[Report 1914] / Medical Officer of Health, St Helens County Borough.

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COUNTY BOROUGH OF ST. HELENS.

Annual Report

ON THE

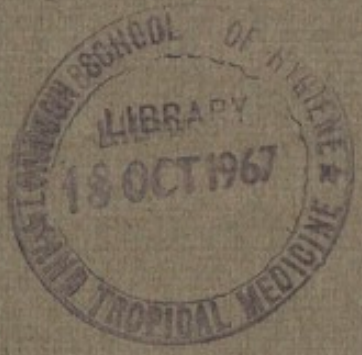
Health and Sanitary Circumstances of the Borough

FOR THE YEAR 1914.

—BY—

JOSEPH CATES,
M.D., Lond., D.P.H., Camb.
Medical Officer of Health,
School Medical Officer.

St. Helens:
Westworth & Sons, Printers and Stationers, Lowe Street.
1915.



Shelters at Eccleston Hall Sanatorium.

COUNTY BOROUGH OF ST. HELENS.

42ND

Annual Report

OF THE

Medical Officer of Health.

—BY—

JOSEPH CATES, M.D., State Medicine. B.S., (Lond). D P.H. (Camb).

Medical Officer of Health, Chief Tuberculosis Officer, School Medical Officer, and Medical Superintendent of the Corporation Hospitals, County Borough of St. Helens; Fellow of the Royal Society of Medicine and Member of the Epidemiological Section, Fellow of the Society of Medical Officers of Health, Member of the Royal Sanitary Institute, Formerly Demonstrator of Public Health at King's College, University of London, Assistant Medical Officer of Health to the County Borough of Coventry, Medical Officer of Health and School Medical Officer to Borough and Port of Lancaster.

1914.

St. Helens:
WESTWORTH & SONS, PRINTERS AND STATIONERS, LOWE STREET.

1915.

HEALTH COMMITTEE.

THE RIGHT WORSHIPFUL THE MAYOR
(SIR DAVID GAMBLE, BART, J.P.)

ALDERMAN H. B. BATES, L.S.A., *Chairman.*

ALDERMAN J. FORSTER, J.P., *Deputy-Chairman.*

ALDERMAN J. GREEN, J.P.

COUNCILLOR T. ABBOTT.

COUNCILLOR J. A. BARON.

COUNCILLOR R. ELLISON.

COUNCILLOR W. FORSHAW.

COUNCILLOR J. H. FOX.

COUNCILLOR T. HAMBLETT, J.P.

COUNCILLOR R. JACKSON, M.B.

COUNCILLOR H. H. PEET.

COUNCILLOR J. PHYTHIAN.

SUB-COMMITTEES.

HOSPITALS.

THE RIGHT WORSHIPFUL THE MAYOR.

ALDERMAN H. B. BATES, L.S.A.

ALDERMAN J. FORSTER, J.P.

ALDERMAN J. GREEN, J.P.

COUNCILLOR R. JACKSON, M.B.

COUNCILLOR J. PHYTHIAN.

SANITARY.

THE RIGHT WORSHIPFUL THE MAYOR.

ALDERMAN H. B. BATES, L.S.A.

ALDERMAN J. FORSTER, J.P.

ALDERMAN J. GREEN, J.P.

COUNCILLOR J. A. BARON.

COUNCILLOR R. ELLISON.

COUNCILLOR J. H. FOX.

INFANT LIFE.

THE RIGHT WORSHIPFUL THE MAYOR.

ALDERMAN H. B. BATES, L.S.A.

ALDERMAN J. FORSTER, J.P.

COUNCILLOR T. HAMBLETT, J.P.

COUNCILLOR R. JACKSON, M.B.

SEWAGE.

THE RIGHT WORSHIPFUL THE MAYOR.

ALDERMAN H. B. BATES, L.S.A.

ALDERMAN J. FORSTER, J.P.

ALDERMAN J. GREEN, J.P.

COUNCILLOR J. A. BARON.

COUNCILLOR W. FORSHAW.

TUBERCULOSIS (*Consultative*).

The Right Worshipful the Mayor.
Alderman H. B. Bates, L.S.A.
Alderman J. Green, J.P.
Councillor T. Abbott.
Councillor J. A. Baron.
Councillor J. H. Fox.
Councillor H. H. Peet.
Councillor J. Phythian.

TUBERCULOSIS (*Animals*).

The Right Worshipful the Mayor.
Alderman H. B. Bates, L.S.A.
Councillor J. A. Baron.
Councillor R. Jackson, M.B.
Councillor H. H. Peet.
Councillor J. Phythian.

HOUSING.

The Right Worshipful the Mayor.
Alderman H. B. Bates, L.S.A.
Alderman J. Forster, J.P.
Councillor T. Abbott.
Councillor W. A. Brooke.
Councillor R. Ellison.
Councillor W. Forshaw.
Councillor T. Hamblett, J.P.

EDUCATION COMMITTEE.

Councillor J. Heaton .....*Chairman.*
Alderman C. J. Bishop, J.P. .....*Deputy-Chairman.*

and the whole of the Members of the Council,
with the following co-opted Members :—

Mrs. M. J. Hammill.
Mrs R. Pilkington.
Mr. J. E. C. Else.
Mr. K. Forbes, (Liverpool University Representative)
Mr. J. Frodsham.
Sir D. Gamble, Bart.
Mr. T. Jenkinson.
Mr. L. E. Pilkington, (Lancashire County Council Representative).
Mr. G. Stringfellow.
Mr. E. W. Swift.

CENTRAL CHILDREN'S CARE COMMITTEE.

Councillor R. Jackson, M.B. .....*Chairman.*
Councillor T. Hamblett, J.P. .....*Deputy-Chairman.*

The Right Worshipful the Mayor.
Alderman H. B. Bates, L.S.A.
Alderman C. J. Bishop, J.P.
Alderman J. Crooks, J.P.
Alderman A. J. Foote, J.P.
Alderman J. Foster, J.P.
Alderman H. Martin, J.P.
Councillor T. Abbott.
Councillor W. Collier.
Councillor W. Forshaw.
Councillor P. Glynn.
Councillor H. H. Peet.
Councillor P. Phythian, J.P.
Councillor G. P. Varley.
Councillor W. Woodcock.

AND

Mrs. M. J. Hammill
Mrs. R. Pilkington.

STAFF
OF THE MEDICAL OFFICER'S DEPARTMENT.

JOSEPH CATES, M.D., B.S. (Lond.), D.P.H. (Camb.)
Medical Officer of Health, Chief Tuberculosis Officer, Medical Officer of the Education Committee, and Medical Superintendent of the Corporation Hospitals.

S. J. C. HOLDEN, M.B., D.P.H. ¶
Deputy Medical Officer of Health and Tuberculosis Officer.

FRANK HAUXWELL, M.B., D.P.H. ¶
Assistant Medical Officer of Health.

R. L. GAMLEN, M.A., M.D., B.C. (Camb.), M.R.C.S., L.R.C.P. (Lond.), D.P.H. (Camb). (September to November).
C. W. GEE, L.R.C.P. & S. (Ed.), D.P.H.
G. BARKER CHARNOCK, L.R.C.P. & S., (Ed.).
} Temporary Assistant Medical Officers of Health.

R. BARON, L.D.S. ¶ .. ..School Dental Surgeon.
B. R. TOWNEND, L.D.S. .. ..Temporary School Dental Surgeon.

W. J. MILLIGAN, (1) ¶ .. .. Chief Inspector of Nuisances.
J. ALMOND (1), (4), (6) .. .. District Inspector.
H. BROWN, (1), (4), (5), (6), (9) ¶ .. District Inspector.
F. COLLIER, (1), (4), (5), (6), (7) ¶ .. Housing, Shops, and Workshops Inspector.
H. LOWE, (4), (6) ¶ .. .. .. District Inspector.
J. SKEATH, (4) ¶ .. .. .. Drainage and Shops Inspector.

H. CHEETHAM, (1), (7), (9) .. ..
J. GALLAGHER (1), (4), (7), (10), (11), (12), (13) .. ..
R. J. JACKSON (1) .. .. ..
G. E. TAYLOR (1) .. .. ..
C. WHITELEY, (1) .. .. ..
} Temporary District Inspectors.

T. BLASHILL, (1), (5) .. .. .. Superintendent of the Public Abattoir.

R. SHEPHERD .. .. Conversions Inspector.

H. MYERS .. ..
H. RIDGWAY .. ..
} Disinfectors.
J. PETTY .. .. Assistant Disinfector

H. Simcox ¶	Motor Ambulance Driver.
P. McDermott..	Temporary Motor Ambulance Driver
W. Barr	Hospital Porters.
F. Abbott..	
Margaret Burgess	Matron of the Corporation Hospitals
Ruth Appleton, (2), (3)	Health Visitors, School Nurses, Tuberculosis Nurses, and Inspectors of Midwives.
Ethel Denman, (1), (3), (8)	
Mary Dudley, (2), (3), (8)	
Jeannie Grime, (3), (8)	
Grace MacClelland, (3), (8)	
Ada Rogerson, (2), (3)..	
Josephine Sephton, (3), (8)	
Hannah Weir (3), (8)	
Norah Wickens (3), (8)	
Jessie Weatherilt	Assistants at the Maternity Centre.
Dorothy Worsley	
Thomas G. Ellis	Chief Clerk.
Henry Cassell	Clerk Dispenser.
Arthur Harrison ¶	Third Class Clerk.
Fred Thomas	Junior Clerk.
Thomas Howard	Office Boys.
Joseph Helsby	

The following are part time officers—

J. Fox, M.B., C.M. (Ed.), M.R.C.S. (Eng.)	Surgeon for the Throat and Nose Department, School Clinic.
J. Donnellan, M.B., Ch.B. (Liverp.) ..	Anæsthetist at the School Clinic.
A. Graham, M.B., C.M., (Glasg).	Ophthalmic Surgeon at the School Clinic.
F. J. Knowles, M.R.C.S., L.R.C.P. (Lond.)	Physician to the X-ray Department at the School Clinic and Tuberculosis Dispensary.
H. E. Davies, M.A., B.Sc., F.I.C.	Public Analyst.
W. G. Dixon, M.R.C.V.S.	Veterinary Inspector.

(¶) *On active service.*
(1) *Sanitary Inspector's Certificate of the Royal Sanitary Institute.*
(2) *Health Visitor's Certificate of the Royal Sanitary Institute.*
(3) *Certificate of the Central Midwives Board.*
(4) *Sanitary Inspector's Certificate of Liverpool University.*
(5) *Certificate for Meat Inspection of the Royal Sanitary Institute.*
(6) *Certificate for Meat Inspection of Liverpool University.*
(7) *Certificate for Building Construction (advanced) Board of Education.*
(8) *A trained Nurse.*
(9) *Certificate for Building Construction, first stage.*
(10) *Certificate Honours for Building Construction (Board of Education).*
(11) *Honours in Technology, City and Guilds, London.*
(12) *Advanced Hygiene Certificate Board of Education.*
(13) *Certificate of the Worshipful Company of Plumbers.*

PREFACE.

TO THE CHAIRMAN AND MEMBERS
OF THE HEALTH COMMITTEE.

GENTLEMEN,

I have the honour to present the following report, which deals with the health and sanitary circumstances of the borough for the year ending 31st December, 1914, and reviews the work carried out under the direction of your medical officer.

Although on the whole the vital statistics of the district are rather more favourable than those of the preceding year yet the loss of infant life continues excessive. At this crisis in our history when the ravages of war are destroying the best of our manhood, it is more than ever the bounden duty of a local authority to spare no effort in the removal of conditions of insanitation inimical to child life.

The work of a Health Committee is open to the assail of those who object to any expenditure which does not show an immediate and commensurate return. It would sometimes seem to be forgotten that the saving of life is not only a legal obligation, but also a saving of money.

During 1914, the scope of the work done on the authority of the Committee continued to show substantial progress. A centre to afford advice and assistance to expectant mothers has been established, and steps are now being taken to provide a municipal maternity hospital. The Corporation depôt for the supply of suitably prepared milk for infants has materially extended its sphere of usefulness.

At the end of the year a serious epidemic of measles decided the Committee to admit cases of the disease into the borough isolation hospital. If full advantage is taken of the accommodation afforded the fatality from measles should be considerably diminished.

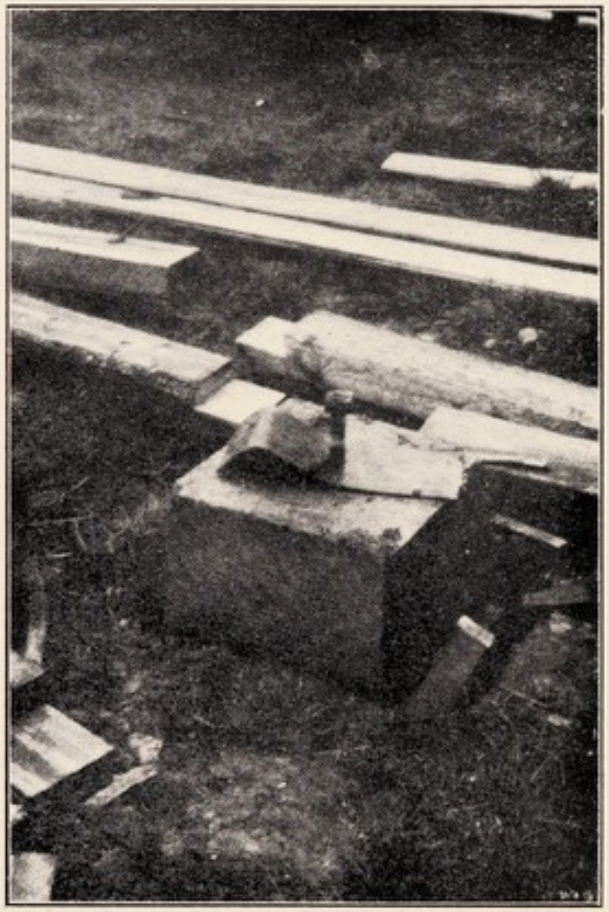
Reports on the Importance to Health of clean streets by Dr. Gee and Dental Hygiene by Mr. Townend are issued as an appendix to my annual report. It gives me pleasure to refer to the willing and satisfactory manner in which the members of my staff have carried out their duties.

I am, Gentlemen,
Your obedient servant,
JOSEPH CATES.

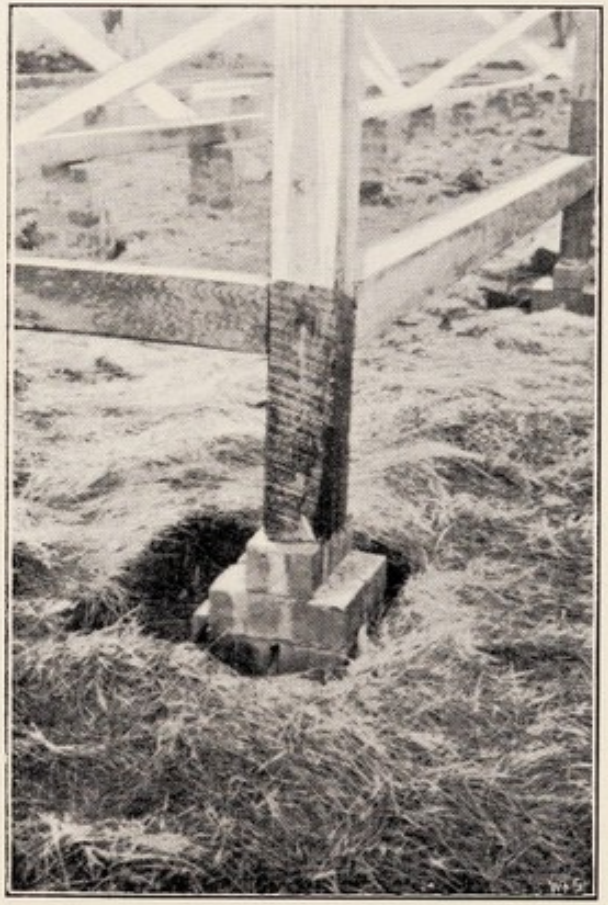
Town Hall,
St. Helens.
March 27th, 1915.

SUMMARY OF VITAL STATISTICS FOR 1914.

		St. Helens.	England and Wales.
Population—Estimated to the middle of the year— Males ... 52,650 / Females ... 48,125	Total	100,775	36,960,684
Increase during the year		1,315	362,044
Marriages		706	294,087
Annual rate of persons married per 1000 of the population		14·01	15·9
Births ... ... Males ... 1,756 / Females ... 1,601	Total ...	3,357	878,822
Annual rate of births per 1000 of the population ...		33·31	23·8
Deaths ... ... Males ... 958 / Females ... 765	Total ...	1,723	516,778
Annual rate of mortality per 1000 of the population ... Males ...18·3 / Females 15·8	Total ...17·09		14·0
Annual rate of mortality per 1000 of the population, corrected for age and sex distribution of the population		18·43	—
Total deaths from zymotic diseases...		164	—
Annual rate of mortality from zymotic diseases per 1000 of the population		1·62	—
Infant mortality rate per 1,000 births		138	105
Death-rate from diarrhœa of children under two years of age, per 1,000 births		27·7	20·4

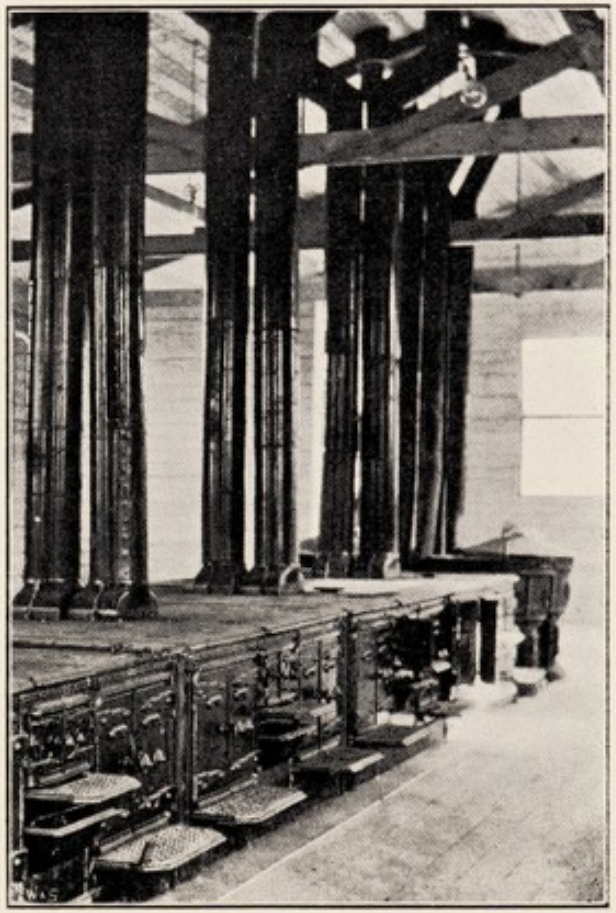


Concrete foundation of hut showing damp proof course and iron bolt.



