| 1885 | 97,034 | 4,164 | 2,487 | .... | 1,683 |
| 1886 | 100,736 | 4,270 | 2,269 | .... | 2,001 |
| 1887 | 104,580 | 4,277 | 2,280 | .... | 1,997 |
| 1888 | 108,570 | 4,409 | 2,212 | .... | 2,197 |
| 1889 | 112,712 | 4,361 | 2,190 | .... | 2,172 |
| 1890 | 117,012 | 4,600 | 2,469 | .... | 2,131 |
| 1891 | 130,283 | 4,739 | 2,873 | .... | 1,866 |
| 1892 | 136,181 | 4,776 | 2,560 | .... | 2,216 |
| 1893 | 142,435 | 5,110 | 2,794 | .... | 2,316 |
| 1894 | 148,890 | 5,100 | 2,415 | .... | 2,685 |

TABLE X.—Showing age distribution of population, number of deaths, and death-rates at age periods.

| Age periods. | Estimated Population 1894. | Number of Deaths. | Annual Death-rate per 1,000. |
|---|---|---|---|
| 0- 5 | 19,942 | 1,087 | 54·5 |
| 5-10 | 17,544 | 78 | 4·44 |
| 10-15 | 15,608 | 36 | 2·30 |
| 15-25 | 29,854 | 130 | 4·35 |
| 25-30 | 14,347 | 90 | 6·27 |
| 30-35 | 12,039 | 84 | 6·97 |
| 35-40 | 9,977 | 100 | 10·0 |
| 40-45 | 8,000 | 108 | 13·5 |
| 45-50 | 6,460 | 93 | 14·3 |
| 50-55 | 5,013 | 118 | 23·5 |
| 55-60 | 3,418 | 89 | 26·0 |
| 60-65 | 2,938 | 107 | 36·4 |
| 65-70 | 1,720 | 97 | 56·3 |
| 70-75 | 1,142 | 77 | 67·4 |
| 75-80 | 551 | 74 | 134·3 |
| 80-upwards | 337 | 47 | 139·4 |

## TABLE XI.—STATISTICS OF WARDS.

| WARDS. | Population, 1894. | Area in Acres. | Persons per Acre. | Total Deaths. | Death-rate per 1,000. | Seven Chief Zymotic Diseases. | | Small Pox. | | Measles. | | Scarlatina. | | Diphtheria. | | Whooping Cough. | | Typhoid Fever. | | Typhus Fever. | | Diarrhœa. | | Phthisis. | | Diseases of Respiratory Organs. | | Tuberculosis. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Deaths. | Death-rate. | Deaths. | Death-rate. | Deaths. | Death-rate. | Deaths. | Death-rate. | Deaths. | Death-rate. | Deaths. | Death-rate. | Deaths. | Death-rate. | Deaths. | Death-rate. | Deaths, | Death-rate. | Deaths. | Death-rate. | Deaths. | Death-rate. | Deaths. | Death-rate. |
| Central .... | 13,265 | 473 | 28 | 188 | 14·1 | 19 | 1·4 | .... | .... | .... | .... | 3 | 0·22 | 4 | 0·30 | 7 | 0·52 | .... | .... | 1 | 0·07 | 4 | 0·30 | 16 | 1·20 | 35 | 2·63 | 1 | 0·07 |
| South .... | 10,724 | 519 | 20 | 208 | 19·3 | 12 | 1·1 | 1 | 0·09 | .... | .... | 1 | 0·09 | 1 | 0·09 | 4 | 0·37 | 2 | 0·18 | .... | .... | 3 | 0·28 | 24 | 2·23 | 33 | 3·07 | 1 | 0·09 |
| Cathays .... | 15,888 | 369 | 43 | 208 | 13·0 | 22 | 1·3 | .... | .... | .... | .... | .... | .... | 5 | 0·31 | 7 | 0·44 | 1 | 0·07 | .... | .... | 9 | 0·56 | 13 | 0·81 | 39 | 2·45 | .... | .... |
| Park .... | 20,153 | 533 | 37 | 221 | 10·9 | 24 | 1·1 | .... | .... | .... | .... | .... | .... | 12 | 0·59 | 10 | 0·49 | 1 | 0·04 | .... | .... | 1 | 0·04 | 27 | 1·33 | 35 | 1·73 | 5 | 0·24 |
| Adamsdown .... | 20,800 | 1,678 | 12 | 327 | 15·7 | 18 | 0·8 | .... | .... | .... | .... | .... | .... | 7 | 0·33 | 7 | 0·33 | 1 | 0·04 | .... | .... | 3 | 0·14 | 29 | 1·39 | 54 | 2·59 | 4 | 0·19 |
| Riverside .... | 17,184 | 313 | 54 | 384 | 22·3 | 25 | 1·4 | .... | .... | .... | .... | .... | .... | 6 | 0·34 | 14 | 0·81 | 2 | 0·11 | .... | .... | 3 | 0·17 | 55 | 3·21 | 54 | 3·14 | 20 | 1·16 |
| Canton .... | 16,247 | 449 | 36 | 232 | 14·2 | 40 | 2·4 | .... | .... | 1 | 0·06 | 2 | 0·12 | 5 | 0·30 | 27 | 1·66 | .... | .... | .... | .... | 5 | 0·30 | 21 | 1·29 | 45 | 2·76 | 3 | 0·18 |
| Roath .... | 14,133 | 766 | 18 | 202 | 14·2 | 21 | 1·4 | .... | .... | .... | .... | .... | .... | 5 | 0·35 | 9 | 0·63 | .... | .... | .... | .... | 7 | 0·49 | 11 | 0·77 | 41 | 2·90 | 4 | 0·28 |
| Grangetown .... | 15,096 | 1,905 | 7 | 280 | 18·5 | 58 | 3·8 | .... | .... | 10 | 0·66 | 1 | 0·06 | 8 | 0·52 | 31 | 2·05 | .... | .... | .... | .... | 8 | 0·52 | 18 | 1·18 | 48 | 3·17 | 3 | 0·19 |
| Splott .... | 11,743 | 1,454 | 8 | 165 | 14·0 | 16 | 1·3 | .... | .... | .... | .... | 1 | 0·08 | 6 | 0·51 | 7 | 0·59 | .... | .... | .... | .... | 2 | 0·16 | 13 | 1·10 | 44 | 3·74 | 3 | 0·25 |

TABLE XII.—Annual Death-rate per 1,000 of 33 large Towns in England and Wales for the 10 years, 1885—1894 inclusive.

| 33 LARGE TOWNS. | Annual Death-rate per 1,000 living. | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1885 | 1886 | 1887 | 1888 | 1889 | 1890 | 1891 | 1892 | 1893 | 1894 |
| London .... | 19·7 | 19·9 | 19·6 | 18·5 | 17·4 | 20·3 | 21·4 | 20·6 | 21·3 | 17·8 |
| West Ham .... | .... | .... | .... | .... | .... | .... | .... | 18·6 | 18·9 | 16·2 |
| Croydon .... | .... | .... | .... | .... | .... | .... | .... | 15·8 | 16·3 | 13·2 |
| Brighton .... | 17·1 | 17·1 | 16·9 | 16·1 | 15·1 | 17·8 | 18·2 | 19·2 | 18·4 | 16·4 |
| Portsmouth .... | 19·7 | 23·9 | 19·5 | 18·7 | 18·1 | 19·6 | 19·0 | 18·5 | 18·2 | 15·2 |
| Plymouth .... | 22·3 | 23·5 | 22·7 | 22·3 | 25·2 | 22·4 | 22·5 | 18·8 | 21·2 | 18·3 |
| Bristol .... | 19·7 | 19·3 | 20·4 | 16·9 | 17·6 | 19·2 | 20·9 | 19·5 | 18·9 | 17·3 |
| Swansea .... | .... | .... | .... | .... | .... | .... | .... | 20·4 | 19·6 | 17·0 |
| Wolverhampton .... | 20·2 | 22·2 | 21·7 | 20·7 | 20·6 | 21·8 | 24·2 | 21·5 | 23·3 | 20·7 |
| Birmingham .... | 19·3 | 19·9 | 19·7 | 17·8 | 18·7 | 20·7 | 22·2 | 20·4 | 22·2 | 18·6 |
| Norwich .... | 20·3 | 23·3 | 20·4 | 20·2 | 18·3 | 21·1 | 19·3 | 20·0 | 19·3 | 18·7 |
| Leicester .... | 19·4 | 19·6 | 19·0 | 18·3 | 16·9 | 17·9 | 21·7 | 18·2 | 20·0 | 14·7 |
| Nottingham .... | 19·9 | 20·4 | 18·7 | 17·3 | 17·0 | 16·5 | 19·9 | 18·7 | 18·5 | 17·2 |
| Derby .... | 18·1 | 18·2 | 17·1 | 16·3 | 16·3 | 18·5 | 19·1 | 19·3 | 18·2 | 15·0 |
| Birkenhead .... | 19·5 | 19·1 | 21·0 | 17·8 | 17·8 | 19·7 | 20·9 | 19·6 | 20·5 | 18·1 |
| Liverpool .... | 23·8 | 23·8 | 23·7 | 20·3 | 21·5 | 23·6 | 27·0 | 24·7 | 27·3 | 23·8 |
| Bolton .... | 20·8 | 23·1 | 21·3 | 21·6 | 22·0 | 25·8 | 21·9 | 22·8 | 24·1 | 18·8 |
| Manchester .... | 26·5 | 26·3 | 28·7 | 26·1 | 26·7 | 30·6 | 26·5 | 23·8 | 24·9 | 20·4 |
| Salford .... | 21·1 | 22·1 | 22·2 | 21·1 | 20·4 | 22·4 | 26·0 | 24·6 | 24·1 | 21·0 |
| Oldham .... | 22·0 | 22·8 | 23·8 | 20·3 | 20·4 | 21·2 | 25·7 | 22·0 | 21·0 | 18·6 |
| Burnley .... | .... | .... | .... | .... | .... | .... | .... | 20·4 | 21·9 | 18·7 |
| Blackburn .... | 21·8 | 25·5 | 25·5 | 23·9 | 25·4 | 23·5 | 25·8 | 21·7 | 23·3 | 17·9 |
| Preston .... | 27·1 | 28·9 | 27·9 | 23·9 | 30·0 | 27·4 | 27·3 | 24·1 | 26·4 | 20·8 |
| Huddersfield .... | 20·1 | 19·6 | 23·0 | 18·5 | 18·8 | 19·0 | 23·0 | 18·1 | 17·2 | 15·8 |
| Halifax .... | 19·7 | 22·7 | 21·0 | 19·1 | 21·5 | 22·5 | 22·8 | 19·5 | 17·4 | 16·5 |
| Bradford .... | 17·7 | 19·2 | 19·9 | 17·1 | 19·1 | 20·4 | 22·2 | 18·0 | 21·0 | 17·0 |
| Leeds .... | 19·9 | 21·9 | 21·1 | 20·6 | 22·0 | 22·6 | 22·9 | 19·8 | 22·3 | 17·9 |
| Sheffield .... | 20·7 | 19·8 | 21·6 | 20·5 | 20·8 | 24·9 | 23·9 | 20·8 | 22·3 | 17·8 |
| Hull .... | 17·2 | 18·8 | 19·3 | 16·4 | 20·2 | 19·2 | 21·0 | 19·6 | 21·8 | 17·4 |
| Sunderland .... | 23·8 | 19·5 | 19·7 | 18·1 | 22·8 | 22·7 | 25·0 | 20·9 | 22·5 | 20·8 |
| Gateshead .... | .... | .... | .... | .... | .... | .... | .... | 18·9 | 19·3 | 17·7 |
| Newcastle-on-Tyne .... | 26·1 | 22·2 | 25·3 | 20·5 | 25·1 | 25·9 | 23·8 | 19·7 | 21·0 | 18·3 |
| **Cardiff** .... | 25·7 | 22·6 | 21·9 | 20·3 | 19·4 | 21·1 | 22·0 | 18·8 | 19·6 | 16·2 |
| 33 Large Towns.... | .... | .... | .... | .... | .... | .... | .... | 20·7 | 21·6 | 18·1 |

CORRECTED DEATH-RATE.—In comparing the death-rates of different towns, it must be borne in mind that if this comparison be based simply on general death-rates it may lead to erroneous conclusions, as towns differ from each other, often considerably, in respect of the age distribution of their populations.

In order, therefore, to make a more correct comparison of the mortality of different towns, it is necessary to know the difference that exists between them in respect of age and sex distribution (the male death-rate being usually higher than the female death-rate). The Registrar General has given "factors" for the large English Towns, based upon the age and sex distribution, as ascertained by the census. In order to obtain this corrected death-rate in each town, he multiplies the recorded death-rate by this factor, the effect of which is to neutralise this disparity and to give rates that would have been recorded in the several towns had their populations been identical, so far as age and sex distribution is concerned, with the

population of England and Wales. Table XIII. is taken from the Annual Summary of the Registrar General for the year 1894. From this it will be seen, on comparing the recorded with the corrected rates, that the mortality of the towns as compared with that of the entire country is, with two exceptions, much greater than would be concluded from a consideration solely of the recorded general death-rate.

The age distribution of a population is therefore of importance in determining the relative value of a death-rate. Table X. shows that between the ages of five and fifty the death-rate per 1,000 living at each group of ages is lower than the death-rate for all ages. It follows that an unusually large proportion of persons at these ages in a population will cause a low mortality, and that an unusually large proportion of persons under five and over fifty years will raise the death-rate. Although perhaps in both cases the conditions as regards sanitation may be similar. When, therefore, the age distribution of a population has remained stationary during a number of years (as it has in Cardiff) and at the same time the death-rate has decreased, it is fair to assume that the result is due to improved sanitation and not to any alteration in the age distribution. This is shown by the following figures which give the number of persons at certain age periods per 1,000 of the population in the Borough according to the census of 1881 as compared with the number at the same periods according to the estimated population of 1894. From this it will be seen that the age distribution amongst the population is practically the same now as it was in 1881, there being a difference of 12 per 1,000 at ages under 10 years, and of only 1 per 1,000 for all ages over 10 years.

Borough of Cardiff.—Persons per 1,000 at age periods.

| | Under 5 yrs. | 5-10 | 10-15 | 15-35 | 35-60 | 60 years and upwards. |
|---|---|---|---|---|---|---|
| 1881 | 147 | 115 | 109 | 372 | 222 | 44 |
| 1894 | 133 | 117 | 105 | 377 | 220 | 44 |

TABLE XIII.—Recorded and Corrected Death-rates per 1,000 persons living in thirty-three Great Towns in 1894.

| Towns, in the order of their Corrected Death-rates. | Standard Death-rate.* | Factor for Correction for Sex and Age Distribution.† | Recorded Death-rate, 1894. | Corrected Death-rate, 1894.‡ | Comparative Mortality Figure, 1894.§ |
|---|---|---|---|---|---|
| England and Wales .... .... | 19·15 | 1·0000 | 16·59 | 16·59 | 1000 |
| England and Wales, less the 33 Towns .... .... | 19·45 | 0·9845 | 15·78 | 15·54 | 937 |
| 33 Towns .... .... | 17·71 | 1·0813 | 18·12 | 19·59 | 1181 |
| Croydon .... .... | 18·37 | 1·0424 | 13·19 | 13·75 | 829 |
| Portsmouth .... .... | 18·73 | 1·0224 | 15·15 | 15·49 | 934 |
| Leicester .... .... | 17·64 | 1·0855 | 14·65 | 15·90 | 958 |
| Derby .... .... .... | 17·36 | 1·1031 | 15·01 | 16·56 | 998 |
| Brighton .... .... | 18·94 | 1·0110 | 16·41 | 16·59 | 1000 |
| West Ham .... .... | 17·75 | 1·0788 | 16·17 | 17·44 | 1051 |
| Plymouth .... .... | 19·70 | 0·9720 | 18·30 | 17·79 | 1072 |
| Norwich .... .... | 19·99 | 0·9579 | 18·74 | 17·95 | 1082 |
| Bristol .... .... .... | 18·33 | 1·0447 | 17·26 | 18·03 | 1087 |
| Cardiff .... .... .... | 17·16 | 1·1159 | 16·22 | 18·10 | 1091 |
| Hull .... .... .... | 18·23 | 1·0504 | 17·36 | 18·23 | 1099 |
| Halifax .... .... .... | 17·20 | 1·1133 | 16·48 | 18·35 | 1106 |
| Huddersfield .... .... | 16·47 | 1·1627 | 15·80 | 18·37 | 1107 |
| Nottingham .... .... | 17·81 | 1·0752 | 17·24 | 18·54 | 1118 |
| Swansea .... .... | 17·53 | 1·0924 | 17·04 | 18·61 | 1122 |
| London .... .... .... | 17·97 | 1·0656 | 17·76 | 18·93 | 1141 |
| Gateshead .... .... | 17·83 | 1·0740 | 17·66 | 18·97 | 1143 |
| Bradford .... .... | 16·73 | 1·1446 | 17·00 | 19·46 | 1173 |
| Sheffield .... .... | 17·22 | 1·1120 | 17·77 | 19·76 | 1191 |
| Leeds .... .... .... | 17·28 | 1·1082 | 17·87 | 19·80 | 1193 |
| Birkenhead .... .... | 17·42 | 1·0993 | 18·06 | 19·85 | 1197 |
| Newcastle .... .... | 17·58 | 1·0892 | 18·29 | 19·92 | 1201 |
| Blackburn .... .... | 17·05 | 1·1231 | 17·89 | 20·09 | 1211 |
| Birmingham .... .... | 17·33 | 1·1050 | 18·59 | 20·54 | 1238 |
| Bolton .... .... .... | 16·90 | 1·1331 | 18·79 | 21·29 | 1283 |
| Oldham .... .... .... | 16·72 | 1·1453 | 18·61 | 21·31 | 1285 |
| Burnley .... .... | 16·67 | 1·1487 | 18·70 | 21·48 | 1295 |
| Wolverhampton .... .... | 18·30 | 1·0464 | 20·70 | 21·66 | 1306 |
| Sunderland .... .... | 18·25 | 1·0493 | 20·78 | 21·80 | 1314 |
| Preston .... .... .... | 17·42 | 1·0993 | 20·81 | 22·88 | 1379 |
| Manchester .... .... | 16·90 | 1·1331 | 20·42 | 23·14 | 1395 |
| Salford .... .... .... | 17·03 | 1·1244 | 21·00 | 23·61 | 1423 |
| Liverpool .... .... | 17·26 | 1·1094 | 23·85 | 26·46 | 1595 |

* The Standard Death-rate signifies the death-rate at all ages calculated on the hypothesis that the rates at each of twelve age-periods in each town were the same as in England and Wales during the ten years 1881-90, the Death-rate at all ages in England and Wales during that period having been 19·15 per 1,000.

† The Factor for Correction is the figure by which the Recorded Death-rate should be multiplied in order to correct for variations of sex and age distribution.

‡ The Corrected Death-rate is the Recorded Death-rate multiplied by the Factor for Correction.

§ The Comparative Mortality Figure represents the Corrected Death-rate in each town compared with the Recorded Death-rate at all ages in England and Wales in 1894, taken as 1,000.

TABLE XIV.—Birth-rate and Analysis of the Zymotic Death-rate in thirty-three of the largest English towns for the year ending December 31st, 1894. Compiled from the Registrar-General's Returns.

| Name of Town. | Population. | Annual Rates per 1,000 persons living. | | | | | | | | | | Deaths under 1 year to 1,000 Births. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Birth-rate. | Death-rate. | Principal Zymotic Diseases | Small-Pox. | Measles. | Scarlet Fever. | Diphtheria. | Whooping Cough. | Fever. | Diarrhœa. | |
| London .... | 4,349,166 | 30·1 | 17·8 | 2·66 | 0.02 | 0·76 | 0·22 | 0·61 | 0·48 | 0·15 | 0·42 | 143 |
| West Ham .... | 238,184 | 34·0 | 16·2 | 3·19 | 0·21 | 0·96 | 0·15 | 0·80 | 0·43 | 0·19 | 0·45 | 138 |
| Croydon .... | 111,921 | 25·0 | 13·2 | 1·54 | .... | 0·36 | 0·07 | 0·29 | 0·56 | 0·06 | 0·20 | 121 |
| Brighton .... | 118,715 | 25·8 | 16·4 | 1·21 | .... | 0·30 | 0·03 | 0·22 | 0·12 | 0·09 | 0·45 | 138 |
| Portsmouth .... | 170,973 | 27·6 | 15·2 | 1·95 | 0·02 | 0·81 | 0·09 | 0·19 | 0·24 | 0·16 | 0·44 | 131 |
| Plymouth .... | 87,931 | 28·8 | 18·3 | 1·59 | 0·06 | 0·03 | 0·09 | 0·06 | 0.89 | 0·13 | 0·33 | 169 |
| Bristol .... | 226,578 | 28·2 | 17·3 | 2.04 | 0·07 | 0·50 | 0·07 | 0·21 | 0·78 | 0·10 | 0·31 | 150 |
| Cardiff .... | 148,890 | 34·4 | 16·2 | 1·94 | 0·01 | 0·07 | 0·05 | 0·46 | 0·83 | 0·05 | 0·47 | 141 |
| Swansea .... | 95,399 | 32·3 | 17·0 | 1·77 | .... | 0·27 | 0·24 | 0·11 | 0·81 | 0·13 | 0·21 | 163 |
| Wolverhampton. | 85,036 | 34·1 | 20·7 | 3·23 | 0·06 | 0·85 | 0·63 | 0·41 | 0·33 | 0·20 | 0·75 | 166 |
| Birmingham..... | 492,301 | 31·7 | 18·6 | 2·50 | 0·35 | 0·67 | 0·15 | 0·15 | 0·44 | 0·22 | 0·52 | 163 |
| Norwich .... | 105,645 | 29·8 | 18·7 | 1·51 | .... | 0·21 | 0·14 | 0·17 | 0.36 | 0·22 | 0.41 | 164 |
| Leicester .... | 189,136 | 31·5 | 14·7 | 1·94 | .... | 0·56 | 0.16 | 0·07 | 0·06 | 0·15 | 0·94 | 162 |
| Nottingham..... | 223,584 | 28·6 | 17·2 | 2·33 | 0·01 | 0·60 | 0·23 | 0·08 | 0·53 | 0·28 | 0·60 | 174 |
| Derby .... | 98,796 | 29·3 | 15·0 | 1·62 | .... | 0·65 | 0·15 | 0·05 | 0·16 | 0·26 | 0·35 | 123 |
| Birkenhead .... | 105,627 | 30·6 | 18·1 | 2·64 | 0·01 | 0·87 | 0·11 | 0·39 | 0·64 | 0·16 | 0·46 | 143 |
| Liverpool .... | 507,230 | 35·4 | 23·8 | 3·41 | 0·04 | 0·59 | 0·45 | 0·19 | 0·55 | 0·59 | 1·00 | 179 |
| Bolton .... | 118,303 | 31·5 | 18·8 | 1·82 | .... | 0.18 | 0·08 | 0·08 | 0·50 | 0·22 | 0·76 | 162 |
| Manchester .... | 520,211 | 32·0 | 20·4 | 2·38 | 0·04 | 0·43 | 0·22 | 0·28 | 0·55 | 0·19 | 0.67 | 160 |
| Salford .... | 205,828 | 34·3 | 21·0 | 3·25 | 0·01 | 0·71 | 0·55 | 0·31 | 0·68 | 0·31 | 0·68 | 174 |
| Oldham .... | 138,755 | 27·2 | 18·6 | 1·84 | 0·17 | 0·40 | 0·15 | 0·28 | 0·41 | 0·11 | 0·32 | 161 |
| Burnley .... | 96,478 | 32.2 | 18·7 | 2·46 | .... | 0·37 | 0·53 | 0·30 | 0·18 | 0·28 | 0·80 | 170 |
| Blackburn .... | 125,797 | 28·8 | 17·9 | 1·60 | .... | 0·10 | 0·07 | 0·14 | 0·33 | 0·26 | 0·70 | 169 |
| Preston .... | 111,425 | 32·1 | 20·8 | 2·61 | 0·01 | 0·33 | 0·11 | 0·07 | 0·41 | 0·26 | 1·42 | 217 |
| Huddersfield..... | 98,511 | 20·2 | 15·8 | 1·45 | .... | 0·13 | 0·23 | 0·22 | 0·55 | 0·12 | 0·20 | 160 |
| Halifax .... | 92,861 | 23·1 | 16·5 | 0·87 | 0·04 | 0·36 | 0·03 | 0·13 | 0·21 | 0·06 | 0·04 | 135 |
| Bradford .... | 223,985 | 26·7 | 17·0 | 1·76 | 0·12 | 0·51 | 0·32 | 0·08 | 0·30 | 0·13 | 0·30 | 145 |
| Leeds .... | 388,761 | 32·2 | 17·9 | 2·00 | 0·01 | 0·75 | 0·13 | 0·19 | 0·34 | 0·13 | 0·45 | 155 |
| Sheffield .... | 338,316 | 33·4 | 17·8 | 2·27 | .... | 0·49 | 0·12 | 0·20 | 0·71 | 0·19 | 0·56 | 157 |
| Hull .... | 212,679 | 32·4 | 17·4 | 1·76 | 0·01 | 0·43 | 0·18 | 0·14 | 0·38 | 0·19 | 0·43 | 142 |
| Sunderland .... | 136,101 | 35·1 | 20·8 | 3·06 | .... | 0·85 | 0·18 | 0·07 | 0·52 | 0·60 | 0·84 | 167 |
| Gateshead .... | 98,372 | 34·2 | 17·7 | 2·35 | 0·01 | 1·00 | 0·06 | 0·23 | 0·33 | 0·25 | 0·47 | 152 |
| Newcastle .... | 201,947 | 31·0 | 18·3 | 2·16 | .... | 0·48 | 0·14 | 0·16 | 0·76 | 0·13 | 0·49 | 157 |

TABLE XV.—Gives the population of each year, the annual deaths from all causes, from the seven chief Zymotic diseases, and the death-rates from 1845 to 1894 inclusive, in the Borough of Cardiff.

| Year. | Population. | All Causes. | | | Seven Chief Zymotic Diseases. | | |
|---|---|---|---|---|---|---|---|
| | | No. of Deaths. | Death Rates per 1,000. | Mean of 10 years. | No. of Deaths. | Death Rates per 1,000. | Mean of 10 years. |
| 1845 | 13,385 | 324 | 24·2 | | 51 | 3·8 | |
| 1846 | 14,212 | 321 | 22·6 | | 50 | 3·5 | |
| 1847 | 15,039 | 484 | 32·2 | | 133 | 8·8 | |
| 1848 | 15,856 | 579 | 36·5 | | 186 | 11·7 | |
| 1849 | 16,693 | 864 | 51·7 | | 483 | 28·9 | |
| 1850 | 17,520 | 485 | 27·7 | 32·7 | 116 | 6·6 | 9·8 |
| 1851 | 18,354 | 525 | 28·6 | | 81 | 4·4 | |
| 1852 | 19,724 | 620 | 31·4 | | 175 | 8·8 | |
| 1853 | 21,094 | 644 | 30·5 | | 129 | 6·1 | |
| 1854 | 22,464 | 925 | 41·1 | | 353 | 15·7 | |
| 1855 | 23,834 | 641 | 26·9 | | 665 | 2·7 | |
| 1856 | 25,204 | 772 | 30·6 | | 136 | 5·3 | |
| 1857 | 26,574 | 883 | 33·2 | | 234 | 8·8 | |
| 1858 | 27,944 | 753 | 26·9 | | 128 | 4·5 | |
| 1859 | 29,314 | 826 | 28·1 | | 212 | 7·2 | |
| 1860 | 30,684 | 662 | 21·5 | 26·7 | 95 | 3·0 | 5·4 |
| 1861 | 32,054 | 837 | 26·1 | | 100 | 3·1 | |
| 1862 | 32,804 | 695 | 21·2 | | 132 | 4·0 | |
| 1863 | 33,552 | 862 | 25·7 | | 268 | 7·0 | |
| 1864 | 34,300 | 932 | 27·1 | | 250 | 7·3 | |
| 1865 | 35,048 | 867 | 24·7 | | 161 | 4·5 | |
| 1866 | 35,796 | 882 | 24·6 | | 192 | 5·3 | |
| 1867 | 36,544 | 873 | 23·8 | | 116 | 3·1 | |
| 1868 | 37,292 | 843 | 22·6 | | 109 | 2·9 | |
| 1869 | 38,040 | 1,005 | 26·4 | | 156 | 4·1 | |
| 1870 | 38,788 | 903 | 23·2 | 23·6 | 133 | 3·4 | 3·9 |
| 1871 | 59,494 | 891 | 22·5 | | 158 | 3·9 | |
| 1872 | 62,086 | 916 | 22·7 | | 234 | 5·8 | |
| 1873 | 64,674 | 995 | 24·2 | | 103 | 2·5 | |
| 1874 | 67,262 | 885 | 21·2 | | 154 | 3·6 | |
| 1875 | 69,850 | 1,547 | 22·1 | | 294 | 4·2 | |
| 1876 | 72,438 | 1,455 | 20·8 | | 339 | 4·6 | |
| 1877 | 75,026 | 1,475 | 19·6 | | 255 | 3·5 | |
| 1878 | 77,614 | 1,468 | 18·9 | | 197 | 2·5 | |
| 1879 | 80,202 | 1,428 | 17·6 | | 137 | 1·7 | |
| 1880 | 82,790 | 1,634 | 19·7 | 20·0 | 306 | 3·7 | 3·3 |
| 1881 | 85,378 | 1,556 | 18·2 | | 164 | 1·9 | |
| 1882 | 88,603 | 1,724 | 19·4 | | 293 | 3·3 | |
| 1883 | 91,204 | 1,807 | 19·8 | | 253 | 2·7 | |
| 1884 | 93,468 | 2,250 | 24·3 | | 476 | 5·0 | |
| 1885 | 97,034 | 2,481 | 25·5 | | 521 | 5·3 | |
| 1886 | 100,736 | 2,269 | 22·5 | | 532 | 3·2 | |
| 1887 | 104,580 | 2,280 | 21·8 | | 278 | 2·6 | |
| 1888 | 108,570 | 2,212 | 20·3 | | 324 | 2·9 | |
| 1889 | 112,712 | 2,190 | 19·4 | | 248 | 2·1 | |
| 1890 | 117,012 | 2,469 | 21·1 | 20·7 | 282 | 2·4 | 2·7 |
| 1891 | 130,283 | 2,873 | 22·0 | | 272 | 2·1 | |
| 1892 | 136,181 | 2,560 | 18·7 | | 371 | 2·7 | |
| 1893 | 142,435 | 2,794 | 19·6 | | 408 | 2·8 | |
| 1894 | 148,890 | 2,415 | 16·2 | | 257 | 1·7 | |

Infant Mortality.—The rate of Infant Mortality as measured by the proportion of deaths of infants under one year to 1,000 births registered was 137 as compared with 171 in 1893. In the 33 large towns the mean proportion was 152, ranging from 121 in Croydon, and 123 in Derby to 217 per 1,000 births in Preston.