Another method of making a foundation for a hut.

Foundations of a Hut.



Ovens for a Hutment.

ANNUAL REPORT

ON THE HEALTH AND SANITARY CIRCUMSTANCES OF THE BOROUGH FOR THE YEAR 1914.

NATURAL AND SOCIAL CONDITIONS.

St. Helens is situated in the south-west of Lancashire, about ten miles north-east of Liverpool and twenty miles west of Manchester. The coast is nearest at Seaforth, a town at the mouth of the Mersey, twelve miles west of the borough.

The line of the borough boundary is roughly the circumference of a circle, the centre being at Peasley Cross, and the radius a distance of about two miles.

The area is approximately 7,285 acres: the rateable value on the 31st March, 1914, was £408,072. A penny rate under Section 211 of the Public Health Act, 1875, is estimated to yield £1,493.

On the north-east are the urban districts of Haydock and Ashton-in-Makerfield, and the rural district of Warrington. With these exceptions, the borough is bounded by the Whiston rural area.

From the south-west corner of the borough, about 270 feet above sea-level, the ground slopes gradually towards a belt of low-lying land extending from east to west across the district, and traversed by small streams which unite in the eastern part of the area to form the Sankey brook. One of these watercourses, known as Windle brook, passes through the centre of the thickly populated, north-western division of the borough. It appears that the older portions of the town were built along the banks of this stream. The land in the northern part of the borough also inclines towards the Windle brook.

Between St. Helens and the coast, the land generally is low-lying and is used for agricultural purposes.

The borough is divided into nine wards. Table 1, on page 66, shows the position, acreage, estimated population for 1914, and density of each ward calculated on the approximate area built upon.

RAILWAYS AND ROADS.

The district is served by two railways. A branch of the London and North Western from Liverpool to Wigan passes through the town in a northerly direction. The Liverpool and Manchester line of the same railway traverses the southern portion of the district, giving off a branch from St. Helens Junction into the centre of the town.

The Great Central Railway has a terminus in St. Helens, from which a line passes through the north-east of the borough to Manchester. There are also several lines used only for colliery purposes.

About twelve roads converge from the outskirts of the borough. The more important of these are from Warrington, Widnes, Liverpool, Ormskirk, and Wigan. There is a main road through the town from Liverpool to the north.

A canal from Widnes and Warrington enters the borough on its eastern boundary. Passing in a westerly direction it terminates near Gerards Bridge; a branch into the centre of St. Helens crosses Windle brook. For a considerable distance the course of the Sankey brook is followed by the canal.

GEOLOGY.

St. Helens lies on the southern fringe of the Lancashire coal fields. The coal measures of this district join those of Prescot round the north end of a promontory of New Red sandstone at Eccleston Hill. The western boundary of the coal measures is a large fault which throws down the New Red sandstone ranging north, from Elton Head to the big dam at Eccleston. The boundary along the south and east is, as far as can be ascertained, on direct super-position of the trias or the Permian rocks on the coal formation. The beds, which appear to rest on the coal measures at Sutton, belong to the Lower Red sandstone. Out-crops of the various coals have been discovered at the big dam at Eccleston, at Elm Grove, Thatto Heath, and other parts of the borough. Above the deeper coal measures are beds of unproductive coal, insufficiently thick for working. The only locality within the district where strata referable to the Permian period are known to exist, is at Sutton. The formation elsewhere consists of two divisions, the Lower Red Sandstone, forming the base, overlain by purple marls with bands of fossiliferous limestone. A sub-division of New Red sandstone, known as the Lower Mottled sandstone, may be seen at Eccleston and St. Helens Junction. It is of no great thickness and appears to rest directly on the coal measures at Eccleston Hall. Another sub-division, the Pebble Beds, occurs in the southern portion of the borough. At Eccleston Hill the Corporation Waterworks have been sunk into these beds. The superficial deposits consist of boulder clay in the low ground and valleys, Sherdley Hill sands in the north-western portion of the borough, and peat on the southwestern extremity of the district.*

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* Memoir of Geological Survey, 1882.

METEOROLOGY.

At the Corporation Observatory in Victoria Park, readings are taken once a day, at 9 a.m.

Table 2 on page 67 shows the annual rainfall in St. Helens since 1889.

The temperature of the soil four feet below the surface during 1914 will be seen on table 3, together with a curve representing the weekly number of deaths from diarrhœa. It will be observed that there appears to be a close relationship between the temperature of the soil and the prevalence of fatal cases of diarrhœa.

The weekly record of readings taken at the Observatory during the year is given in table 4 on page 68.

HISTORY OF THE TOWN.

Although the townships now comprising the borough are rich in ancient history, the borough itself is of comparatively recent date. A charter of incorporation was granted in 1868, including the whole of the townships of Sutton and Parr and parts of those of Eccleston and Windle. The borough was then divided into six wards, but in 1889 a re-distribution was carried out, increasing the number of wards to nine. In the same year St. Helens became a county borough. In 1893 the borough boundaries were extended by the taking in of a further portion of Eccleston. From table 5 on page 69, which shows the population of the town at each census period since 1801, it will be seen that a somewhat large increase in inhabitants has been disclosed by each census.

INDUSTRIES AND OCCUPATIONS.

The census returns for 1911 show that out of 37,929 males, 10 years of age and upwards, 32,211 were engaged in some occupation. 941 were employed on railways—565 as carmen; 9,440 in mines and quarries—of this number, 4,802 were workers at the face and 3,687 were below ground. 7,701 were workers in brick, pottery and glass—of these 5,209 were employed in sheet or plate glass manufacture and 1,871 in the making of glass bottles. 1,168 were engaged in the manufacture of chemicals and of this number 1,044 were employed in alkali works.

Among 34,190 females at ages of 10 years and over, 6,843 were stated to be engaged in occupations. 481 in teaching, 1,649 as domestic servants, 176 as workers in mine service above ground. 860 were employed in brick, pottery and glass work—of this number 497 were working in plate or sheet glass manufacture, and 134 in the making of glass bottles. 542 were dressmakers. Out of 6,843 females engaged in occupations, 5,685 were unmarried, 672 married, and 486 were widows.

POPULATION.

The estimated population of the borough at the middle of 1914 was 100,775, being 52,650 males and 48,125 females. Table 6 on page 69 gives the number of inhabitants of each ward as shown by the census returns of 1911.

The age and sex distribution of the population at the time of the last census is set out in table 7 on page 70.

Table 8 on page 71 gives the number of persons resident in the various institutions of the borough at the census period 1911, and also the figures for 1914.

An inquiry was carried out during March, 1915, respecting the number of unoccupied buildings in the borough, the figures are shown in table 9.

NUMBER OF PERSONS PER INHABITED BUILDING.

The average number of persons per inhabited building, and the average number of persons per family revealed by the census returns of 1901 and 1911, are shown on table 10 on page 72.

The number of unmarried, married, and widowed persons per thousand of each sex, aged 20 years and upwards according to the census returns is given in table 11.

CLASSIFICATION OF BUILDINGS.

The census returns relating to the buildings in the borough for 1911 are set out in table 12 on page 73.

Table 13 on page 73 shows the number of persons per tenement at the time of the census, a tenement being defined as "a place in which any person entitled to receive a census schedule shall live."

The figures in tables 13, 14, 15, 16, on pages 74 and 75 give rise to certain important considerations. St. Helens, among the county boroughs and large towns, at the time of the census had the *lowest* proportion per 1,000 families, of families of *less than four* persons, and the *highest* proportion of families of *over six persons*. In this district, a high percentage of large families corresponds with a high birth-rate.

With regard to room accommodation in St. Helens, 16·9 per cent of the population had less than one room for two persons, the average number of persons per room being 1·24. The number of persons per inhabited house was 5·49.

The number of inhabited houses in St. Helens at the middle of 1914 was 18,361, giving an estimated population of 100,900. The corresponding figures for June, 1913, were 18,248 and 100,364 respectively.

BOARD OF TRADE LABOUR EXCHANGE.

The figures on table 17 show the number of applications for employment received, the number of vacancies notified by employers and the number of vacancies filled, for the twelve months ending the 15th January, 1915. The figures, which do not include vacancies of a casual nature, are indicative of the valuable work carried on by the Exchange.

POOR LAW AND OTHER FORMS OF RELIEF.

The amount of out-door relief in money and kind supplied by the Guardians during the year ending the 30th September, 1914, to persons resident within the borough, and chargeable to the Union was £6,479 - 10 - 2.

It has been found impossible to obtain figures showing the amount of pauperism in the borough for a series of years.

A local branch of the Charity Organization Society has afforded assistance to 92 applicants during 1914, a sum of £24 - 1 - 8 being expended in suitable relief.

A Police Aided scheme to provide clothing for destitute children is in existence in the borough. As a result of useful work carried out during the past year, 981 children received foot-gear and clothing, 2,615 articles being distributed.

Free meals to the number of 22,199 were provided by the local Education Authority for children selected from a school population of 20,205.

MEDICAL AND SURGICAL ASSISTANCE.

There are two general hospitals in St. Helens, containing 200 beds for the relief of those residing within the borough and the surrounding district. During the year, 2,385 in-patients and 631 out-patients received treatment, and 108 wounded soldiers were taken into hospital. Neither institution will accept maternity cases.

Accommodation is provided by the Corporation at the borough isolation hospitals for persons suffering from scarlet fever, diphtheria, enteric fever smallpox, tuberculosis and certain other infectious diseases.

A voluntary Association for the aid of crippled children has rendered valuable help during the year to 86 patients, by the provision of apparatus, spinal carriages, and hospital treatment,

A Fresh-Air Fund sent 76 children to convalescent homes for a period of at least three weeks, and also provided in other ways for a large number of cases.

The Education Authority contributed £348 - 4 - 0 towards the maintenance of children at surgical homes and other institutions.

A Nursing Association, by means of voluntary contributions, maintains a superintendent and seven nurses to attend suitable cases in their own homes. 1,243 new cases were nursed during the year, the total number of visits amounting to 34,807.

Reference may here be made to the urgent need for adequate accommodation for the institutional treatment of disease. An attempt to treat a patient suffering from pneumonia or whooping cough in an insanitary room shared by other members of the family is unlikely to yield a satisfactory result. Illnesses such as apoplexy and certain accidents and injuries need for a long period the skilled nursing and daily attention only to be obtained in a hospital.

Framework of a hut and concrete foundation.

Framework of hut showing felt lining.

General view of Hutment

Dining Room of Hutment.

SANITARY CIRCUMSTANCES.

WATER SUPPLY.

The Council supply water to the district under the provisions of the St. Helens Improvement Act, 1869, and the St. Helens Water Act, 1882.

Water is obtained from deep wells in the new red sandstone. There are six pumping stations with a daily supply of about 5,800,000 gallons. From the various wells water is pumped to a central reservoir, and before being distributed is softened by a liming process, the average hardness before and after softening being, according to Clark's scale, 20·9° and 10·16° respectively. During the year ending the 31st December, 1914, 1,415,310,954 gallons were used, 881,515,054 for domestic supply, and 533,795,900 for trade purposes. The vast majority of houses in the borough are supplied from the Corporation mains. The supply is constant, and in periods of prolonged drought has proved sufficient. A few farms and cottages in the outlying districts are still supplied from shallow wells. The average daily consumption per head for domestic purposes is about 23 gallons, and for other than domestic purposes, 13 gallons.

Chemical and bacteriological analyses which are carried out at regular intervals show that the water, although very hard, is of a high degree of purity. There is no evidence of metallic or other contamination.

RIVERS AND STREAMS.

The Sankey brook, formed by the union of Windle, Sutton and Rainford brooks together with several small watercourses, passes through the north-eastern quarter of the borough, closely following the course of the St. Helens Canal. It receives the effluent from the Corporation sewage works and also an amount of untreated sewage. Trade effluent from various works passes into the brook, which is considerably polluted.

DRAINAGE AND SEWAGE.

Drains are laid in practically the whole of the populous portions of the borough. There is separation of sewage and storm water in the Denton's Green and Newtown areas, surface and storm water being turned into Windle brook. In the outlying districts a number of houses have been built in a situation remote from a sewer. About three-quarters of the sewage of the borough is treated at the Parr sewage works by liming and sedimentation; the effluent, varying greatly in composition, is discharged into the Sankey brook. The remainder of the sewage is turned, untreated, into the same watercourse. The bulk of the material collected from the conservancy system is treated at a depot at Parr. A portion of the substance obtained from privy middens is sold to farmers, the remainder is mixed with the contents of the tubs and pails, and converted into artificial manure.

CLOSET ACCOMMODATION.

Until recent years the privy midden or the tub and pail closet was common throughout the borough. After several attempts to deal with the conversion of the older types of conveniences, the Council in 1911 decided that all privy middens and tub and pail closets should be converted to the water carriage system. It was decided, therefore, to divide the borough into five districts, and to attempt to carry out the conversions in one of these districts each year. It was estimated that the average cost of the conversion of a privy midden might be taken as £8, and towards this amount the Council made a grant of a basin, seat, cistern, pull and flush pipe, of the approximate value of 30/–. In order that the grant might be obtained, the Corporation had to be satisfied with the general sanitary requirements of the house to which the privy was attached. The cost of the conversion of a tub and pail closet was estimated to be £5 - 7 - 0, and towards this amount the Council made a similar grant of fittings and a payment of £1 - 7 - 6. In this case also the owner was required to carry out such general sanitary improvements to the house as might be considered necessary.

Tables 18 and 19 on page 76 show the estimated number of houses with the various types of sanitary conveniences existent in the borough each year since 1907, and the number of conversions completed since 1904. It will be seen that the figures of conversions carried out during 1914 are considerably in excess of those for previous years.

PUBLIC CONVENIENCES.

There are fifteen of these situated in various parts of the town. Eleven are modern structures, but in only one instance is there water closet accommodation. Additional provision is urgently needed, both as regards closets and also urinals for women.

PUBLIC BATHS.

These are situated in Boundary Road. The total number of baths used during the year was 129,179, being 89,524 plunge baths, 6,196 slipper baths, 47 vapour baths, and 33,412 baths were provided free for soldiers.

REMOVAL OF HOUSE REFUSE.

Removal of house refuse, and the emptying of tub and pail closets and privy middens are undertaken by the Corporation. The removal of the contents of privy middens is carried out about three times a year, and at less infrequent intervals on request. Pail closets and ashplaces are emptied about once a week. Fish refuse and other material liable readily to decompose are taken away about twice a week. Bricked ashpits and ashplaces with wooden doors are common in the borough. The conversion of these to moveable wall bins of the tippler type is being proceeded with- 397 were converted during the year. In new houses moveable bins are generally provided.

About three-quarters of the house and trade dry refuse is treated at a destructor in Boundary Road. During 1914, 14,832 tons were destroyed. The actual cost of labour per ton for destruction only was 1s. 2d., and the approximate allowance for the sale of steam amounted to £570.

The remainder of the house refuse is tipped at Parr. It is only during comparatively recent years that the importance to health of regular and frequent removal of house refuse has become to be realised. Unfortunately there still remains room for much improvement. It is absolutely essential that house refuse of all descriptions should be removed at least twice a week, and more frequently during the summer months. House refuse is extremely liable to undergo decomposition and may soon become a considerable source of nuisance. Bricked ashplaces with doors opening into a back passage are a hunting ground for rag pickers, and persons of a similar occupation, who, leaving open the door, allow the contents to fall out into the back passage or roadway, affording an opportunity for children to play about in the garbage.

The general condition of the streets, passages and footpaths is unsatisfactory and in some areas of the town extremely insanitary. Where streets and passages are allowed to remain in a filthy condition the health of the inhabitants is certain to suffer. Passages are fouled with fæcal matter and littered with the overflowing contents of ashplaces ; in streets, horse manure and other refuse is trodden under foot, and in wet weather is splashed over pedestrians and over food displayed in shop windows. During dry seasons a cloud of dust mainly composed of finely powdered manure, intermixed with human expectoration percolates into the houses and is blown over fruit and other articles of food. It is unlikely that householders will attempt a reasonable standard of domestic cleanliness while streets and passages remain in an unclean condition.

SCAVENGING.

Street sweeping is carried out by the Corporation. The state of the paving, in many of the streets, renders the work difficult. The main streets are cleansed about twice a week, the side streets and passages about once a week. The cleansing and sweeping of footpaths is the duty of occupiers.

A considerable number of uncovered, bricked manure middens exist in the thickly populated portions of the district. The surface of these is generally below the level of the ground. In the summer months a mass of highly objectionable and readily decomposible material affords a suitable breeding ground for an innumerable number of flies. The importance to the public health of properly constructed manure middens, the contents of which are removed at regular and frequent intervals, cannot be over estimated.

SANITARY INSPECTIONS OF THE DISTRICT.

The total number of visits made by the staff of the medical officer's department during the year was 38791.

Table 20 on page 77 contains a list of notices served during 1914, and a record of previous years.

CHOKED DRAINS.

When it is discovered that a drain is choked an officer of the department attempts to remove the obstruction before a notice is served on the owner or occupier. During the year, 622 drains were plunged, and in 375 instances the obstruction was removed.

CLEANSING OF PREMISES.

A whitewash brush and a supply of lime were provided for the use of 306 persons unable to pay for the necessary cleaning of their houses.

PREMISES AND OCCUPATIONS CONTROLLED BY BYE-LAWS OR REGULATIONS.

COMMON LODGING HOUSES.

There were in the borough at the beginning of the year, 13 common lodging houses registered for the reception of 616 lodgers. During the early part of 1914 the Committee warned ten of the occupiers that the yearly renewal of registration would not be granted unless the houses were made structurally suitable. No steps having been taken to carry out the requirements of the Committee the licences in question were refused at the end of the year.

During 122 inspections no serious infringement of byelaws was discovered. The bedrooms, however, are generally badly ventilated.

HOUSES LET IN LODGINGS.

There were seven houses on the register at the end of the year, but there are a number of houses illegally used as houses let-in lodgings. The houses are on the whole only moderately well kept. Twenty-one inspections were made, but no notices have been served, although several houses are unsatisfactory.

BAKE HOUSES

There are 112 of these on the register ; one is underground. Mechanical power is used in 14 instances. Seven defects were discovered during the year, and after notice each was remedied.

There is room for considerable improvement both in the sanitation of the premises and in the standard of cleanliness observed. Much carelessness exists in the manner in which bread is handled and conveyed through the streets.

CANAL BOATS.

The borough surveyor was inspector under the Canal Boat Acts until the end of the year, when the Committee decided that duties under the Act should be carried out by the medical officer of health. Although there is a considerable amount of traffic along the canal no boats were on the register during 1914. Five boats were inspected. No instance of infectious disease was discovered nor were any boats detained for cleansing or disinfection. One infringement of the Acts was detected, namely, failure to produce the necessary certificate.

OFFENSIVE TRADES.

At least nine offensive trades are carried on within the borough. There are five tripe dealers, a manure manufacturer, a fat melter, a bone boiler, and a gut scraper. In several cases the premises are structurally unsuitable. The Committee during the year permitted a change of ownership of premises used for tripe boiling.

CELLAR DWELLINGS.

There is no record of any underground room having been separately occupied as a dwelling during the year.

SMOKE NUISANCE.

The atmosphere of the district is considerably polluted by the imperfect combustion of coal; the injurious effect of such pollution on the health of the inhabitants must be considerable, for it is well known that persons suffering from respiratory diseases are unable for long to endure fog and smoke. The efficient ventilation of rooms becomes almost impossible owing to the amount of soot carried into the dwellings, and not less important from the standpoint of health is the loss of sunlight, occasioned by a smoky atmosphere.

The chief offenders are the domestic chimney and the factory. As regards the former much improvement can be brought about by the substitution of fireplaces of modern construction for the old-fashioned grates, and the use of coke and gas fires in private houses; in the case of factories it may be said at once that the emission of more than appreciable amount of smoke is entirely preventable, and arises from defective construction of boilers, careless firing, and the use of unsuitable fuel, or a combination of these causes. Unfortunately the firing of boilers is often left to ill-paid and unskilled workmen, and as a result both the atmosphere and the manufacturer suffer.

Table 21 shows the percentage of offences to the number of observations made each year since 1903.

SCHOOLS.

Reference to the sanitary conditions and water supply of the schools will be found on page 123, and an account of the administrative control over infectious disease in schools is given on page 140.

FOOD AND FOOD PREMISES.

MILK SUPPLY.

COWKEEPERS AND COWSHEDS.

Twenty-eight persons are registered as cowkeepers. No alteration occurred in the register during the year. There are about 250 cows kept for dairy purposes within the district. The animals are inspected four times a year by a veterinary surgeon appointed by the Committee. Three defects in the cowsheds were reported during 1914. One unregistered building was discovered to be in use. A considerably higher standard of cleanliness might be observed both in the methods of milking and in the state of the sheds, and insufficient use is made of the means of ventilation provided.

MILK SHOPS.

During 1914, 7 milk shop keepers were added to the register, and 1 removed, 121 remaining on the register at the end of the year.

Although the Committee now insist that milk sold from shops shall be stored in special receptacles, yet there can be little doubt that the risk of contamination in certain cases is considerable. General dealers should not be permitted to sell milk.

MILK.

No systematic bacteriological examination has been made of milk sold within the borough. Two animals were reported during the year to be suffering from tuberculosis and were slaughtered by the Local Authority under the provisions of the Tuberculosis (Animals) Order, 1913.

MEAT.

A municipal abattoir was built in 1895 and extended in 1901 at an approximate total cost of £7,500. The building is in a central position and has in connection with it cold air stores. Meat inspection at the abattoir is carried out by the superintendent who holds a certificate in meat inspection. A similar certificate is held by four of the assistant inspectors. In cases of difficulty reference is made to the medical officer of health. 3,910 beasts, 291 calves, 1,938 sheep and 3,526 pigs were killed in the public slaughter house during the year. No utilisation is made of the offal or other waste products. A proportion of the meat sold in the district is prepared outside the borough, in places where efficient inspection is impossible, and it appears very desirable that all meat brought into the district for sale should be first passed through a clearing-house: until this is accomplished no system of meat inspection can be considered satisfactory. Five private slaughterhouses still remain in the borough. Four are licensed for the slaughter of cattle and pigs, and one for pigs only. The private slaughter-houses are regularly visited by the inspectors, frequent visits being paid when slaughtering is expected to occur. The licensee of each private slaughter-house keeps a register of animals slaughtered and makes a weekly return to the medical officer of health. An inspection of meat exposed for sale is regularly carried out. The numbers of animals killed in the private slaughter houses during the year were 259 beasts, 48 calves 344 sheep, 2,421 pigs.

Table 22 shows the number of animals found on slaughter to be diseased, and the approximate weights of meats condemned at the abattoir and at the private slaughter-houses.

ICE CREAM.

During the past year very considerable improvement has been effected in the conditions under which ice cream is made and stored in the district. One manufacturer arranged for the erection of premises suitable for an ice cream factory, and there installed modern machinery. Others obtained empty houses which were converted to provide the necessary accommodation, but so long as ice cream is made in different parts of the district there will be serious difficulties in maintaining efficient supervision. The only satisfactory method of dealing with the problem appears to be the provision of a municipal ice cream factory where for a small charge makers and dealers could prepare and store their materials and make the commodity.

FOOD POISONING.

No definite epidemic of food poisoning occurred in the borough during 1914, but it is almost certain that the majority of the 98 deaths which occurred from diarrhœa and enteritis can be directly attributed to infected food.

Attention is only beginning to be directed to the widespread dangers to the health, not only of the child population, but of the whole community, which may arise from the consumption of unclean and unwholesome food.

It has long been known that the consumption of unsound food might give rise to disease, and instances of localised epidemics, with not infrequently a high mortality due to so-called ptomaine poisoning have been recorded since about the year 1890. For several years it was thought that infected meat was the only channel by which outbreaks of ptomaine poisoning could occur. It was then discovered that milk could give rise to serious illness. More recently it has been shown that ice cream may be responsible for epidemics of poisoning, and it can now be stated with some degree of certainty that infected food in any form may produce massive epidemics of acute disease. It is, however, to an aspect of the question no less important, but insufficiently appreciated, that it is proposed particularly to refer.

Apart from epidemics of food poisoning, dirty, unwholesome and infected food undoubtedly is the cause of a considerable portion of the sickness and diarrhœa occurring during the warmer months of the year. With the exception of the evidence afforded by fatal cases of diarrhœa and enteritis, it is difficult accurately to gauge the extent of the illness caused by unwholesome food, but it is hoped that the returns made under the National Insurance Act will soon be available in order that the nature and extent of illnesses prevalent in a district may receive the cognizance of the health authorities.

In order to attempt some classification of the sources of contamination it may be said that unsoundness, unwholesomeness or infection may be primary or secondary; in other words present in the food previous to preparation, or brought about during preparation, storage or distribution. Under the first section may be included diseases in meat, such as tuberculosis, infection by other definite organisms, or the encysted form of certain parasites such as tape worm. Milk also may contain from the beginning germs of tuberculosis and other diseases derived from the udder of the cow. Grains such as wheat, barley, and rye may be attacked by various forms of fungi, which frequently injure the seed. Secondary contamination usually begins

from the moment at which an article of food is touched by hand, and generally speaking the greater the manipulation undergone by food, the larger the opportunities for unwholesomeness.

It may be stated that there are in the main five sources by which secondary contamination may occur, namely, from insanitation of premises, by handling, by flies, from dust, from domestic or other animals.

Insanitary premises include old slaughterhouses, which by their structure and surroundings are totally unsuitable for the dressing and storage of carcases; insanitary or underground bakehouses; dirty and ill-kept cowsheds; insanitary ice cream premises; unclean and overcrowded factories, workshops, and workplaces; milkshops where businesses such as those of a general dealer are carried on; small rooms used as a shop by day and a living room at other times; insanitary rooms, outbuildings and stables, used for the storage of articles of food; the absence of proper storage accommodation for food in the home, particularly in old and insanitary houses of the working classes, where food is left standing on the tables partially covered by a cloth, or placed in a drawer or on a shelf, exposed to dust, dirt, and flies. An enormous amount of easily avoidable pollution could be prevented were sufficient care given to handling of food.

In addition to the dangers which may arise from the lack of precautions in handling food, there is also to be considered the wider question of communicable diseases existing in those engaged in the trade. Persons suffering from infectious disease, such as influenza, or tuberculosis, undoubtedly may transmit the illness to others through the food in which they are dealing.

The extent to which contamination of food is brought about by flies is as yet insufficiently well-known. Not only do flies contaminate extensively practically every article of food, but the contamination is generally of the most loathsome description. In spite of this fact it is rare to see an attempt on the part of tradesmen to protect their goods against flies; nor on the other hand does any appreciable section of the public appear to favour precautions being taken. During summer months one may see flies crawling over meat, fish, pastry, butter, cheese, jam, fruit, vegetables, and other articles, or crowding round utensils containing milk or cream. Owing to the lack of suitable fly-proof accommodation for the storage of food equally extensive contamination goes on in private houses.

SALE OF FOOD AND DRUGS ACTS.

An increasing amount of time during the year was devoted to work arising out of these Acts, and, as in the previous year, to avoid arousing the suspicions of the seller, a number of the samples were obtained informally. Where the informal sample proved to be adulterated, a further sample was taken with the necessary formalities.

Milk.

Sixty-four informal samples were purchased, and of these 5 were not genuine: 148 formal samples were taken, and 10 were adulterated or otherwise tampered with.

The following details relate to the samples reported to be not genuine:

(1). An informal sample was 14 per cent. deficient in fat. A formal sample taken from the same source was not adulterated.

(2). An informal sample was 6 per cent deficient in fat. A formal sample taken at a railway station was apparently not adulterated.

(3). An informal sample taken at a railway station was 9 per cent. deficient in fat. A formal sample was not adulterated.

(4). An informal sample taken at a railway station was 3 per cent. deficient in fat. A formal sample taken was not adulterated.

(5). An informal sample taken at a railway station was 7 per cent. deficient in fat. A formal sample was not adulterated.

(6). A formal sample was 5 per cent. deficient in fat. An appeal was made to the cows, and it was found that the milk given was of excellent quality. Proceedings were instituted against the cow-keeper, who was convicted and fined.

(7). An informal sample was 3 per cent. deficient in fat. A formal sample was taken and found to be not adulterated.

(8). An informal sample revealed the addition of at least 6 per cent. of added water. A formal sample being taken, the milk was reported not to be adulterated.

(9). A formal sample was 5 per cent. deficient in fat, and contained 2 per cent. of added water. As it appeared likely that the milk was tampered with before it reached the retailer an appeal was made to the cows. The sample so obtained was 3 per cent. deficient in fat. This deficiency was probably brought about by improper methods of milking. No proceedings were taken in this case.

(10). A formal sample was 8 per cent. deficient in fat and contained 2 per cent. of added water. This sample was taken at the same time and from the same retailer as sample 9. It was found that the milk was derived from a similar source.

(11). A formal sample taken at the time of milking was 4 per cent. deficient in fat. In this case the deficiency in fat was due to improper methods of milking. No proceedings were instituted.

(12). A formal sample was 3 per cent. deficient in fat. This sample was taken from the same farm as sample 11.

(13). An informal sample contained 20 per cent. of added water. A formal sample was reported to be not adulterated.

(14). An informal sample contained 22 per cent. of added water. A formal sample was reported to be not adulterated.

(15). A formal sample contained 9½ per cent. of added water. Proceedings were taken against the cowkeeper who satisfied the Bench that the milk had been tampered with during transit. The case was dismissed on payment of cost.

Table 23 on page 79 shows the results of the analyses of milk samples.

From many directions there is ample evidence of the existence of a widespread and increasing adulteration of milk, euphemistically known as "toning," consisting of the addition to a naturally rich milk of water or more commonly, skimmed milk, in sufficient amount to bring the resultant mixture into line with the minimum requirement of the Board of Agriculture. With almost mathmatical exactness, samples of milk will show an analysis of 3 per cent. of fat and 8·5 per cent. non-fatty solids. As the average quality of pure milk is well above these figures, it would seem that either by removal of cream, or addition of skimmed milk or water, a careful manipulation is being carried out. In a certain town the local authority decided to disregard the minimum limit suggested in the Sale of Milk Regulations, and instituted proceedings only in the cases in which the percentage of fat in a sample fell below 2·7, a progressive deterioration thereupon followed in the quality of the samples taken. In view of the precision with which such toning is carried out, it seems more than likely that cowkeepers and milk dealers are being systematically instructed in the extent to which they can safely adulterate milk. In fact, facilities are provided by which, in return for a small fee, farmers may learn the extent to which the milk of their herd corresponds with "standard milk." The risk of detection, under existing conditions, is slight, and even in the event of a conviction the fines imposed would probably fail to prevent the fraud from being a financial success.

Any attempt to deal with the question of the supply of genuine milk must include some provision directed to check the practice of toning. Section 9 of the Sale of Food and Drugs Act would at first sight seem adequate for the purpose; experience, however, has shown that it is practically useless, probably because it is almost impossible to obtain evidence of the act of abstraction. So long as milk is sold by volume, at a price fixed irrespective of the extent to which the quality may exceed a minimum limit, it will be difficult to abolish toning. There can be little doubt that an extensive illicit trade in skimmed milk is being carried on at the present time, and it would seem that some system by which separated milk should be "ear-marked," from the time of separation is urgently needed. By restrictions of sale and appropriate labelling, similar to those relating to preserved cream, set out in the Milk and Cream Regulations, 1912, it should be possible to exercise supervision over the distribution and sale of skimmed milk, and to permit, if necessary, a trade in milk of low quality. Under the present state of the law with respect to the sale of food and drugs, when a purchaser asks for milk he should legally be entitled to receive the entire secretion of the mammary glands of a healthy cow, fed and milked in a normal manner. In practice he may be sold a fluid of varying composition, mainly obtained from the udder of a cow, kept so as to yield a maximum amount of milk at the most convenient time.

Largely owing to the unfortunate wording of the Sale of Milk Regulations, the working of the Food and Drugs Acts is a failure in so far as they were intended to secure for the consumers pure milk. Although the Regulations in question are little more than a pious opinion as to when a presumption of adulteration should arise, yet as a matter of fact it is rare for proceedings to be instituted unless a sample fails to reach the minimum limits there suggested, and even then, with the requisite amount of expert evidence, generally consisting of a recapitulation of oft-quoted instances where the analysis of a morning milk showed a fat content less than 3 per cent., it is unlikely that a conviction will result. In spite of a circular letter issued by the Home Office, the fines imposed continue to be totally inadequate, and it seems useless to expect that the public will be supplied with genuine milk of good quality until an alteration is made in the legislation relating to the sale of milk.

If it be admitted that some change is necessary, in what direction should action be taken? It would seem that it should be made an offence to sell milk which does not attain a certain fixed minimum limit, irrespective of the cause of the deficiency in fat or solids. Against such a course it may

be argued that a fixed minimum percentage composition for a substance such as milk is in practice an impossibility, that it would lead to wholesale toning, be to the prejudice of the producers of high grade milk, and press hardly on those who keep a small number of cows.

In the first place, by judicious breeding, by care in milking, feeding, and in other ways it is certain that cowkeepers can obtain from their herds a milk of any reasonable quality required. Secondly, as regards toning, it is doubtful whether this practice could be much more extensive than it is at the present day, and it is not unlikely that a fixed minimum limit would tend to check adulteration by removing that shield of the sophisticator—the opportunity of placing the blame on the cow ; in any event, the public would be safeguarded in a manner now impossible. The vendor of a rich milk would increase the price or attempt to reduce the quality ; in either case, the sale of milk containing less than the minimum of fat and solid would be entirely prohibited. The dairyman with one or two cows, would probably be unable to modify the milk with the same degree of success as a wholesale dealer. On the other hand by fixing a minimum limit the present unsatisfactory legal position would no longer exist. The fact that a sample did not reach the requirements would not, as at present, raise the presumption of adulteration. Efficient supervision of the sale of milk would be made possible and those buying milk would be entitled to receive an article of at least a certain quality.