The most common causes of death amongst infants are the ordinary infectious diseases of childhood, diseases of the nervous system, diarrhœal and pulmonary disorders.

Table XVI. shows the chief causes of death amongst infants under one year of age. The deaths at this period which amounted to 699 comprised 28·9 per cent of the total deaths.

Table XVI.

| Causes of Death. | Number of Deaths under one year of age. |
|---|---|
| Premature Birth .... .... .... .... .... | 82 |
| Congenital Defects .... .... .... .... | 12 |
| Diphtheria .... .... .... .... .... | 4 |
| Scarlet Fever .... .... .... .... .... | 1 |
| Measles .... .... .... .... .... | 2 |
| Whooping Cough .... .... .... .... .... | 55 |
| Diseases of the Respiratory System .... .... .... | 126 |
| ,, ,, Nervous System .... .... .... | 110 |
| ,, ,, Digestive System .... .... .... | 56 |
| Diarrhœa .... .... .... .... .... | 33 |
| Tubercular Meningitis .... .... .... .... | 13 |
| Other Tubercular Diseases .... .... .... .... | 34 |
| Violence .... .... .... .... .... | .... |
| Other Diseases .... .... .... .... .... | 171 |

TABLE XVII.—Infant mortality in Cardiff as compared with that of the large towns during the ten years 1885—1894 inclusive.

| 33 LARGE TOWNS. | Deaths under one year to 1,000 births registered. | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1885 | 1886 | 1887 | 1888 | 1889 | 1890 | 1891 | 1892 | 1893 | 1894 |
| London .... | 148 | 159 | 158 | 146 | 141 | 163 | 154 | 155 | 164 | 143 |
| West Ham .... | .... | .... | .... | .... | .... | .... | .... | 153 | 170 | 138 |
| Croydon .... | .... | .... | .... | .... | .... | .... | .... | 123 | 155 | 121 |
| Brighton .... | 131 | 160 | 149 | 148 | 131 | 164 | 137 | 151 | 169 | 138 |
| Portsmouth .... | 131 | 174 | 143 | 134 | 139 | 135 | 139 | 156 | 164 | 131 |
| Plymouth .... | 156 | 154 | 196 | 164 | 166 | 161 | 178 | 137 | 169 | 169 |
| Bristol .... | 152 | 149 | 149 | 123 | 146 | 150 | 146 | 147 | 141 | 150 |
| Swansea .... | .... | .... | .... | .... | .... | .... | .... | 175 | 170 | 163 |
| Wolverhampton .... | 140 | 175 | 176 | 168 | 181 | 175 | 190 | 172 | 208 | 166 |
| Birmingham .... | 157 | 175 | 176 | 149 | 170 | 183 | 171 | 166 | 198 | 163 |
| Norwich .... | 136 | 202 | 158 | 165 | 164 | 180 | 159 | 182 | 195 | 164 |
| Leicester .... | 193 | 216 | 215 | 203 | 208 | 195 | 214 | 196 | 220 | 162 |
| Nottingham .... | 157 | 180 | 170 | 151 | 182 | 159 | 169 | 167 | 170 | 174 |
| Derby .... | 137 | 150 | 142 | 143 | 149 | 157 | 142 | 173 | 156 | 123 |
| Birkenhead .... | 137 | 162 | 156 | 152 | 170 | 166 | 148 | 168 | 136 | 143 |
| Liverpool .... | 174 | 188 | 186 | 168 | 188 | 195 | 188 | 181 | 211 | 179 |
| Bolton .... | 160 | 186 | 171 | 173 | 166 | 176 | 165 | 180 | 199 | 162 |
| Manchester .... | 175 | 183 | 191 | 177 | 176 | 187 | 192 | 179 | 203 | 160 |
| Salford .... | 174 | 198 | 195 | 184 | 182 | 199 | 194 | 185 | 210 | 174 |
| Oldham .... | 166 | 174 | 187 | 150 | 178 | 180 | 292 | 177 | 187 | 161 |
| Burnley .... | .... | .... | .... | .... | .... | .... | .... | 192 | 223 | 170 |
| Blackburn .... | 170 | 209 | 201 | 189 | 203 | 188 | 204 | 198 | 241 | 169 |
| Preston .... | 218 | 233 | 214 | 188 | 265 | 241 | 227 | 216 | 269 | 217 |
| Huddersfield .... | 157 | 167 | 181 | 157 | 167 | 168 | 185 | 150 | 141 | 160 |
| Halifax .... | 132 | 171 | 153 | 154 | 175 | 170 | 169 | 160 | 173 | 135 |
| Bradford .... | 143 | 167 | 178 | 154 | 183 | 169 | 181 | 155 | 197 | 145 |
| Leeds .... | 155 | 181 | 172 | 173 | 177 | 172 | 177 | 169 | 206 | 155 |
| Sheffield .... | 164 | 168 | 177 | 178 | 174 | 195 | 170 | 171 | 191 | 157 |
| Hull .... | 128 | 164 | 165 | 139 | 184 | 160 | 172 | 166 | 206 | 142 |
| Sunderland .... | 158 | 151 | 151 | 132 | 181 | 173 | 176 | 157 | 188 | 167 |
| Gateshead .... | .... | .... | .... | .... | .... | .... | .... | 154 | 170 | 152 |
| Newcastle-on-Tyne .... | 172 | 155 | 174 | 136 | 174 | 169 | 174 | 151 | 174 | 157 |
| Cardiff .... | 189 | 168 | 172 | 143 | 157 | 165 | 148 | 163 | 171 | 137 |
| 33 Large Towns .... | .... | .... | .... | .... | .... | .... | .... | 164 | 181 | 152 |

ZYMOTIC DISEASES.—The 2,415 deaths from all causes included:—

| | | | |
|---|---|---|---|
| 11 | Attributed to Measles | 10 | Attributed to Enteric or Continued Fever |
| 8 | ,, Scarlatina | 45 | Attributed to Diarrhœa |
| 59 | ,, Diphtheria | 1 | ,, Small Pox |
| 123 | ,, Whooping Cough | | |

The 257 deaths ascribed to these diseases corresponded to an annual death-rate of 1·7 per 1,000 persons living as compared with 2·9, the rate in 1893, and with 2·7 the average rate in the 10 years, 1885-1894 inclusive. The death-rate from these diseases in the 33 large towns was 2·44 per 1,000, ranging from 0·87 per 1,000 in Halifax, 1·21 in Brighton, 1·45 in Huddersfield, and 1.54 in Croydon to 3·19 in West Ham, 3·23 in Wolverhampton, 3·25 in Salford, and 3·41 in Liverpool.

The Zymotic death-rate is frequently regarded as a kind of test of the sanitary condition of a district, but it is as a rule a most misleading standard.

A high rate of mortality from Enteric Fever, Diarrhœa, or perhaps Diphtheria may imply defective sanitation, but it may also (especially in the case of Enteric Fever) be due to accidental pollution of a water supply or of milk. Again an epidemic of Measles, Whooping Cough or Scarlet Fever may raise the Zymotic death-rate, although the spread of these diseases is in general totally unconnected with what are known as "insanitary conditions," and is due for the most part to direct infection amongst the susceptible portion of the community.

The number of cases of infectious disease notified during the year was 1,147 as compared with 1,621 in the year, 1893. The total amount paid by the Sanitary Authority for notifications received from Medical Practitioners under the provisions of the Infectious Diseases Notification Act was £125 15s. 0d.

Table XVIII. shows the number of cases of Infectious Disease which came to the knowledge of the Medical Officer of Health during the years 1888 to 1894. In the year 1888 a system of voluntary notification was adopted, and a fee of 2/6 paid in the case of each notice received from Medical Practitioners. This system, which was fairly successful, was continued until the adoption, in January, 1890, of the Infectious Disease Notification Act, 1889. By this Act a complete return is obtained of certain diseases, namely:—Small Pox, Cholera, Diphtheria, Membranous Croup, Erysipelas, Scarlet Fever, Enteric Fever, Typhus Fever, and Puerperal Fever.

It will be readily understood on referring to the number of Infectious cases notified to the Medical Officer of Health that the working of this Act has occupied a large amount of the time of the Officers of this Department.

Table XVIII.

| | 1888 | 1889 | 1890 | 1891 | 1892 | 1893 | 1894 |
|---|---|---|---|---|---|---|---|
| Small Pox .... | 9 | .... | .... | 9 | 5 | 4 | 10 |
| Diphtheria .... | .... | 42 | 63 | 67 | 155 | 462 | 326 |
| Croup .... | .... | .... | 9 | 3 | 9 | 17 | 17 |
| Scarlet Fever .... | 151 | 166 | 335 | 685 | 1851 | 816 | 577 |
| Enteric Fever .... | 114 | 132 | 152 | 130 | 118 | 105 | 62 |
| Typhus Fever .... | .... | .... | .... | .... | .... | 41 | 1 |
| Erysipelas .... | .... | .... | 45 | 52 | 95 | 152 | 135 |
| Puerperal Fever .... | .... | .... | 4 | 10 | 12 | 24 | 19 |
| Total .... | 274 | 340 | 608 | 956 | 2245 | 1621 | 1147 |

The method adopted in connection with this notification, and with a view of checking the spread of disease is as follows:—An Inspector is appointed who devotes his whole time to carrying out the instructions of the Medical Officer of Health for dealing with infectious diseases. He is, however, assisted in times of epidemics by the District Inspectors. On the receipt of each notification the premises are visited with as little delay as possible, and enquiries are made respecting the history of the case, and the necessary steps are taken for limiting the spread of the disease. In each case report sheets are filled up, of which the subjoined are samples:—

SMALL POX.

| | |
|---|---|
| Dates of enquiry | Date and address of any recent case in neighbourhood |
| Notified by | Has there been any communication with an infected house, if so, when and where? |
| Name, age, and occupation of patient | Has patient had small pox before; when? |
| Residence | What evidence of vaccination or re-vaccination? |
| Date of first symptoms | The washing and mangling, where and by whom done? |
| Where was patient on the 12th, 13th, 14th, 15th, or 16th day before the appearance of rash? | Remarks, and probable origin of disease. |

ENTERIC or TYPHOID FEVER.

| | |
|---|---|
| Dates of enquiry | Whence is the supply of water derived? |
| Notified by | Whence is the supply of milk derived? |
| Name, age, and occupation of patient | The washing and mangling, where and by whom done? |
| Residence | Name and residence of any visitor from where disease exists. |
| Date of first symptoms | Sanitary condition of dwelling and immediate neighbourhood, probable origin of disease. |
| Date and address of any recent case in same street | |

SCARLET FEVER.

| | |
|---|---|
| Dates of enquiry | Date and address of any recent case in same street |
| Notified by | The washing and mangling, where and by whom done? |
| Name, age, and occupation of patient | Whence is the supply of milk? |
| Residence | Any books from Free Library? |
| Date of first symptoms | Are parents in receipt of parish relief? |
| Has child within one week been to school, church, or other assembly, or visited any infected house; if so, when and where? | Sanitary condition of dwelling, remarks and probable origin of disease? |

From these sheets the most important particulars are copied into a register, each particular disease having its own book. From this register it is easy at a glance to ascertain any factor common to several cases, and to trace the relation of the disease to the particular locality in which it occurs.

Printed instructions in the following form are left at the infected houses;—

PRECAUTIONS TO BE OBSERVED IN CASES OF INFECTIOUS DISEASE.

*The expression "Infectious Disease" means any one of the following diseases:—Small Pox, Scarlet Fever, Typhoid Fever, Typhus Fever, Measles, and Diphtheria.*

1. Where Scarlet Fever, Diphtheria, or Small Pox exists in a house, no child should attend school from the house for a period of at least six weeks after the occurrence of the last case, and in the case of Measles the period should not be less than three or four weeks.
2. The patient should be isolated by being placed, if possible, in a well ventilated room at the top of the house; all carpets, curtains, and unnecessary furniture should be removed from the room.
3. A sheet should be hung up outside the door of the sick room, and kept wet with a solution of carbolic acid, ½-pint to a gallon of water, or with some other recognised disinfectant.

4. All bed and body linen, as soon as removed from the sick person, and before being taken from the sick room, should be first put into a solution of carbolic acid of the above-named strength, or into some other disinfectant, remaining there for an hour, and afterwards boiled in water.

5. All discharges from the patient, especially if the disease be Small Pox, Scarlet Fever, or Typhoid Fever, should be received into vessels containing some suitable disinfectant, and should be removed from the sick room and be disposed of without delay.

6. If the disease is Small Pox, any unvaccinated infant in the house should at once be vaccinated, and all adults or young persons over twelve years of age should be revaccinated.

7. The patient cannot be pronounced absolutely free from conveying infection until all peeling has entirely ceased in Scarlet Fever, and until the crusts and scales have been removed in Small Pox, and the whole of the body has been well bathed. In all cases of infectious disease the patient should have one or more warm baths before putting on clean clothes.

8. The sick room should not be visited by any but those in attendance on the patient, as the clothing of visitors is very liable to convey infection.

9. In case of death, the body should be completely enveloped in a sheet steeped in a strong solution of carbolic acid (1 pint to a gallon of water), placed in a coffin, with a pound or two of carbolic acid powder sprinkled over it, fastened down and buried without delay.

10. On the termination of a case, the sick room, the clothing, and everything with which the patient has come in contact, must be thoroughly disinfected; notice should be sent to the Medical Officer of Health, who will send an Inspector to superintend the the process of disinfection.

11. Infected clothing, bedding, and other articles must be given to the Inspector, who will cause them to be removed to the public disinfecting apparatus, where they will be disinfected free of charge, after which they should be thoroughly washed at home. Infected clothing should not on any account, or under any pretence whatever, be sent to the laundress; and if clothes are received to wash, they should not be received until the house is pronounced free from infection.

12. Books obtained from the Free Library should be returned to the Inspector of Nuisances, at the Town Hall.

*Your attention is particularly directed to the following provisions of the Public Health Act, and of the Infectious Disease (Prevention) Act, so far as they relate to the prevention of the spread of Infectious Diseases:—*

Any person who:—

1. While suffering from any dangerous infectious disease, wilfully exposes himself without proper precaution against spreading the said disorder in any street, public place, or vehicle, or enters any public conveyance without previously notifying to the driver that he is so suffering.

2. Being in charge of any person so suffering, or exposes such sufferer, or

3. Gives, lends, sells, or transmits, or exposes without previous disinfection any bedding, clothing, rags, or other things which have been exposed to infection, shall be liable to a penalty not exceeding Five Pounds.

Every person who shall cease to occupy any house, room, or part of a house in which any person has, within six weeks previously, been suffering from any infectious disease without having such house, room, or part of a house, and all articles therein liable to retain infection, disinfected to the satisfaction of a registered medical practitioner, as testified by a certificate signed by him, or without first giving to the owner of such house, room, or part of a house, notice of the previous existence of such a disease, and every person ceasing to occupy any house, room, or part of a house, and who on being questioned by the owner thereof, or by any person negotiating for the hire of such house, room, or part of a house, as to the fact of there having within six weeks previously been therein any person suffering from any infectious disease, knowingly makes a false answer to such question, shall be liable to a penalty not exceeding Ten Pounds.

Any person who shall knowingly cast, or cause, or permit to be cast into any ash-pit, ash-tub, or other receptacle for the deposit of refuse, any infectious rubbish without previous disinfection, shall be guilty of an offence under this Act.

Any Local Authority or the Medical Officer of any local Authority generally empowered by the Authority in that behalf, may, by notice in writing require the owner of any bedding, clothing, or other articles which have been exposed to the infection of any infectious disease, to cause the same to be delivered over to an Officer of the Local Authority for removal for the purpose of disinfection, and any person who fails to comply with such a requirement, shall be liable to a penalty not exceeding Ten Pounds.

In the case of Children attending school, the head master or mistress receives from the Medical Officer of Health a notice of the existence of Infectious Disease, in families attending the particular school; in this way an effectual check is put upon the attendance at school of children from infected houses.

The notice is as follows:—

SANITARY AUTHORITY,

TOWN HALL, CARDIFF,

.....189

SIR,

I have to inform you that.....residing at.....
is now suffering from an Infectious Disease, and that no Child from this house should be allowed to return to School without producing to you a Certificate, signed by the MEDICAL OFFICER OF HEALTH, stating that the infectious premises, &c., have been disinfected by the SANITARY AUTHORITY.

Yours faithfully,

EDWARD WALFORD, M.D.,

*Medical Officer of Health.*

*To the Head Master.....School.*

On the completion of the case, either by recovery or death, disinfection of the premises takes place, and this is effected by the Officers of your Authority, after which process the following Certificate is given:—

CARDIFF URBAN SANITARY AUTHORITY,

*Medical Officer of Health's Department,*

TOWN HALL, CARDIFF,

.....189

I hereby ceritfy that the premises at No.....have been disinfected, and that children from this house may be allowed to return to school.

EDWARD WALFORD, M.D.,

*Medical Officer of Health.*

In the case of adults employed in places of business, or in workshops, etc., a similar process is gone through, notices in these cases being sent to the employer and to the infected house.

TABLE XIX.—Shews the number of Infectious Diseases reported under the Notification Act, and the Deaths during each Quarter in the year 1894.

| | Small Pox. | | Cholera. | | Diphtheria. | | Croup. | | Erysipelas. | | Scarlet Fever. | | Typhoid Fever | | Typhus Fever. | | Puerperal Fever. | | Relapsing Fever. | | Continued Fever. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Deaths. | Cases Reported. | Deaths | Cases Reported. | Deaths. | Cases Reported. | Deaths. | Cases Reported. | Deaths. | Cases Reported. | Deaths. | Cases Reported. | Deaths. | Cases Reported. | Deaths. | Cases Reported. | Deaths. | Cases Reported. | Deaths. | Cases Reported. | Deaths. | Cases Reported. |
| First Quarter .... .... | 1 | 9 | .... | .... | 17 | 73 | 9 | 4 | 3 | 50 | 1 | 161 | 4 | 14 | 1 | 1 | 2 | 9 | .... | .... | .... | .... |
| Second ,, .... .... | .... | 1 | .... | .... | 18 | 94 | 8 | 7 | 2 | 20 | 2 | 126 | 1 | 16 | .... | .... | 1 | 2 | .... | .... | .... | .... |
| Third ,, .... .... | .... | .... | .... | .... | 13 | 85 | 5 | 1 | 1 | 32 | 1 | 123 | .... | 14 | .... | .... | .... | 4 | .... | .... | .... | .... |
| Fourth ,, .... .... | .... | .... | .... | .... | 11 | 74 | 7 | 5 | 1 | 33 | 4 | 167 | 2 | 18 | .... | .... | .... | 4 | .... | .... | .... | 3 |
| Year 1894 .... | 1 | 10 | .... | .... | 59 | 326 | 29 | 17 | 7 | 135 | 8 | 577 | 7 | 62 | 1 | 1 | 3 | 19 | .... | .... | .... | 3 |

TABLE XX.—MORTALITY FROM PRINCIPAL ZYMOTIC DISEASES.

| Year. | Mean of Six years 1878–1883. | | Mean of Six years 1884–1889. | | 1890. | | 1891. | | 1892. | | 1893. | | 1894. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Estimated Population according to Registrar General. | 84,723. | | 102,850. | | 117,012. | | 130,288. | | 136,181. | | 142,346. | | 148,890. | |
| Seven Chief Zymotic Diseases. | Deaths. | Death-rate. | Deaths. | Death-rate. | Deaths. | Death-rate. | Deaths. | Death-rate. | Deaths. | Death-rate. | Deaths. | Death-rate. | Deaths. | Death-rate. |
| Small Pox ... ... ... ... | 1·0 | 0·011 | 4·3 | 0·043 | ... | ... | ... | ... | 1 | 0·007 | ... | ... | 1 | 0·006 |
| Measles ... ... ... ... | 20·6 | 0·243 | 84·8 | 0·841 | 65 | 0·555 | 55 | 0·422 | 58 | 0·425 | 97 | 0·681 | 11 | 0.073 |
| Scarlatina ... ... ... ... | 35·3 | 0.410 | 38·2 | 0·389 | 19 | 0·162 | 35 | 0·268 | 87 | 0.638 | 39 | 0·273 | 8 | 0.53 |
| Diphtheria ... ... ... ... | 15·3 | 0·180 | 20 7 | 0·208 | 15 | 0·128 | 16 | 0·122 | 36 | 0·264 | 93 | 0.653 | 59 | 0·396 |
| Whooping Cough ... ... ... | 55·1 | 0·650 | 62·5 | 0·559 | 38 | 0·324 | 89 | 0·683 | 46 | 0·337 | 41 | 0·288 | 123 | 0·826 |
| Fever (Enteric) ... ... ... | 24·3 | 0·286 | 38·2 | 0·373 | 23 | 0·196 | 26 | 0·199 | 26 | 0·190 | 18 | 0·126 | 7 | 0·047 |
| Diarrhœa ... ... ... ... | 73·1 | 0·859 | 114·5 | 1·134 | 122 | 1·042 | 52 | 0·399 | 117 | 0·859 | 131 | 0·920 | 45 | 0·302 |
| TOTAL ... ... | 224·7 | 2·639 | 363·2 | 3·598 | 282 | 2·410 | 273 | 2·095 | 371 | 2·720 | 419 | 2·943 | 254 | 1·706 |

The following table shows the distribution of mortality from the Seven Chief Zymotic Diseases, from Phthisis, from diseases of the Respiratory Organs, and from Tuberculosis in each Street in the Borough during the year 1894.

TABLE XXI.—CENTRAL WARD.

| NAME OF STREET. | Small-Pox. | Measles. | Scarlet Fever. | Diphtheria. | Whooping Cough. | Fever. | Diarrhœa. | Phthisis. | Respiratory Diseases. | Tuberculosis. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bridge & Little Bridge st. | .... | .... | .... | 1 | 2 | .... | .... | .... | 2 | .... | 5 |
| Caroline street | .... | .... | .... | .... | .... | .... | .... | .... | 2 | .... | 2 |
| Castle court | .... | .... | .... | .... | .... | .... | 1 | .... | .... | .... | 1 |
| Carpenters' Arms court | .... | .... | .... | .... | .... | .... | .... | .... | 2 | .... | 2 |
| Dews court | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| David street | .... | .... | .... | .... | .... | .... | .... | 1 | 3 | .... | 4 |
| Eisteddfod street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| East terrace | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Evans' court | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Edward street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| ,, place | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Frederick street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Godfrey street | .... | .... | .... | .... | 1 | .... | .... | .... | .... | .... | 1 |
| Gough street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Havelock street | .... | .... | .... | .... | 3 | .... | .... | 1 | .... | .... | 4 |
| Homfray street | .... | .... | .... | .... | .... | .... | .... | .... | 2 | .... | 2 |
| Hill's terrace | .... | .... | .... | .... | .... | .... | 1 | .... | .... | .... | 1 |
| Hill's street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Love lane | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1 | 1 |
| Mason's Arms' court | .... | .... | 1 | .... | .... | .... | .... | .... | .... | .... | 1 |
| Millicent street | .... | .... | .... | .... | .... | .... | 1 | .... | 3 | .... | 4 |
| Mary Ann street | .... | .... | .... | .... | .... | .... | .... | 2 | 1 | .... | 3 |
| North road | .... | .... | .... | .... | .... | .... | .... | 3 | .... | .... | 3 |
| Plymouth street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Park place | .... | .... | 1 | .... | .... | .... | .... | .... | .... | .... | 1 |
| Paradise place | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Ruperra street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Rodney street | .... | .... | .... | 1 | .... | .... | .... | .... | 1 | .... | 2 |
| Scott street | .... | .... | .... | 1 | 1 | .... | .... | 1 | 2 | .... | 5 |
| St. John's square | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| St. Mary street | .... | .... | .... | .... | .... | .... | .... | .... | 2 | .... | 2 |
| Station terrace | .... | .... | .... | 1 | .... | .... | .... | .... | .... | .... | 1 |
| Stanley street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Tredegar street | .... | .... | .... | .... | .... | .... | .... | .... | 2 | .... | 2 |
| Union buildings | .... | .... | .... | .... | .... | .... | 1 | .... | .... | .... | 1 |
| Union street | .... | .... | .... | .... | .... | 1 | .... | 3 | 1 | .... | 5 |
| Wood street | .... | .... | .... | .... | .... | .... | .... | .... | 2 | .... | 2 |
| Wharton street | .... | .... | 1 | .... | .... | .... | .... | 1 | .... | .... | 2 |
| TOTAL .... | .... | .... | 3 | 4 | 7 | 1 | 4 | 16 | 35 | 1 | 71 |