PUBLIC HEALTH (MILK AND CREAM) REGULATIONS, 1912.

These regulations prohibit the addition of any preservative substance to milk intended for human consumption. Only cream containing 35 per cent. or over of fat may be preserved, and then only by certain substances, the nature and amount of which must be stated on a label. No preservative was discovered in the samples of milk examined. Two samples of preserved cream were analysed, in each case the statement on the label was found to be correct, and the amount of milk fat was over 35 per cent. No instances of an infringement of the requirements as to labelling were detected. No thickening substance was found in the two samples of preserved cream examined. Practically no cream other than preserved cream is obtainable in the district.

OTHER FOOD.

The number and nature of samples other than those of milk taken during the year are given on table 24 on page 79.

Four formal samples of chopped suet purchased in December, on analysis were shown to contain 26, 14, 16, and 9 per cent. of added flour. Proceedings in these cases were pending at the end of the year.

HOUSING.

Although during the year a considerable amount of work has been performed under the provisions of the Housing and Town Planning Act, 1909, and also under section 141 of St. Helens Improvement Act, 1869, yet little progress has been made.

A number of closing orders and orders for demolition have been made by the Council, but in the majority of the cases the houses are still occupied and no steps have been taken to remedy the defects there existent. Until the latter part of the summer the impossibility of obtaining houses suitable for the working classes undoubtedly prevented proceedings being taken to obtain the ejectment of the tenants. Since the outbreak of war more houses have become vacant, but overcrowding has largely increased.

Several schemes to provide houses have been considered by the Committee, and on more than one occasion resolutions authorising the erection by the Corporation of houses for the working classes have been passed by the Council. At present the position appears to be that there is standing a resolution of the Council that 150 cottages having one, two or three bedrooms are to be erected on land acquired or conditionally acquired by the Corporation, and that plans and a balance sheet relating thereto be forwarded to the Local Government Board.

Tables 25 and 26, beginning on page 80, form an extremely interesting record of efforts, leading to a result similar to that achieved by Sisyphus.

OVERCROWDING.

A large amount of overcrowding exists in the borough. Efficient action to remedy the condition is rendered difficult by the scarcity of houses suitable for the working classes.

FACTORY AND WORKSHOPS ACTS.

FACTORIES.

The inspection of these is in the hands of a factory inspector appointed by the Home Office. Any act, neglect, or default which can be dealt with under the Public Health Acts is referred to the Local Authority. Table 27 gives a list of matters so referred during 1914; with three exceptions, the necessary alteration had been carried out at the end of the year.

WORKSHOPS.

The number of workshops registered is 318. These were visited on 354 occasions and as a result the defects shown in table 28 were discovered and in due course remedied.

WORKPLACES.

Eighteen workplaces are registered, the trades carried on being in one instance that of a plumber, in seven a joiner, in three a wheelwright, in three a smith, and in two a mason. Two cab yards are registered.

BAKEHOUSES.

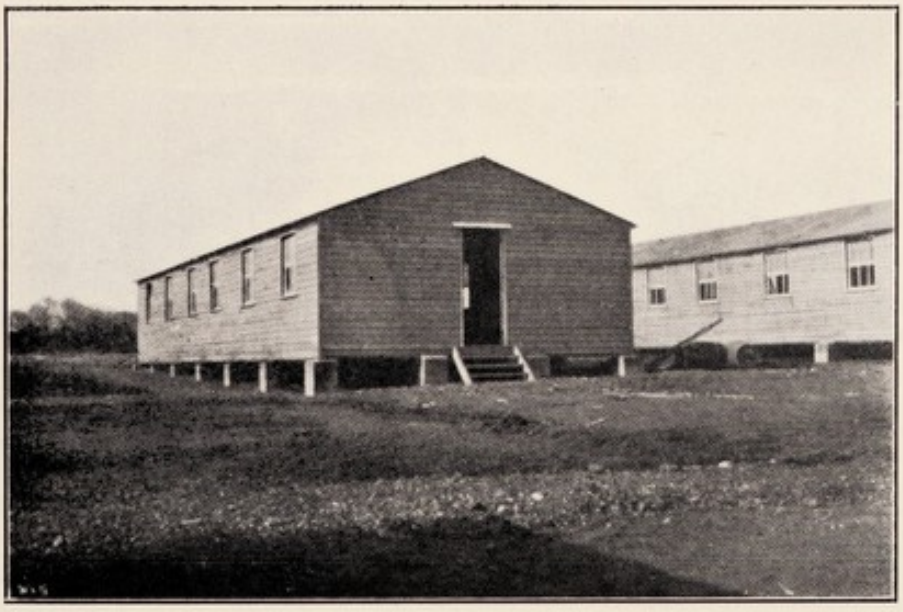
Reference to these will be found on page 21

OUTWORKERS.

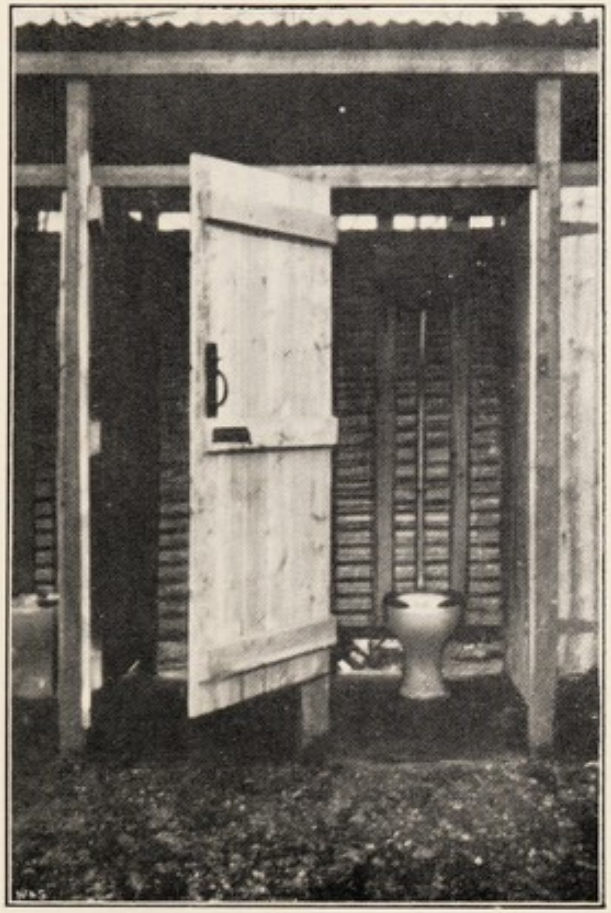
Occupiers of factories, workshops, or any place from which work of certain kinds is given out are compelled to keep a list of outworkers employed by them, and to send a copy of the list to the Local Authority on or before the 1st February and August in each year. Eight lists referring to 38 persons were made out by employers during the year. Few of the lists were sent in by the required dates. The outworkers were visited on 35 occasions and the surroundings under which the work was being done were found to be on the whole satisfactory.

Tables 29, 30, 31, 32 and 33 furnish the returns annually required by the Home Office.

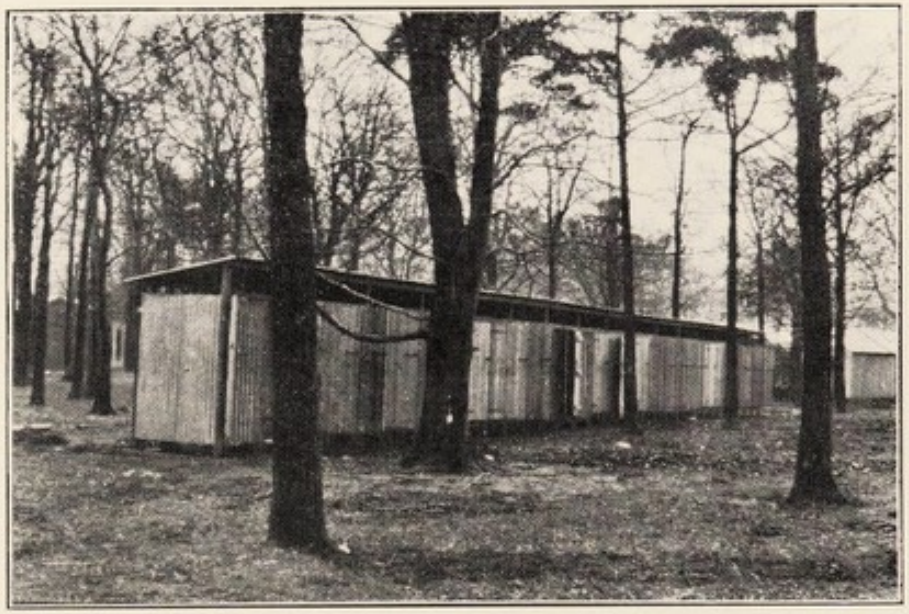
Framework of hut.



A completed hut.



One compartment of the range of water closets.



Range of water closets at a hutment.

SANITARY ADMINISTRATION.

WORK CARRIED OUT BY THE VARIOUS MEMBERS OF THE STAFF.

The inspector of nuisances generally directs the work of the assistant inspectors, supervises the conversions of closets to the water carriage system, and is available for special investigations.

Of the five assistant inspectors of nuisances, three are district inspectors, one mainly devotes his time to work arising from the conversion scheme, and one is principally engaged in inspections under the Housing Acts.

The nurses are employed in visiting houses in which a birth has occurred, in the supervision of midwives, in the medical inspection of school children and in following up cases of defects. They also take part in the treatment of children at the school clinic and act as tuberculosis nurses.

Both assistant medical officers of health, the whole time dental surgeon, the chief inspector of nuisances, four assistant inspectors, a third class clerk, and the driver of the motor ambulance are on active service. The vacancies in the staff in each case have been filled by the appointment of temporary officers.

CORPORATION HOSPITALS.

Peasley Cross Hospital.

The borough isolation hospital at Peasley Cross provides accommodation for 120 patients. Cases of scarlet fever, diphtheria, typhoid fever, erysipelas, puerperal fever, and when necessary other diseases are treated. During the first quarter of the year one pavilion was set apart for the admission of cases of pulmonary tuberculosis. Tables 34 and 35 show the number of patients treated in the institution during the year, and the duration of treatment.

The need of additional accommodation for the staff at Peasley Cross Isolation Hospital, urgent for several years, has now become acute. Mainly owing to subsidence the wards require frequently structural alterations and repairs, and it is now a matter for serious consideration whether it would not be advisable to build an isolation hospital in more favourable surroundings.

Old Whint Hospital.

The small pox hospital is situated at Old Whint. Thirty-six patients can be isolated. The hospital has been unoccupied during the whole of the year.

Eccleston Hall Sanatorium.

This institution, opened for the reception of patients in December, 1913, has been fully occupied during the year, and in spite of the fact that the number of beds provided is considerably in excess of that recommended in the Astor Report, the necessity of further accommodation will soon have to be faced, and in this respect it is significant that no less than 34 poor law cases of pulmonary tuberculosis were being treated in Whiston Infirmary on a certain date in 1914.

The proportion of notified cases of infectious disease treated in hospital is given in table 36.

The total staff on duty in the hospitals at the end of December consisted of a matron, 2 sisters, 8 staff nurses, 14 probationers, 32 domestic servants, 3 porters, a gardener, and an errand boy. Two sisters were on active service.

DISINFECTING STATION.

The disinfection station is situated at the Peasley Cross hospital. Visits to 751 houses were made for the removal of clothing and bedding for disinfection by steam. A list of the articles disinfected is given in table 37.

Infected rooms are now sprayed with a solution of formalin and closed for four hours. 2,480 rooms were disinfected during the year.

AMBULANCE STATION.

A motor ambulance is kept at the Peasley Cross hospital, to convey patients to either of the Corporation hospitals. During the year, the total distance covered was 6,011 miles.

PUBLIC MORTUARY.

This is situated at the rear of the town hall and consists of a brick building containing two rooms.

Thirty bodies have been placed in the mortuary during the year, and 14 post-mortem examinations conducted.

ADMINISTRATION OF LOCAL OR ADOPTIVE ACTS.

The borough is fortunate in possessing several valuable Local Acts :—

St. Helens Improvement Act, 1869.
St. Helens Corporation Act, 1889.
St. Helens Corporation Act, 1893.
St. Helens Corporation Act, 1898.
St. Helens Corporation Act, 1911.

The following general Adoptive Acts are either wholly or in part in force in the district :—

Infectious Diseases Prevention Act, 1890.
Public Health Acts (Amendment) Act, 1890.
Notification of Births Act, 1907.
Public Health Acts (Amendment) Act, 1907.

Byelaws have been made with respect to :—

Nuisances.
Slaughter houses.
New streets and buildings.
Common lodging houses.
Houses let in lodgings.
Spitting.

Regulations are in force relating to dairies, cowsheds and milk shops, glanders or farcy, public abattoir, closing orders, general weekly half-holiday, etc.

CHEMICAL AND BACTERIOLOGICAL LABORATORY.

A well-equipped laboratory is provided at the town hall. A smaller laboratory has also been fitted up at the tuberculosis dispensary. Examination of material from suspected cases of disease is carried out free of cost at the request of a medical attendant. The Council now provide facilities for the diagnosis of cases of venereal disease, including the Wassermann reaction for syphilis.

The numbers of specimens examined during the year are shown in table 38.

Anti-toxins are provided free for persons suffering from diphtheria and other diseases. The total amount supplied during the year was 744,000 units.

PREVENTION OF AND CONTROL OVER ACUTE INFECTIOUS DISEASE.

NOTIFIABLE DISEASES.

Under the Infectious Diseases Notifications Acts, 1889 and 1899, the St. Helens Corporation Act, 1911, and Regulations made under the powers conferred by the Public Health Act, 1875, the following diseases are compulsorily notifiable in the borough :—

Smallpox.	Typhus fever.
Cholera.	Continued fever.
Diphtheria.	Relapsing fever.
Membranous croup.	Puerperal fever.
Erysipelas.	Cerebro-spinal fever.
Scarlet fever.	Ophthalmia neonatorum.
Typhoid fever.	Acute poliomyelitis, and
	All forms of tuberculosis.

The means adopted in the borough to control the spread of infectious disease are briefly as follows. Immediately on the receipt of a notification a member of the staff is sent to visit the house in order to obtain full particulars concerning the source of infection, the health of the contacts and the sanitary conditions of the dwelling. Unless there is ample provision for home treatment the patient is removed to the isolation hospital. Cards giving instructions concerning the particular disease and setting out the steps to be taken with regard to disinfection, are left at the house. The infected room or rooms are sprayed with a solution of formalin and closed for four hours. A supply of suitable disinfectant is given, and in every case the bedding is removed for steam sterilisation. In the few cases where the patient is nursed at home frequent visits are made to see that the necessary precautions are taken, and as soon as the illness is over, disinfection is carried out. Cards of warning are sent to any laundry or library connected with the case and where school children are living in an infected house exclusion notices are forwarded to the school attendance department, the parents and head teachers. Further notices are sent out when the home is free from infection. Within about ten days from the date of discharge from the isolation hospital, a final visit is made to ascertain whether the patient still remains free from infection, and to inquire concerning the health of the other members of the family. Persons coming from a house where an infectious disease is being nursed are not permitted to engage in certain trades. Arrangements have been made whereby the local registrar of births and deaths at once notifies to the medical officer of health the occurrence of a death from an infectious disease. Table 81, on page 120, shows the ward distribution of the notified cases of infectious disease.

Smallpox.

No instance of this infection was notified during the year.

The number of cases notified and the number of deaths occurring from smallpox in the borough since 1873 are given in table 39 on page 89.

Although the town has been comparatively free from the disease for nearly ten years, it is to be feared that the increasing number of the population unprotected by vaccination will afford suitable material for an extensive epidemic. Table 40, on page 90, shows the extent of vaccination in St. Helens since 1897.

Cerebro-Spinal Fever and Acute Poliomyelitis.

Two cases of cerebro-spinal fever were notified during the year, and two deaths occurred from the disease. One case of acute poliomyelitis was notified.

Diphtheria and Membraneous Croup.

During the year, 120 cases with 8 deaths have been reported, giving an attack rate of 1·19 and a death rate of 0·07 per thousand of the population. Table 41 on page 91 sets out the record for previous years.

The number of cases removed to hospital was 106, or 88·3 per cent of the total cases notified. Table 42, page 90, gives a classification of the cases and the deaths according to the age of the patients.

Erysipelas.

One hundred and nine cases were notified and three deaths were stated to have taken place from the disease. Two cases were removed to the isolation hospital. Table 43 on page 92 gives a record of the notifications and deaths of former years.

Scarlet Fever.

During the year, 335 notifications were received, and 5 deaths were reported.

The numbers for previous years are shown in table 44 on page 93.

Although the origin and transmission of the disease are still somewhat obscure, there can be little doubt that efficient administration can do much to control the prevalence of scarlet fever. The disease at the present time throughout the country is generally of a mild type. It is probable that the main source of infection is direct personal contact with a person suffering from an unrecognised and sometimes apparently trivial attack of the disease.

In its early stages scarlet fever is particularly infectious. Later on in the illness discharges from the nose or ears are very liable to give rise to the disease. Experience has shown that persistent and regular inquiries made at the school attended by a patient not infrequently lead to the discovery of other children similarly affected.

The number of cases removed to hospital was 292, or 87·1 per cent. of those notified. Table 45, page 94, gives a classification of the cases and deaths at various ages from scarlet fever during the year.

Typhoid Fever.

Twenty-seven cases with four deaths were notified during 1914. All but two of the cases notified were removed to hospital and it is probable that prompt and complete isolation of the patients had some influence in diminishing the prevalence of the disease. Table 46, page 95, gives the record for previous years.

Puerperal Fever.

Seventeen persons were reported during the year to be suffering from puerperal fever and eight deaths were stated to be due to the disease. Eleven of the cases notified were removed to hospital.

Table 47 on page 96 gives figures relating to the cases reported in previous years. It will be noticed that a considerable increase in the prevalence of the disease occurred during 1914.

Ophthalmia Neonatorum.

Seventy-four children were notified as suffering from this disease. Sixty-five of the children were nursed at home, being attended by private practitioners and district nurses, while of the more severe cases, nine were admitted into the isolation hospital.

NON-NOTIFIABLE DISEASES.

Measles.

The number of cases reported during the year was 454, with 25 deaths. Table 48 on page 97 gives the record for previous years.

Measles is prevalent in St. Helens about every second year, but although a severe outbreak which began in 1912 continued until early in 1913, a further epidemic commenced in December, 1914.

It is fair to assume that measles, in its crippling effects, is among the most important of the infectious illnesses common to children.

It is a disease of childhood. Over 99 per cent. of fatal cases occur during the first fifteen years of life, and about three-fifths of the deaths are in children under two years of age. The total number of deaths from measles exceeds the deaths from scarlet fever and diphtheria combined. The fatality rate among those attacked is said to vary from one to five per cent., but among the poorest class of children—those coming from insanitary districts, a figure as high as 13 per cent. has been recorded. The commonest fatal termination as revealed by death certificates is broncho-pneumonia ; 49 per cent. of the deaths occurring in England and Wales from measles were thus described, and 81 per cent. were returned as complicated by some form of respiratory disease. Investigations which have recently been carried out seem to indicate that the causes of chest complication in measles are related to a septic state of the mouth. It is, therefore, not difficult to understand the reason of a high mortality under conditions where efficient nursing is impossible and the environment unsatisfactory.

It is notorious that measles rarely causes death among children of the upper and middle classes. The death rate among infants under one year of age of these classes was 1·2 per thousand births, while among children of unskilled labourers it was 4·7.

Of the sequelæ of measles, the most important is tuberculosis, either as an involvement of the lymphatic glands within the chest, or an acute general infection. Bronchitis, which is almost always associated with measles, may be persistent, passing into regularly recurring attacks. The inflammation, generally present in the nose and throat, may spread to the middle ear, leading to abscess formation, chronic ear discharge, and deafness. In weakly, debilitated children an ulceration of the eyelids may occur, resulting in permanent damage to the sight ; or, without any tangible sign, convalescence may be prolonged and the child pass into a state of malnutrition, requiring even under suitable conditions careful management to bring about restoration to health.

In view of these facts the Committee decided at the end of the year to reserve forty beds in Peasley Cross isolation hospital for the treatment of children suffering from the disease.

The deaths at various ages during 1914 are shown in table 49 on page 94.

Whooping Cough.

Two hundred and seven cases with 24 deaths were notified. The only notifications received were those from school teachers and attendance officers. Table 50 on page 98 gives a record of the extent of the disease in other years.

Diarrhœa and Enteritis.

According to a system adopted by the Registrar General, deaths from diarrhoea and enteritis are divided up as they occur in children under or above two years of age. A further sub-division is made into infective and non-infective varieties of the diseases. The Local Government Board, on the other hand, requires a return of all deaths from diarrhoea and enteritis irrespective of the age of the deceased. During 1914, 98 deaths were attributed to diarrhoea or enteritis, and of these 93 occurred in children under two years, being a death-rate from these diseases of 29 per 1,000 births. Table 52 on page 94 shows the deaths at certain age periods from both diseases.

The figures for other years are given in table 51 on page 99.

The enormous sacrifice of infant lives occasioned by the prevalence of diarrhœa and enteritis is a reproach against sanitary authorities. During 1911, in England and Wales these diseases were given as the cause of 40,000 deaths in children under five years of age, over 30,000 being in infants under one year. Of all disorders affecting childhood they are probably the most amenable to measures of sanitary reform. The incidence of the diseases is by far the greatest on infants who are artificially fed, and thereby exposed to all the risks of domestic insanitation and contaminated food. So long as pollution of the soil and of sub-soil water is allowed to continue, house refuse and horse manure permitted to remain within the proximity of dwellings, yards and back passages to be unpaved and in a foul and filthy condition, the responsibility for this destruction of infant life will lie at the doors of sanitary authorities.

During the past year in St. Helens an attempt has been made to bring home to the public the seriousness of the disease. More frequent house visitation of young children was carried out by the nurses, special attention being given to those living in insanitary areas, and cards and leaflets with simple instructions concerning the dangers to be avoided were sent to homes containing children under two years of age. Unfortunately a proposed bye-law to enforce the regular removal of manure was successfully opposed: steps, however, were taken to encourage the destruction of flies, and to promote domestic cleanliness, and a weekly prize was awarded by the Mayor to the school showing the largest number of flies destroyed.

PREVENTION OF AND CONTROL OVER TUBERCULOSIS.

A systematic campaign against tuberculosis has been carried on in St. Helens since about the year 1899, when arrangements were made with medical practitioners for the voluntary notification of pulmonary tuberculosis. In 1906 the Committee decided that accommodation should be provided in a ward at the isolation hospital at Peasley Cross for certain cases of the disease. In 1912 the smallpox hospital at Old Whint was adapted for the reception and treatment of a further number of patients. In the preceding year St. Helens obtained in a private Act power to remove to hospital persons suffering from consumption, who were living under home conditions such that due precautions could not be taken to prevent the spread of infection. Although proceedings under this section have been instituted only in one instance, the powers conferred have on many occasions been found to be very valuable.

PULMONARY TUBERCULOSIS.

During the year 225 notifications were received, 18 of the cases had been previously notified, and 113 deaths from the disease were recorded. Table 53, on page 100, shows the number of notifications of pulmonary tuberculosis received each year since 1900, and also the number of deaths stated to be due to the disease.

Table 54, page 101, shows the division into age and sex groups of the primary notifications received.

Eleven deaths due to pulmonary tuberculosis occurred in persons concerning whom no notification had been received, and in a considerable number of cases the notifications were made within a short period before death. The interval between the time of notification and of death is shown in table 53 on page 101.

The steps which are taken to prevent the spread of the disease are as follows:—On the receipt of a notification the patient is visited by a nurse, who instructs him concerning the infectious nature of the illness, particularly with regard to the disposal of expectoration, and the value of fresh air and suitable sleeping accommodation. Arrangements are made so that the patient can at once attend the tuberculosis dispensary for examination and treatment. If he is too ill to leave his home, the patient is visited by the tuberculosis officer. In either case steps are taken to give sanatorium or hospital treatment for at least three months. This period is extended in suitable cases. On discharge from hospital the patient commences a regular attendance at the dispensary. Disinfection is carried

out soon after the first visit, on removal of the patient to sanatorium, at the termination of the illness and from time to time during the progress of the case. Before the patient is discharged an attempt is made to approximate the condition of the bedroom to be occupied as near as possible to open-air treatment. There has been a cordial co-operation between the local Insurance Committee and the Sanitary Authority in dealing with persons suffering from pulmonary tuberculosis. The work carried out by the former is described in detail on page 59.

Other Forms of Tuberculosis.

135 notifications have been received during 1914, of which 19 had been previously notified, and 65 deaths have been recorded. Table 56 on page 102 shows the number of deaths attributed to forms of tuberculosis other than pulmonary since 1873. Up to the present, hospital accommodation has not been generally provided by the Local Authority for instances of non-pulmonary tuberculosis. Table 57 gives the age and sex distribution of the notifications received. Steps similar to those previously detailed are taken to follow up and prevent the spread of infection.

Table 58 on page 103 gives a record of cases admitted to Eccleston Hall, and in table 58a is shown the present condition of the patients discharged.

TUBERCULOSIS DISPENSARY.

The dispensary is situated in new and well-equipped premises in Claughton Street. During the year a considerable amount of work has been there carried out. Three sittings a week are given to the examination and treatment of persons suffering from tuberculosis. Frequent use is made of the X-rays in the diagnosis of pulmonary tuberculosis and in the treatment of non-pulmonary cases.

The number of patients attending the dispensary is set out in table 59.

The nurses made 265 first-visits and 1,204 re-visits to notified cases and as a result of inquiries into the possible sources of infection, it was found that in 26 per cent. of the cases a definite history could be obtained of close association with a person known to have been suffering from the disease.

VENEREAL DISEASE.

Statistics derived from an inquiry into causes of mortality as given on certificates of death entirely fail to show the extent of sickness and death due to venereal disease. In the course of evidence given before the Royal Commission on venereal disease it was stated that the histories of 34 syphilitic mothers gave 175 conceptions, resulting in 104 premature births, still-births and deaths in early infancy; 41 diseased in some serious form or other, such as blindness, deafness, stunted growth, paralysis, imbecility or fits, and only 30 or 17 per cent. were apparently or doubtfully healthy. Another witness gave a record of 21 families affected with syphilis, showing that two-thirds of the children born were either still-born, or if alive were blind or deaf. As showing the importance of venereal disease on the after life of children of syphilitic parents, the same witness gave as his opinion that 25 per cent. of the cases of congenital deafness were due to syphilis, and, moreover that that form of deafness was practically incurable. Concerning the prevalence of venereal disease it has been estimated on the assumption that three per cent. of cases of syphilis die from general paralysis or locomotor ataxy, that there are in the United Kingdom about 111,000 fresh cases of syphilis each year. In other words, there are at present living some 3,000,000 syphilitics. Another witness before the Commission expressed the opinion that syphilis was the main cause of still-births, and also probably of a large proportion of intra uterine deaths.

A careful inquiry into the deaths which took place in the borough during the year showed that at least 19 could be attributed to the immediate or remote effects of venereal disease. The table on page 117 gives an analysis of the cases.

INVESTIGATION OF OTHER DISEASES.

Cancer and Malignant Disease.

Seventy-three deaths during 1914, were stated to be due to cancer and malignant disease, this is the largest number recorded in the borough.

Table 60, page 105, shows the figures for previous years.

Until the cause of the disease is known, any steps directed towards prevention will be somewhat uncertain. In view of the possibility that the disease may be due to a micro-organism, disinfection is always carried out at a house where death occurs. Although many substances have been used for the cure of the complaint, early and complete removal by a surgeon still affords the best chance of success. It cannot be too widely known that prompt and thorough removal of the growth will, in the majority of cases, prove successful in effecting a cure.

Pulmonary Diseases other than Tuberculosis.

Three hundred and ninety-seven deaths were certified to be due to respiratory diseases other than tuberculosis. The number of deaths from these diseases in previous years is shown in table 61 on page 106.

Table 62 on page 107 sets out the prevalence of certain winds and the number of deaths occurring from pulmonary diseases.

Deaths from Violence.

The number of deaths which took place from violence was 52. Seventy-seven inquests were held and 14 post-mortem examinations carried out.

Uncertified Causes of Death.

In no less than 60 instances a death was registered without being certified by a medical practitioner or coroner. The alleged causes of these deaths were as follows :—Premature birth, 7 ; Convulsions, 16 ; Heart-failure, 10 ; Vomiting, 1 ; Apoplexy, 4 ; Bronchitis, 6 ; Senile decay, 2 ; Debility, 3 ; Teething, 1 ; Erysipelas, 1 ; Meningitis, 1 ; Natural causes, 2 ; Other causes, 6.

It will be apparent that the existing law relating to the registration of births and deaths is most unsatisfactory.

MEANS FOR PREVENTING MORTALITY IN CHILDBIRTH AND INFANCY.

MIDWIVES ACT.

At the close of 1914, 36 women gave notices of their intention to practice within the borough during the ensuing year. The qualifications of these women were :—Central Midwives Board examination certificate, 13; other recognised certificate, 14; untrained, 9.

Of the total births occurring in the borough during the year, 97·3 per cent. were attended by midwives. No instance was discovered of a birth being attended by an uncertified midwife. The extent of the practices of the women vary considerably, one having attended 285 births while another had only one case.

Table 63 shows the work carried out by the midwives during 1914, and gives a record for previous years.

STILLBIRTHS.

The number of stillbirths notified by midwives during the year was 64, which is at the rate of 1·9 per cent. of the births attended.

Table 64, page 108 shows the numbers notified each year since the adoption of the Notification of Births Act, and also the number buried in the cemeteries.

The prevalence of stillbirths in the practice of midwives shows much variation, the highest rate being eleven per cent. The months of pregnancy during which the stillbirths took place were stated to be as follows :—

6th month	10
7th month	14
8th month	9
9th month	31

MEDICAL ASSISTANCE.

Under rules issued by the Central Midwives Board, a midwife must advise that medical assistance shall be obtained in any case where abnormal conditions occur during the confinement or in the lying-in period. The conditions for which medical assistance was required were as follows :—

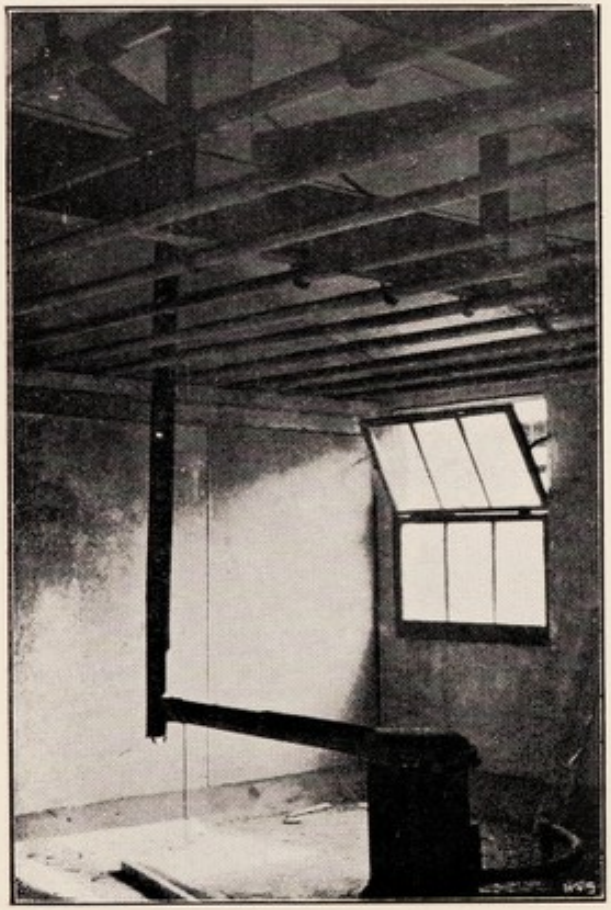
Abnormal presentation	35
Deformed pelvis	37
Ante-partum hæmorrhage	28
Post–partum hæmorrhage	17
Retained placenta	36
Ruptured perinæum	62
Premature birth	24
Fever	1
Uterine inertia	29
Other causes	562
Ophthalmia neonatorum	67
	898

PUERPERAL FEVER, OPHTHALMIA NEONATORUM.

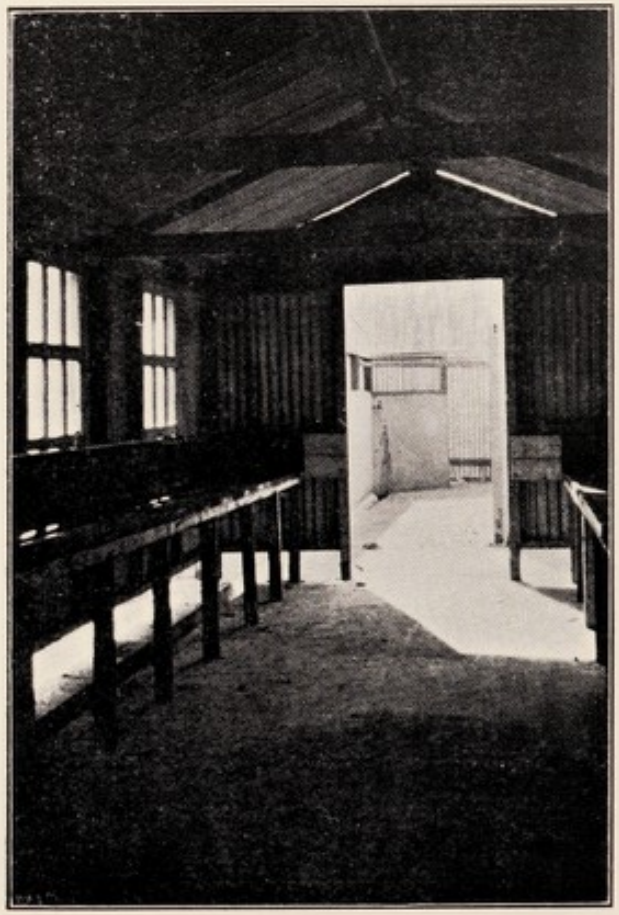
Particulars relating to these diseases are given on page 39.

NOTIFICATION OF BIRTHS ACT.

This Act came into force in St. Helens in 1908. Four years later the Council resolved to pay a fee of 6d. for each birth notified by medical practitioners or midwives. Under the Act a notice in writing has to be sent to the medical officer of health within thirty-six hours of birth. Notification forms are supplied addressed and stamped for use. During the year all the births occurring in the borough were notified, 97·3 per cent. by midwives, 2·7 per cent. by doctors. With very few exceptions each birth is visited as early as possible, and generally within five days of the occurrence, by a trained nurse who is also a certified midwife. The visits are well received, suitable instructions are given concerning the care and feeding of the infant and advantage is taken of the visit to note any sanitary defect in the house. Unless the home circumstances appear to be favourable and the health and general condition of the child satisfactory, a further visit is paid in about a month ; unsatisfactory cases receive almost constant supervision. The number of visits made by the nurses during the year was 8,313. A high percentage (97%) of infants were breast-fed at the time of the first visit, but there is reason to believe that in a proportion of the cases breast feeding is discontinued within a short period.