## SOUTH WARD.

| Name of Street. | Small-Pox. | Measles. | Scarlet Fever. | Diphtheria. | Whooping Cough. | Fever. | Diarrhœa. | Phthisis. | Respiratory Diseases. | Tuberculosis. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Adelaide street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Bute street | .... | .... | .... | 1 | .... | .... | .... | 2 | 6 | .... | 9 |
| Bute Esplanade | .... | .... | .... | .... | 1 | .... | .... | 1 | .... | .... | 2 |
| Christina street | .... | .... | 1 | .... | .... | .... | .... | 1 | 2 | .... | 4 |
| Canal parade | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| Crawshay street | .... | .... | .... | .... | .... | .... | .... | 2 | 1 | .... | 3 |
| Crichton street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Dudley terrace | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Eleanor street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Frances street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| George street | .... | .... | .... | .... | .... | .... | .... | 2 | 1 | .... | 3 |
| Harrowby street | .... | .... | .... | .... | .. | .... | .... | .... | 4 | .... | 4 |
| Herbert street | .... | .... | .... | .... | 1 | .... | .... | .... | .... | .... | 1 |
| Hamadryad Hospital Ship | 1 | .... | .... | .... | .... | 2 | 1 | .... | 2 | .... | 6 |
| John street | .... | .... | .... | .... | .... | .... | .... | 2 | .... | .... | 2 |
| Louisa street | .... | .... | .... | .... | .... | .... | .... | 2 | 1 | .... | 3 |
| Loudoun square | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | .... | 2 |
| Mount Stuart square | .... | .... | .... | .... | .... | .... | .... | 2 | .... | .... | 2 |
| Margaret street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Maria street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| North Church street | .... | .... | .... | .... | .... | .... | .... | 2 | 1 | .... | 3 |
| Penarth road | .... | .... | .... | .... | 1 | .... | 1 | .... | 1 | 1 | 4 |
| Peel street | .... | .... | .... | .... | 1 | .... | .... | .... | 1 | .... | 2 |
| Patrick street | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | .... | 2 |
| South Loudoun place | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| South Church street | .... | .... | .... | .... | .... | .... | .... | 2 | 2 | .... | 4 |
| Sophia street | .... | .... | .... | .... | .... | .... | .... | 2 | 1 | .... | 3 |
| Stuart street | .... | .... | .... | .... | .... | .... | .... | .... | 2 | .... | 2 |
| Windsor Esplanade | .... | .... | .... | .... | .... | .... | 1 | .... | .... | .... | 1 |
| Total .... | 1 | .... | 1 | 1 | 4 | 2 | 3 | 24 | 33 | 1 | 70 |

## CATHAYS WARD.

| Name of Street. | Small Pox. | Measles. | Scarlet Fever. | Diphtheria. | Whooping Cough. | Fever. | Diarrhœa. | Phthisis. | Respiratory Diseases. | Tuberculosis. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Alexander street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Cairns street | .... | .... | .... | .... | .... | .... | 1 | 1 | 4 | .... | 6 |
| Cathays terrace | .... | .... | .... | .... | .... | .... | 1 | 1 | .... | .... | 2 |
| Coburn street | .... | .... | .... | .... | .... | .... | 1 | 1 | 1 | .... | 3 |
| Crwys road | .... | .... | .... | .... | .... | .... | 1 | 1 | 2 | .... | 4 |
| Cranbrook street | .... | .... | .... | .... | .... | .... | .... | .... | 3 | .... | 3 |
| Daniel street | .... | .... | .... | .... | 1 | .... | 2 | .... | 2 | .... | 5 |
| Fitzroy street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Flora street | .... | .... | .... | .... | .... | .... | .... | .... | 2 | .... | 2 |
| Florentia street | .... | .... | .... | .... | .... | .... | 2 | .... | 1 | .... | 3 |
| Glynrhondda street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| George street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Harriett street and place | .... | .... | .... | 2 | .... | .... | .... | .... | .... | .... | 2 |
| Letty street | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | .... | 2 |
| May street | .... | .... | .... | 1 | .... | .... | .... | 2 | 1 | .... | 4 |
| Merthyr street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Minny street | .... | .... | .... | .... | 2 | .... | .... | 1 | 9 | .... | 12 |
| Norman street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Richard street | .... | .... | .... | .... | 1 | .... | .... | .... | 2 | .... | 3 |
| Robert street | .... | .... | .... | 1 | .... | .... | 1 | .... | 2 | .... | 4 |
| Salisbury road | .... | .... | .... | .... | .... | 1 | .... | .... | 1 | .... | 2 |
| Thesiger street | .... | .... | .... | .... | .... | .... | .... | 1 | 2 | .... | 3 |
| Treherbert street | .... | .... | .... | .... | 1 | .... | .... | .... | .... | .... | 1 |
| Treorky street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Woodville road | .... | .... | .... | 1 | 2 | .... | .... | .... | 3 | .... | 6 |
| Total .... | .... | .... | .... | 5 | 7 | 1 | 9 | 13 | 39 | .... | 74 |

## PARK WARD.

| Name of Street. | Small-Pox. | Measles. | Scarlet Fever. | Diphtheria. | Whooping Cough. | Fever. | Diarrhœa. | Phthisis. | Respiratory Diseases. | Tuberculosis. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Alfred street | .... | .... | .... | .... | .... | 1 | .... | .... | .... | .... | 1 |
| Albany road | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 | 2 |
| Arran street | .... | .... | .... | .... | 1 | .... | .... | 3 | 3 | .... | 7 |
| Arabella street | .... | .... | .... | 2 | .... | .... | .... | .... | .... | .... | 2 |
| Byron street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Bedford street and place | .... | .... | .... | .... | .... | .... | .... | 1 | 4 | .... | 5 |
| Castle road | .... | .... | .... | .... | 1 | .... | .... | 3 | 3 | 1 | 8 |
| Cyfarthfa street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Donald street | .... | .... | .... | .... | 1 | .... | .... | .... | .... | .... | 1 |
| Diana street | .... | .... | .... | 1 | .... | .... | .... | 1 | .... | .... | 2 |
| Elm street | .... | .... | .... | .... | .... | .... | .... | 2 | 1 | .... | 3 |
| Glenroy street | .... | .... | .... | 2 | 1 | .... | .... | 1 | 4 | .... | 8 |
| Gordon road | .... | .... | .... | .... | .... | .... | .... | .... | 2 | 1 | 3 |
| Kincraig street | .... | .... | .... | 1 | .... | .... | .... | .... | .... | .... | 1 |
| Keppoch street | .... | .... | .... | .... | 1 | .... | .... | 2 | .... | .... | 3 |
| Leason terrace | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Lily street | .... | .... | .... | 1 | .... | .... | .... | 1 | 1 | 1 | 4 |
| Moy road | .... | .... | .... | .... | 2 | .... | .... | 1 | 1 | .... | 4 |
| Northcote street | .... | .... | .... | 1 | .... | .... | .... | .... | .... | .... | 1 |
| Ninian road | .... | .... | .... | 1 | .... | .... | .... | .... | .... | .... | 1 |
| Oxford street | .... | .... | .... | .... | .... | .... | .... | .... | 2 | .... | 2 |
| Plasnewydd road | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Penylan | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | .... | 2 |
| Ruthven street | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| Russell street | .... | .... | .... | .... | .... | .... | .... | .... | 3 | 1 | 4 |
| Rose street | .... | .... | .... | .... | .... | .... | .... | .... | 2 | .... | 2 |
| Richmond road and crescent | .... | .... | .... | 1 | .... | .... | .... | 1 | 4 | .... | 6 |
| Strathnairn street | .... | .... | .... | 1 | .... | .... | .... | 2 | 1 | .... | 4 |
| The Walk | .... | .... | .... | 1 | .... | .... | .... | .... | .... | .... | 1 |
| The Parade | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Treharris street | .... | .... | .... | .... | 2 | .... | .... | 1 | 1 | .... | 4 |
| Talworth street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Upper Kincraig street | .... | .... | .... | .... | 1 | .... | .... | .... | .... | .... | 1 |
| Violet row | .... | .... | .... | .... | .... | .... | 1 | .... | .... | .... | 1 |
| Wordsworth street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| West Grove | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Total .... | .... | .... | .... | 12 | 10 | 1 | 1 | 27 | 35 | 5 | 91 |

## ADAMSDOWN WARD.

| Name of Street. | Small-Pox. | Measles. | Scarlet Fever. | Diphtheria. | Whooping Cough. | Fever. | Diarrhœa. | Phthisis. | Respiratory Diseases. | Tuberculosis. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Augusta street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Adam street | .... | .... | .... | 1 | .... | .... | .... | 1 | 2 | .... | 4 |
| Adamsdown square | .... | .... | .... | .... | 1 | .... | .... | .... | .... | .... | 1 |
| Buzzard street | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | .... | 2 |
| Cycle street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Comet street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Cumnock place and terrace | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Clifton street | .... | .... | .... | 1 | .... | .... | .... | .... | .... | 1 | 2 |
| Constellation street | .... | .... | .... | .... | 1 | .... | .... | .... | 3 | .... | 4 |
| Duffryn street | .... | .... | .... | .... | .... | .... | .... | 1 | 2 | .... | 3 |
| Davies street | .... | .... | .... | 1 | .... | .... | .... | .... | 2 | .... | 3 |
| Eclipse street | .... | .... | .... | 1 | .... | .... | .... | .... | .... | .... | 1 |
| Fitzalan place | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Garth street | .... | .... | .... | .... | 1 | .... | .... | .... | 1 | .... | 2 |
| Glossop terrace | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Godfrey street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Inchmarnock street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Ivor street and place | .... | .... | .... | .... | .... | .... | .... | .... | 2 | 1 | 3 |
| Infirmary | .... | .... | .... | 1 | .... | 1 | .... | 2 | 8 | 2 | 14 |
| Kilcatten street | .... | .... | .... | 1 | .... | .... | .... | .... | .... | .... | 1 |
| Metal street | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | .... | 2 |
| Moon street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Moira place | .... | .... | .... | .... | .... | .... | .... | .... | 2 | .... | 2 |
| Moira street and terrace | .... | .... | .... | .... | .... | .... | .... | .... | 2 | .... | 2 |
| Meteor street | .... | .... | .... | .... | .... | .... | 1 | 1 | 1 | .... | 3 |
| Noah street | .... | .... | .... | .... | 1 | .... | .... | .... | .... | .... | 1 |
| North Luton place | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| North William street | .... | .... | .... | .... | .... | .... | 1 | 1 | 4 | .... | 6 |
| Pellett street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Planet street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Platinum street | .... | .... | .... | .... | 2 | .... | .... | .... | 1 | .... | 3 |
| Pendoylan street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Prince Leopold street | .... | .... | .... | .... | .... | .... | .... | 2 | .... | .... | 2 |
| Roland street | .... | .... | .... | .... | .... | .... | .... | 2 | 1 | .... | 3 |
| Roath dock | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Rosemary street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| South terrace | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Sandon place | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| System street | .... | .... | .... | .... | .... | .... | 1 | 1 | 2 | .... | 4 |
| Taff street | .... | .... | .... | .... | 1 | .... | .... | 2 | .... | .... | 3 |
| Tin street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Tyndall street | .... | .... | .... | 1 | .... | .... | .... | 4 | 5 | .... | 10 |
| Thomas court | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Victoria street | .... | .... | .... | .... | .... | .... | .... | 1 | 2 | .... | 3 |
| Windsor road | .... | .... | .... | .... | .... | .... | .... | .... | 2 | .... | 2 |
| Total .... | .... | .... | .... | 7 | 7 | 1 | 3 | 29 | 54 | 4 | 105 |

## RIVERSIDE WARD.

| Name of Street. | Small-Pox. | Measles. | Scarlet Fever. | Diphtheria. | Whooping Cough. | Fever. | Diarrhœa. | Phthisis. | Respiratory Diseases. | Tuberculosis. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ann street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Brook street | .... | .... | .... | .... | .... | .... | .... | .... | 2 | .... | 2 |
| Brunel street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Cowbridge road | .... | .... | .... | .... | 1 | .... | 1 | 1 | 4 | .... | 7 |
| Craddock street | .... | .... | .... | 1 | .... | .... | .... | 1 | 5 | .... | 7 |
| Cathedral road | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | .... | 2 |
| East street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .. | 1 |
| Eldon road | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Fitzhammon embankment | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Green street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Halket street | .... | .... | .... | .... | 3 | .... | .... | .... | 4 | .... | 7 |
| Hamilton street | .... | .... | .... | 1 | 1 | 1 | .... | .... | .... | .... | 3 |
| Heath street | .... | .... | .... | .... | .... | .... | .... | 1 | 2 | .... | 3 |
| King's road | .... | .... | .... | .... | 1 | .... | .... | 1 | 2 | .... | 4 |
| Lewis street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Mark street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | 2 |
| Machen place | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Plantagenet street | .... | .... | .... | 1 | .... | .... | 1 | 2 | 1 | .... | 5 |
| Pitman street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Rennie street | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1 | 1 |
| Rawdon place | .... | .... | .... | .... | 1 | .... | .... | .... | .... | .... | 1 |
| South Morgan street | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | .... | 2 |
| Talbot street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Tudor road | .... | .... | .... | 1 | 1 | .... | .... | 1 | .... | .... | 3 |
| Telford street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Union Workhouse | .... | .... | .... | .... | 3 | 1 | 1 | 39 | 16 | 18 | 78 |
| Wells street | .... | .... | .... | 1 | 1 | .... | .... | .... | 2 | .... | 4 |
| Wyndham crescent | .... | .... | .... | .... | .... | .... | .... | 2 | 4 | .... | 6 |
| Wyndham road | .... | .... | .... | 1 | .... | .... | .... | .... | .... | .... | 1 |
| Wyndham place | .... | .... | .... | .... | 1 | .... | .... | 1 | 1 | .... | 3 |
| Wellington street | .... | .... | .... | .... | 1 | .... | .... | .... | 1 | .... | 2 |
| Total .... | .... | .... | .... | 6 | 14 | 2 | 3 | 55 | 54 | 20 | 154 |

## CANTON WARD.

| Name of Street. | Small-Pox. | Measles. | Scarlet Fever. | Diphtheria. | Whooping Cough. | Fever. | Diarrhœa. | Phthisis. | Respiratory Diseases. | Tuberculosis. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Anglesea street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Alexandra road | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Albert street | .... | .... | .... | 1 | 1 | .... | .... | 1 | 1 | .... | 4 |
| Clive road | .... | .... | .... | .... | 2 | .... | .... | 1 | 2 | .... | 5 |
| Chancery lane | .... | .... | .... | .... | 1 | .... | .... | .... | .... | .... | 1 |
| Cowbridge road | .... | .... | .... | 1 | 2 | .... | .... | .... | 3 | 1 | 7 |
| Conybeare road | .... | .... | .... | .... | 2 | .... | .... | .... | .... | .... | 2 |
| Delta street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Daisy street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Eldon road | .... | .... | 1 | 1 | 3 | .... | .... | 2 | 3 | .... | 10 |
| Ethel street | .... | .... | .... | .... | 2 | .... | .... | .... | 4 | .... | 6 |
| Egerton street | .... | .... | .... | .... | 1 | .... | .... | .... | 2 | .... | 3 |
| Fern street | .... | .... | .... | .... | 1 | .... | .... | .... | .... | .... | 1 |
| Glamorgan street | .... | .... | .... | 2 | .... | .... | .... | .... | 1 | .... | 3 |
| Gray street | .... | .... | .... | .... | .... | .... | 2 | .... | .... | .... | 2 |
| Glynne street | .... | .... | .... | .... | .... | .... | .... | .... | 4 | .... | 4 |
| Harvey street | .... | .... | .... | .... | 1 | .... | 1 | .... | 1 | .... | 3 |
| Lyndhurst street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Loftus street | .... | 1 | .... | .... | .... | .... | .... | 1 | 1 | .... | 3 |
| Leckwith road | .... | .... | .... | .... | 2 | .... | .... | 2 | 3 | .... | 7 |
| Llandaff road | .... | .... | .... | .... | 2 | .... | .... | .... | 1 | .... | 3 |
| Market road | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Picton place | .... | .... | .... | .... | 1 | .... | .... | .... | .... | 1 | 2 |
| Penypeel road | .... | .... | .... | .... | 1 | .... | .... | .... | 3 | .... | 4 |
| Penlline road | .... | .... | .... | .... | 1 | .... | .... | .... | .... | .... | 1 |
| Rectory road | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Rolls street | .... | .... | .... | .... | 1 | .... | .... | .... | 1 | .... | 2 |
| Radnor road | .... | .... | .... | .... | 1 | .... | .... | .... | 1 | .... | 2 |
| Railway terrace | .... | .... | .... | .... | 1 | .... | .... | .... | 2 | .... | 3 |
| Romilly crescent | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Romilly road | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Severn road | .... | .... | .... | .... | .... | .... | .... | 4 | 3 | 1 | 8 |
| Stag terrace | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | .... | 2 |
| Sanatorium | .... | .... | 1 | .... | .... | .... | .... | .... | .... | .... | 1 |
| Springfield place | .... | .... | .... | .... | 1 | .... | 1 | 2 | 1 | .... | 5 |
| Thornhill street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Wells street | .... | .... | .... | .... | .... | .... | 1 | .... | 2 | .... | 3 |
| Wellington street | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | .... | 2 |
| Total .... | .... | 1 | 2 | 5 | 27 | .... | 5 | 21 | 45 | 3 | 109 |

## ROATH WARD.

| Name of Street. | Small-Pox. | Measles. | Scarlet Fever. | Diphtheria. | Whooping Cough. | Fever. | Diarrhœa. | Phthisis. | Respiratory Diseases. | Tuberculosis. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Agate street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Bertram street | .... | .... | .... | .... | 1 | .... | 1 | .... | 2 | .... | 4 |
| Blanche street | .... | .... | .... | 1 | .... | .... | .... | .... | 1 | .... | 2 |
| Broadway | .... | .... | .... | .... | 1 | .... | 1 | .... | 2 | .... | 4 |
| Church terrace | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Cecil street | .... | .... | .... | .... | 1 | .... | .... | .... | 4 | .... | 5 |
| Clive place | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Cyril crescent | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | .... | 2 |
| Cottrell road | .... | .... | .... | 1 | .... | .... | .... | 1 | .... | .... | 2 |
| Diamond street | .... | .... | .... | .... | .... | .... | .... | .... | 5 | .... | 5 |
| Emerald street | .... | .... | .... | .... | .... | .... | .... | .... | 2 | 1 | 3 |
| Elm street | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | .... | 2 |
| Fox street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Harold street | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | .... | 2 |
| Helen street | .... | .... | .... | .... | 3 | .... | 1 | 1 | 3 | 1 | 9 |
| Maud street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | 2 |
| Nora street | .... | .... | .... | 1 | .... | .... | 1 | 1 | 3 | .... | 6 |
| Oakfield street | .... | .... | .... | 1 | .... | .... | .... | .... | 1 | .... | 2 |
| Partridge road | .... | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | 2 |
| Pearl street | .... | .... | .... | .... | .... | .... | 2 | 2 | 6 | .... | 10 |
| Ruby street | .... | .... | .... | 1 | 1 | .... | 1 | .... | 2 | .... | 5 |
| Richards terrace | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Stacey road | .... | .... | .... | .... | 1 | .... | .... | 1 | .... | .... | 2 |
| Sapphire street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Snipe street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Theodora street | .... | .... | .... | .... | 1 | .... | .... | .... | .... | .... | 1 |
| Total .... | .... | .... | .... | 5 | 9 | .... | 7 | 11 | 41 | 4 | 77 |

## GRANGETOWN WARD.

| Name of Street. | Small-Pox. | Measles. | Scarlet Fever. | Diphtheria. | Whooping Cough. | Fever. | Diarrhœa. | Phthisis. | Respiratory Diseases. | Tuberculosis. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Andrew's terrace | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| Allerton street | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | .... | 2 |
| Amherst street | .... | .... | .... | 1 | .... | .... | .... | .... | 2 | .... | 3 |
| Bishop street | .... | .... | .... | .... | 1 | .... | .... | .... | 1 | .... | 2 |
| Bromfield street | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| Bradford street | .... | .... | .... | 3 | .... | .... | 1 | .... | 2 | .... | 6 |
| Bromsgrove street | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 | 2 |
| Bedwas street | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1 | 1 |
| Corporation road | .... | 1 | .... | .... | .... | .... | .... | 1 | .... | .... | 2 |
| Clive street | .... | .... | .... | .... | 1 | .... | 1 | .... | 3 | .... | 5 |
| Clarence road | .... | .... | .... | .... | 2 | .... | .... | .... | 1 | .... | 3 |
| Compton street | .... | 1 | .... | .... | .... | .... | .... | .... | .... | .... | 1 |
| Cornwall street | .... | .... | .... | .... | 3 | .... | .... | .... | .... | .... | 3 |
| Clare road | .... | 1 | .... | 1 | 1 | .... | .... | .... | .... | .... | 3 |
| Court road | .... | .... | .... | .... | .... | .... | .... | .... | 3 | .... | 3 |
| Chester street | .... | .... | .... | .... | .... | .... | .... | .... | 3 | .... | 3 |
| Cambridge street | .... | .... | .... | 2 | .... | .... | .... | .... | .... | .... | 2 |
| Dorset street | .... | 1 | .... | .... | 2 | .... | .... | .... | 1 | .... | 4 |
| Devon street and place | .... | 3 | .... | .... | 3 | .... | .... | 1 | 3 | .... | 10 |
| Durham street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Earl street | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| Ferry road | .... | .... | .... | .... | 2 | .... | .... | 1 | 1 | .... | 4 |
| Frances street | .... | .... | .... | .... | 1 | .... | .... | .... | .... | .... | 1 |
| Forrest street | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| Holmesdale street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Hewell street | .... | .... | .... | .... | .... | .... | .... | 2 | 3 | .... | 5 |
| Hereford street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Kent street | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | .... | 2 |
| Knole street | .... | .... | .... | .... | .... | .... | 1 | .... | .... | .... | 1 |
| Llanmaes street | .... | .... | .... | .... | .... | .... | 1 | .... | 2 | .... | 3 |
| Ludlow street | .... | .... | .... | .... | .... | .... | .... | .... | 2 | .... | 2 |
| Lucknow street | .... | .... | .... | .... | 2 | .... | 1 | .... | 1 | .... | 4 |
| Monmouth street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Matthew's terrace | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| Madras street | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | .... | 2 |
| Machen street | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| North Clive street | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| Newport street | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| Oakley street | .... | .... | 1 | .... | .... | .... | .... | .... | .... | .... | 1 |
| Pentrebane street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Penarth road | .... | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | 2 |
| Paget street | .... | .... | .... | .... | 2 | .... | .... | 2 | 4 | .... | 8 |
| Penhevad street | .... | .... | .... | 1 | .... | .... | .... | .... | 2 | .... | 3 |
| Rutland street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Rookwood street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Rhydlafur street | .... | .... | .... | .... | 2 | .... | 1 | 2 | .... | .... | 5 |
| St. Fagan's street | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| Sevenoak street | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| Brought forward .... | .... | 7 | 1 | 8 | 22 | .... | 7 | 16 | 41 | 3 | 105 |

GRANGETOWN WARD.—*Continued.*

| Name of Street. | Small-Pox. | Measles. | Scarlet Fever. | Diphtheria. | Whooping Cough. | Fever. | Diarrhœa. | Phthisis. | Respiratory Diseases. | Tuberculosis. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carried forward .... | .... | 7 | 1 | 8 | 22 | .... | 7 | 16 | 41 | 3 | 105 |
| Stoughton street | .... | 2 | .... | .... | 6 | .... | .... | .... | 4 | .... | 12 |
| Saltmead road | .... | 1 | .... | .... | 3 | .... | .... | .... | 1 | .... | 5 |
| Sir Edward terrace | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| Stockland street | .... | .... | .... | .... | .... | .... | 1 | .... | 1 | .... | 2 |
| Tynant street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Thomas street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Van street | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| Warwick street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Total .... | .... | 10 | 1 | 8 | 31 | .... | 8 | 18 | 48 | 3 | 127 |

SPLOTT WARD.

| Name of Street. | Small-Pox. | Measles. | Scarlet Fever. | Diphtheria. | Whooping Cough. | Fever. | Diarrhœa. | Phthisis. | Respiratory Diseases. | Tuberculosis. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Adeline street | .... | .... | 1 | 1 | .... | .... | .... | .... | 1 | .... | 3 |
| Aberystwith street | .... | .... | .... | .... | .... | .... | 1 | .... | .... | .... | 1 |
| Burnaby street | .... | .... | .... | .... | .... | .... | .... | .... | 2 | .... | 2 |
| Bridgend street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Coveny street | .... | .... | .... | 1 | .... | .... | .... | .... | 1 | .... | 2 |
| Cornelia street | .... | .... | .... | 2 | .... | .... | .... | .... | 1 | .... | 3 |
| Carlisle street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Eyre street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Gwendoline street | .... | .... | .... | .... | 1 | .... | .... | .... | .... | .... | 1 |
| Habershon street | .... | .... | .... | .... | 1 | .... | .... | 1 | 4 | .... | 6 |
| Howard street | .... | .... | .... | .... | 1 | .... | .... | .... | 1 | .... | 2 |
| Janet street | .... | .... | .... | .... | .... | .... | .... | 1 | 3 | .... | 4 |
| Layard street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Llanelly street | .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | 1 |
| Moorland road | .... | .... | .... | 1 | .... | .... | .... | .... | .... | .... | 1 |
| Marion street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Menelaus street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Ordell street | .... | .... | .... | .... | 1 | .... | .... | 4 | 4 | .... | 9 |
| Portmanmoor road | .... | .... | .... | .... | .... | .... | .... | 2 | 5 | .... | 7 |
| Pontypridd street | .... | .... | .... | .... | .... | .... | .... | .... | 2 | 1 | 3 |
| Railway street | .... | .... | .... | .... | 2 | .... | 1 | 2 | 6 | 1 | 12 |
| Sanquahar street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Seymour street | .... | .... | .... | .... | .... | .... | .... | 1 | 2 | .... | 3 |
| Splott road | .... | .... | .... | .... | 1 | .... | .... | 1 | .... | .... | 2 |
| Swansea terrace | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Swansea street | .... | .... | .... | 1 | .... | .... | .... | .... | .... | .... | 1 |
| Tenby street | .... | .... | .... | .... | .... | .... | .... | .... | 1 | 1 | 2 |
| Walker's road | .... | .... | .... | .... | .... | .... | .... | .... | 3 | .... | 3 |
| Total .... | .... | .... | 1 | 6 | 7 | .... | 2 | 13 | 44 | 3 | 76 |

SMALL POX.—One death from Small Pox was registered during the year, that of a patient in the Infectious Ward of the Hamadryad Hospital Ship. In this case the disease was contracted in Birmingham by a labourer in search of work, who walked from this city, passing through Worcester, Hereford and Abergavenny, and arriving at Cardiff on March 1st. On this date he was seen by a medical man in this town who notified the case as one of Small Pox. The man was immediately removed to the hospital where he died on March 4th.

Altogether ten cases of Small Pox came to the knowledge of the Sanitary Authority during the year 1894. In January an outbreak occurred which was fortunately very limited in extent. The prompt notification of a case in the early stage of the disease enabled the Officers of the Sanitary Authority to discover its origin and to take effectual means for preventing the further spread of the disease. The first case notified was that of a young man living at the time with his parents in the Cowbridge Road, but who had been residing up to the 14th January in the Cotterell Road. On enquiry I found that on several occasions between the 1st and 7th January this youth had been visited by a person who was supposed to have recently recovered from Chicken Pox. A further enquiry at the residence of this person in Snipe Street, resulted in the discovery of four other persons suffering from Small Pox to whom the infection had evidently been conveyed in the same manner, one being this person's brother, and the others intimate friends, living in the same street, all of whom had been in contact with her very frequently. The brother at the time of being taken ill was living in the same house in the Cotterell Road as the young man first attacked. In all these cases the initial symptoms dated from the 20th January. Fortunately it was possible to remove all these cases to the hospital where they were effectually isolated. As far as possible all those who were known to have come into contact with these cases were re-vaccinated. The infected premises and articles were disinfected, and a house to house inspection of the district was made, and by these means the disease was completely stamped out. Four other cases of Small Pox were reported in the early part of the year; sailors brought into the town from Havre where they contracted the disease. These cases were removed to the hospital on February 17th, March 20th, and 21st respectively. The usual precautions of disinfection and re-vaccination were adopted and no further spread of the infection occurred. The average death-rate from Small Pox in Cardiff during the ten years, 1884-93, was equal to 0·03 per 1,000 of the population.

MEASLES.—Eleven deaths were registered from Measles during the year as compared with ninety-seven in the year 1893. The deaths corresponded to an annual death-rate of 0·073 per 1,000 persons living as compared with 0·70 the average rate from this disease during the ten years 1884-1893. Of the total deaths from Measles 7 occurred in the first quarter of the year, 2 in the second quarter, and 2 in the third quarter. The death-rate from Measles in the 33 large towns was equal to 0·63 per 1,000, ranging from 0·03 in Plymouth to 1·00 in Gateshead.

WHOOPING COUGH.—123 deaths are attributed to this disease. All but six were of children under 5 years of age. The deaths corresponded to an annual death-rate of 0·826 per 1,000 of the population as compared with 0·288, the rate in 1893, and with 0·49 the average rate in the ten years, 1884-1893. Of the total deaths from Whooping Cough 52 occurred in the first quarter, 49 in the second quarter, 15 in the third quarter, and 7 in the fourth quarter of the year. The disease was relatively most prevalent in the Canton and Grangetown Wards, where the death-rates were respectively 1·66 and 2·05 per 1,000 of the Ward populations.