Corner of a drying room.



Lavatory and urinal outside.

General view of Hutment.

Inside view of a hut.

INFANT MORTALITY.

During the year there were no less than 464 deaths of infants under one year of age, giving a mortality of 138 per thousand births. Table 65 shows the infant death-rate in St. Helens since 1873, and also figures for England and Wales.

The extent of infant mortality in the various wards is given in table 66.

Any review of the methods whereby an attempt may be made to prevent the loss of infant life demands a consideration of those influences which, acting before birth, may bring about the early death of the infant or materially cripple its career. Of the extent of the part played by ante-natal influences in causing infant mortality, infant sickness and a lower standard of health in youth and adult life, it is as yet impossible to speak with any degree of exactness. The laws dealing with the registration of births and deaths expressly exclude any official record of still-births. Neither is it known with what frequency miscarriages occur. It has been estimated that two still-births and nine miscarriages take place for every hundred live births. In other words, there is a mortality of infants before birth as great as that which occurs among the survivors during the first year of life. A special inquiry in one large city showed that no less than 25 per cent of pregnancies failed to result in a living, full time child. During the year 1911, in England and Wales, over 31,000 deaths in children under one year of age were certified as due to premature birth.

Ante-natal causes, therefore, exact a heavy toll during the nine months of fœtal life, and it is only reasonable to expect that they will continue to operate during the first month or more after birth.

For the year 1910, out of 105 deaths occurring in England and Wales among 1000 births, 11 took place within twenty-four hours of birth, 12 between one day and one week, and 38 under one month.

Reference to the different causes of death in infancy afford striking evidence of the importance of parental influences, generally acting through the mother. Of the 11 deaths occurring during the first day of life, 10 were attributed to the so-called wasting diseases, and of this number 7 were ascribed to premature birth. Of the 12 children who died during the first week, in ten instances wasting diseases were given as the cause of death, and of the 10, 6 were due to premature birth. Of the deaths under one month 76 per cent were due to premature birth and congenital defects, and when the deaths for the first year of life are taken, the percentages

from the same diseases show the high figure of 38. It is safe to conclude that the majority of deaths due to these diseases are referable to causes acting before birth and also to lack of care and skilled assistance at the time of confinement.

Of the amount of infant sickness and ill-health during childhood and youth attributable to ante natal causes, there is as yet insufficient evidence to warrant a definite opinion. However, it may be said that a high infant death rate in a given community implies in general a high death rate in the next four years of life, while a similar association is found between low death rates at both age periods.

When it is realised that out of a thousand pregnancies ante-natal causes bring about, within a year and nine months, a fatal termination in approximately 250 instances, some idea will be obtained of the magnitude of the devastation. It becomes necessary, therefore, to attempt to define the unfavourable influences which may act through the parents before the birth of their offspring, to discover in what measure they may be prevented, and the lines along which an attack is likely to be most effective. In the following classification no attempt has been made to give priority of place to the more important causes.

Health of the parents.
Age of the parents.
Occupations of the parents.
Size of the family.
Illegitimacy.
Domestic overcrowding.
Insanitation.
Parental ignorance.
Poverty.
Intemperance.
Lack of medical and nursing assistance.

Reference on this occasion will be made to the last of the above factors.

Lack of Medical and Nursing Assistance.

There is more than a strong suspicion in many cases that the want of long-continued medical attention before confinement, and the absence of skilled nursing during and after labour, are potent factors in causing a high maternal and infantile death rate. Expectant mothers not infrequently exhibit signs of the utmost importance or undergo weeks of suffering owing

to ignorance of the significance of their symptoms. An incident occurred recently where a woman for nearly a month had ante-partum hæmorrhage, terminating fatally soon after labour. Failure to appreciate the seriousness of her condition was the direct cause of her death. Not an inconsiderable proportion of still-births and premature births are due to want of knowledge of the simple rules of the hygiene of pregnancy, and of the steps to be taken at the onset of a threatened abortion. One cannot avoid the conclusion that incompetence and careless negligence on the part of certain midwives largely contribute to the same end. In a certain town during 1913 an inquiry into the circumstances of 68 still-births showed that over 50 per cent occurred during the ninth month of pregnancy, and that 30 per cent of the children were macerated at birth. The causes to which the deaths were ascribed were, injury or shock to mother 10, ante-partum hæmorrhage 6, difficult labour 7, ill-health of mother 18, inattention at birth 7, other causes 20. It is rare, even among the better class of well-trained midwives, that a systematic and careful inquiry is made of the time of engagement to detect those dangers which, left untreated, may jeopardise the lives of mother and child. Neither have midwives generally the facilities to provide those articles of clothing indispensable to a well-arranged labour and lying-in. Adequate accommodation for cases of difficult labour and for ailing and delicate infants is practically non-existent even in the largest cities.

THE MATERNITY CENTRE.

During 1914 the Committee decided to establish a maternity centre, from which might radiate the activities of the various agencies dealing with the care of maternity and child welfare, and in order that as complete knowledge as possible might be obtained of suitable cases, the midwives practising in the borough were instructed to notify at once to the medical officer of health their engagement to attend a woman in confinement. Suitable books of forms were supplied to the midwives, and although the scheme has only been in operation for a few months, satisfactory results are being obtained. On receipt of the notification or after information otherwise obtained, tactful inquiry is made into the home circumstances of the expectant mother and her state of health. Appropriate advice is given and when necessary a complete set of clothing for mother and infant is lent for the occasion. Throughout, a very urgent need has been experienced for pre-maternity and labour wards for patients suffering from certain complications of pregnancy, and the Committee have already approved of the establishment of a maternity home. Women suffering from puerperal fever and other infections arising from child birth are admitted into the borough isolation hospital, where treatment is also provided for infants affected with ophthalmia.

In conjunction with the maternity centre and under the direct control of the Committee there have been inaugurated

An Infant Consultation to which babies are brought for weekly or fortnightly inspection. The children are seen by the medical officer of health or his assistants, weighed, medically examined and a careful record is kept of their progress. The nurse in whose district the child lives, assists at the consultations, and in that way it is possible to insure continuity of advice and instruction not infrequently lacking in certain centres.

Classes of Instruction for Mothers. At these the nurses give practical demonstrations and short addresses in infant management, the making of children's garments and the prevention of disease.

As an auxiliary to the maternity centre there is provided a municipal milk depôt where for suitable cases a supply of dried milk may be obtained at cost price. It may be interesting to recall that the first milk depôt established in England was the one opened in St. Helens in 1899. Similar municipal undertakings were started in other parts of the country, but generally speaking without conspicuous success. It was found that in some

instances a heavy expense was being incurred, and in others that interest in the institution after a short period began to decline. The main reasons for the lack of success were probably two. In the first place, the scope of the depôts was entirely restricted to the buying and selling of milk, and no attempt was made to undertake the work now carried on at infant consultations. Secondly, difficulty was at times experienced during the summer months in obtaining, preparing, and delivering the milk, and in handling, filling and washing a considerable number of bottles. Fortunately, however, there is ample evidence that a municipal milk depôt can be successfully managed. The Leicester depôt was opened in 1906. For the year 1907 the net cost to the Corporation for the supply of milk to 202 infants was £339. Towards the end of the year the use of dried milk was commenced with results so encouraging that four years later, with an average of 325 cases on the books, the cost to the municipality was nil, and at the present time the milk depôt is being carried on at a small profit to the Leicester Corporation.

It would appear that there are in the main four advantages to be gained from the use of dried milk :

It is easily digested and in many cases more so than ordinary cows milk.

It is much less liable to contamination in the home.

The cost of the storage and distribution is small.

There need be no waste.

Against its use it has been said that being practically germ free, and having undergone a process of cooking there is a liability to nutritional diseases such as rickets and scurvy, and the absence of lactic acid organisms is likely to cause intestinal disorders.

Against these suppositions is the experience of the Leicester depôt which affords conclusive evidence that dried milk may be extensively used without risk of the diseases in question, and, moreover, if thought desirable it is a comparatively simple matter to add lactic acid bacilli to the food. So long as contaminated milk continues to be the cause of a considerable amount of infant mortality, local authorities will possess a valuable safeguard in dried milk.

More recently the economic advantages of suitably modified dried milk have been carefully considered, and it has been pointed out that if separated dried milk is employed and in the place of cream a cheap substitute is added, the food thereby obtained is one of the cheapest and most satisfactory that can be desired.

There would seem little reason why the range of a milk depôt should not be extended to the provision and distribution of other articles of food suitable for expectant mothers in need of assistance, and it is probable that the giving out of substances such as oatmeal, flour and similar materials, and practical demonstrations in simple methods of food preparation is more likely to be of benefit to mothers than the provision of free meals.

It was therefore decided early in 1914 to discontinue the distribution of pasteurised milk and to supply dried milk instead. The results have amply justified the change; whereas at the end of 1913 there were nine children receiving milk from the depôt, in December, 1914, the number had increased to sixty-nine.

It is probable that in the near future municipalities will find it economical to establish factories for the drying of milk.

VITAL STATISTICS.

Table 67 on page 110 gives certain vital statistics relating to the borough since the year 1908 and in table 68 other important figures are shown. The diagram on table 69 illustrates the natural increase of the population—the excess of births over deaths.

BIRTHS.

The number of births registered during 1914 was 3,326; thirty-one occurring in other districts were transferable to St. Helens, making a total of 3,357. The birth-rate for the year was 33·31, a slightly higher rate than that of the previous year. The chart on table 70 shows that an alarming decline has occurred in the birth-rate for St. Helens since 1873; the rate for St. Helens however, is still above that for the rest of the country. A declining birth-rate is general, and is to be found in most civilised countries, more strenuous efforts must therefore be made to check the present waste of infant life. Table 71 gives the birth-rate in the various wards of the town.

STILLBIRTHS

Reference to these is made on page 47.

ILLEGITIMATE BIRTHS.

There were 97 illegitimate births registered, being 0·96 per thousand of the population. Table 72 on page 114 shows the proportion of illegitimate births during past years.

MARRIAGES

The number of marriages during the year has been 706, giving a marriage rate (persons married) of 14·01 per thousand of the population. Table 73 on page 114 shows the rate for past years.

DEATHS.

The total number of deaths registered as having taken place within the borough during the year is 1,602. Of these 98 were deaths in St. Helens of persons usually resident in other parts; and were transferred by the Registrar General to the districts to which they belonged. 219 deaths of persons usually living within the borough occurred in other places, giving a total of 1,723 as the actual number of deaths to be accepted in estimating the death-rate for the year, and a recorded death-rate of 17·09 per thousand of the population. A recorded death-rate is, on the whole, a trustworthy test of the health of a large population, but for comparing one district with another, it may lead to fallacies, because no account is taken of the age and sex distribution of the two localities. A high proportion of old persons naturally raises the recorded death-rate of an area. In order to allow for the varying constitution as to age and sex of the population of different towns, the Registrar General issues a factor of correction for each area, and when the recorded death-rate is multiplied by this factor, a corrected death-rate is obtained. The corrected death-rate is 18·43, a most unsatisfactory figure. Table 74 shows the recorded death-rate in St. Helens since 1873.

The death-rates in the different wards for 1914 are set out in table 76.

Figures relating to the causes of and ages at death during the year are given in table 77 on page 117.

AN ACCOUNT OF OTHER WORK.

In addition to the usual fortnightly statements of births, deaths, and infectious disease, special reports have been made to the Committee during the year by the medical officer of health. These have related to the Sale of Food and Drugs Acts; empty houses and shops; reports of veterinary inspector; conditions under which ice-cream is made in the borough; notifications from midwives; Tuberculosis (Animals) Order, 1913—slaughter of cattle; housing; measles; and removal of manure.

Tables 78 and 79 give a statement of plans approved by the Committee, and magisterial proceedings taken.

SHOPS ACTS, 1912 and 1913.

Closing Orders—(Barbers and Cycle Dealers).

The closing orders with respect to these trades are as follows:—

BARBERS	CYCLE DEALERS
Monday ..... 8–0 p.m.	From the 15th day of February to the 30th day of September (both inclusive).
Tuesday ..... 8–0 p.m.	
Wednesday ..... 8–0 p.m.	
Thursday (Weekly Half Holiday) 1–0 p.m.	
Friday ..... 9–0 p.m.	..... 9–0 p.m.
Saturday .....10–0 p.m.	..... 8–0 p.m.
Sunday ..... 7–0 p.m.	..... 8–0 p.m.
	..... 1–0 p.m.
	.....10–0 p.m.
	.....10–30p.m.
	.....
	From the 1st day of October to the 14th day of February (both inclusive).
	..... 8–0 p.m.
	..... 7–0 p.m.
	..... 7–0 p.m.
	..... 1–0 p.m.
	..... 9–0 p.m.
	..... 9–30 p.m.
	.....

For failure to observe the Acts, the Committee decided to prosecute in two instances. These prosecutions had some effect and brought about in the town better compliance with the orders.

One application was made during the year for Closing Orders.

The weekly Half-holiday orders at present in force in the borough are as follows:—

> "The week day in every week on which the shops in the Borough of St. Helens in which the retail trades or businesses mentioned in the first schedule hereto are carried on, are to be closed for the serving of customers not later than one o'clock in the afternoon, shall be Thursday; Provided that Saturday may be substituted for Thursday as respects any shop in which notice to that effect is affixed by the occupier."

> "The week day in every week on which the Shops in the Borough of St. Helens in which the retail trades or businesses mentioned in the second schedule hereto are carried on, are to be closed for the serving of customers not later than one o'clock in the afternoon shall be Saturday; Provided that Thursday may be substituted for Saturday as respects any shop in which notice to that effect is affixed by the occupier."

The first schedule comprises, with one known exception, every trade not exempted by the second schedule of the Shops Act, 1912, the exception being that meat which has been treated so as not to be of a perishable nature has not been mentioned in the schedule, and this allows shop-keepers to choose their own weekly half-holiday with respect to meat of this class.

The second schedule comprises builders, plumbers, etc., saddlers and scales and weights dealers.

A weekly half-holiday extension order is in force for butchers and chemists as follows :—

(a) " The provisions of Section 4 of the Shops Act, 1912, are hereby extended to shops in which the following retail trades or businesses are carried on, viz. :—
The sale of Meat.
The sale of medicines and medical and surgical appliances.

(b) The week day in every week on which the shops in the Borough of St. Helens mentioned in Sub-section (a) of this article, are to be closed for the serving of customers not later than one o'clock in the afternoon shall be as follows :—

" Shops in the East Sutton Ward of the said Borough in which the retail trade or business of the sale of meat is carried on — MONDAY.

" Shops in the Borough other than the East Sutton Ward in which the retail trade or business of the sale of meat is carried on — THURSDAY.

" Shops in which the retail trade or business of the sale of medicines and medical surgical appliances is carried on — THURSDAY.

Provided that Saturday may be substituted for Monday or for Thursday as the case may be as respects any Shop in which notice to that effect is affixed by the occupier.

NATIONAL INSURANCE ACT, 1911.

A temporary arrangement has been made between the local Insurance Committee and the Health Committee, whereby the latter provide accommodation in an approved institution followed by treatment at a dispensary, (including the provision of drugs) for all insured persons and their dependents recommended by the Insurance Committee for sanatorium benefit. During 1914, fifty applications were made to the Insurance Committee, forty-seven from insured persons and two from dependents. The remaining application was made from a person outside the area. Sixty-five insured persons were admitted into Eccleston Hall and thirty-three were discharged.

THE WAR.

Soon after the outbreak of war a considerable amount of time was devoted by the medical officer of health in making the necessary arrangements for the medical examination of recruits, particularly those of the St. Helens battalion, and until it became possible to obtain the services of a whole time officer, the duties of medical officer to the battalion were carried out by him. It was decided to find accommodation for the men in disused glass works at Sutton, and steps were at once taken to erect the necessary sanitary conveniences. Separate pedestal water closets each with a flushing cistern, were provided at cost price by the Health Committee, ample washing facilities, and concreted urinals were constructed under the direct supervision of the medical officer of health. Fortunately the chief sanitary inspector, although on active service, was able to give his time to the work. During the six months that the battalion remained in the glass works the medical officer of health was responsible for the sanitation of the barracks, and of the hutments erected for the unit in Garswood Park. Some further reference may be made to the provision of separate pedestal water closets for the recruits. In spite of some adverse criticism the civilian Committee were strongly advised to adopt the separate water closet system, and they are to be congratulated on the firm attitude taken up. It was said that the insanitary contrivance known as an earth closet was the only type of closet suitable for soldiers, and that a water closet would be a source of recurring nuisance. The result of the experiment has shown that the water closets were kept scrupulously clean, were regularly flushed after use, were preferred by the men, and were free from any nuisance.

A close inspection was kept of the food supplied to the soldiers and of premises in the borough where certain articles of the food were prepared. Regular removal of refuse was carried out by theLocal Authority, water and

lighting were supplied from the Corporation mains, and ample facilities for free bathing were provided at the public baths. Cases of infectious and contagious diseases occurring among the soldiers were admitted into the borough isolation hospitals, and a very considerable amount of disinfection of clothing and equipment was carried out. The motor ambulance was used on many occasions to convey military patients to the local hospitals and no charge was made by the Local Authority. Up to the end of the year there was no instance of any notifiable infectious disease among the troops in the borough.

Further details of the work are set out in table 37.

BELGIAN REFUGEES.