The death-rate from Whooping Cough in the 33 large towns was equal to 0·48 per 1,000, ranging from 0·06 in Leicester, 0·12 in Brighton, 0·16 in Derby, 0·18 in Burnley, to 0·89 in Plymouth.

SCARLET FEVER.—Eight deaths were registered from Scarlet Fever during the year as compared with thirty-nine in 1893 and with eighty-seven in 1892. The deaths were equivalent to a death-rate of 0·053 per 1,000 of the population, as compared with 0·35 the average rate in the ten years, 1884-1893. The total number of cases notified within the Borough and the deaths registered since the adoption of the Infectious Disease Notification Act, were as follows :—

| YEAR. | CASES NOTIFIED. | DEATHS. |
|---|---|---|
| 1890 .... | 335 .... | 19 |
| 1891 .... | 685 .... | 35 |
| 1892 .... | 1851 .... | 87 |
| 1893 .... | 816 .... | 39 |
| 1894 .... | 577 .... | 8 |

From the above it will be seen that during 1894 the proportion of deaths to cases notified was exceedingly low, being only at the rate of 1·3 per cent., as against 4·7 per cent. the rate in 1893.

During the year 180 cases were admitted to the Sanatorium, being 31 per cent. of the cases notified during that period, as compared with 22 per cent. and with 13 per cent. the proportions of admissions in the years 1893 and 1892 respectively.

There was no special incidence of the disease in any particular locality, the cases being distributed pretty evenly all over the district. With respect to the season of the year the relation of notifications and deaths was as follows :—

| | NO. OF NOTIFICATIONS. | NO. OF DEATHS. |
|---|---|---|
| First Quarter .... | 161 .... | 1 |
| Second ,, .... | 126 .... | 2 |
| Third ,, .... | 123 .... | 1 |
| Fourth ,, .... | 167 .... | 4 |

The death-rate from Scarlet Fever in the thirty-three large towns was equal to 0·21, ranging from 0·03 in Brighton and in Halifax, 0·05 in Cardiff, and 0·08 in Bolton, to 0·53 in Burnley, 0·55 in Salford, and 0·63 in Wolverhampton.

DIPHTHERIA.—Fifty-nine deaths were registered as due to Diphtheria as compared with ninety-three in 1893 and with 36 in 1892.

The number of deaths was equivalent to a death-rate of 0·39. The average annual rate for the ten years ending 1893 being 0·24 per 1,000. The number of cases of Diphtheria reported to the Sanitary Authority amounted to 326, being 136 less than in 1893.

The case mortality, or rather the proportion of deaths to cases notified was 18 per cent.

As usual, the mortality fell chiefly upon young children, 61 per cent. of the total deaths from this disease being amongst children under five years of age.

Of the deaths, 17 occurred during the First Quarter of the year, 18 during the Second, 13 during the Third, and 11 during the Fourth Quarter.

With the exception of the South Ward in which only four cases were reported, the disease was distributed somewhat evenly over the town ; the largest number notified being 81 in the Splott Ward. There was, however, nothing in the sanitary condition of this Ward to account for the greater incidence of the disease.

A good deal of difference of opinion exists amongst qualified investigators as to the nature and extent of the influence exerted by insanitary surroundings on the development and spread of Diphtheria. Some observers think that ordinary sanitary defects such as are met with in Urban Districts, have little or no effect on Diphtheria, others consider that they play the chief part in the causation of the disease.

The most recent and trustworthy observations in connection with this subject seem to show that the influence of insanitary conditions has been greatly exaggerated, and that the most active agent in the spread of the disease is the aggregation of the most susceptible of the community in the large and well filled Public Elementary Schools of the District.

Diphtheria is perhaps, one of the most intensely infectious amongst the Zymotic class of disease. Should one case occur in a household, the other susceptible inmates usually contract the disease. It will spread with great rapidity amongst scholars in the same class.

A reference to the table of mortality in the Appendix to this Report, will show that with one exception, all the deaths registered as due to Diphtheria, occurred amongst children under ten years of age, and an analysis of the cases reported, shows that a majority (54 per cent.) of those attacked were between the ages of three and thirteen, that is at school ages.

TABLE XXII.—The following table shows the age periods of the cases reported :—

CASES OF DIPHTHERIA REPORTED DURING THE YEAR 1894.

| AGE PERIODS. | 1st Quarter. | 2nd Quarter. | 3rd Quarter. | 4th Quarter. | Year. |
|---|---|---|---|---|---|
| Under three years .... .... | 10 | 15 | 7 | 8 | 40 |
| Three and under thirteen .... | 35 | 55 | 44 | 41 | 175 |
| Thirteen and under twenty-five .... | 16 | 8 | 11 | 11 | 46 |
| Twenty-five and upwards .... | 12 | 16 | 23 | 14 | 65 |
| Total .... .... | 73 | 94 | 85 | 74 | 326 |

The age incidence varied considerably in the different Wards, as will be seen by the following Table :—

TABLE XXIII.—Percentage of cases at age periods to cases reported in each Ward :—

| WARD. | Total No. of cases of all ages. | Under three years. (Per centage.) | Three and under thirteen. (Per centage.) | Thirteen and under twenty-five (Per centage.) | Twenty-five and upwards. (Per centage.) |
|---|---|---|---|---|---|
| Central .... .... | 13 | 23·0 | 61·5 | .... | 15·3 |
| South .... .... | 5 | .... | 40·0 | 20·0 | 40·0 |
| Cathays .... .... | 33 | 18·1 | 45·4 | 24·2 | 12·1 |
| Park .... .... | 63 | 9·5 | 58·7 | 14·2 | 17·4 |
| Adamsdown .... | 36 | 13·8 | 44·4 | 13·8 | 27·7 |
| Riverside .... .... | 25 | 8·0 | 60·0 | 8·0 | 24·0 |
| Canton .... .... | 11 | 27·2 | 54·5 | 9·0 | 9·0 |
| Roath .... .... | 29 | 27·5 | 37·9 | 20·6 | 13·7 |
| Grangetown .... | 31 | 12·9 | 61·2 | 3·2 | 22·5 |
| Splott .... .... | 80 | 3·7 | 57·5 | 16·2 | 22·5 |

TYPHOID OR ENTERIC FEVER.—Seven deaths were registered from this disease, as compared with eighteen in 1893. The number of deaths was equivalent to a death-rate of 0·047 per 1,000 of the population as compared with 0·17 and 0·12 the rates in the years 1892 and 1893 respectively. The mean death-rate from Fever during the ten years, 1884-1893, was 0·29 per 1,000.

The number of cases of Enteric Fever notified within the Borough and the number of deaths registered during each year since the adoption of the Infectious Disease Notification Act, is given below:—

| YEAR. | CASES NOTIFIED. | DEATHS. |
|---|---|---|
| 1890 .... | 152 .... | 23 |
| 1891 .... | 130 .... | 26 |
| 1892 .... | 118 .... | 24 |
| 1893 .... | 103 .... | 18 |
| 1894 .... | 62 .... | 7 |

The number of cases reported and of deaths during each quarter of the year 1894 was as follows:—

| | CASES NOTIFIED. | DEATHS. |
|---|---|---|
| First Quarter .... | 14 .... | 4 |
| Second do. .... | 16 .... | 1 |
| Third do. .... | 14 .... | 0 |
| Fourth do. .... | 18 .... | 2 |

The proportion of deaths to cases notified during the year was 11·2 per cent.

It will be seen that the decline in the death-rate and sickness from this disease has continued uninterruptedly during the past five years, and that whereas the mean rate of mortality during the six years 1884—1889 was 0·37 per 1,000, the average for the five years 1890—1894 was only 0·14 per 1,000.

The mortality compares now favourably with that of the country generally and with that of the large towns, as will be seen from the returns of the Registrar General given below.

ENTERIC FEVER MORTALITY.—Death-rates per 1,000 of the population:—

| | 1887 | 1888 | 1889 | 1890 | 1891 | 1892 | 1893 | 1894 |
|---|---|---|---|---|---|---|---|---|
| England and Wales .... | 0·20 | 0·18 | 0·18 | 0·18 | 0·18 | 0·15 | 0·22 | 0·16 |
| Large Towns .... | 0·22 | 0·20 | 0·20 | 0·19 | 0·20 | 0·15 | 0·24 | 0·19 |
| Cardiff .... | 0·16 | 0·33 | 0·25 | 0·19 | 0·19 | 0·19 | 0·12 | 0·04 |

In London the deaths from Enteric Fever during the year 1894 were equivalent to a rate of 0·15 per 1,000, and in the other large towns the rates ranged from 0·04 in Cardiff, 0·06 in Croydon and Halifax, to 0·31 in Salford, 0·59 in Liverpool, and 0·60 in Sunderland.

Enteric Fever is usually more prevalent in the Autumn; the meterological conditions which prevail at this time seem to favour the growth of the bacterial organisms connected with the disease. During the past year, however, the notifications were evenly distributed throughout the seasons, and no increase in their number

occurred in the autumn months. It is probable that the comparatively cold summer had some effect in checking the usual spread of the disease at this time. Of the total number of cases reported to the Sanitary Authority, six were of children under five years of age, the incidence of the disease at other age periods being as follows:—

| NO. OF CASES REPORTED. | AGE PERIODS. |
|---|---|
| 5 | 5 and under 10 years. |
| 10 | 10 ,, ,, 15 ,, |
| 9 | 15 ,, ,, 20 ,, |
| 9 | 20 ,, ,, 25 ,, |
| 4 | 25 ,, ,, 30 ,, |
| 13 | 30 ,, ,, 40 ,, |
| 5 | 40 ,, ,, 50 ,, |
| 1 | 50 years and upwards. |

The cases of Enteric Fever were for the most part evenly distributed throughout the district, and at no time was there anything in their situation or number pointing to a common cause or to any epidemic form of the disease.

The sanitary surroundings of the infected premises were investigated in each case, and twenty houses in which the disease occurred were found to have defective sanitary arrangements of some kind. These were remedied without delay. The diminution in the amount of Typhoid Fever during past years is one of the most satisfactory features of the vital statistics of this district, as this disease appears with good reason to be intimably associated with bad sanitation and to respond more than other diseases to the improvements which can be effected by Sanitary Authorities.

As pointed out in previous reports, the comparative immunity of this town from Typhoid Fever may fairly be attributed to the enlightened policy of the Local Authority in providing the district with a pure and abundant water supply, a complete and efficient system of sewerage, a satisfactory method of collecting house and trade refuse, and in causing to be made a vigorous and systematic inspection of the district, and in promptly abating nuisances therein to the full extent of the powers conferred on them by the various Sanitary Acts of Parliament.

DIARRHŒA.—The deaths from Diarrhœa numbered 45, as compared with 131 in the preceding year. The number of deaths was equal to an annual death-rate of 0·30 per 1,000 persons living. This rate was 0·63 lower than the average rate from Diarrhœa during the ten years 1884-1893. The deaths were distributed as follows:—

| Deaths from Diarrhœa. | 1st Quarter. | 2nd Quarter. | 3rd Quarter. | 4th Quarter. | Year. |
|---|---|---|---|---|---|
| Under one year .... .... | .... | .... | 17 | .... | 33 |
| One and under five years .... | .... | .... | 3 | .... | 5 |
| Five and under fifteen years .... | .... | 1 | 1 | .... | 2 |
| Fifteen and under twenty-five years | .... | .... | .... | .... | .... |
| Twenty-five and under sixty years | .... | 1 | 1 | .... | 2 |
| Sixty years and upwards .... | 3 | .... | .... | .... | 3 |
| TOTAL .... .... | 6 | 3 | 22 | 14 | 45 |

As usual, the majority of the deaths occurred during the Third and Fourth Quarters of the year, and amongst children under one year of age. The fatality from Infantile Diarrhœa during the months of July, August, and September, is usually considerable, and is influenced to a great extent by Meteorogical conditions. Owing to the unusually low temperature which prevailed during the summer 1894, the mortality from Diarrhœa was remarkably small throughout the country. In Cardiff, the death-rate has rarely been as low. In the Third Quarter of the year, the death-rate was 1·69 below the average rate in the five preceding Third Quarters. In the thirty-three great towns, the average rate was 1·32 per 1,000, the rates in the several towns ranging from 0·05 in Halifax, 0·25 in Swansea, and in Huddersfield, 0·41 in Oldham, and 0·46 in Bristol to 2·44 in Sunderland, 3·10 in Liverpool, 3·32 in Leicester, and 4·46 in Preston.

The relation between the temperature of the air, and the prevalence of Diarrhœa is shown in the following table which gives the Diarrhœal, Death-rate and the mean temperature of the air in Cardiff during the Third Quarter of the 10 years, 1885-1894.

| YEAR. | DEATH-RATE FROM DIARRHŒA. | MEAN TEMPERATURE. |
|---|---|---|
| 1885 .... | 2·2 per 1,000 .... | 59·1 |
| 1886 .... | 4·6 ,, ,, .... | 61·2 |
| 1887 .... | 2·8 ,, ,, .... | 58·8 |
| 1888 .... | 1·4 ,, ,, .... | 57·6 |
| 1889 .... | 1·7 ,, ,, .... | 59·0 |
| 1890 .... | 2·9 ,, ,, .... | 59·7 |
| 1891 .... | 0·8 ,, ,, .... | 57·8 |
| 1892 .... | 2·3 ,, ,, .... | 60·4 |
| 1893 .... | 2·5 ,, ,, .... | 61·8 |
| 1894 .... | 0·5 ,, ,, .... | 57·0 |

## THE CARDIFF SANATORIUM.

Table XXIV. shows cases of Scarlet Fever admitted into the Sanatorium and discharged during the year 1894, and the result in each case.

| WARDS. | No admitted during 1894. | Number Discharged. | | Mortality per cent. of admissions. | Patients in Hospital on Dec. 31st, 1893. | Patients in Hospital on Dec. 31st, 1894. |
|---|---|---|---|---|---|---|
| | | Recovered | Died. | | | |
| Central Ward .... .... | 25 | 28 | .... | .... | .... | .... |
| South ,, .... .... | 6 | 6 | .... | .... | .... | .... |
| Cathays ,, .... .... | 12 | 11 | .... | .... | .... | .... |
| Park ,, .... .... | 19 | 24 | 1 | .... | .... | .... |
| Adamsdown ,, .... .... | 18 | 19 | .... | .... | .... | .... |
| Riverside ,, .... .... | 22 | 19 | .... | .... | .... | .... |
| Canton ,, .... .... | 23 | 21 | .... | .... | .... | .... |
| Roath ,, .... .... | 11 | 11 | .... | .... | .... | .... |
| Grangetown ,, .... .... | 29 | 27 | .... | .... | .... | .... |
| Splott ,, .... .... | 14 | 11 | .... | .... | .... | .... |
| Cardiff Rural Sanitary District .... | 1 | 2 | .... | .... | .... | .... |
| Total .... .... | 180 | 179 | 1 | 0·5 | 27 | 27 |

TABLE XXV. gives the distribution and other details connected with the cases of Scarlet Fever admitted into the Sanatorium during the year 1894.

| Ages of Patients admitted into Sanatorium | Wards from which Admitted. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Central. | South. | Cadoxs. | Park. | Adamstown. | Riverside | Canton. | Roath. | Grangetown. | Splott. | Cardiff Rural Sanitary District. | Total. |
| Under 3 years..... | 2 | .... | .... | 1 | 5 | 2 | 2 | 2 | 2 | 1 | .... | 17 |
| 3 yrs. & under 4 .... | 2 | .... | 1 | 1 | .... | 1 | 1 | 1 | 2 | 1 | .... | 10 |
| 4 ,, ,, 6 .... | 6 | 1 | 2 | 6 | 2 | 4 | 5 | 1 | 9 | 3 | .... | 39 |
| 6 ,, ,, 10 .... | 10 | 3 | 5 | 5 | 10 | 8 | 7 | 3 | 9 | 3 | .... | 63 |
| 10 ,, ,, 20 .... | 1 | 2 | 3 | 4 | .... | 4 | 6 | 4 | 5 | 6 | .... | 35 |
| 20 ,, ,, 40 .... | 4 | .... | 1 | 2 | 1 | 3 | 2 | .... | 2 | .... | 1 | 16 |
| 40 and upwards .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |

The temporary Sanatorium has again proved most useful as a means of isolating cases of Scarlet Fever. With the exception of a short period when the Wards were closed for repairs, all the beds were occupied during the whole year, and from want of accommodation, many cases were refused admission. From the subjoined tables it will be seen that 180 cases of Scarlet Fever were admitted into the hospital as compared with 184 in the year 1893. The ordinary Nursing Staff consisted of a Matron (Miss Ainsworth) and three permanent Nurses. The greatest credit is due to them for the way in which they have performed their responsible and difficult duties. Only one fatal case occurred amongst the cases under treatment during the year.

The expenditure for the year, including the salaries and wages of the Staff, amounted to £897 as compared with £886, the amount expended in 1893.

The receipts (sums from Guardians and Sanitary Authorities for maintenance of pauper patients, and patients from outside districts) were £54 12s. 10d. for the year ending 31st December, 1894. Deducting this from the amount expended, and dividing by the number of persons treated, the cost per head is found to be £4 10s. 0d. The average cost per week per patient was 16/-. The new Hospital for Infectious Diseases is now almost ready for the reception of patients. It will be one of the most complete of its kind in the Kingdom. I am indebted to the architect, Mr. W. Harpur, M.I.C.E., Borough Engineer, for the following description of the buildings :—

"The site is about 12 acres in extent, including 2 acres now occupied by the temporary structure, and is situate on the Canton Moors near the western boundary of the borough. The entrance is at the north-west corner of the site, and to the left

of the gateway will be the porter's lodge, which it is intended to build at some future time. The buildings are eight in number—the administrative block, two main ward blocks, isolation blocks, laundry blocks, stable, disinfecting house, and mortuary. The administrative block is the only one of the buildings which is three storeys in height, the rest being one storey, with the exception of the stable block, which has two floors. The administrative block contains: on the ground floor—matron's room, doctor's room, bath-room and lavatory, dispensing-room, visitor's-room, nurses' dining-room, linen closet, matron's stores, general stores, kitchen, scullery, servants' dining-room, staff ironing-room, drying closet and washhouse, pantry, china closet, dairy, coal and wood stores, &c. The kitchen is fitted up with cooking range, griller, cooking pans, sinks, hot closet, carving table and dressers, and the scullery is arranged with porcelain sinks, potato steamers, plate racks, &c. The staff washhouse and laundry contain washing troughs, rinsers, hydro extractors, mangle, stoves, &c. There are three staircases—the main staircase in the entrance hall, the nurses' staircase and the servants' staircase, which is at the back of the buildings adjoining the kitchen. On the first floor there is a nurses' sitting-room and fifteen bed-rooms, and on the second floor nineteen bed-rooms. Bath-rooms, lavatories and waterclosets are also provided on the first and second floors for the use of the staff. The floors of the sitting-rooms and dining-rooms are boarded, whilst the hall, kitchen and passages are laid with marble mosaic, the scullery and washhouse being laid with cement concrete.

"The wards are erected on the pavilion principle. There are two large wards in each main block, one for males the other for females, each being 60 ft. by 26 ft., and two small wards, for special cases, each 12 ft. by 12 ft. and 14 ft. high, the total number of beds thus provided being fourty-four. Between the wards in each block there is a nurses' kitchen and duty-room, with inspection window looking into each ward, so that the nurse has perfect control over the wards from her duty-room. At the end of each main ward are the waterclosets, sinks and bath-room, cut off from the building by a ventilated lobby, and adjoining each of the main wards is a verandah with French casement windows opening on to it. In connection with the main wards there is a waiting-room and also a bath-room, with two dressing-rooms for discharging patients, which will enable each patient on being discharged to leave the building directly from the bath-room without having to re-enter the ward after the final bath. The isolation block is divided into two equal parts by a wall, and the arrangements on one side of the wall are an exact counterpart of those on the other. Each of the larger isolation wards is 23 ft. by 15 ft., and of the smaller wards 14 ft. by 14 ft., all 12 ft. high, providing in all accommodation for six beds. Between the wards will be nurses' duty-rooms, with inspection windows as in the main wards, and adjoining will be waterclosets and slop sinks, as well as bath-rooms with space for movable baths.

"The windows, which form the chief means of ventilation to all the wards, are divided into two parts by a transom rail about 1 ft. 6 in. down from the head of the frame. Below the transom are ordinary double hung sashes and frames, but above the transom hopper lights have been provided hung on hinges and falling inwards. In addition to the ventilation provided by the windows, hit-and-miss ventilating grids are fixed immediately above the floor level, and Tobin's inlet tubes about 6 ft. high. Ventilating trunks are fixed in the ceilings, connected to

Shorland's extract ventilators on the ridge for carrying off the vitiated air. The wards, besides being heated by steam, are also provided with Shorland's patent Manchester stoves and grates, which have an air chamber supplied with fresh air from the outside, and thus the air before passing into the room is heated. The wards, nurses'-room, bath-room, &c., have no sharp corners or angles, all window angles being bull-nosed, the angle between floor and skirting being formed with a rounded scotia, and that between ceiling and wall with a plaster cove. The vertical internal angles of all walls are coved, also all angles of door panels and windows are rounded, no fillets being used, so that dust can be easily removed

"Owing to the exceptionally low situation of the site, the whole of the floors have been kept 6 ft. above the ground level, and the floors and main walls of the wards are carried on piers and arches, so that there is a through current of air under the floors, which will not be liable to be affected by damp. The floors of the wards are constructed of cement concrete carried on steel joists and finished with oak blocks, whilst the floors of the verandahs, water-closets and bath-rooms are similarly constructed but finished with marble mosaic. The whole of the wards are connected with the administrative block by means of covered corridors. The laundry block

CARDIFF SANATORIUM.

Cardiff: View of Sanatorium.

contains a washhouse and finishing-room, drying closet, engine house, boiler house and coal stores. The chimney is 70 ft. high and 2 ft. 3 in. internal size, and adjoining it is an incinerator for the purpose of destroying bedding, bandages, poultices and other seriously-infected articles. The washhouse is fitted up with steeping tanks, clothes bins, washing machines and troughs, soap boilers, rinsers, boiling tanks and hydro extractors, whilst the finishing-room is arranged with ironing stove, rolling-in table, ironing boards, &c. The boiler house contains two steam boilers 21 ft. long by 5 ft. diameter, which supply steam to work the laundry engine, &c., and for heating, cooking, laundry purposes, disinfecting and baths throughout the administration block and all the wards.

"The stable block has two stalls, loose box, harness-room and van shed, with washing yard in front, whilst over the stable are a hay loft and corn stores. The disinfecting house has two compartments, the one for infected clothing and the other for disinfected articles, and in the division wall is built one of Washington Lyon's largest-sized patent steam disinfectors; so that the articles, having passed through the stove and been disinfected, do not again come in contact with the infected

clothing. The mortuary is placed at the extreme south-east end of the site, and contains two rooms for stretchers and tables, *post mortem*-room and pathological-room. The *post mortem*-room is lighted from the roof, and is provided with cupboards, sinks, lavatories, and revolving slate slab for dissecting purposes. The drains are laid with glazed stoneware pipes jointed with cement, and have manholes at each junction and change of direction. At the head of the drains to each main ward and to the administrative block one of Field's patent automatic flushing tanks has been fixed; the bath waste is connected to the tank and used for flushing purposes as well as the ordinary supply.

"The buildings, which are plain in design, are faced with Ruabon buff bricks above the plinth level, relieved by red bands and Forest of Dean stone dressings, the rubble masonry under the plinth being built in blue Pennant stone, whilst the roofs are covered with Bangor slates capped with red ridge-tiles. Space is reserved on the present site for five more main ward blocks and one isolation block, which would provide accommodation for 116 additional patients. The contractors for the work are Messrs. Turner & Sons, builders, of Cardiff, and the cost of the buildings and furnishing will amount to about £37,000, exclusive of the cost of the land. The laundry machinery, boilers, kitchen appliances, &c., have been supplied by Messrs. Bradford & Co., Salford, who have also carried out the steam-heating of the wards. The foundation-stone was laid by Alderman Jacobs, J.P., on the 7th of June, 1893, and the building will shortly be opened by Alderman P. W. Carey, J.P. (the Mayor)."

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### Mortality from Diseases in Classes IV, V, and VI.

On referring to the Mortality Table in the appendix it will be seen that in these classes are included (1) Constitutional Diseases, (2) Developmental Diseases, (3) Local Diseases.

The deaths from these diseases deserve perhaps more attention than they usually receive at the hands of Sanitary Authorities. Phthisis and other tubercular diseases, which are included in Class IV., although frequently hereditary are more or less influenced by sanitary surroundings. Pure air, efficient drainage, a dry subsoil, warm clothing and good food are the conditions necessary for the prevention of these diseases.

Of late years the attention of the public has been called to the danger from the use of meat from tuberculous cattle, and from the use of milk of tuberculous cows. In July, 1890, a Royal Commission was appointed to inquire into the "Effect of Food derived from Tuberculous Animals on Human Health." The report of this Commission has just been presented to Parliament and contains the evidence and reports of experts to whom the inquiries were entrusted. The Commissioners arrived at certain conclusions, some of which, as they are of great practical importance and bear directly on the question of the condemnation of meat of tuberculous cattle, it may be useful to quote. The Report states that "Tuberculous matter is found principally in the organs of the animals, as a rule most abundantly in the lungs, lymphatic glands, serous membranes, but often in the liver, spleen, kidneys, intestines, and other structures. These organs are usually removed by the butcher in dressing the carcass, though some of them may, intentionally or not, be left. In the tissues which go to form the butcher's 'joint' the material of tubercle is not often found, even where the organs exhibit very advanced or generalised tuberculosis."

With regard to the prevalence of tuberculous disease among food animals, the Commissioners state that "The actual amount of tuberculous disease among certain classes of food animals is so large as to afford to man frequent occasions for contracting tuberculous disease through his food. As to the proportion of tuberculosis acquired by man through his food or through other means, we can form no definite opinion, but we think it probable that an appreciable part of the tuberculosis that affects man is obtained through his food. The recognition of tuberculosis during the life of an animal is not wholly unattended with difficulty. Happily however it can in most cases be detected with certainty in the udders of milch cows. Provided every part that is the seat of tuberculous matter be avoided and destroyed, and provided care be taken to save from contamination by such matter the actual meat substance of a tuberculous animal a great deal of meat from animals affected by tuberculosis may be eaten without risk to the consumer." The final conclusions of the Commissioners are as follows:—"Ordinary processes of cooking applied to meat which has got contaminated on its surface are probably sufficient to destroy the harmful quality. They would not avail to render wholsome any piece of meat that contained tuberculous matter in its deeper parts. In regard to milk we are aware of the preference by English people for drinking cow's milk raw, a practice attended by danger, on account of possible contamination by pathogenic organisms. The boiling of milk even for a moment, would probably be sufficient to remove the very dangerous quality of tuberculous milk."

The Report of the Commissioners on the whole points to the desirability of a much more stringent inspection of animals and carcasses intended for food than exists at present in this country.

Taking Phthisis or Tubercular consumption we find that 227 deaths were registered from this cause during the year, and that the death-rate was 1·524 per 1,000 of the population, the highest rate of any single disease.

The following table gives the death-rate per 1,000 from Phthisis in Cardiff, as compared with the rate in England and Wales during the years 1884-1893 inclusive.