At the time when their country was being devastated by fire and sword, St. Helens, in common with a multitude of other English towns, offered shelter to a number of homeless Belgians. The local Co-operative Society furnished a large house generously placed at their disposal, and bore the maintenance expenses. A Committee was formed to direct the activities of those assisting the refugees, and the medical officer of health accepted an invitation to become a member of the Committee. Two cases of whooping cough occurring amongst the children in the hostel were removed to the borough isolation hospital.

APPENDIX.

THE IMPORTANCE TO HEALTH OF CLEAN STREETS.

By C. W. Gee, L.R.C.P. and S. Ed., D.P.H.

In towns where streets and back passages are neglected as regards repair and cleanliness, there can be no doubt that the health of the inhabitants is certain to suffer thereby. The surface of a road should be of a material which is not capable of absorbing moisture, should slope gently from the crown to the gutter and be so laid that pools of water will not collect on it. The gutter should sufficiently incline to the gullies in order that water may be quickly carried away. When one may see after a shower pools of water in the road, in the gutter and on the pavement, and when it is realised that rain is a cleanser of the atmosphere, carrying down with it suspended matter and organisms capable of causing disease, it will be easily understood that pools of water contain a considerable amount of impurity other than that of the surface on which the rain first falls. If streets are not frequently and thoroughly cleansed water in the puddles evaporates and in the summer commences to putrify. Disagreeable odours arise and as the drying continues, the mud, turned to dust again, is blown about, scattering into the atmosphere disease bearing particles. Another nuisance caused by the collection of semi-fluid filth in the road is the splashing which occurs from traffic in the streets and on the pavement. Food displayed in shop windows or in transit along the street and the clothes of pedestrians receive a liberal sprinkling of liquid manure. The death-rate among children to a large extent may be attributed to insanitary conditions, not the least important of which are dirty streets, footpaths, and passages. The person and clothing of the children becomes contaminated, and the contamination is soon conveyed to articles of food. In thickly populated urban districts where inhabitants spend a considerable portion of their time in the streets and on the doorsteps of their houses, it is very necessary that the thoroughfares and back passages should be kept in an extremely clean condition.

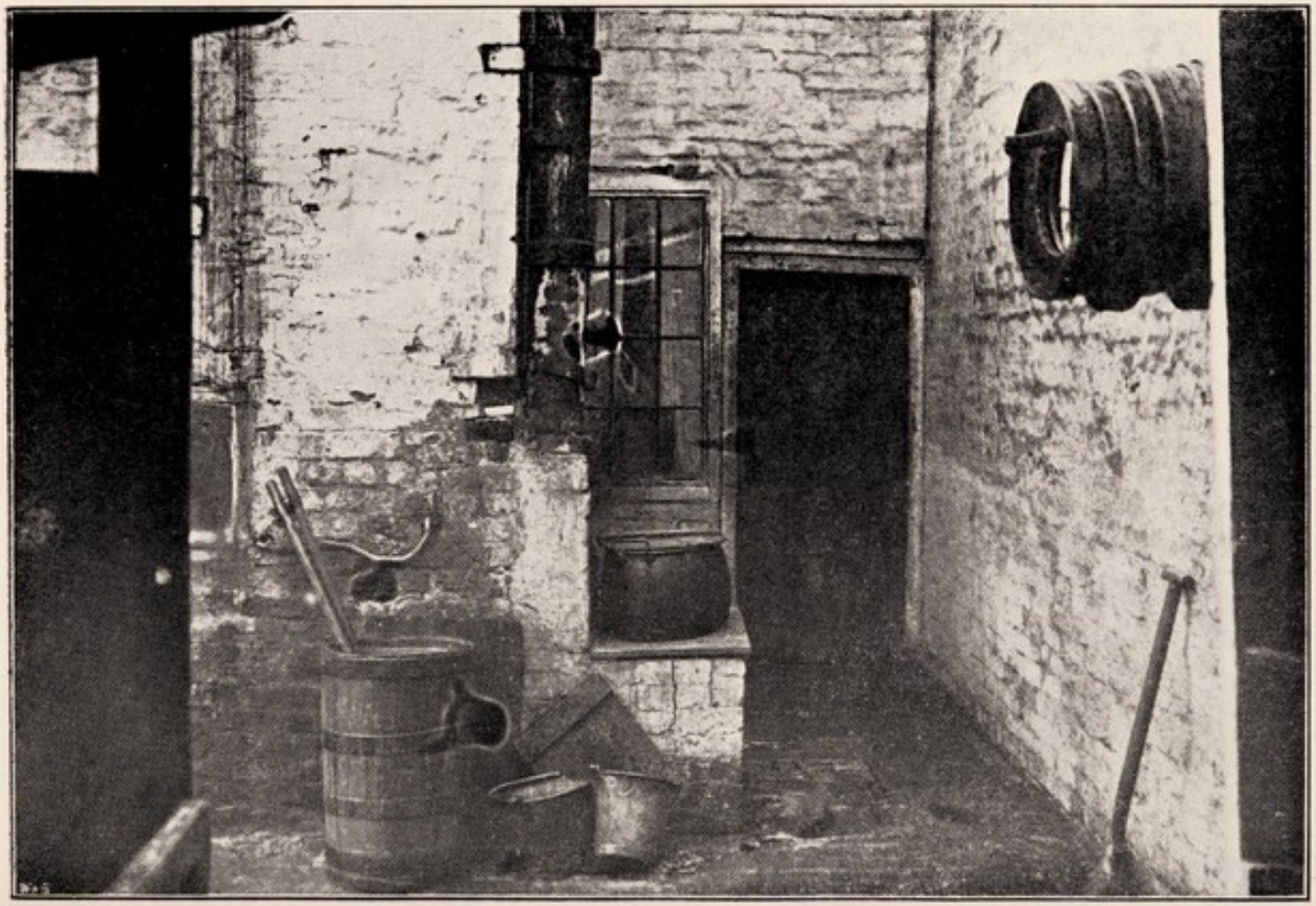
While streets and passages remain in a dirty condition there is little encouragement for inhabitants of the district to keep their houses and yards in a sanitary state. Children brought up under dirty surroundings have little knowledge of what constitutes cleanliness, and when it is remembered that certain of the children may eventually hold public positions, it can be easily understood that they will realise with difficulty the importance to health of municipal cleanliness. There is no insuperable reason

why a manufacturing town should not approximate in appearance to a seaside or inland health resort. The financial loss experienced by manufacturing districts owing to its more wealthy inhabitants seeking residences in areas outside the borough boundaries cannot fail to be considerable.

The use of mechanical power for horse traction is a sanitary advancement, and if it could be employed on a larger scale than at present, would effect a great saving of expense in the matters of street cleaning. The bringing of trade refuse out into the street, and the general scattering about which results, is a practice to be condemned.

Summary of Tables.

Summary of Tables—*Continued.*

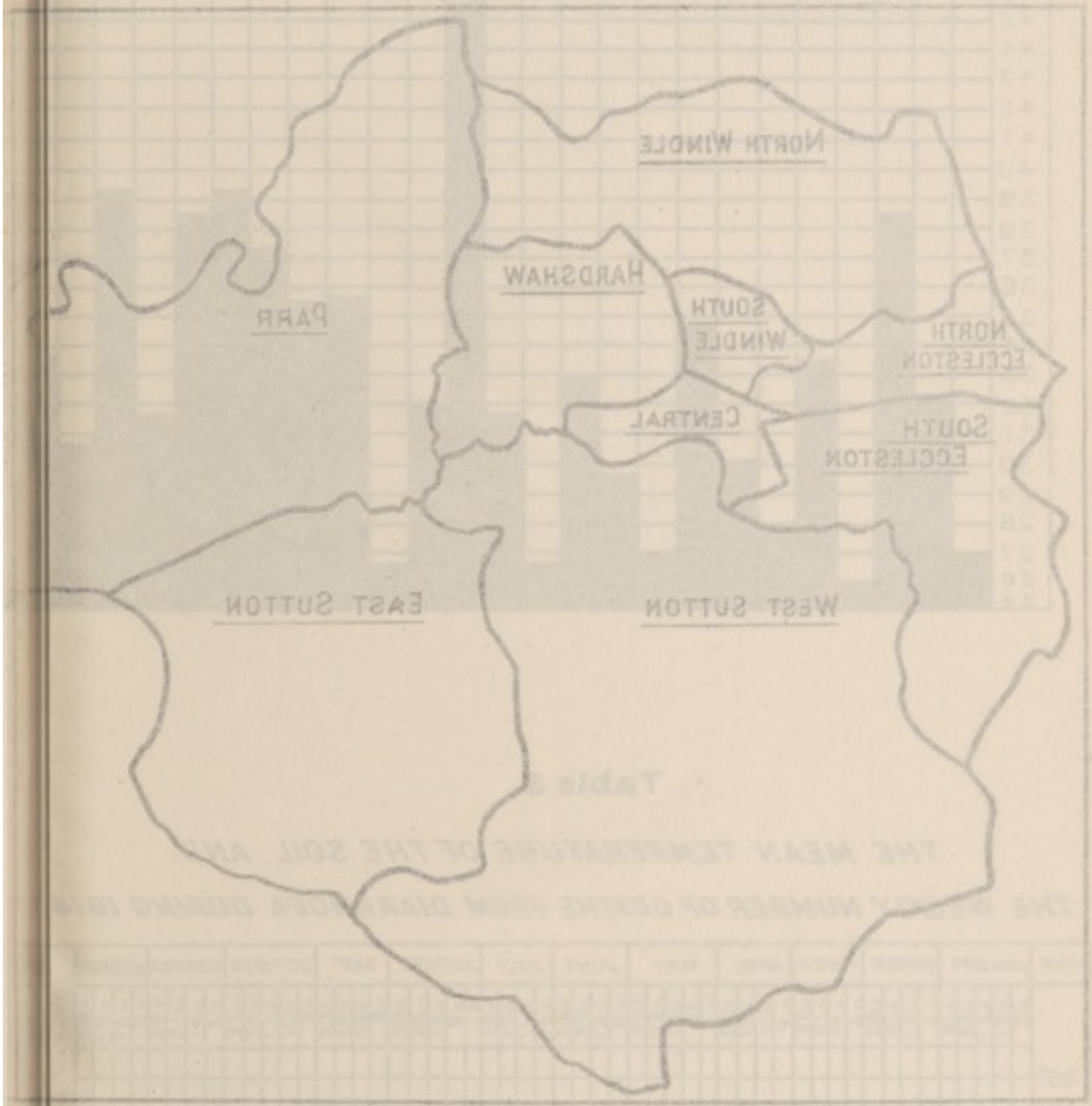


View of premises where ice cream was [illegible]

An over-flowing horse midden—a breeding ground for flies.

Table 1.

Showing the position of the wards, the acreage, estimated population for 1911, and the density of each, calculated on the approximate area built upon.



The population, acreage, and density of persons in each ward.

WARD.	Population.	Area in acres.	Approximate Acreage built on.	Persons per Acre built upon.
North Eccleston	12,840	235·139	135	127·8
South Eccleston	12,860	621·625	449	74·4
Central	6,140	94·159	2	66·4
North Windle	12,500	697·051	447	49·3
South Windle	8,385	67·116	0	124·9
Hardshaw	14,860	342·084	160	64·9
East Sutton	12,470	1,312·319	1,190	101·9
West Sutton	10,810	2,429·151	2,300	83·7
Parr	12,920	1,484·550	1,395	144·5

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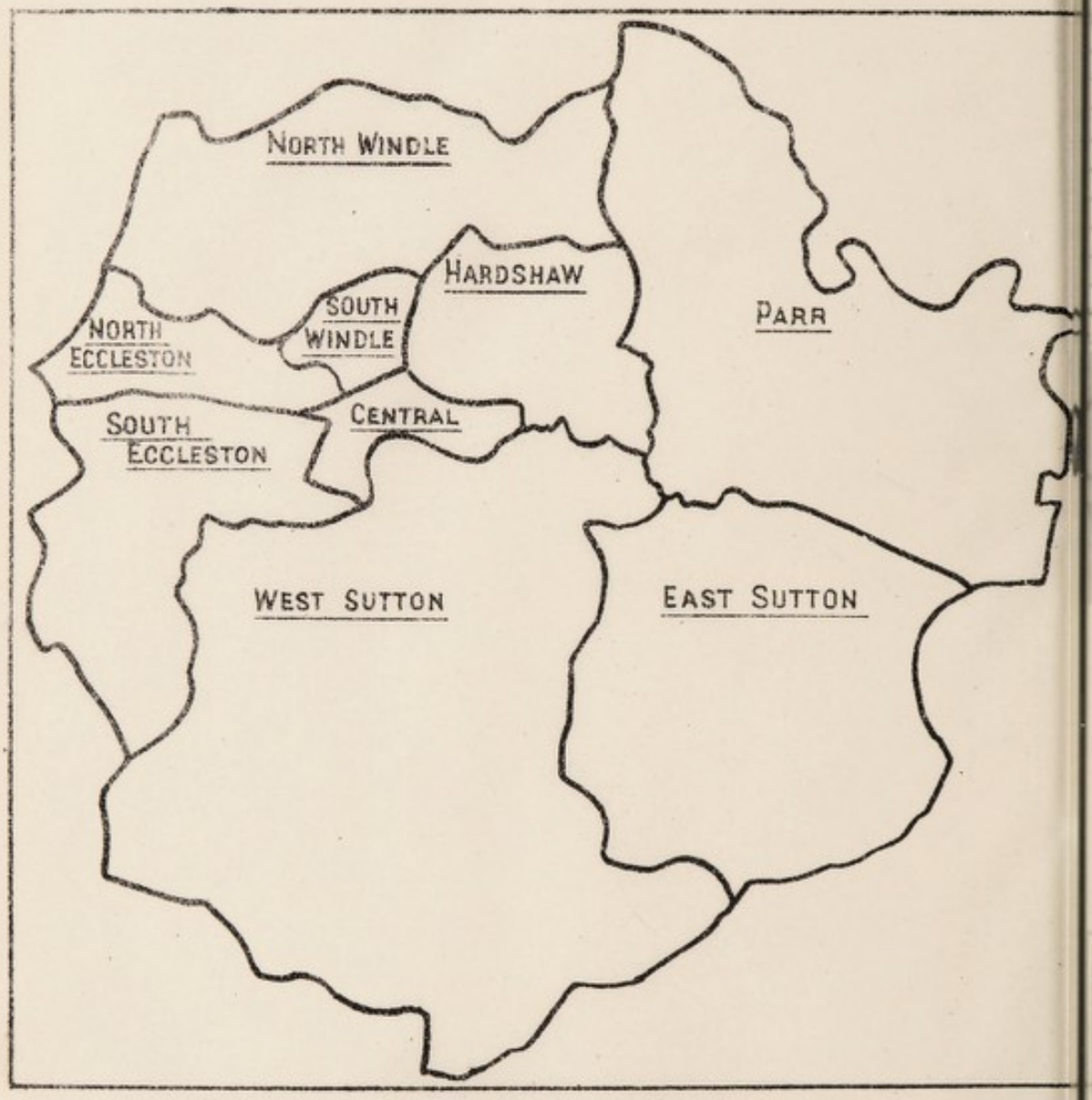

The population, acreage, and density of persons in each ward.

WARD.	Population.	Area in acres.	Approximate Acreage unbuilt on.	Persons per Acre built upon.
North Eccleston	12,840	235·439	135	127·8
South Eccleston	12,850	621·625	449	74·4
Central	6,140	94·459	2	66·4
North Windle	12,500	697·084	447	49·9
South Windle	8,385	67·116	0	124·9
Hardshaw	11,860	342·684	160	64·9
East Sutton	12,470	1,312·319	1,190	101·9
West Sutton	10,810	2,429·151	2,300	83·7
Parr	12,920	1,484·550	1,395	144·5

Table 2.

TOTAL RAINFALL IN INCHES IN ST HELENS SINCE 1890.

Table 3.