TABLE XXVI.—Death-rate per 1,000 from Phthisis.

| YEAR. | ENGLAND AND WALES. | CARDIFF. |
|---|---|---|
| 1884 | 1·827 | 2·385 |
| 1885 | 1·770 | 2·483 |
| 1886 | 1·739 | 2·124 |
| 1887 | 1·615 | 2·000 |
| 1888 | 1·508 | 1·943 |
| 1889 | 1·573 | 1·987 |
| 1890 | 1·682 | 1·974 |
| 1891 | 1·599 | 1·834 |
| 1892 | 1·468 | 1·777 |
| 1893 | 1·468 | 1·615 |

TABLE XXVII.—Death-rate per 1,000 from classes of disease.

| YEARS. | Class IV. Constitutional Diseases. | | Class V. Developmental Diseases. | | Class VI. Local Diseases. | |
|---|---|---|---|---|---|---|
| | Cardiff. | England and Wales. | Cardiff. | England and Wales. | Cardiff. | England and Wales. |
| 1884 | 3·423 | 3·431 | 3·263 | 1·586 | 10·097 | 9·618 |
| 1885 | 4·122 | 3·340 | 3·091 | 1·614 | 10·924 | 10·007 |
| 1886 | 4·305 | 3·370 | 3·563 | 1·638 | 10·373 | 10·040 |
| 1887 | 3·203 | 3·213 | 3·442 | 1·578 | 10·384 | 9·867 |
| 1888 | 3·306 | 3·166 | 2·947 | 1·569 | 9·275 | 9·643 |
| 1889 | 3·690 | 3·223 | 1·446 | 1.550 | 9·164 | 9·394 |
| 1890 | 3·498 | 3·374 | 1·692 | 1·611 | 10·101 | 10·364 |
| 1891 | 3·645 | 3·339 | 1·366 | 1·690 | 11·398 | 10·807 |
| 1892 | 3·517 | 3·168 | 1·240 | 1·624 | 7·791 | 9·801 |
| 1893 | 3·470 | 3·210 | 1·257 | 1·593 | 8·261 | 9·536 |

## SANITARY CONDITION OF THE DISTRICT, AND SUMMARY OF WORK PERFORMED BY THE OFFICERS OF THE HEALTH DEPARTMENT.

The systematic house to house inspection of the district, commenced in January, 1891, was continued throughout the year. The following tables show the result of this inspection during the year, from which it will be seen that a large number of sanitary defects have been remedied. The erection of new houses, together with the construction of their drainage, is entirely under the control of the Borough Engineer and Surveyor, and of the Officers of his Department.

### HOUSE INSPECTION.—CENTRAL WARD.

| Name of Street. | No. of Houses Inspected. | Defective Drains. | Choked Drains. | W.C. Pans and Syphons Defective. | Defective Stench Traps and no escape of Sewer Gas. | Scullery Sinks connected direct with Drain. | Inside Closets not ventilated. | Closets not supplied with Water. | Other Nuisances. |
|---|---|---|---|---|---|---|---|---|---|
| Guildford street .... | 8 | .... | .... | 1 | 1 | 1 | .... | 8 | .... |
| ,, crescent .... | 7 | .... | .... | .... | .... | .... | .... | 7 | 2 |
| Edward terrace .... | 28 | 3 | .... | 4 | 8 | 3 | 2 | 18 | 1 |
| Union street .... .... | 78 | 8 | 2 | 7 | 29 | .... | .... | 75 | 28 |
| Moulder's Arms court .... | 2 | .... | .... | .... | 2 | .... | .... | 1 | .... |
| Ebenezer street .... | 9 | .... | .... | .... | 5 | .... | .... | 9 | 3 |
| Kingston court .... | 10 | .... | .... | .... | .... | .... | .... | .... | .... |
| Carpenter's Arms court .... | 7 | .... | .... | .... | .... | .... | .... | 7 | .... |
| Temperance terrace .... | 4 | .... | .... | .... | .... | .... | .... | 1 | 1 |
| Rising Sun court .... | 5 | .... | .... | 1 | .... | .... | .... | 5 | .... |
| Evans' court .... .... | 3 | .... | .... | .... | .... | .... | .... | 2 | 1 |
| Rowe's square .... | 2 | .... | .... | .... | .... | .... | .... | 2 | 1 |
| Wharton place .... | 4 | .... | .... | .... | .... | .... | .... | 4 | .... |
| Lower Station terrace .... | 20 | .... | .... | .... | 11 | .... | .... | 20 | 3 |
| Edward street.... .... | 42 | 3 | .... | 3 | 15 | .... | .... | 41 | 13 |
| North Edward street .... | 8 | 2 | .... | .... | 2 | .... | .... | 8 | .... |
| Edward place .... .... | 12 | .... | .... | .... | 2 | 2 | .... | 12 | .... |
| Union buildings .... | 13 | .... | 2 | .... | .... | .... | .... | 7 | 3 |
| Green Garden court .... | 6 | .... | .... | .... | .... | .... | .... | 1 | 1 |
| Baker's row .... .... | 10 | .... | .... | 1 | .... | .... | .... | 10 | 4 |
| William's court .... | 6 | .... | .... | .... | 1 | .... | .... | 3 | .... |
| Tredegar street .... | 49 | .... | .... | .... | 1 | .... | .... | 49 | 1 |
| Canal bank .... .... | 5 | .... | .... | .... | .... | .... | .... | .... | .... |
| Robert's court.... .... | 7 | .... | 2 | .... | .... | .... | .... | .... | .... |
| Jenkin's ,, .... .... | 7 | .... | .... | .... | .... | .... | .... | 3 | .... |
| Evans' ,, (1) .... | 3 | .... | .... | .... | .... | .... | .... | 2 | .... |
| Matthew's,, .... .... | 5 | .... | .... | .... | .... | .... | .... | 3 | .... |
| Evans' ,, (2) .... | 3 | .... | .... | .... | .... | .... | .... | 2 | .... |
| Frederick Street court .... | 4 | .... | .... | .... | .... | .... | .... | 1 | .... |
| Trice's court .... .... | 4 | .... | .... | .... | .... | .... | .... | 2 | .... |
| Spring Garden court .... | 5 | .... | .... | .... | .... | .... | .... | 4 | .... |

## SOUTH WARD.

| NAME OF STREET. | No. of Houses Inspected. | Defective Drains. | Choked Drains. | W.C. Pans and Syphons Defective | Defective Stench Traps and Escape of Sewer Gas. | Scullery Sinks connected direct with Drain. | Inside Closets not ventilated. | Closets not supplied with Water. | Other Nuisances. |
|---|---|---|---|---|---|---|---|---|---|
| Bute crescent .... | 5 | .... | .... | .... | 1 | .... | .... | .... | .... |
| Herbert street .... | 22 | .... | .... | .... | .... | .... | .... | 22 | 1 |
| Stuart street .... | 45 | .... | .... | 1 | 19 | 1 | 1 | 42 | 8 |
| Allen's arch .... | 3 | .... | .... | .... | .... | .... | .... | .... | .... |
| Dudley street .... | 25 | 2 | .... | 3 | 13 | 1 | .... | 21 | 11 |
| Dudley place .... | 9 | 1 | .... | 1 | 3 | .... | .... | 9 | 4 |
| Margaret street .... | 38 | 2 | .... | 2 | 8 | .... | 1 | 38 | 9 |
| Eleanor street .... | 27 | 2 | .... | 1 | 6 | .... | .... | 27 | 7 |
| Bute Esplanade .... | 12 | .... | 1 | 5 | 1 | .... | 2 | 4 | .... |
| Windsor Terrace .... | 5 | .... | .... | 2 | .... | .... | .... | 5 | .... |
| Windsor Esplanade .... | 19 | 1 | .... | 12 | 2 | .... | 8 | 18 | 4 |
| Penarth Terrace .... | 8 | 1 | .... | .... | 2 | 1 | .... | 6 | 1 |

## CATHAYS WARD.

| NAME OF STREET. | No. of Houses Inspected. | Defective Drains. | Choked Drains. | W.C. Pans and Syphons Defective. | Defective Stench Traps and Escape of Sewer Gas. | Scullery Sinks connected direct with Drain. | Inside Closets not ventilated. | Closets not supplied with Water. | Other Nuisances. |
|---|---|---|---|---|---|---|---|---|---|
| Robert street .... | 68 | 6 | .... | 3 | 3 | .... | .... | 68 | 4 |
| Florentia street .... | 16 | 5 | .... | 2 | .... | .... | .... | 16 | 2 |
| Crwys road .... | 64 | 6 | 4 | 1 | 26 | .... | .... | 49 | 19 |
| Dalton street .... | 19 | .... | .... | .... | .... | .... | .... | 11 | 1 |
| Daniel street .... | 60 | 7 | .... | 9 | 18 | .... | .... | 60 | 13 |
| Woodville road .... | 35 | 8 | .... | 2 | 6 | .... | .... | 27 | .... |
| May street .... | 96 | 6 | 2 | 4 | .... | .... | .... | 96 | 15 |
| Gladys street .... | 8 | 1 | .... | .... | .... | .... | .... | 8 | 2 |
| Whitchurch place .... | 18 | 4 | .... | 1 | .... | .... | .... | 18 | 10 |
| Letty street .... | 22 | 5 | .... | .... | 13 | .... | .... | 22 | 2 |
| Flora street .... | 77 | 1 | .... | 3 | 42 | .... | .... | 77 | 12 |
| Minny street .... | 81 | 1 | 3 | 4 | 1 | .... | .... | 81 | 34 |

## ADAMSDOWN WARD.

| Name of Street. | Number of Houses Inspected. | Defective Drains. | Choked Drains. | W.C. Pans and Syphons Defective. | Defective Stench Traps permitting an escape of Sewer Gas. | Scullery Sinks connected direct with Drain. | Inside Closets not ventilated. | Closets not supplied with water. | Other Nuisances. |
|---|---|---|---|---|---|---|---|---|---|
| Augusta street .... | 42 | 3 | .... | 8 | 32 | .... | .... | 42 | 19 |
| Moira street .... .... | 33 | 3 | .... | 5 | 21 | .... | .... | 33 | 14 |
| Moira place .... .... | 28 | 2 | 1 | 5 | 15 | 4 | 1 | 28 | 10 |
| Ellen street .... .... | 34 | .... | .... | .... | 1 | .... | .... | 34 | 5 |
| Roland street .... .... | 31 | .... | .... | .... | 1 | .... | .... | 31 | 5 |
| Pendoylan street .... | 30 | .... | 1 | 1 | 1 | .... | .... | 30 | 4 |
| North William street .... | 34 | .... | .... | 3 | 2 | .... | .... | 34 | 1 |

## RIVERSIDE WARD.

| Name of Street. | No. of Houses Inspected. | Defective Drains. | Choked Drains. | W.C. Pans and Syphons Defective. | Defective Stench Traps permitting an escape of Sewer Gas. | Scullery Sinks connected direct with Drain. | Inside Closets not ventilated. | Closets not supplied with Water. | Other Nuisances. |
|---|---|---|---|---|---|---|---|---|---|
| Halket street .... .... | 52 | 1 | .... | 1 | 22 | .... | .... | 52 | 30 |
| Plantagenet street .... | 25 | 1 | .... | 10 | .... | .... | .... | 17 | 3 |
| Cowbridge road .... | 8 | .... | .... | 5 | 2 | .... | 2 | 8 | 1 |

## CANTON WARD.

| Name of Street. | No. of Houses Inspected. | Defective Drains. | Choked Drains. | W.C. Pans and Syphons Defective. | Defective Stench Traps permitting an escape of Sewer Gas. | Scullery Sinks connected direct with Drain. | Inside Closets not ventilated. | Closets not supplied with Water. | Other Nuisances. |
|---|---|---|---|---|---|---|---|---|---|
| Cowbridge road .... | 69 | 4 | 1 | 5 | 23 | 1 | .... | 45 | 13 |
| Eldon street .... .... | 174 | 16 | 4 | 39 | .... | .... | .... | 169 | 79 |
| Gray street .... .... | 58 | 2 | .... | .... | 27 | .... | .... | 48 | 27 |
| Coke street .... .... | 4 | .... | .... | .... | 1 | .... | .... | 4 | 2 |
| Littleton street .... | 23 | 8 | .... | .... | 2 | .... | .... | 23 | 12 |
| Lyndhurst street .... | 22 | 8 | 1 | .... | 2 | .... | .... | 22 | 15 |
| Rolls street .... .... | 44 | 2 | 3 | 3 | 1 | .... | .... | 44 | 20 |
| Chancery Lane .... | 44 | 3 | 3 | 4 | .... | .... | .... | 44 | 7 |
| Wells street .... .... | 34 | 1 | 2 | .... | .... | .... | .... | 33 | 10 |

## ROATH WARD.

| NAME OF STREET. | No. of Houses Inspected. | Defective Drains. | Choked Drains. | W.C. Pans and Syphons Defective. | Defective Stench Traps permitting an escape of Sewer Gas. | Scullery Sinks connected direct with Drains. | Inside Closets not ventilated. | Closets not supplied with Water. | Other Nuisances. |
|---|---|---|---|---|---|---|---|---|---|
| Cottrell road .... | 79 | .... | .... | .... | .... | .... | .... | 79 | 1 |
| Fox street .... | 11 | .... | .... | .... | 1 | .... | .... | 11 | 4 |
| Helen street .... | 78 | .... | 1 | 1 | 2 | .... | .... | 78 | 12 |
| Maud street .... | 39 | 5 | .... | 6 | 23 | .... | .... | 39 | 22 |
| Nora street .... | 69 | 5 | 1 | 9 | 18 | .... | .... | 69 | 10 |
| Ruby street .... | 56 | 4 | .... | 10 | 26 | .... | .... | 56 | 18 |
| Blanche street .... | 37 | 1 | .... | 3 | 3 | .... | .... | 37 | 3 |
| Arthur street .... | 54 | 1 | .... | 4 | 12 | .... | .... | 54 | 4 |

## SPLOTT WARD.

| NAME OF STREET. | No. of Houses Inspected. | Defective Drains. | Choked Drains. | W.C. Pans and Syphons Defective. | Defective Stench Traps permitting an escape of Sewer Gas. | Scullery Sinks connected direct with Drain. | Inside Closets not ventilated. | Closets not supplied with Water. | Other Nuisances. |
|---|---|---|---|---|---|---|---|---|---|
| Janet street .... .... | 72 | 6 | .... | 10 | 26 | .... | .... | 69 | 25 |
| Eyre street .... .... | 18 | 2 | .... | .... | .... | .... | .... | 18 | .... |
| Burnaby street .... | 44 | .... | .... | 1 | .... | .... | .... | 44 | 4 |
| Railway street.... ....120 | .... | .... | 9 | 13 | .... | .... | 120 | 23 |
| Ordell street .... .... | 87 | 4 | .... | 15 | 25 | .... | .... | 87 | 19 |
| Carlisle street .... ....141 | .... | 1 | 10 | 1 | .... | .... | 123 | 22 |
| Habershon street ....135 | 4 | .... | 12 | 6 | .... | .... | 135 | 16 |

INSPECTION OF COMMON LODGING HOUSES.—These houses are regulated by the provisions of the Public Health Act, 1875. Section 77 requires all Common Lodging Houses to be registered, and Section 80 empowers the Sanitary Authority to make Bye-laws.

(1) For fixing and from time to time varying the number of lodgers who may be received into a Common Lodging House, and for the separation of the sexes therein.

(2) For promoting cleanliness and ventilation in such houses.

(3) For the giving of notices and the taking precautions in the case of any infectious diseases; and

(4) Generally for the well ordering of such houses.

In the year 1891, your Authority adopted Bye-Laws which correspond closely with the "Model Bye-Laws" of the Local Government Board.

Since that date special attention has been paid to the Inspection of Common Lodging Houses. Altogether 196 houses have been registered. The number remaining on the register at the end of the year being 117.

The Bye-Laws require that every case of infectious sickness should be immediately reported to the Medical Officer of Health by the keeper of the Lodging House. Eight such cases occurred during the year. These comprised 2 cases of Small Pox, 2 cases of Scarlet Fever, 3 cases of Typhoid Fever, and 1 case of Erysipelas. With the exception of the case of Erysipelas all of these were removed to the Hospital. The subjoined table gives a summary of the results of the inspections during the year.

COMMON LODGING HOUSES.

| | |
|---|---|
| Total number on register .... .... .... .... | 117 |
| Registered rooms .... .... .... .... | 485 |
| Number of persons certified to accommodate .... .... | 1,970 |
| Day inspections .... .... .... .... .... | 3,432 |
| Night ,, .... .... .... .... .... | 251 |
| W.C.'s cleansed and repaired .... .... .... | 221 |
| ,, supplied with water .... .... .... .... | 67 |
| Additional W.C. accommodation provided .... .... | 11 |
| Drains trapped and repaired .... .... .... .... | 109 |
| Soil pipes ventilated .... .... .... .... | 3 |
| Special ventilation provided to rooms .... .... .... | 117 |
| Limewashed .... .... .... .... .... | 118 |
| Repaired .... .... .... .... .... | 103 |
| Overcrowded .... .... .... .... .... | 1 |
| Yards Paved .... .... .... .... .... | 55 |
| Accumulations removed .... .... ... .... | 23 |
| Infectious disease discovered .... .... .... | 8 |
| Registered during the year .... .... .... .... | 84 |

SEAMEN'S LICENSED LODGING HOUSES.—The Corporation have made Bye-Laws with the sanction of the President of the Board of Trade, for the licensing of Seamen's Lodging Houses, under the Merchant Shipping (Fishing Boats) Act, 1883.

The Bye-Laws provide that:—"On the written application of the keeper "of any registered common lodging house, or registered lodging "house, made in such form and stating such particulars as the "Council require, the Council will, if they see fit, grant to such "keeper a license authorizing him to designate his house a Seamen's "Licensed Lodging House."

No such application has been made during the year, but the majority of lodging houses receiving seamen are dealt with under the Common Lodging House Bye-Laws.

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WATER SUPPLY.—From a Public Health point of view, one of the most important events which occured during the year was the completion of the New Water Supply, by means of which an ample quantity of an exceedingly pure soft water is now supplied to the town, in place of the somewhat inadequate supply of exceedingly hard water from the gathering grounds of Lisvane and from the pumping station at Ely. To Mr. J. A. B. Williams, M. Inst., C.E., Water Engineer to the Corporation, I am indebted for the following information relating to the new works which were designed by him, and which have been carried out under his direct supervision. Mr. Williams, as the Engineer, and the Sanitary Authority as the responsible governing body, are to be congratulated on the successful accomplishment of an undertaking which will doubtless prove of inestimable value to the district.

In 1884, parliamentary powers were obtained for securing a new supply of water from the Taff Fawr water shed of the Brecon Beacons, situated on the old red sandstone formation, beyond the northern boundary of the South Wales Coal Field, and about 34 miles from Cardiff, at an elevation of from 1,100 feet to nearly 3,000 feet above the mean level of the sea. The works recently completed consist of:—

(i.) A storage reservoir (known as the Cantreff reservoir) with a storage capacity of 322 millions of gallons.

(ii.) Balancing reservoirs at Cefn, Blackwood, and Rhubina, also a high level service reservoir and filters at Rhubina, for the future supply of Penarth by gravitation, and which is now supplying the high level district of Llandaff, Whitchurch, Maindy, Llanishen, Penylan, Tongwynlais, and a large portion of the district outside the Corporation area of supply through the Llandaff and Dynas Powis District Council who take the water in bulk at the Corporation boundary at Tongwynlais and Eastbrook.

The following is the most recent result of the Analysis of the Town Water made by Mr. Hughes, the Borough Analyst.

Result of Analysis of samples of water, expressed in parts per 100,000 :—

| Description. | | Total Solid Impurity. | Albumenoid Ammonia. | Free Ammonia. | Nitrogen as Nitrates & Nitrites. | Previous Sewage Contamination. | Chlorine. | Sulphuric Acid in Sulphates. | Magnesia Salts. | Hardness. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Temporary. | Permanent. | Total. |
| Llanishen Water | Old supply. | 18·4 | 0·009 | 0·001 | 0·01 | nil | 1·6 | 1·68 | .... | 3·8 | 12·6 | 16·4 |
| Ely Water | Old supply. | 32·25 | 0·004 | nil. | 0·14 | trace | 1·95 | 3·19 | .... | 15·6 | 14·5 | 30·1 |
| Taff Fawr Water (New supply) | | 6·4 | 0·005 | 0·003 | .... | .... | 0·75 | .... | .... | .... | 4·3 | 4·3 |

(iii.) A conduit or line of pipes connecting the different reservoirs together and passing down the Taff Valley to the storage reservoirs at Llanishen and Lisvane, which are now utilized for the reception of Taff Fawr Water.

The new works as originally designed, comprised two other reservoirs in the Taff Fawr Valley, Nos. 1 and 3. One of these (No. 1) is now in the course of construction, and will have a capacity of 335 million gallons, the other (No. 3) will be made when the increase of population renders further storage capacity necessary, and will contain about 700 million gallons.

By the present arrangements, pending the construction of No. 1 Reservoir, the water passes through copper cloth strainers provided in a large straining chamber adjoining the Cantreff Reservoir, by which the suspended particles are arrested before the water enters the main conduit pipes leading to the storage reservoirs at Llanishen, from thence it passes through similar copper cloth strainers before entering the Filter beds. It is finally filtered and passed through into a covered service reservoir at the Heath.

It is estimated that about 4 million gallons are supplied per day, corresponding to an average daily supply of about 23 to 24 gallons per head.

The town and neighbouring districts were until the opening of the new works, supplied partly by gravitation from works at Lisvane, and partly by pumping from a well and culverts at Ely. The water from both these sources is objectionably hard, and that from the Lisvane gathering ground possesses the additional disadvantage of being derived from cultivated land, and of containing at times an undesirable amount of organic matter in solution.

The Taff Fawr Water is in every respect of exceptional purity, a matter at all times of importance, but at present of the highest consequence in view of the possible importation of Cholera from abroad. There is, perhaps, nothing more certain in the history of Cholera epidemics, both at home and abroad, than their close connection with impure water supplies, and it may be considered a well ascertained fact that one of the chief local conditions of safety is a public supply of water free from organic impurities. It is probable, therefore, that your Authority has by the construction of the new works, adopted one of the most effectual precautions against the development of the disease in your district.

The advantages of a soft over a hard water for the supply of a town are also very great. In some few cases, where much peat exists on the water sheds, these waters have been known to act injuriously by their solvent action on the lead in the service pipes, but in the case of the Taff Fawr Water, these conditions do not exist, and there is no reason to suspect that this action will take place, as in the experiments and analysis which were made at the time this water was recommended, were doubtless of a satisfactory nature in this respect.

Generally speaking, it may be stated that while soft waters are perfectly wholesome for all dietic purposes, they are much more economical than hard waters for all other purposes to which they are applied. Chemically the difference between a hard and soft water is, that whereas hard water is water holding in solution perhaps 70-100 grains of mineral matter per gallon, soft water may have only 5, 10, or 15. It has been suggested that the lime salts present in these hard waters are necessary for health, and that they contribute in some way to the formation of bone. But it has been conclusively shown that the lime required for this purpose does not come from the water, but from the solid particles in the food taken, and that the lime in the water has no influence whatever on the processes of animal nutrition.

From a commercial and economical point of view the advantages are altogether on the side of a soft water, especially for those manufacturing processes in which soap is largely used. The waste of soap occasioned by hard water is very considerable, every grain of chalk or carbonate of lime decomposing ten grains of soap, all the soap therefore which is unavoidably decomposed or dissolved in order to render the water capable of washing, is absolutely wasted. Hardness is calculated by degrees, each degree corresponding to one grain of lime in one gallon of water, and it is estimated that each degree of hardness involves the waste of upwards of a pound of soap per 1,000 gallons used in washing. As regards cooking, soft water has an acknowledged superiority over hard water.

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SLAUGHTER HOUSES AND MEAT INSPECTION.—The two public abattoirs have been regularly inspected. During the year 264 visits were paid to these places and 340 to the meat markets. No private slaughter-houses exist in the borough, and no cases of illegally slaughtering in unlicensed premises came to the knowledge of the Sanitary Authority. The managers of the abattoirs report to me that during the year the following animals were slaughtered :—

| | Canton Abattoir. | Roath Abattoir. |
|---|---|---|
| Beasts .... | 779 .... | 6,573 |
| Sheep .... | 7,198 .... | 45,151 |
| Calves .... | 411 .... | 3,628 |
| Pigs .... | 2,910 .... | 20,268 |
| Total .... | 11,298 | 75,620 |

The 116th Section of the Public Health Act, 1875, requires the Medical Officer of Health or Inspector of Nuisances to examine at all reasonable times any animal, carcase, meat, poultry, game, fish, fruit, vegetables, corn, bread, flour, or milk exposed for sale or deposited for the purpose of sale or of preparation for sale, and intended for the food of man, and if he find that any such article is unfit for food, he may cause the same to be seized and dealt with by a magistrate. Altogether 3,209 pounds of food were seized and condemned, and subsequently destroyed by order of the magistrates.

## INSPECTION OF FACTORIES AND WORKSHOPS

UNDER THE FACTORY AND WORKSHOP ACTS, 1878-1891, AND THE SHOP HOURS ACT, 1892.

During the year a large number of workshops have been inspected. The results of these inspections are given in the annexed tables. A special Inspector has been appointed under the Shop Hours Act; his duty consists in preventing the employment in shops of any young persons under 18 years of age for a period longer than 74 hours in any one week. A list of out-workers connected with workshops has been kept, and notices in the form prescribed by the Secretary of State have been served upon 17 Dressmakers, and upon 75 Tailors.

### INSPECTION OF WORKSHOPS.

| Nature of Workshop. | Number Inspected. |
|---|---|
| Dressmakers | 204 |
| Tailors | 199 |
| Bakehouses | 165 |
| Boot-makers | 57 |
| Joiners.... | 2 |
| Plumbers | 17 |
| Cabinet-makers | 5 |
| Lath-renders | 1 |
| Bicycle-makers | 2 |
| Smiths | 5 |
| Tinmen | 5 |
| Coach-builders | 4 |
| Watchmakers | 1 |
| Sugar-boilers | 5 |
| Oilskin-makers | 4 |
| Upholsterers | 9 |
| Machine-makers | 5 |
| Saddlers | 2 |
| Box-makers | 3 |
| Butchers' Clothiers | 3 |
| Cap-makers | 2 |
| Wire-workers | 1 |
| Carpenters | 1 |
| Electro-platers | 1 |
| Laundries | 2 |
| Fancy Drapers | 1 |
| Cabinet-makers | 2 |
| Paper bag makers | 3 |
| Hose makers | 1 |
| Printers | 1 |
| Leather-dressers | 5 |
| Coopers | 2 |
| Pianoforte makers | 2 |
| Clay pipe makers | 1 |
| Carpenters | 2 |
| Toy Factory | 1 |
| Asbestos packers | 1 |
| Dye packers | 1 |
| Wheelwright | 1 |
| Total | 729 |

| Nuisance Abated. | Tailors. | Bake-houses. | Joiners. | Cabinet Makers. | Plumbers | Cap Makers. | Dress Makers. | Laun-dries. | Leather Dressers. | Sewing Machine Makers. | Uphol-sterers. | Confec-tioners. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Water closets cleansed and repaired .... | 8 | 3 | .... | 1 | .... | .... | 1 | .... | .... | .... | 1 | 1 | 15 |
| Water closets supplied with water .... | 1 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1 |
| Drains trapped and repaired .... | 3 | 4 | .... | .... | .... | 1 | 6 | .... | .... | .... | .... | .... | 14 |
| Ventilation provided ... | 1 | 1 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 2 |
| Limewashed .... | 6 | 6 | .... | .... | .... | .... | 2 | .... | 2 | .... | .... | .... | 16 |
| Repaired .... .... | .... | 3 | 1 | .... | 1 | .... | .... | .... | .... | .... | .... | .... | 5 |
| Overcrowded .... | .... | .... | .... | .... | .... | .... | 1 | .... | .... | .... | .... | .... | 1 |
| Closed .... .... | 1 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1 |
| W.C. accommodation provided .... | .... | .... | .... | 1 | .... | .... | .... | 1 | .... | 1 | .... | .... | 3 |
| Total .... | 20 | 17 | 1 | 2 | 1 | 1 | 10 | 1 | 2 | 1 | 1 | 1 | 58 |

## SHOP HOURS ACT

| Nature of Shops Inspected. | Number of Inspections. | Number of Shops in which young persons are employed. | Infringements of Act. | Proceedings taken. Result. |
|---|---|---|---|---|
| Drapers .... .... .... | 110 | 90 | .... | .... |
| Butchers .... .... .... | 96 | 85 | .... | .... |
| Grocers .... .... .... | 193 | 184 | .... | .... |
| Hairdressers .... .... | 71 | 66 | .... | .... |
| Chemists .... .... .... | 40 | 39 | 1 | To pay costs |
| Boot and Shoe Shops .... .... | 38 | 34 | 1 | Withdrawn |
| Restaurants .... .... | 35 | 26 | .... | .... |
| Ship Chandlers .... .... | 43 | 39 | .... | .... |
| Clothiers .... .... .... | 58 | 54 | 1 | Cautioned |
| Stationers .... .... .... | 16 | 15 | .... | .... |
| Saddlers .... .... .... | 1 | .... | .... | .... |
| Hatters .... .... .... | 10 | 10 | .... | .... |
| Ironmongers .... .... | 30 | 27 | .... | .... |
| Jewellers .... .... .... | 5 | 5 | .... | .... |
| Furniture Shops .... .... | 3 | 2 | .... | .... |
| Toy Shops .... .... .... | 31 | 29 | .... | .... |
| Leather Dealers .... .... | 4 | 4 | .... | .... |
| Public Houses .... .... | 11 | 7 | .... | .... |
| Confectioners .... .... | 18 | 13 | .... | .... |
| Butter Shops .... .... | 1 | 1 | .... | .... |
| Tobacconists .... .... | 21 | 19 | .... | .... |
| Mantle Shops .... .... | 3 | 2 | .... | .... |
| Fruiterers .... .... .... | 23 | 21 | .... | .... |
| Tea Shops .... .... | 9 | 7 | .... | .... |
| Provision Warehouses .... .... | 1 | 1 | .... | .... |
| Carvers & Gilders .... .... | 3 | 3 | 1 | Fined 5/- & costs |
| Picture Framers .... .... | 1 | 1 | .... | .... |
| Oyster Dealers .... .... | 3 | .... | .... | .... |
| Fishmongers .... .... | 17 | 15 | .... | .... |
| Pawnbrokers .... .... | 7 | 6 | .... | .... |
| India Rubber Stores .... .... | 4 | 3 | .... | .... |
| Wine Merchants .... .... | 1 | 1 | .... | .... |
| Potato Stores .... .... | 5 | 3 | .... | .... |
| Oil and Paint Stores .... .... | 1 | 1 | .... | .... |
| Hosiers .... .... .... | 7 | 7 | .... | .... |
| China Dealers .... .... | 3 | 3 | .... | .... |
| Hotels .... .... .... | 15 | 12 | .... | .... |
| Wholesale Stores .... .... | 7 | 2 | .... | .... |
| Umbrella Makers .... .... | 1 | 1 | .... | .... |
| Cake Makers .... .... | 2 | 2 | .... | .... |
| Total .... .... | 948 | 840 | 4 | .... |

## SALE OF FOOD AND DRUGS ACT.

The following articles were analysed during the year by Mr. Thomas Hughes, F.I.C., F.C.S., Borough Analyst.

| Samples obtained. | Number of Samples. | Number of Genuine Samples. | Number of Samples Adulterated. | Fines. |
|---|---|---|---|---|
| Milk .... .... | 379 | 367 | 12 | 3=£10 and costs<br>2=£5 ,, ,,<br>2=£3 ,, ,,<br>3=£2 ,, ,,<br>2=10/- ,, ,, |
| Mustard .... | 22 | 21 | 1 | 1=£1 ,, ,, |
| Butter .... .... | 88 | 88 | .... | |
| Coffee .... .... | 48 | 47 | 1 | 1=£2 ,, ,, |
| Flour .... .... | 6 | 6 | .... | |
| Bread .... .... | 12 | 12 | .... | |
| Lard .... .... | 6 | 6 | .... | |
| Ginger .... .... | 24 | 23 | 1 | Dismissed |
| Margarine .... | 4 | 4 | .... | |
| Pepper .... .... | 12 | 12 | .... | |
| | | | | Exposing Margarine for sale without being properly marked.<br>2=£3 and costs<br>2=£1 ,, ,,<br>1=5/- ,, ,,<br>1=2/6 ,, ,,<br>1=1/- ,, ,, |
| Total .... | 601 | 586 | 15 | |

## MAGISTERIAL PROCEEDINGS.

| | No. of Cases. | Fines. £ | s. | d. |
|---|---|---|---|---|
| Proceedings under Sale of Food and Drugs Act | 22 .... | 74 | 16 | 0 |
| Overcrowding Common Lodging Houses .... | 1 .... | 0 | 17 | 6 |
| Proceedings under Section 126, Public Health Act, 1875 .... .... .... | 2 .... | 1 | 9 | 6 |
| Proceedings under Shop Hours Act, 1892 .... | 5 .... | 1 | 0 | 0 |
| Proceedings under Section 3, Infectious Disease (Notification) Act, 1889 .... .... | 3 .... | 1 | 5 | 0 |
| Non-compliance with Notices .... .... | 6 .... | | | |

In conclusion I have the pleasure of reporting that your Inspectors of Nuisances have carried out their work in a satisfactory manner, and that they have, as usual, paid the greatest attention to their varied and important duties.

I have the honour to be, Gentlemen,

Your obedient Servant,

EDWARD WALFORD, M.D.,

Medical Officer of Health.

# APPENDIX.

## Report of Mr. D. VAUGHAN, Chief Inspector of Nuisances, and Inspector of Canal Boats for the Year 1894.

| | |
|---|---|
| Nuisances inspected | 3,589 |
| Notices issued | 3,245 |
| Nuisances abated without legal proceedings | 3,239 |
| ,, ,, with ,, ,, | 6 |
| Animals kept so as to be a nuisance | 31 |
| Injurious and foul accumulations | 870 |
| Nuisances from smoke and offensive trades | 4 |
| Suspected samples of water obtained for analysis | — |
| Cesspools cleansed | 5 |
| ,, abolished | 3 |
| Defective drainage | 515 |
| Drains unstopped and cleansed | 355 |
| ,, trapped and repaired | 732 |
| ,, tested | 274 |
| Foul and offensive closets cleansed | 163 |
| Defective apparatus to water closets repaired | 59 |
| Water laid on to dwelling houses | 10 |
| ,, ,, to water closets | 80 |
| ,, ,, to urinals | 4 |
| Additional ventilation provided to rooms | 19 |
| Dilapidated and dirty houses cleansed and repaired | 201 |
| Overcrowding notices | 7 |
| Additional W.C. accommodation provided | 7 |
| DISINFECTION :— | |
| Houses disinfected | 778 |
| Articles of bedding and clothing disinfected | 5,581 |
| ,, ,, ,, destroyed | 37 |
| OFFENSIVE TRADES :— | |
| Premises visited | 672 |
| SLAUGHTER HOUSES AND MARKETS :— | |
| Visits paid to slaughter houses | 264 |
| ,, ,, markets | 340 |
| ARTICLES DESTROYED AS UNFIT FOR FOOD :— | |
| Beef | 671 lbs. |
| Lamb | 30 ,, |
| Pork | 1,915 ,, |
| Veal | 117 ,, |
| Poultry | 182 ,, |
| Mutton | 294 ,, |
| BUTCHERS' AND PROVISION SHOPS :— | |
| Inspected | 1,198 |

Cowsheds and Milkshops :—

| | |
|---|---|
| Number of cowkeepers on register | 78 |
| ,, milksellers ,, | 511 |
| Total | 589 |
| Number of cowkeepers registered during the year | 6 |
| ,, milksellers ,, ,, ,, | 143 |
| Total | 149 |
| Number of cowsheds inspected | 653 |
| ,, milkshops ,, | 1,081 |
| ,, re-visits ,, | 171 |
| Total | 1,905 |
| Notices served, written | 217 |
| ,, ,, verbal | 61 |
| Total | 278 |

## COWSHEDS, MILKSHOPS AND DAIRIES.

| Particulars of Inspection. | Cow-sheds. | Milk-shops. |
|---|---|---|
| Total number inspected | 653 | 1,081 |
| Found in good condition | 480 | 976 |
| Impure water supply | .... | .... |
| Water Closets, Sinks, or Drains Defective | 16 | 45 |
| ,, ,, communicating with premises | .... | .... |
| Receptacles for manure erected | .... | 1 |
| Cesspools | .... | 1 |
| Yards badly paved and accumulations of rubbish | 32 | 57 |
| Dairies or milkshops used for purposes incompatible with proper preservation of milk | .... | .... |
| Dirty milk vessels | .... | .... |
| Infectious disease amongst persons employed | 1 | 11 |
| Swine kept on premises | .... | .... |
| Cowsheds with defective lighting, cleansing and ventilation or air space | 125 | 1 |
| ,, ,, cattle disease | .... | .... |

## CANAL BOATS.

| | |
|---|---|
| Number of boats on register | 45 |
| ,, ,, inspected | 93 |
| ,, ,, found in good condition | 82 |
| ,, ,, ,, without water vessels | 2 |
| ,, ,, ,, with wrong register number | 2 |
| ,, ,, ,, ,, defective ventilation | 6 |
| ,, ,, ,, ,, roof leaking | 1 |
| ,, ,, ,, ,, change of Masters | 4 |
| Number of notices served and complied with | 11 |

# Meteorological Observations for the Year 1894.

| MONTH. | Attached Thermometer. | Barometer. Inches. | TEMPERATURE IN SHADE. | | | | | | | HYGROMETER. | | | RAINFALL. | | | | DEATH RATE Per 1,000. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Maximum. | Minimum. | Mean of Maximum. | Mean of Minimum. | Mean of Month. | Earth. 1 foot. | Earth. 4 feet. | Dry Bulb. | Wet Bulb. | Relative Humidity. | Amount in Inches. | Greatest Fall in 24 hours. | Date of Greatest Fall. | Days on which 0·01 or more rain fell. | All Causes. | 7 Chief Zymotic Diseases. |
| January .... | 51 | 29·832 | 53°·4 | 15°·2 | 44°·2 | 34°·6 | 39°·4 | 39°·5 | 44°·8 | 39°·5 | 37°·8 | 87 | 3·20 | 0·44 | 19th | 23 | 24·4 | 2·90 |
| February .... | 53 | 30·031 | 56°·0 | 24°·4 | 48°·5 | 37°·6 | 43°·0 | 42°·9 | 45°·0 | 42°·1 | 40°·7 | 89 | 3·68 | 0·78 | 17th | 20 | 16·2 | 2·09 |
| March .... | 54 | 29·944 | 63°·2 | 26°·6 | 52°·3 | 36°·6 | 44°·4 | 44°·9 | 46°·0 | 44°·3 | 42°·0 | 84 | 3·37 | 0·82 | 1st | 13 | 17·0 | 2·17 |
| April .... | 55 | 28·883 | 65°·8 | 29°·8 | 56°·2 | 37°·8 | 47°·0 | 47°·4 | 47°·3 | 49°.6 | 46°·7 | 81 | 2·05 | 0·41 | 23rd | 15 | 16·3 | 2·25 |
| May .... | 58 | 29·903 | 68°·0 | 29°·2 | 57°·4 | 42°·1 | 49°·7 | 52°·1 | 50°·7 | 51°·7 | 47°·2 | 72 | 2·18 | 0·50 | 15th | 15 | 19·3 | 2·49 |
| June .... | 61 | 29·906 | 80°·2 | 34°·2 | 65°·0 | 49°·2 | 57°·1 | 56°·7 | 54°·1 | 58°·9 | 54°·8 | 76 | 2·43 | 0·64 | 3rd | 16 | 12·4 | 1·28 |
| July .... | 65 | 29·860 | 84°·2 | 43°·2 | 68°·1 | 52°·5 | 60°·3 | 61°·1 | 57°·8 | 61°·8 | 57°·8 | 77 | 4·22 | 0·97 | 24th | 20 | 11·5 | 0·88 |
| August .... | 63 | 29·928 | 75°·0 | 40°·2 | 64°·9 | 50°·2 | 57°·5 | 60°·3 | 58°·4 | 59°·4 | 56°·1 | 81 | 4·55 | 1·55 | 25th | 18 | 13·8 | 1·61 |
| September .... | 61 | 30·127 | 69°·5 | 32°·0 | 61°·5 | 44°·5 | 53°·2 | 56°·6 | 56°·5 | 55°·3 | 52°·1 | 80 | 2·22 | 0·80 | 22nd | 10 | 16·4 | 1·77 |
| October .... | 58 | 29·901 | 65°·0 | 32°·4 | 56°·7 | 44°·0 | 50°·3 | 52°·3 | 53°·3 | 50°·5 | 48°·7 | 87 | 4·91 | 1·05 | 24th | 14 | 15·9 | 1·45 |
| November .... | 57 | 29·936 | 63°·2 | 32°·0 | 52°·6 | 41°·8 | 47°·2 | 48°·8 | 50°·7 | 47°·5 | 46°·0 | 90 | 4·72 | 0·83 | 13th | 20 | 14·4 | 0·56 |
| December .... | 54 | 29·942 | 54°·0 | 25°·0 | 47°·4 | 36°·3 | 41°·8 | 44°·7 | 47°·4 | 42°·1 | 40°·7 | 89 | 3·66 | 0·51 | 17th | 20 | 16·6 | 1·04 |

Mean Temperature of each month in the year, as compared with that of the previous five years.

| Month. | 1889 | 1890 | 1891 | 1892 | 1893 | Mean of 5 years. | 1894 |
|---|---|---|---|---|---|---|---|
| January .... | 38°·9 | 41°·8 | 35°·8 | 36°·2 | 36°·8 | 37°·9 | 39°·4 |
| February .... | 39°·1 | 38°·1 | 41°·6 | 38°·6 | 42°·2 | 39°·9 | 43°·0 |
| March .... | 41°·8 | 45°·1 | 40°·8 | 35°·9 | 47°·1 | 42°·1 | 44°·4 |
| April .... | 43°·4 | 45°·1 | 45°·5 | 43°·2 | 53°·0 | 46°·0 | 47°·0 |
| May .... | 55°·3 | 54°·7 | 50°·9 | 50°·7 | 57°·3 | 53°·7 | 49°·7 |
| June .... | 61°·6 | 57°·7 | 60°·2 | 54°·5 | 62°·4 | 59°·2 | 57°·1 |
| July .... | 60°·8 | 59°·7 | 60°·2 | 64°·1 | 63°·6 | 61°·6 | 60°·3 |
| August .... | 59°·5 | 59°·8 | 56°·4 | 61°·3 | 64°·8 | 60°·3 | 57°·5 |
| September .... | 56°·7 | 59°·8 | 57°·0 | 56°·0 | 57°·1 | 37°·3 | 53°·2 |
| October .... | 52°·2 | 47°·5 | 48°·8 | 42°·9 | 51°·0 | 48°·4 | 50°·3 |
| November .... | 46°·2 | 45°·3 | 41°·7 | 43°·8 | 43°·2 | 44°·0 | 47°·2 |
| December .... | 39°·9 | 35°·3 | 40°·4 | 35°·8 | 42°·1 | 38°·7 | 41°·8 |

The following Table illustrates the daily direction of Winds throughout the year 1894.

| Direction of Wind. | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. | Year 1894. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N. .... | .... | .... | .... | .... | .... | 1 | .... | .... | .... | 3 | 1 | .... | 5 |
| N.E. .... | 8 | 4 | 2 | 8 | 10 | 6 | 3 | 1 | 13 | 5 | 2 | 5 | 67 |
| N.W. .... | 3 | 4 | 8 | 3 | 6 | 2 | 1 | .... | 3 | 1 | 3 | 11 | 45 |
| N.N.E. .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| N.N.W. .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| S. .... | 1 | 2 | .... | 1 | .... | 7 | 4 | 4 | 2 | 1 | 1 | 4 | 27 |
| S.E. .... | 2 | 1 | 10 | 2 | 4 | 2 | 5 | 4 | 7 | 7 | 7 | 1 | 52 |
| S.W. .... | 11 | 5 | 9 | 11 | 8 | 10 | 12 | 12 | 1 | 11 | 13 | 7 | 110 |
| S.S.E. .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| S.S.W. .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| E. .... | .... | 2 | .... | .... | 1 | 2 | 4 | 7 | 4 | 3 | 1 | .... | 24 |
| W. .... | 6 | 10 | 2 | 6 | 2 | .... | 2 | 3 | .... | .... | 2 | 3 | 36 |

TABLE SHEWING RAINFALL AT CARDIFF IN EACH MONTH, DURING THE NINETEEN YEARS, 1876—1894.

| YEAR. | JANUARY. | | | | FEBRUARY. | | | | MARCH. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Rainfall in Month. Inches. | Days on which 0·01 or more rain fell. | Greatest fall in 24 hours. | Date of greatest fall | Rainfall in Month. Inches. | Days on which 0·01 or more rain fell. | Greatest fall in 24 hours. | Date of greatest fall. | Rainfall in Month. Inches. | Days on which 0·01 or more rain fell. | Greatest fall in 24 hours. | Date of greatest fall. |
| 1876 | 1·91 | 12 | 0·68 | 2nd | 5·33 | 22 | 0·90 | 14th | 3·92 | 22 | 0·54 | 9th |
| 1877 | 5·77 | 27 | 0·72 | 3rd | 2·79 | 20 | 0·42 | 11th | 2·66 | 21 | 0·55 | 23rd |
| 1878 | 1·73 | 17 | 0·36 | 27th | 3·07 | 16 | 0·87 | 27th | 1·25 | 8 | 0·40 | 28th |
| 1879 | 5·95 | 10 | 1·30 | 1st | 5·95 | 23 | 0·86 | 20th | 1·14 | 14 | 0·32 | 23rd |
| 1880 | 0·87 | 11 | 0·42 | 13th | 3·88 | 22 | 1·06 | 18th | 1·90 | 12 | 0·75 | 2nd |
| 1881 | 0·92 | 12 | 0·23 | 26th | 4 81 | 15 | 1·12 | 9th | 3·88 | 16 | 0·68 | 3rd |
| 1882 | 3·19 | 13 | 0·82 | 2nd | 2·56 | 15 | 0·60 | 28th | 2·26 | 19 | 0·32 | 1st |
| 1883 | 5·75 | 25 | 1·11 | 24th | 3·73 | 20 | 0·65 | 10th | 0·60 | 10 | 0·12 | 19th |
| 1884 | 6·03 | 21 | 0·99 | 31st | 4·40 | 22 | 1·35 | 17th | 3.39 | 16 | 1·27 | 3rd |
| 1885 | 3·71 | 20 | 0·58 | 9th | 3·65 | 22 | 0·67 | 26th | 1·87 | 16 | 0·53 | 29th |
| 1886 | 5·03 | 23 | 0·91 | 30th | 1·32 | 11 | 0·62 | 28th | 3·97 | 13 | 0·68 | 20th |
| 1887 | 2·76 | 15 | 0·73 | 7th | 1·45 | 6 | 0·73 | 3rd | 3·21 | 10 | 1·16 | 15th |
| 1888 | 1·70 | 12 | 0·49 | 1st | 1·07 | 9 | 1·09 | 2nd | 4·62 | 15 | 0·76 | 24th |
| 1889 | 1·58 | 10 | 0·58 | 9th | 2·00 | 16 | 0·64 | 10th | 3·89 | 16 | 1·17 | 8th |
| 1890 | 5·21 | 24 | 0·61 | 26th | 0·55 | 7 | 0·22 | 19th | 1·52 | 14 | 0·28 | 24th |
| 1891 | 3·58 | 13 | 1·26 | 23rd | 0·05 | 2 | 0·03 | 2nd | 1·76 | 16 | 0·31 | 15th |
| 1892 | 2·10 | 15 | 0·70 | 16th | 2·38 | 19 | 0·58 | 20th | 1·18 | 6 | 0·48 | 15th |
| 1893 | 2·38 | 19 | 0·94 | 12th | 6·04 | 22 | 0·95 | 25th | 0·31 | 6 | 0·14 | 2nd |
| 1894 | 3·20 | 23 | 0·44 | 19th | 3·68 | 20 | 0·78 | 17th | 3·37 | 13 | 0·82 | 1st |

TABLE SHEWING RAINFALL AT CARDIFF IN EACH MONTH, DURING THE NINETEEN YEARS, 1876—1894.

| YEAR. | APRIL. | | | | MAY. | | | | JUNE. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Rainfall in Month. Inches. | Days on which 0·01 or more rain fell. | Greatest fall in 24 hours. | Date of greatest fall. | Rainfall in Month. Inches. | Days on which 0·01 or more rain fell. | Greatest fall in 24 hours. | Date of greatest fall. | Rainfall in Month. Inches. | Days on which 0·01 or more rain fell. | Greatest fall in 24 hours. | Date of greatest fall. |
| 1876 | 1·91 | 17 | 0·38 | 28th | 0·23 | 4 | 0·12 | 24th | 1·91 | 9 | 0·52 | 15th |
| 1877 | 2·90 | 20 | 0·52 | 20th | 2·47 | 14 | 0·99 | 16th | 1·48 | 12 | 0·41 | 1st |
| 1878 | 4·10 | 21 | 0·75 | 9th | 4·32 | 24 | 0·71 | 16th | 3·68 | 15 | 1·65 | 16th |
| 1879 | 2·64 | 17 | 0·73 | 19th | 2·85 | 15 | 0·88 | 29th | 6·48 | 23 | 1·64 | 30th |
| 1880 | 1·98 | 13 | 0·40 | 5th | 1·45 | 11 | 0·46 | 26th | 2·38 | 19 | 0·53 | 17th |
| 1881 | 1·44 | 7 | 0·60 | 13th | 2·62 | 10 | 1·73 | 17th | 3·59 | 18 | 0·63 | 16th |
| 1882 | 5·68 | 20 | 0·60 | 12th | 2·72 | 13 | 0·59 | 22nd | 4·28 | 20 | 0·82 | 5th |
| 1883 | 0·67 | 7 | 0·28 | 26th | 1·90 | 12 | 0·70 | 11th | 18·1 | 17 | 1·16 | 27th |
| 1884 | 1·56 | 11 | 0·43 | 3rd | 2·37 | 14 | 0·50 | 2nd | 1·92 | 9 | 1·11 | 28th |
| 1885 | 2·52 | 16 | 0·67 | 1st | 3·86 | 27 | 0·71 | 19th | 2·61 | 13 | 1·04 | 23rd |
| 1886 | 2·98 | 15 | 0·73 | 7th | 6·38 | 19 | 1·52 | 31st | 0·70 | 7 | 0·28 | 1st |
| 1887 | 1·63 | 10 | 0·45 | 26th | 1·94 | 14 | 0·63 | 19th | 0·60 | 4 | 0·51 | 2nd |
| 1888 | 1·48 | 13 | 0·30 | 17th | 1·69 | 8 | 0·40 | 17th | 3·69 | 17 | 0·74 | 17th |
| 1889 | 3·54 | 18 | 0·71 | 30th | 2·51 | 16 | 0·88 | 31st | 0·58 | 6 | 0·41 | 1st |
| 1890 | 1·80 | 14 | 0.84 | 6th | 1·99 | 13 | 0·66 | 9th | 2·46 | 17 | 0·40 | 10th |
| 1891 | 2·02 | 11 | 0·40 | 2nd | 3·41 | 17 | 0·75 | 21st | 2·47 | 12 | 1·30 | 24th |
| 1892 | 1·27 | 9 | 0·43 | 20th | 1·35 | 11 | 0·66 | 27th | 1·98 | 10 | 0·61 | 28th |
| 1893 | 0·29 | 5 | 0·16 | 1st | 2·80 | 12 | 0·72 | 19th | 0·67 | 9 | 0·23 | 22nd |
| 1894 | 2·05 | 15 | 0·41 | 23rd | 2·18 | 15 | 0·50 | 15th | 2·43 | 16 | 0·64 | 3rd |

TABLE SHEWING RAINFALL AT CARDIFF IN EACH MONTH, DURING THE NINETEEN YEARS, 1876—1894.

| YEAR. | JULY. | | | | AUGUST. | | | | SEPTEMBER. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Rainfall in Month. Inches. | Days on which 0·01 or more rain fell. | Greatest fall in 24 hours. | Date of greatest fall. | Rainfall in Month. Inches. | Days on which 0·01 or more rain fell. | Greatest fall in 24 hours. | Date of greatest fall. | Rainfall in Month. Inches. | Days on which 0·01 or more rain fell. | Greatest fall in 24 hours. | Date of greatest fall. |
| 1876 | 1·91 | 10 | 0·41 | 6th | 6·06 | 27 | 2·72 | 19th | 7·08 | 19 | 1·28 | 30th |
| 1877 | 4·94 | 18 | 1·27 | 14th | 5·70 | 21 | 1·14 | 27th | 3·25 | 8 | 1·39 | 27th |
| 1878 | 2·01 | 9 | 0.78 | 23rd | 10·82 | 24 | 3·64 | 15th | 3·21 | 9 | 1·28 | 22nd |
| 1879 | 4·00 | 21 | 0·81 | 19th | 8·12 | 22 | 1·34 | 27th | 4·85 | 17 | 0·69 | 7th |
| 1880 | 6·64 | 23 | 0·95 | 17th | 0·77 | 7 | 0·27 | 2nd | 3·67 | 15 | 0·77 | 17th |
| 1881 | 2·62 | 15 | 0·77 | 30th | 6·94 | 20 | 1·45 | 22nd | 2·09 | 13 | 0·48 | 22nd |
| 1882 | 5·77 | 24 | 0·84 | 6th | 6·75 | 16 | 1·14 | 22nd | 3·94 | 17 | 0·79 | 28th |
| 1883 | 3·56 | 21 | 0·82 | 20th | 2·09 | 16 | 0·73 | 8th | 6·14 | 19 | 1·53 | 23rd |
| 1884 | 4·05 | 20 | 0·94 | 23rd | 2·21 | 9 | 0·84 | 31st | 1·96 | 15 | 0·64 | 21st |
| 1885 | 0·72 | 6 | 0·31 | 18th | 2·74 | 12 | 1·07 | 6th | 6·51 | 23 | 1·76 | 10th |
| 1886 | 4·85 | 17 | 0·71 | 29th | 1·68 | 9 | 0·44 | 9th | 4 08 | 14 | 0·75 | 4th |
| 1887 | 1·51 | 13 | 0·85 | 26th | 2·88 | 11 | 1·02 | 16th | 4·07 | 17 | 1·24 | 1st |
| 1888 | 6·83 | 25 | 1·16 | 7th | 3·50 | 17 | 0·74 | 29th | 1·21 | 8 | 0·52 | 27th |
| 1889 | 3·85 | 12 | 1·16 | 9th | 3·90 | 15 | 0·65 | 2nd | 2·09 | 9 | 1·53 | 23rd |
| 1890 | 3·57 | 19 | 0·73 | 17th, | 3·95 | 20 | 0·95 | 9th | 1·57 | 11 | 0·50 | 17th |
| 1891 | 2·21 | 17 | 0·36 | 2nd | 7·19 | 22 | 1·10 | 26th | 2·43 | 19 | 0·51 | 3rd |
| 1892 | 3·83 | 9 | 1·50 | 12th | 4·64 | 16 | 1·62 | 27th | 3·95 | 14 | 1·38 | 29th |
| 1893 | 3·88 | 17 | 0·80 | 10th | 3·05 | 14 | 0·52 | 20th | 2·03 | 15 | 0·89 | 28th |
| 1894 | 4·22 | 20 | 0·97 | 24th | 4·55 | 18 | 1·55 | 25th | 2·22 | 10 | 0·80 | 22nd |

TABLE SHEWING RAINFALL AT CARDIFF IN EACH MONTH, DURING THE NINETEEN YEARS, 1876—1894.

| YEAR. | OCTOBER. | | | | NOVEMBER. | | | | DECEMBER. | | | | YEARS. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Rainfall in Month. Inches. | Days on which 0·01 or more rain fell. | Greatest fall in 24 hours. | Date of greatest fall. | Rainfall in Month. Inches. | Days on which 0·01 or more rain fell. | Greatest fall in 24 hours. | Date of greatest fall. | Rainfall in Month. Inches. | Days on which 0·01 or more rain fell. | Greatest fall in 24 hours. | Date of greatest fall. | Rainfall per annum. Inches. |
| 1876 | 3·84 | 17 | 0·62 | 16th | 5·27 | 18 | 0·75 | 12th | 7·13 | 23 | 0·80 | 17th | 46·62 |
| 1877 | 4·89 | 16 | 1·15 | 24th | 6·54 | 25 | 1·06 | 24th | 3·40 | 25 | 0·88 | 28th | 46·79 |
| 1878 | 5·76 | 18 | 1·09 | 23rd | 5·76 | 13 | 0·84 | 9th | 2·70 | 10 | 0·75 | 28th | 45·71 |
| 1879 | 1·51 | 12 | 0·35 | 19th | 0·43 | 8 | 0·18 | 20th | 2·11 | 9 | 0·79 | 31st | 44·79 |
| 1880 | 4·94 | 15 | 1·45 | 25th | 3·67 | 15 | 0·90 | 15th | 6·70 | 20 | 1·09 | 14th | 38·85 |
| 1881 | 3·23 | 13 | 0·72 | 22nd | 4·98 | 23 | 0·65 | 26th | 4·50 | 15 | 1·77 | 7th | 41·62 |
| 1882 | 8·33 | 23 | 1·64 | 23rd | 6·26 | 21 | 0·90 | 7th | 4·86 | 25 | 0·73 | 31st | 56·60 |
| 1883 | 4·23 | 17 | 0·61 | 15th | 6·38 | 24 | 0·80 | 21st | 1·92 | 17 | 0·57 | 10th | 38·78 |
| 1884 | 1·01 | 17 | 0·35 | 8th | 2·12 | 16 | 0·47 | 30th | 5·87 | 20 | 0·68 | 5th | 36·89 |
| 1885 | 5·59 | 22 | 1·60 | 22nd | 5·47 | 16 | 1·11 | 27th | 1·74 | 17 | 0·05 | 5th | 40·99 |
| 1886 | 5·09 | 21 | 0·87 | 15th | 5·39 | 21 | 1·03 | 5th | 6·64 | 21 | 1·33 | 26th | 48·11 |
| 1887 | 2·80 | 13 | 1·14 | 29th | 3·48 | 21 | 0·69 | 3rd | 3·46 | 20 | 0·75 | 12th | 29·79 |
| 1888 | 1·74 | 11 | 0·52 | 28th | 7·04 | 26 | 1·13 | 12th | 3·61 | 16 | 0·88 | 27th | 38·18 |
| 1889 | 3·77 | 25 | 0·48 | 8th | 1·87 | 12 | 0·75 | 24th | 2·40 | 14 | 0·80 | 21st | 31·38 |
| 1890 | 1·92 | 16 | 0·41 | 7th | 3·89 | 20 | 0·67 | 6th | 0·80 | 4 | 0·33 | 18th | 29·23 |
| 1891 | 7·12 | 22 | 1·32 | 18th | 3·91 | 15 | 0·74 | 28th | 6·19 | 19 | 0·78 | 30th | 42·34 |
| 1892 | 2·64 | 15 | 0·51 | 27th | 3·25 | 18 | 0·66 | 4th | 2·23 | 12 | 0·62 | 1st | 22·63 |
| 1893 | 5·98 | 21 | 1·29 | 4th | 2·30 | 13 | 0·58 | 1st | 4·18 | 19 | 0·94 | 12th | 33·91 |
| 1894 | 4·91 | 14 | 1·05 | 24th | 4·72 | 20 | 0·83 | 13th | 3·66 | 20 | 0·51 | 17th | 41·19 |

# DEATHS REGISTERED AT AGES FROM THE SEVERAL CAUSES.—Year, 1894.

| Causes of Death. (classes.) | 0 to 5 | | 5 to 10 | | 10 to 15 | | 15 to 25 | | 25 to 30 | | 30 to 35 | | 35 to 40 | | 40 to 45 | | 45 to 50 | | 50 to 55 | | 55 to 60 | | 60 to 65 | | 65 to 70 | | 70 to 75 | | 75 to 80 | | 80 to 85 | | 85 & upwards | | Total. | | Death Rate per 1,000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | |
| I. Specific Febrile or Zymotic Diseases ... | 109 | 115 | 19 | 14 | 1 | 3 | 4 | 5 | 2 | 2 | 3 | 3 | 1 | 1 | 2 | 3 | 2 | ... | 1 | 3 | ... | 2 | 1 | 4 | 1 | 2 | 2 | ... | 1 | 1 | ... | ... | ... | 1 | 149 | 159 | 2·068 |
| II. Parasitic Diseases ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| III. Dietic ... ... ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 3 | 4 | 0·047 |
| IV. Constitutional ... ... ... | 55 | 67 | 7 | 6 | 5 | 8 | 29 | 23 | 22 | 19 | 15 | 11 | 22 | 19 | 15 | 19 | 16 | 18 | 18 | 11 | 14 | 8 | 14 | 5 | 9 | 10 | 2 | 1 | 1 | 3 | ... | ... | 1 | ... | 245 | 223 | 3·143 |
| V. Developmental ... ... ... | 64 | 80 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 1 | 1 | 2 | 5 | 11 | 6 | 12 | 16 | 12 | 7 | 8 | 4 | 110 | 70 | 1·208 |
| VI Local ... ... ... ... | 262 | 208 | 4 | 14 | 5 | 10 | 22 | 18 | 9 | 21 | 17 | 16 | 27 | 14 | 28 | 28 | 30 | 22 | 34 | 34 | 29 | 21 | 38 | 29 | 33 | 24 | 26 | 22 | 14 | 19 | 4 | 4 | 2 | 1 | 584 | 500 | 7·280 |
| VII. Violence ... ... ... | 10 | 8 | 7 | ... | 2 | ... | 21 | 1 | 7 | 2 | 12 | ... | 7 | ... | 7 | 1 | 2 | 1 | 4 | 1 | 3 | ... | 5 | ... | 3 | 1 | ... | 2 | ... | ... | ... | ... | ... | ... | 90 | 17 | 0·718 |
| VIII. Ill-defined and not specified causes ... | 79 | 80 | 6 | 1 | ... | 2 | 3 | 3 | 1 | 4 | 5 | 2 | 4 | 4 | 6 | 3 | 4 | 3 | 7 | 4 | 8 | 3 | 4 | 4 | 3 | 4 | 3 | 2 | 2 | 4 | 1 | 2 | ... | ... | 136 | 125 | 1·752 |
| Total ... ... ... | 579 | 508 | 48 | 35 | 18 | 28 | 79 | 51 | 42 | 48 | 52 | 32 | 62 | 38 | 59 | 49 | 54 | 39 | 64 | 54 | 54 | 35 | 63 | 44 | 51 | 46 | 44 | 33 | 30 | 44 | 17 | 18 | 11 | 6 | 1817 | 1098 | 16·22 |
| Class 1.—Specific Febrile or Zymotic Diseases. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| *Miasmatic Diseases.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Small Pox—No Statement ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 0·003 |
| Measles ... ... ... ... | 2 | 6 | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 | 7 | 0·078 |
| Scarlet Fever ... ... ... | 2 | 4 | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 6 | 0·053 |
| Typhus ... ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 0·006 |
| Influenza ... ... ... ... | 3 | 1 | ... | ... | ... | ... | 1 | 1 | 2 | 1 | ... | ... | ... | ... | 1 | 1 | ... | 1 | ... | ... | 1 | 1 | 3 | ... | 1 | ... | ... | 1 | ... | 1 | ... | ... | 1 | ... | 9 | 12 | 0·141 |
| Whooping-cough ... ... ... | 55 | 62 | 3 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 58 | 65 | 0·826 |
| Diphtheria ... ... ... ... | 18 | 18 | 12 | 10 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 30 | 29 | 0·396 |
| Simple and ill-defined Fever ... ... | ... | ... | ... | ... | ... | ... | 1 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 1 | 0·020 |
| Enteric Fever ... ... ... | ... | 1 | 1 | ... | ... | ... | 2 | 2 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 | 3 | 0·047 |
| *Diarrhœal Diseases.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diarrhœa, Dysentery ... ... | 20 | 18 | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 2 | ... | ... | ... | ... | ... | ... | ... | 26 | 19 | 0·302 |
| *Venereal Diseases.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Syphilis ... ... ... | 9 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 9 | 6 | 0·100 |
| Gonorrhœa, Stricture of Urethra ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 0·006 |
| *Septic Diseases.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Erysipelas ... ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 2 | ... | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 2 | 5 | 0·047 |
| Pyæmia, Septicæmia ... ... ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 2 | 0·020 |
| Puerperal Fever ... ... ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 0·020 |
| Total ... ... ... | 109 | 115 | 19 | 14 | 1 | 3 | 4 | 5 | 2 | 2 | 3 | 3 | 1 | 1 | 2 | 3 | 2 | ... | 1 | 3 | ... | 2 | 1 | 4 | 1 | 2 | 2 | ... | 1 | 1 | ... | ... | ... | 1 | 149 | 159 | 2·068 |

| Causes of Death. | 0 to 5 | | 5 to 10 | | 10 to 15 | | 15 to 25 | | 25 to 30 | | 30 to 35 | | 35 to 40 | | 40 to 45 | | 45 to 50 | | 50 to 55 | | 55 to 60 | | 60 to 65 | | 65 to 70 | | 70 to 75 | | 75 to 80 | | 80 to 85 | | & upwards | | Total. | | Death Rate per 1,000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | |
| Class III.—*Dietic Diseases.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intemperance—Chronic Alcoholism ... ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 2 | 4 | 0·040 |
| ,, Delirium Tremens ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 0·006 |
| Total ... ... ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 3 | 4 | 0·047 |
| Class IV.—*Constitutional Diseases.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rheumatic Fever, Rheumatism of Heart ... | ... | 2 | ... | ... | ... | ... | 3 | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 | 4 | 0·060 |
| Rheumatism ... ... ... ... | ... | ... | 1 | ... | ... | ... | 1 | 1 | 1 | ... | 1 | 1 | ... | 1 | ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 | 4 | 0·060 |
| Rickets ... ... ... ... | 7 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 7 | 5 | 0·080 |
| Cancer ... ... ... ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 1 | 1 | 2 | 2 | 8 | 4 | 3 | 6 | 7 | 1 | 2 | 8 | 3 | 4 | 8 | 2 | 1 | ... | 3 | ... | 1 | ... | 30 | 33 | 0·456 |
| Tabes Mesenterica ... ... ... | 4 | 7 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 | 7 | 0·080 |
| Tubercular Meningitis (Acute Hydrocephalus) ... | 27 | 20 | 3 | 4 | 1 | 5 | 3 | 2 | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 2 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 34 | 44 | 0·523 |
| Phthisis ... ... ... ... | 5 | 7 | 1 | 1 | 3 | 2 | 20 | 20 | 20 | 17 | 13 | 9 | 17 | 15 | 11 | 9 | 10 | 10 | 10 | 2 | 9 | 3 | 5 | 2 | 4 | 2 | ... | ... | ... | ... | ... | ... | 128 | 99 | 1·524 |
| Other forms of Tuberculosis, Scrofula ... | 12 | 17 | 3 | ... | 1 | ... | 1 | ... | 1 | 2 | ... | 2 | ... | 1 | ... | 1 | ... | 1 | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 25 | 19 | 0·294 |
| Anæmia, Chlorcsis, Leucocythæmia ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 0·020 |
| Diabetes Mellitus ... ... ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 2 | ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 6 | ... | 0·040 |
| Total ... ... ... | 55 | 67 | 7 | 6 | 5 | 8 | 29 | 23 | 22 | 19 | 15 | 11 | 22 | 19 | 15 | 19 | 16 | 13 | 18 | 11 | 14 | 8 | 14 | 5 | 9 | 10 | 2 | 1 | 1 | 3 | ... | 1 | 245 | 223 | 3·143 |
| Class V.—*Developmental Diseases.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Premature Birth ... ... ... ... | 58 | 24 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 58 | 24 | 0·550 |
| Atelectasis ... ... ... ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | 0·013 |
| Cyanosis ... ... ... ... | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 1 | 0·020 |
| Spina Bifida ... ... ... ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | 0·013 |
| Cleft Palate, Harelip... ... ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 0·006 |
| Other Congenital Defects ... ... | 1 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 3 | 0·026 |
| Old Age ... ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | 1 | 2 | 5 | 11 | 6 | 12 | 16 | 12 | 7 | 8 | 4 | 46 | 40 | 0·577 |
| Total ... ... ... | 64 | 30 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | 1 | 2 | 5 | 11 | 6 | 12 | 16 | 12 | 7 | 8 | 4 | 110 | 70 | 1·208 |
| Class VI.—Local.—1.—*Diseases of Nervous System.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Apoplexy ... ... ... ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | 2 | 1 | 1 | ... | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 1 | ... | 4 | 1 | ... | 1 | ... | 17 | 14 | 0·208 |
| Paralysis ... ... ... ... | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 2 | 1 | 2 | 1 | 1 | 3 | 2 | 2 | 2 | ... | ... | 1 | ... | 1 | ... | ... | ... | 1 | ... | ... | 10 | 11 | 0·141 |
| Softening of Brain ... ... ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | 1 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | 4 | 2 | 0·040 |
| Hemiplegia, Brain Paralysis ... ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 2 | ... | 1 | ... | 2 | 1 | 2 | 2 | 1 | 1 | ... | 1 | ... | 1 | 11 | 6 | 0·114 |
| Paralysis, Agitans ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 1 | 1 | 0·013 |

| Causes of Death. | 0 to 5 | | 5 to 10 | | 10 to 15 | | 15 to 25 | | 25 to 30 | | 30 to 35 | | 35 to 40 | | 40 to 45 | | 45 to 50 | | 50 to 55 | | 55 to 60 | | 60 to 65 | | 65 to 70 | | 70 to 75 | | 75 to 80 | | 80 to 85 | | 85 & upwards | | Total. | | Death Rate per 1,000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Class VI.—*Continued.* | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | |
| Epilepsy | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | 2 | ... | ... | ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 | 0·040 |
| Convulsions | ... | ... | 74 | 49 | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 74 | 51 | 0·040 |
| Laryngismus Stridulus | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | 0·013 |
| Myelitis | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 3 | 2 | 0·033 |
| Paraplegia, Diseases of Spinal Cord | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 2 | 0·033 |
| Other Diseases of Nervous System | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 2 | 0·013 |
| 2.—*Diseases of Organs of Special Sense.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Otitis, Ottorrhœa | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 0·006 |
| 3.—*Diseases of Circulatory System.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Endocarditis, Valvular Diseases | ... | ... | 1 | ... | 3 | 1 | 5 | 5 | 3 | 1 | 6 | 5 | 2 | 6 | 2 | 7 | 7 | 6 | 3 | 5 | 10 | 10 | 4 | 9 | 7 | 7 | 7 | 9 | 6 | 4 | 4 | 1 | 1 | 1 | 78 | 70 | 0·994 |
| Pericarditis | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 0·006 |
| Syncope | ... | ... | 1 | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | 3 | 3 | 0·040 |
| Aneurism | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 | 1 | 0·033 |
| Senile Gangrine | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 | ... | 0·033 |
| 4.—*Diseases of Respiratory System.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Laryngitis | ... | ... | 5 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 | 3 | 0·053 |
| Croup | ... | ... | 15 | 11 | ... | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 15 | 14 | 0·194 |
| Other Diseases of Larynx and Trachea | ... | ... | 3 | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 3 | 0·033 |
| Emphysema, Asthma | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 2 | 2 | 0·026 |
| Bronchitis | ... | ... | 54 | 49 | ... | 2 | ... | ... | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 1 | 6 | 2 | 6 | 3 | 1 | 5 | 8 | 7 | 11 | 5 | 4 | 8 | ... | 5 | 3 | ... | ... | 100 | 92 | 1·289 |
| Pneumonia | ... | ... | 60 | 53 | 1 | 3 | ... | 2 | 8 | 5 | 5 | 1 | 4 | 1 | 7 | 2 | 7 | 1 | 7 | 5 | 11 | 6 | 3 | 2 | 3 | 4 | 3 | 3 | 1 | 1 | 2 | 2 | ... | 1 | 122 | 92 | 1·437 |
| Pleurisy | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 3 | 0·026 |
| Other Diseases of Respiratory System | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 0·006 |
| 5.—*Diseases of Digestive System.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomatitis | ... | ... | 1 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 1 | 0·020 |
| Dentition | ... | ... | 15 | 14 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 15 | 14 | 0·194 |
| Diseases of Stomach | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 0·006 |
| Gastritis | ... | ... | 2 | 3 | ... | ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 | 4 | 0·067 |
| Enteritis | ... | ... | 13 | 13 | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | 1 | ... | ... | ... | 1 | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | 18 | 16 | 0·228 |
| Ulceration of Intestine | ... | ... | 4 | 1 | ... | 1 | ... | ... | 2 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 8 | 1 | 0·060 |
| Ileus, Obstruction of Intestine | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 1 | 1 | 1 | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 4 | 5 | 0·060 |
| Stricture or Strangulation of Intestine | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 0·006 |

| CAUSES OF DEATH. | 0 to 5 | | 5 to 10 | | 10 to 15 | | 15 to 25 | | 25 to 30 | | 30 to 35 | | 35 to 40 | | 40 to 45 | | 45 to 50 | | 50 to 55 | | 55 to 60 | | 60 to 65 | | 65 to 70 | | 70 to 75 | | 75 to 80 | | 80 to 85 | | 85 & upwards | | TOTAL. | | Death Rate per 1,000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CLASS VI.—*Continued.* | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | |
| | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intussusception of Intestine ... ... ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 2 | 0·020 |
| Hernia ... ... ... ... ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 5 | ... | 0·033 |
| Peritonitis ... ... ... ... ... | 2 | 2 | ... | 1 | ... | 1 | 1 | 1 | ... | 3 | ... | 1 | 2 | 4 | 1 | 1 | 1 | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | 7 | 16 | 0·154 |
| Ascites ... ... ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 0·006 |
| Jaundice ... ... ... ... ... | 2 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 2 | 3 | 0·033 |
| Gallstones ... ... ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 0·006 |
| Hepatitis ... ... ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 0·013 |
| Cirrhosis of Liver ... ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | 2 | ... | ... | 1 | ... | 1 | ... | 2 | 1 | ... | 1 | 2 | 1 | 1 | 1 | ... | 1 | ... | ... | ... | ... | ... | 9 | 6 | 0·100 |
| Other Diseases of Liver ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | 0·013 |
| Other Diseases of Digestive System ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 0·006 |
| 6.—*Diseases of Lymphatic System and Ductless Glands.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Disease of Lymphatic System ... ... ... | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | 0·013 |
| 7.—*Diseases of Urinary System.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acute Nephritis ... ... ... ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | 2 | ... | 1 | 1 | ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 5 | 4 | 0·060 |
| Bright's Disease ... ... ... ... | ... | ... | ... | ... | ... | ... | ... | 1 | 2 | 1 | 3 | 2 | ... | ... | 1 | 2 | 3 | 2 | 1 | 2 | 1 | 5 | 1 | 3 | 1 | ... | ... | ... | ... | ... | ... | ... | 18 | 13 | 0·208 |
| Uræmia ... ... ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 0·013 |
| Suppression of Urine ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 0·006 |
| Hæmaturia ... ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 0·006 |
| Disease of Bladder and of Prostate ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | 1 | ... | ... | ... | ... | 4 | 1 | 0·033 |
| 8.—*Diseases of Organs of Generation.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Metritis ... ... ... ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 0·006 |
| Diseases of Uterus and Vagina ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 0·006 |
| Pelvic Abscess ... ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 0·006 |
| Perineal Abscess ... ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 0·006 |
| 9.—*Diseases of Parturition.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Childbirth ... ... ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 | ... | 1 | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 8 | 0·053 |
| Puerperal Convulsions ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 0·006 |
| Placenta Prævia, Flooding ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 0·006 |
| Phlegmasia Dolens ... ... ... ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 0·006 |
| 10.—*Diseases of Organs of Locomotion.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Caries, Necrosis ... ... ... ... | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 | ... | 0·026 |
| Arthritis, Ostitis, Periostitis ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | 1 | ... | ... | 2 | 1 | 0·020 |
| 11.—*Diseases of Integumentary System.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Phlegmon, Cellulitis ... ... ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 0·006 |

# DEATHS REGISTERED AT AGES FROM THE SEVERAL CAUSES.—Year, 1894.

| Causes of Death. | 0 to 5 | | 5 to 10 | | 10 to 15 | | 15 to 25 | | 25 to 30 | | 30 to 35 | | 35 to 40 | | 40 to 45 | | 45 to 50 | | 50 to 55 | | 55 to 60 | | 60 to 65 | | 65 to 70 | | 70 to 75 | | 75 to 80 | | 80 to 85 | | 85 & upwards | | Total. | | Death Rate per 1,000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Class VI.—*Continued.* | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | |
| Ulcer, Bedsore | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | 2 | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 | 7 | 0·053 |
| Eczema | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 0·006 |
| Pemphigus | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | 0·013 |
| Total | 262 | 208 | 4 | 14 | 5 | 10 | 22 | 18 | 9 | 21 | 17 | 16 | 27 | 14 | 28 | 23 | 30 | 22 | 34 | 34 | 29 | 21 | 38 | 29 | 33 | 24 | 26 | 22 | 14 | 19 | 4 | 4 | 2 | 1 | 584 | 500 | 7·280 |
| Class VII.—*Violence, Accident, or Negligence.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fractures, Contusions | 1 | 1 | 1 | ... | 1 | ... | 11 | ... | 5 | 1 | 3 | ... | 3 | ... | ... | 1 | 1 | 1 | 1 | 1 | ... | 3 | ... | 2 | 1 | ... | 2 | ... | ... | ... | ... | ... | ... | ... | 33 | 7 | 0·268 |
| Gunshot Wounds | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 0·006 |
| Burn, Scald | 7 | 4 | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 9 | 5 | 0·094 |
| Poison | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 0·006 |
| Drowning | 2 | 2 | 5 | ... | 1 | ... | 9 | ... | 2 | 1 | 6 | ... | 1 | ... | 5 | ... | 1 | ... | 2 | ... | 1 | ... | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 37 | 3 | 0·268 |
| Suffocation | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | 0·013 |
| *Suicide.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gunshot Wounds | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 0·006 |
| Cut, Stab | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 0·006 |
| Poison | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 0·006 |
| Drowning | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 0·006 |
| Hanging | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | ... | 0·020 |
| Otherwise | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | 0·013 |
| Total | 10 | 8 | 7 | ... | 2 | ... | 21 | 1 | 7 | 2 | 12 | ... | 7 | ... | 7 | 1 | 2 | 1 | 4 | 1 | 3 | ... | 5 | ... | 3 | 1 | ... | 2 | ... | ... | ... | ... | ... | ... | 90 | 17 | 0·718 |
| Class VIII.—*Ill-defined and not Specified Causes.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Debility, Atrophy, Inanition | 58 | 57 | 3 | 1 | ... | ... | 1 | 1 | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | 2 | 1 | ... | 1 | 1 | 1 | 1 | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | 68 | 64 | 0·886 |
| Tumour | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 1 | ... | 1 | 1 | 1 | 1 | ... | ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 5 | 5 | 0·067 |
| Abscess | ... | 3 | 1 | ... | ... | ... | 1 | ... | 1 | 2 | ... | ... | ... | ... | 2 | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 | 7 | 0·080 |
| Hæmorrhage | 1 | ... | 1 | ... | ... | ... | 1 | ... | ... | ... | 1 | ... | 1 | ... | 2 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | 6 | 6 | 0·080 |
| Sudden (Cause unascertained) | 18 | 19 | 1 | ... | 2 | 2 | ... | 1 | 3 | 2 | 1 | 3 | 2 | 5 | 1 | 2 | 2 | 5 | 2 | 5 | 1 | 1 | 3 | 2 | 2 | ... | 2 | 2 | 1 | 1 | ... | ... | ... | ... | 50 | 41 | 0·026 |
| Other ill-defined and not specified | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 2 | 2 | 0·026 |
| Total | 79 | 80 | 6 | 1 | ... | 2 | 3 | 3 | 1 | 4 | 5 | 2 | 4 | 4 | 6 | 3 | 4 | 3 | 7 | 4 | 8 | 3 | 4 | 4 | 3 | 4 | 3 | 2 | 2 | 4 | 1 | 2 | ... | ... | 136 | 125 | 1·752 |

# LOCAL GOVERNMENT BOARD TABLES.

K². 3. TABLE OF DEATHS DURING THE YEAR 1894, IN THE URBAN SANITARY DISTRICT OF CARDIFF, CLASSIFIED ACCORDING TO DISEASES, AGES, AND LOCALITIES.

[A]

| NAMES OF LOCALITIES adopted for the purpose of these Statistics; public Institutions being shown as separate localities. | MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES. | | | | | | | | MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE. | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | FEVERS. | | | | | | | | | | | | | | | | |
| | At all Ages. | Under 1 year. | 1 and under 5. | 5 and under 15. | 15 and under 25. | 25 and under 65. | 65 and upwards. | | Small-Pox. | Scarlatina. | Diphtheria. | Membranous Croup. | Typhus. | Enteric or Typhoid. | Continued. | Relapsing. | Puerperal. | Cholera. | Erysipelas. | Measles. | Whooping Cough. | Diarrhœa and Dysentery. | Rheumatic Fever. | Ague. | Phthisis. | Bronchitis, Pneumonia, and Pleurisy. | Heart Disease. | Injuries. | All other Diseases. | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| Cardiff Urban Sanitary District | 2149 | 666 | 372 | 109 | 103 | 634 | 265 | Under 5 | .... | 5 | 35 | 26 | .... | 1 | .... | .... | .... | .... | .... | 8 | 114 | 37 | 2 | .... | 12 | 210 | 1 | 13 | 574 | 1038 |
| | | | | | | | | 5 upwards | .... | 2 | 23 | 3 | 1 | 2 | .... | .... | 3 | .... | 7 | 3 | 6 | 6 | 7 | .... | 174 | 174 | 122 | 73 | 505 | 1111 |
| Cardiff Sanatorium for Infectious Diseases | 1 | .... | 1 | .... | .... | .... | .... | Under 5 | .... | 1 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1 |
| | | | | | | | | 5 upwards | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| PUBLIC INSTITUTIONS. Union .... | 182 | 30 | 7 | .... | 10 | 108 | 27 | Under 5 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 3 | 1 | .... | .... | .... | 5 | .... | .... | 28 | 37 |
| | | | | | | | | 5 upwards | .... | .... | .... | .... | .... | 1 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 39 | 11 | 19 | 2 | 73 | 145 |
| Infirmary .... | 69 | 3 | 8 | 5 | 12 | 38 | 3 | Under 5 | .... | .... | 1 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 5 | 4 | 11 |
| | | | | | | | | 5 upwards | .... | .... | .... | .... | .... | 1 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 2 | 7 | 5 | 13 | 30 | 58 |
| Hamadryad Hospital Ship .... | 14 | .... | .... | .... | 5 | 9 | .... | Under 5 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| | | | | | | | | 5 upwards | 1 | .... | .... | .... | .... | 2 | .... | .... | .... | .... | .... | .... | 1 | .... | .... | .... | .... | 2 | 1 | 1 | 6 | 14 |
| TOTALS .... | 2415 | 699 | 388 | 114 | 130 | 789 | 295 | Under 5 | .... | 6 | 36 | 26 | .... | 1 | .... | .... | .... | .... | .... | 8 | 117 | 38 | 2 | .... | 12 | 216 | 1 | 18 | 606 | 1087 |
| | | | | | | | | 5 upwards | 1 | 2 | 23 | 3 | 1 | 6 | .... | .... | 3 | .... | 7 | 3 | 6 | 7 | 7 | .... | 215 | 194 | 147 | 89 | 614 | 1328 |

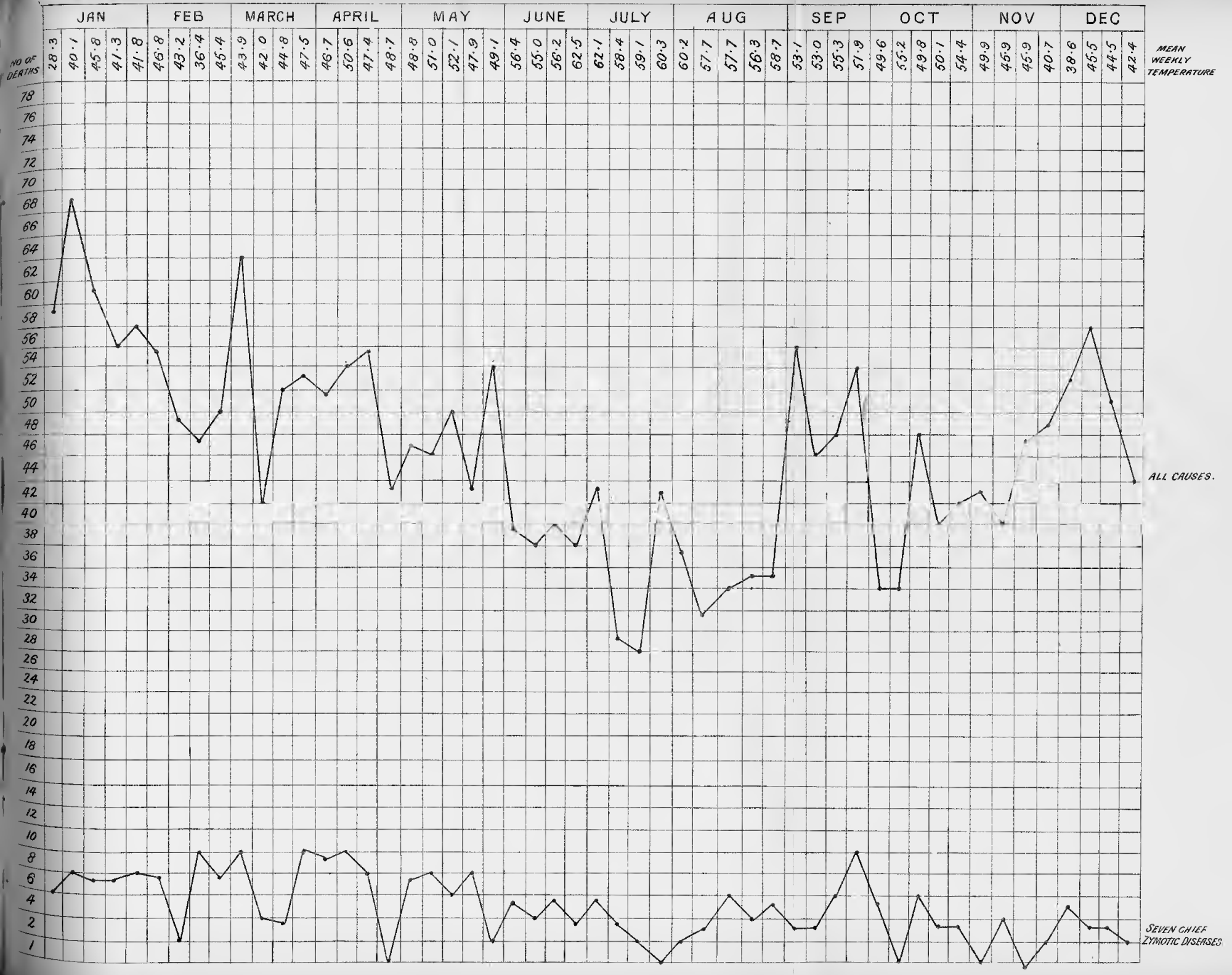
# LOCAL GOVERNMENT BOARD TABLES.

K² 11. Table of Population, Births, and of New Cases of Infectious Sickness, coming to the knowledge of the Medical Officer of Health, during the Year 1894, in the Urban Sanitary District of Cardiff, classified according to Diseases, Ages and Localities.

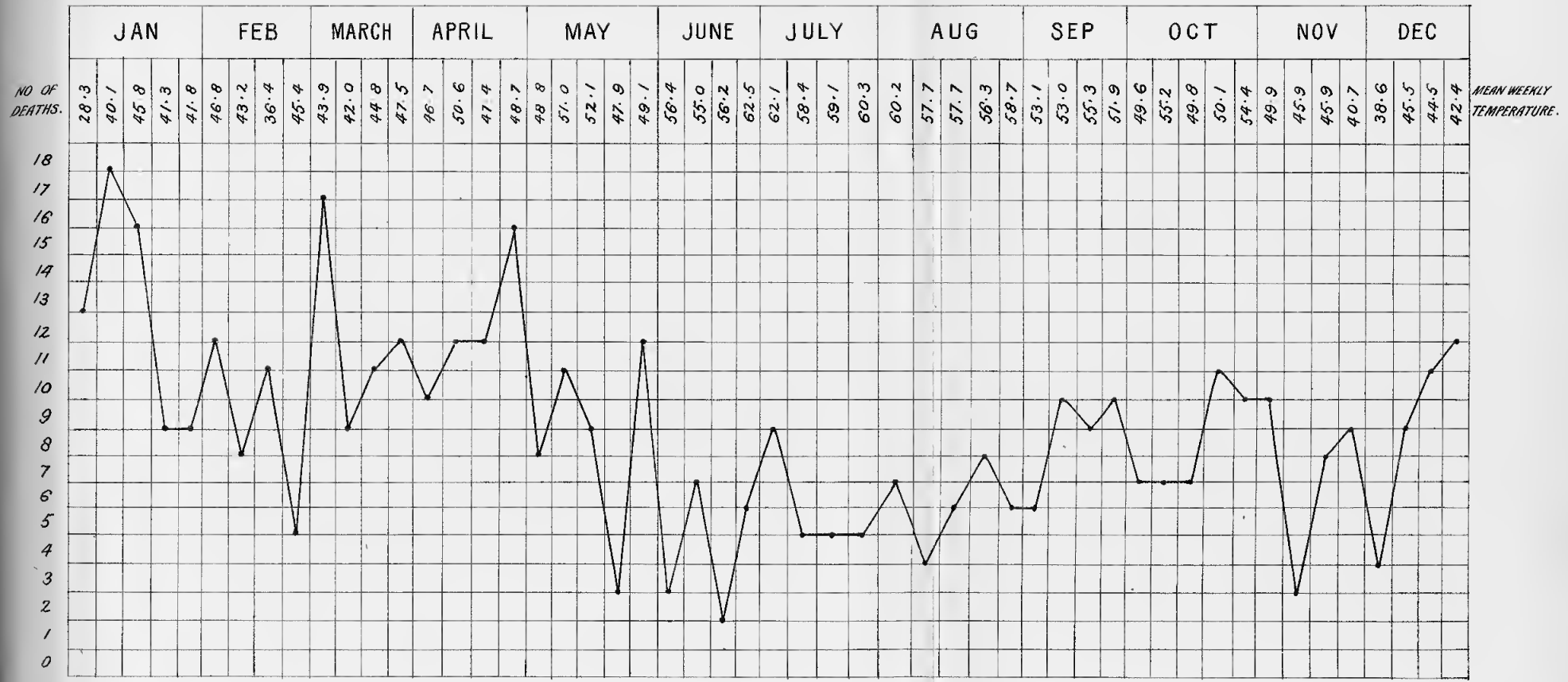
[B]

| Names of Localities adopted for the purpose of these statistics; Public Institutions being shown as separate localities. | Population at all Ages. Census 1891. | Population at all Ages. Estimated to middle of 1894. | Registered Births. | Aged under 5 or over 5. | New Cases of Sickness in each Locality, coming to the knowledge of the Medical Officer of Health. Small-Pox. | Scarlatina. | Diphtheria. | Membranous Croup. | Fevers. Typhus. | Enteric or Typhoid. | Continued. | Relapsing. | Puerperal. | Cholera. | Erysipelas. | | | Number of such Cases Removed from their Homes in the several Localities for Treatment in Isolation Hospitals. Small-Pox. | Scarlatina. | Diphtheria. | Membranous Croup. | Fevers. Typhus. | Enteric or Typhoid. | Continued. | Relapsing. | Puerperal. | Cholera. | Erysipelas. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (a) | (b) | (c) | (d) | (e) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Cardiff Urban Sanitary District .... | 128,849 | 148890 | 5100 | Under 5 | .... | 167 | 94 | 15 | .... | 6 | .... | .... | .... | .... | 1 | .... | .... | .... | 58 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| | | | | 5 upwards | 9 | 407 | 231 | 2 | 1 | 50 | 3 | .... | 19 | .... | 119 | .... | .... | 9 | 119 | 1 | .... | .... | 1 | .... | .... | .... | .... | .... | .... | .... |
| Public Institutions. Union .... | .... | .... | .... | Under 5 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| | | | | 5 upwards | 1 | .... | .... | .... | .... | 4 | .... | .... | .... | .... | 9 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| Public Institutions. Infirmary .... | .... | .... | .... | Under 5 | .... | 3 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 3 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| | | | | 5 upwards | .... | .... | 1 | .... | .... | 2 | .... | .... | .... | .... | 6 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| Public Institutions. Hamadryad Hospital Ship .... | .... | .... | .... | Under 5 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| | | | | 5 upwards | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| Totals .... | 128849 | 148890 | 5100 | Under 5 | .... | 170 | 94 | 15 | .... | 6 | .... | .... | .... | .... | 1 | .... | .... | .... | 61 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| | | | | 5 upwards | 10 | 407 | 232 | 2 | 1 | 56 | 3 | .... | 19 | .... | 134 | .... | .... | 9 | 119 | 1 | .... | .... | 1 | .... | .... | .... | .... | .... | .... | .... |

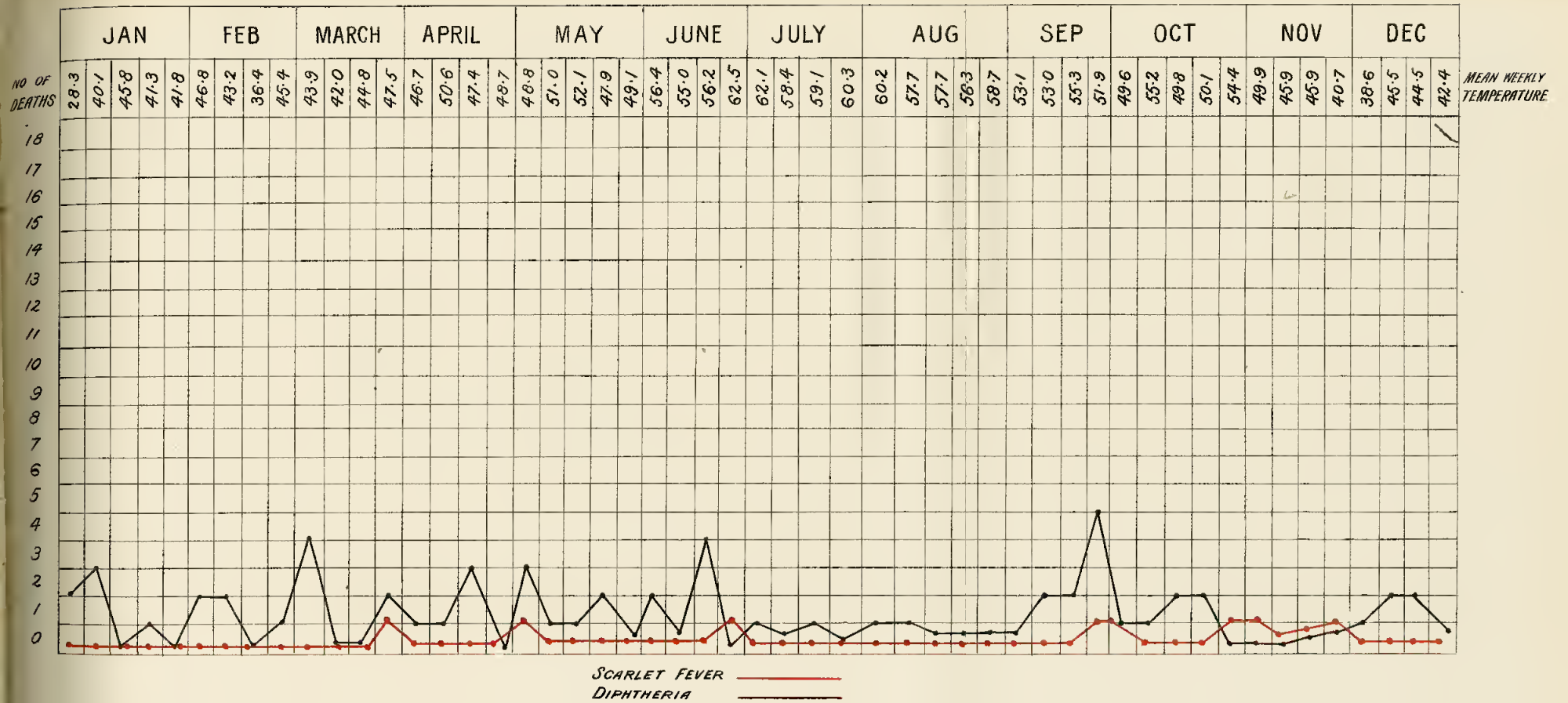
# Chart shewing the number of Deaths from all causes and from the Seven chief Zymotic Diseases during each week in the Year 1894.



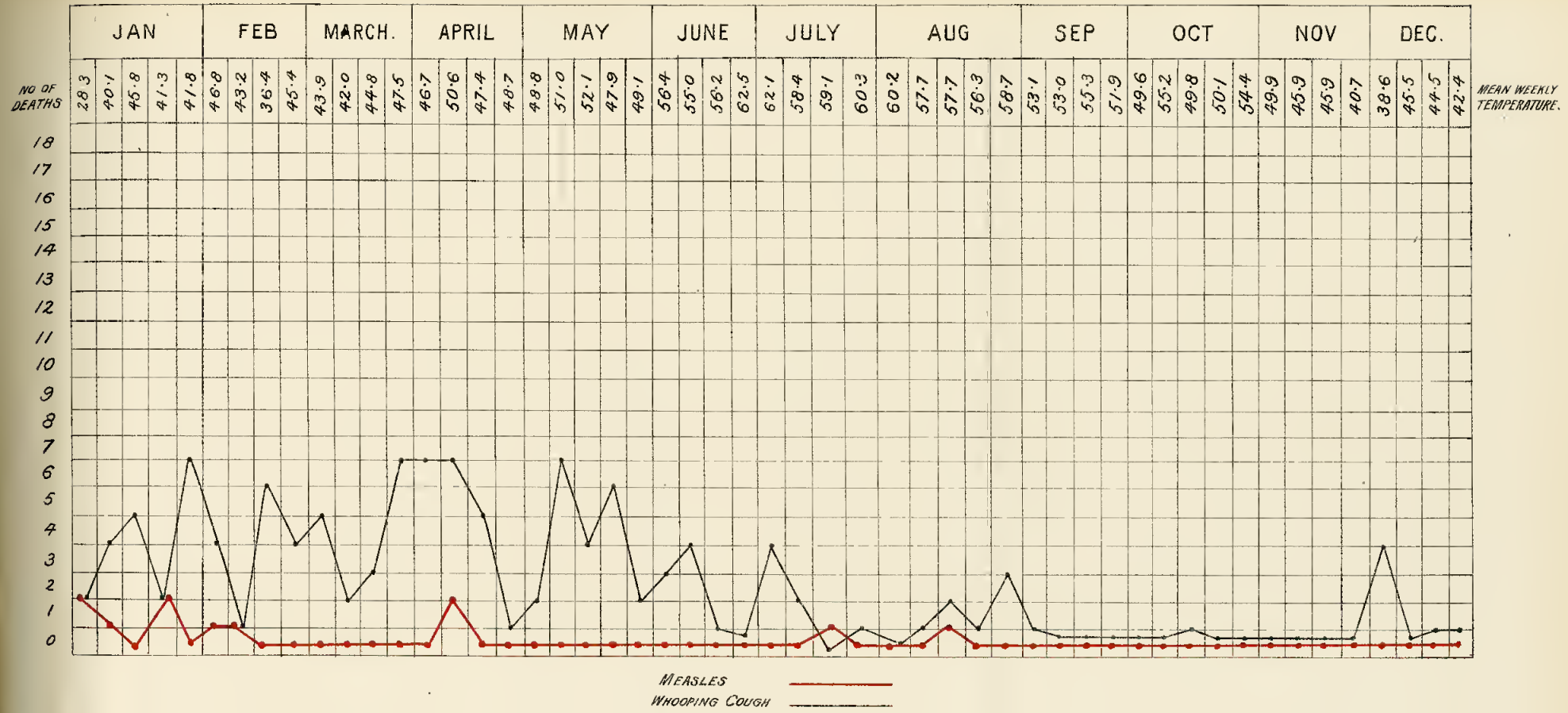
# Chart shewing the number of Deaths from the Respiratory Diseases during each Week in the Year 1894.



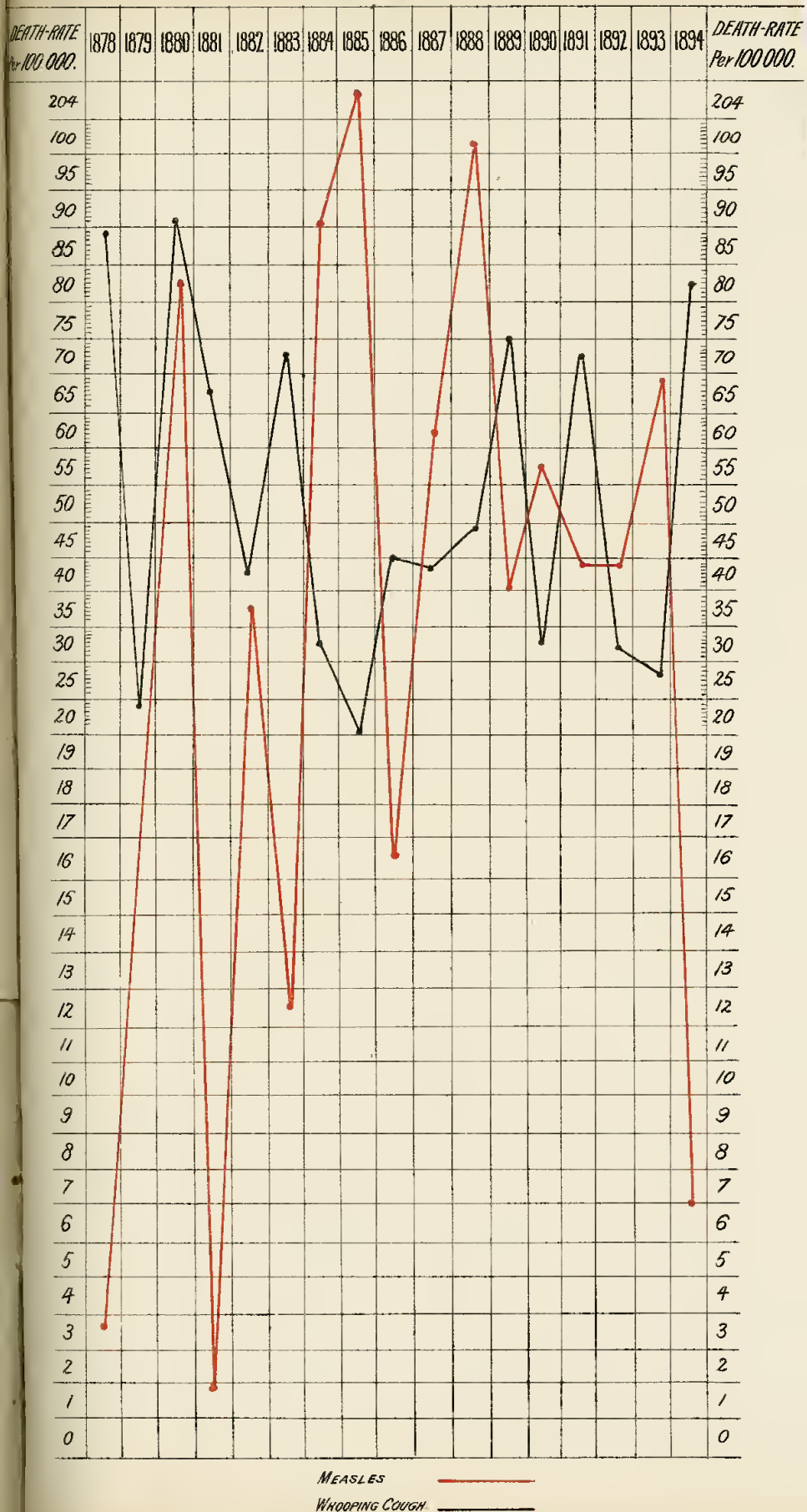
# Chart shewing the number of Deaths from Scarlet Fever & Diphtheria during each week in the Year 1894.



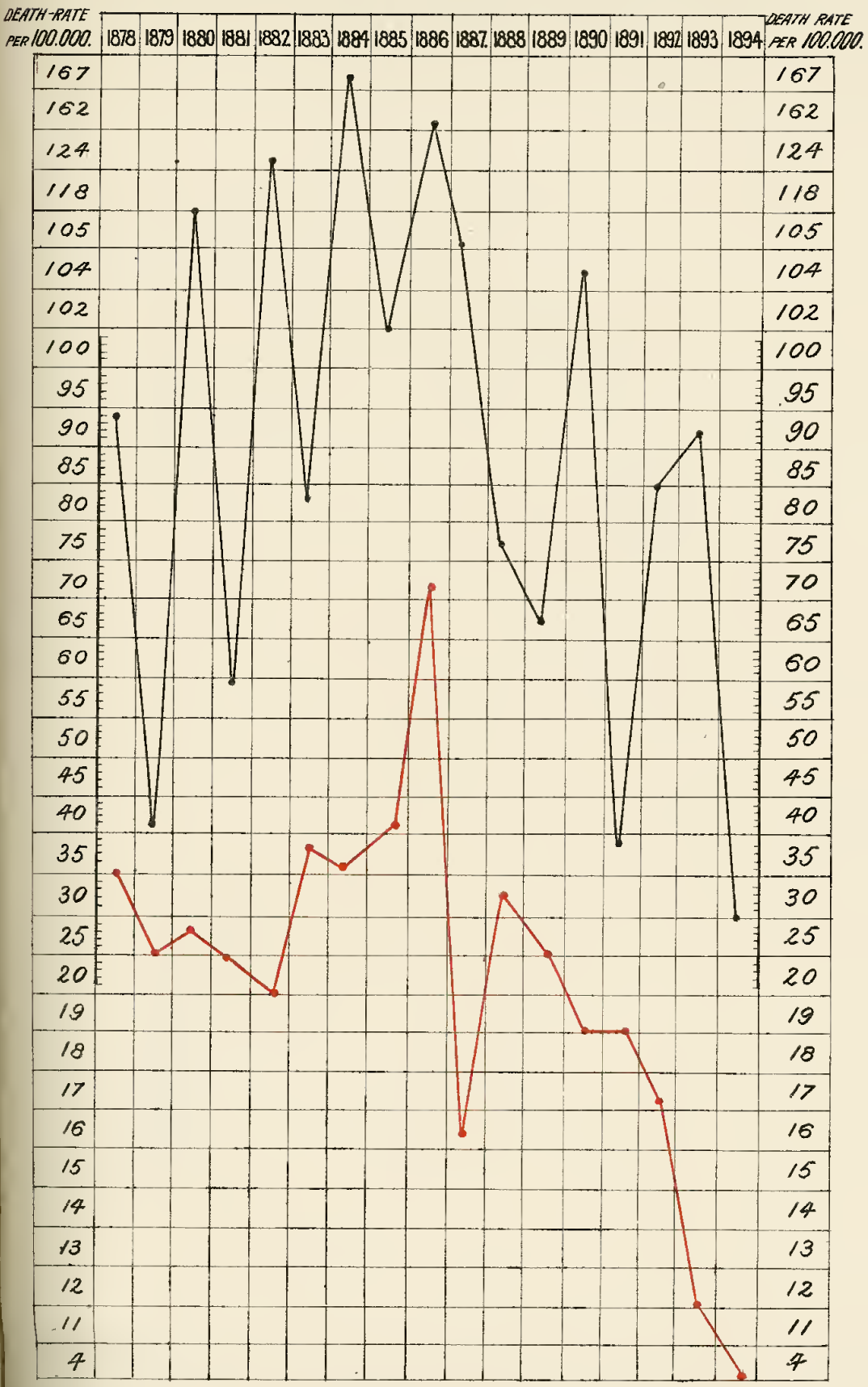
# Chart shewing the number of Deaths from Measles & Whooping Cough during each week in the Year 1894.



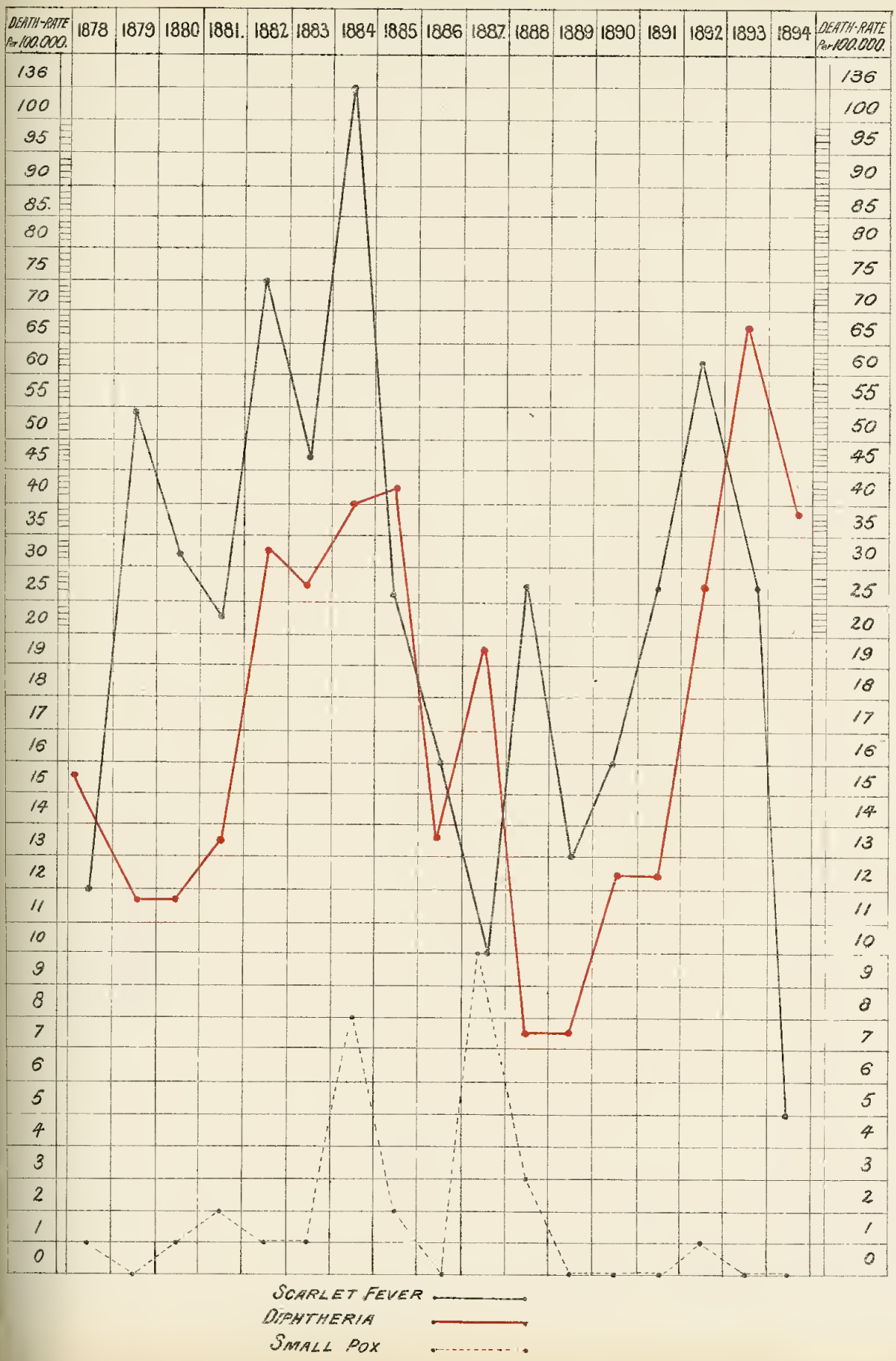
# Chart shewing the Death-rate per 100 000 from Measles and Whooping Cough during the Years 1878-1894.



# Chart shewing the Death-rate per 100.000 from Enteric Fever & Diarrhœa during the years 1878-1894.



# Chart shewing Death-rate per 100 000 from Scarlet Fever, Diphtheria and Small Pox during the years 1878 - 1894.



# Chart shewing the influence of temperature on the Diarrhoea death rate in Cardiff during the summer quarters of the years 1872-94.

| YEARS | 1872 | 1873 | 1874 | 1875 | 1876 | 1877 | 1878 | 1879 | 1880 | 1881 | 1882 | 1883 | 1884 | 1885 | 1886 | 1887 | 1888 | 1889 | 1890 | 1891 | 1892 | 1893 | 1894 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN TEMP ° THIRD QUARTER → | 61·1 | 60·3 | 60·9 | 60·7 | 62·4 | 57·9 | 61·8 | 58·4 | 63·1 | 58·3 | 58·2 | 58·4 | 60·9 | 57·8 | 61·2 | 58·8 | 57·6 | 58·9 | 59·8 | 57·9 | 60·4 | 61·8 | 57·0 |
| DEPARTURE FROM AVERAGE OF 18 YEARS (59·8 → | +1·3 | +0·5 | -1·1 | +0·9 | +2·6 | -1·9 | +2·0 | -1·4 | +3·3 | -0·9 | -1·6 | -1·4 | +1·1 | -2·0 | +1·4 | -1·0 | -2·2 | 0·9 | — | -1·9 | +0·6 | +2·0 | -2·8 |