THE MEAN TEMPERATURE OF THE SOIL AND

THE WEEKLY NUMBER OF DEATHS FROM DIARRHOEA DURING 1914

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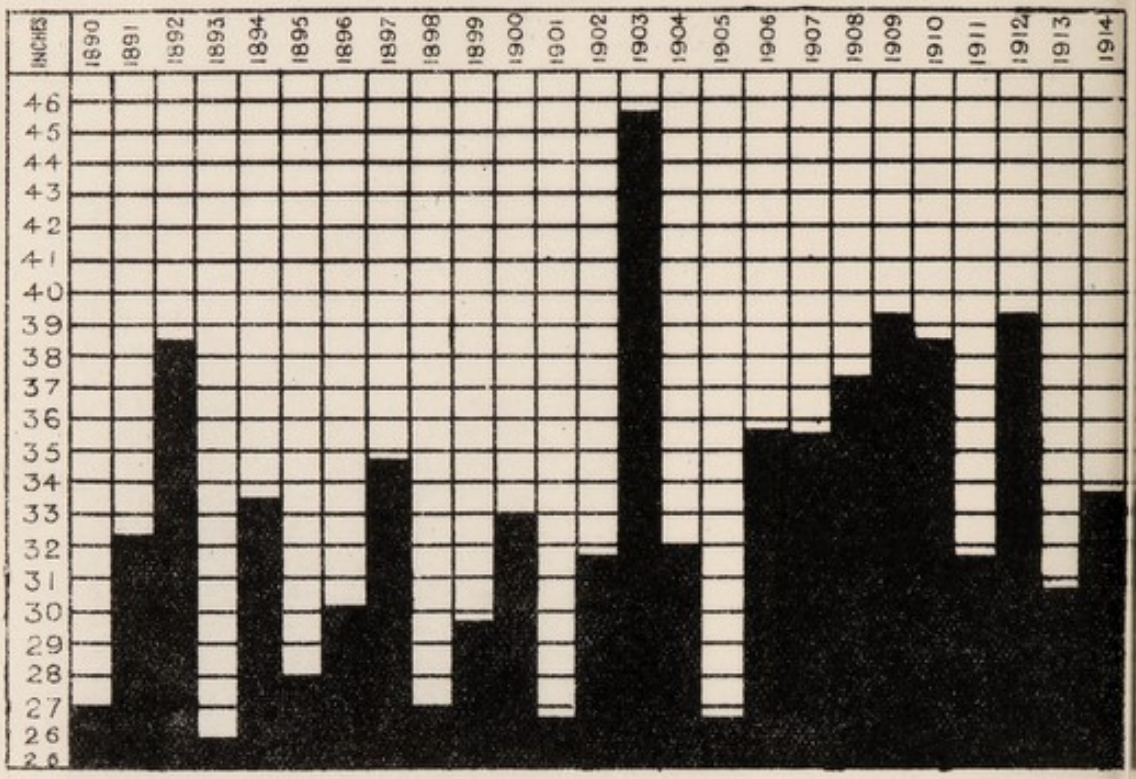

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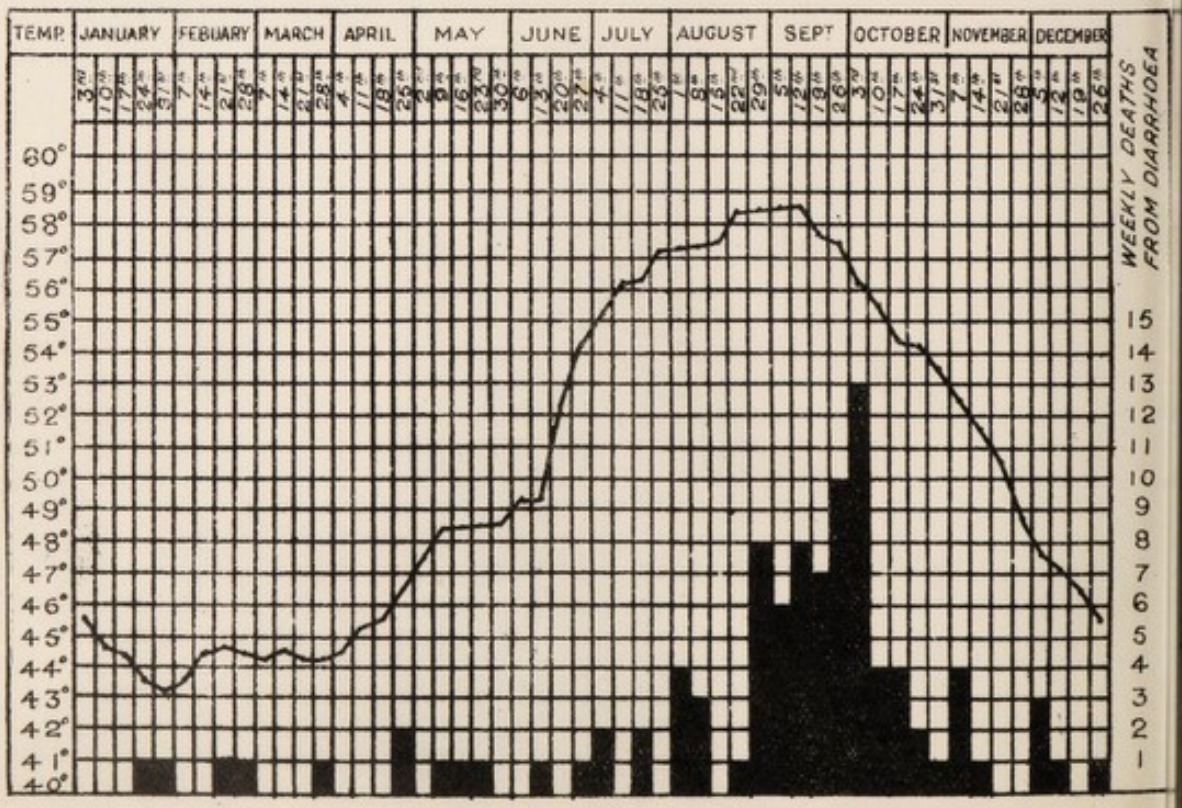

Table 4.

WEEKLY RECORD OF METEOROLOGICAL CONDITIONS TAKEN AT VICTORIA PARK.

Week ending.	Mean Barometer in Inches.	Maximum Temperature.	Minimum Temperature.	Mean Temperature.	Mean Dew Point Temperature (Dew).	Rainfall (Total Inches).	WIND								Force of Wind.	
							Number of Hours per Week.									
							N	NE	E	SE	S	SW	W	NW	Total Miles.	Miles per hour.
Jan. 3	29.852	42.3	23.2	33.0	43.7	0.23	26	1	—	1	2	10¼	57	72¼	2,210	2
„ 10	29.986	34.0	30.8	41.3	44.7	1.10	8¼	—	¼	10	20½	43	32	37¼	2,103	3
„ 17	30.082	42.0	30.0	35.7	44.2	0.32	47½	40¼	33	9	—	—	—	5	1,181	1
„ 24	29.853	41.0	28.0	35.0	43.7	0.00	—	1¼	30½	68	43½	2¼	—	—	1,108	1
„ 31	29.786	33.0	34.0	44.0	43.1	0.32	—	—	—	2	47	36	55	8	1,082	2
Feb. 7	29.643	37.0	40.0	40.3	43.6	0.00	—	—	2	27	97	12	—	—	1,698	2
„ 14	29.340	32.0	32.0	42.4	44.3	0.34	—	—	2	39	91½	27½	8	—	1,582	2
„ 21	29.296	36.0	32.0	44.0	44.4	0.70	—	—	—	10	44½	36½	45½	11½	1,816	2
„ 28	29.239	32.0	29.0	38.3	44.3	0.25	1	—	20½	31	63	17½	14½	12½	1,672	2
Mar. 7	29.486	33.0	36.2	39.1	44.0	0.70	—	—	—	—	½	17	138	11½	2,300	3
„ 14	29.218	33.0	32.2	42.1	44.3	0.67	½	5	0½	22½	25½	20½	41½	22	1,700	2
„ 21	29.349	32.0	32.0	42.0	44.3	1.03	4	2½	—	13	31½	16	16½	31½	1,572	3
„ 28	29.229	30.0	31.0	41.2	44.1	0.40	11½	11	20	35	25½	18	18½	20½	948	2
April 4	29.703	41.0	39.0	39.3	44.3	0.30	2	—	11	26½	40½	40½	20½	15	1,080	1
„ 11	29.281	36.0	40.0	41.4	42.2	0.72	—	—	—	2	38	71	44	3	1,434	2
„ 18	30.064	42.0	34.0	44.3	42.7	0.03	5	4½	26	46½	11½	22	28	24½	1,088	2
„ 25	30.094	43.0	40.2	41.2	46.3	0.12	31	½	21½	27	9½	21½	30	34	884	1
May 2	30.102	47.0	33.0	43.4	47.1	0.00	2	3	48	32	12	1	23½	15½	834	1
„ 9	29.417	48.2	41.0	46.4	48.2	1.30	3	—	—	15½	10	38½	60	33	1,088	2
„ 16	29.903	48.0	32.0	42.0	48.3	0.19	12	—	10½	21	10	7½	48	38½	1,066	1
„ 23	30.077	47.2	42.0	45.2	48.7	0.07	4½	—	8	9½	10	20	45	71	800	1
„ 30	29.979	70.0	37.0	50.0	48.7	0.21	9½	1½	20	15½	10	23	25	34½	808	1
June 6	29.932	68.0	40.0	52.2	49.0	0.00	7	—	11	7½	5	8	32	30	1,200	2
„ 13	29.714	70.0	40.0	51.4	47.2	0.98	42	30	22½	11	1½	4½	16½	38	1,210	2
„ 20	29.912	76.0	48.0	62.8	52.8	0.00	8	22½	30½	14	11	5	19	38	812	1
„ 27	29.928	72.0	48.0	57.0	54.0	0.40	7½	—	5	—	¾	37½	58	36½	646	1
July 4	29.761	80.0	44.2	62.0	52.1	1.30	3½	—	6	17½	12	13½	48½	66	971	1
„ 11	29.866	78.0	50.0	61.7	56.1	0.44	½	½	12	34½	33	25½	14½	15½	430	
„ 18	29.785	76.2	52.0	62.8	56.6	2.31	—	½	½	4½	20	35½	36½	31½	432	
„ 25	29.814	78.2	49.2	61.4	57.4	0.82	½	1½	32½	13	7	1	24½	83	1,138	
Aug. 1	29.916	67.0	49.0	57.2	57.8	0.61	11	2½	11½	30½	17½	3½	23½	58	650	
„ 8	29.932	66.0	47.0	56.0	57.8	0.94	11	—	1	14½	37½	12	44½	19	562	
„ 15	29.948	80.2	44.2	62.2	57.8	0.32	1½	—	37	23	20	21	16	10½	462	
„ 22	29.941	71.0	48.2	60.2	58.1	0.02	3½	7½	48	16	21½	14	15	17½	502	
„ 29	29.908	75.0	47.0	62.0	58.3	1.40	3	½	9	24½	41	20½	10½	44	420	
Sept. 5	30.082	77.0	54.0	63.0	58.3	0.10	6	1	24	42	12	18	4	20½	428	
„ 12	29.737	73.0	48.2	61.7	58.8	1.46	4	½	61½	33½	22½	11½	20	13½	644	
„ 19	29.525	66.0	44.0	55.3	58.4	2.30	10	—	—	1½	32	25	30	42½	1870	
„ 26	30.127	67.0	37.0	52.0	57.1	0.11	21½	½	16	34½	10	10½	9½	24½	724	
Oct. 3	30.093	65.2	37.0	52.7	56.0	0.04	12	½	8	15	1	9	0	32½	870	
„ 10	30.112	61.2	44.0	53.0	55.2	0.02	5	—	39½	12	9	13½	33	27	506	
„ 17	29.865	66.0	44.0	55.4	54.0	0.28	24½	15	37½	30	20	7	2	23	442	
„ 24	29.801	56.2	38.2	48.2	54.3	0.20	4½	2½	102½	27	5	3	23	20½	498	
„ 31	29.474	62.2	40.0	49.2	53.4	1.30	10½	24½	43	16	18	14	20½	17½	774	
Nov. 7	29.474	56.2	42.0	50.1	52.2	0.70	—	2	66	25	43½	16	13½	—	628	
„ 14	29.627	61.0	34.0	48.2	51.3	1.07	5½	—	1½	6	18½	17	17	40½	1,420	
„ 21	29.859	46.2	25.0	37.8	50.8	0.35	30	13	45	30½	7½	12	5	19	494	
„ 28	29.244	54.2	27.2	40.7	48.0	0.88	20	10	6	4½	44	31	10½	13	560	
Dec. 5	29.233	38.0	41.0	42.0	47.8	1.61	1	—	—	7	65½	25	16½	4	1,454	
„ 12	29.272	50.0	31.0	41.2	47.3	0.24	½	1½	41	28½	38	30	8	3½	852	
„ 19	29.118	48.0	35.0	42.3	46.2	1.38	—	2	23½	24½	28½	30	32	21½	870	
„ 26	29.353	46.0	42.2	45.7	45.7	1.13	1	2	25	0½	6	4½	4½	4½	650	
Totals							382	214½	1,125½	1,108	1,314½	1,206½	1,323	1,303	51,087	3
Means	29.359	60.8	38.0	51.8	50.8	0.05									Highest	

Table 4.

WEEKLY RECORD OF METEOROLOGICAL CONDITIONS TAKEN AT VICTORIA PARK.

Week ending.	Mean barometer in inches.	Maximum temperature	Minimum temperature	Mean temperature	Mean soil temperature (4 feet.)	Rainfall (total ins.)	WIND									
							Direction of Wind. Number of Hours per Week.								Force of W	
							N	NE	E	SE	S	SW	W	NW	Total Mileage	Max m'a per hou
Jan. 3	29·952	45·5	23·2	35·0	45·7	0·23	26	1	—	1	2	10½	57	72½	2,210	2
„ 10	29·686	54·0	30·8	41·3	44·7	1·10	8½	—	7½	19	20½	43	32	37½	2,103	3
„ 17	30·082	49·0	30·0	35·7	44·2	0·32	47½	40½	53	9	—	—	—	5	1,181	1
„ 24	29·853	41·0	28·0	35·0	43·7	0·00	—	1½	50½	68	43½	2½	—	—	1,168	1
„ 31	29·736	53·0	34·0	44·9	43·1	0·32	—	—	—	2	47	56	55	8	1,982	2
Feb. 7	29·643	57·0	40·0	49·3	43·6	0·09	—	—	2	57	97	12	—	—	1,696	2
„ 14	29·340	52·0	35·0	45·4	44·3	0·94	—	—	2	39	91½	27½	8	—	1,592	2
„ 21	29·296	56·0	35·0	44·0	44·4	0·70	—	—	—	10	44½	56½	45½	11½	1,916	2
„ 28	29·259	52·0	29·0	48·3	44·3	0·25	1	—	26½	31	63	17½	14½	12½	1,072	2
Mar. 7	29·480	53·0	36·5	50·1	44·0	0·70	—	—	—	—	½	17	138	11½	2,360	3
„ 14	29·218	53·0	32·5	42·7	44·5	0·67	½	5	6½	22½	25½	29½	41½	22	1,200	2
„ 21	29·349	52·0	35·0	42·6	44·3	1·03	4	2½	—	13	31½	16	16½	51½	1,572	3
„ 28	29·220	50·0	31·0	41·2	44·1	0·40	11½	11	26	35	25½	18	19½	20½	948	2
April 4	29·703	61·0	39·0	50·3	44·3	0·30	2	—	11	26½	40½	46½	26½	15	1,086	1
„ 11	29·281	56·0	40·0	47·4	45·2	0·72	—	—	—	2	38	71	44	3	1,434	2
„ 18	30·084	65·0	34·0	44·3	45·7	0·03	5	4½	26	46½	11½	22	28	24½	1,088	2
„ 25	30·094	73·0	40·5	54·9	46·5	0·12	3½	½	21½	27	9½	21½	50	34	884	2
May 2	30·102	67·0	33·0	43·4	47·7	0·00	2	3	48	32	12	1	23½	45½	834	1
„ 9	29·417	61·5	41·0	50·4	48·2	1·39	3	—	—	15½	19	38½	60	33	1,688	2
„ 16	29·965	61·0	35·0	47·0	48·5	0·19	12	—	10½	21	10	7½	48	58½	1,066	1
„ 23	30·077	67·5	45·0	52·5	48·7	0·07	4½	—	8	9½	10	20	45	71	600	1
„ 30	29·979	70·0	37·0	50·0	48·7	0·21	9½	1½	29	15½	10	23	25	54½	608	1
June 6	29·932	68·0	40·0	52·5	49·0	0·09	7	—	11	7½	5	8	32	96	1,200	2
„ 13	29·714	70·0	40·0	51·4	47·2	0·98	42	30	24½	11	1½	4½	16½	38	1,210	2
„ 20	29·912	76·0	48·0	62·8	52·8	0·00	8	22½	50½	14	11	5	19	38	512	1
„ 27	29·928	72·0	48·0	57·0	54·0	0·49	7½	—	5	—	3½	37½	58	56½	646	1
July 4	29·701	80·0	44·5	62·0	55·1	1·30	3½	—	6	17½	12	13½	48½	66	571	1
„ 11	29·806	78·0	50·0	61·7	56·1	0·44	—	—	12	34½	33	25½	14½	15½	430	
„ 18	29·795	79·2	53·0	62·8	56·6	2·31	—	—	—	½	4½	26	35½	36½	31½	432
„ 25	29·514	78·2	49·5	61·4	57·4	0·82	½	1½	32½	13	7	1	24½	83	1,138	2
Aug. 1	29·616	67·0	49·0	57·2	57·8	0·61	11	2½	11½	39½	17½	3½	23½	58	650	2
„ 8	29·535	69·0	47·0	59·0	57·8	0·94	1½	—	1	14½	37½	42	44½	19	562	
„ 15	29·948	80·5	44·5	62·5	57·8	0·52	1½	—	37	53	20	21	16	10½	462	
„ 22	29·941	71·0	48·5	60·2	58·1	0·02	3½	7½	48	16	21½	14	15	17½	262	
„ 29	29·808	75·0	47·0	62·6	58·3	1·49	3	½	9	24½	41	26½	19½	44	420	
Sept. 5	30·082	77·0	54·0	63·0	58·5	0·10	6	1	54	42½	12	18	4	20½	428	
„ 12	29·737	73·0	48·5	61·7	58·8	1·46	4	½	61½	33½	22½	11½	20	13½	644	1
„ 19	29·525	66·0	44·0	55·3	58·4	2·30	10	—	—	1½	32	25	50	42½	1376	2
„ 26	30·127	67·0	37·0	52·0	57·1	0·11	21½	½	16	34½	49	10½	9½	24½	724	2
Oct. 3	30·093	62·5	37·0	52·7	56·0	0·04	12	½	8	15	1	9	52½	68	870	2
„ 10	30·112	61·5	44·0	53·0	55·5	0·02	5	—	36½	12	9	13½	33	57	506	1
„ 17	29·865	60·0	44·0	52·4	54·9	0·28	24½	15	37½	39	20	7	2	23	442	
„ 24	29·801	56·5	38·5	48·9	54·3	0·20	4½	2½	102½	27	5	3	23	20½	498	
„ 31	29·474	65·5	40·0	49·5	53·4	1·59	10½	24½	43	16	18	14	20½	17½	774	
Nov. 7	29·474	56·5	45·0	50·1	52·5	0·79	—	2	66	25	43½	16	13½	—	628	
„ 14	29·637	67·0	34·0	49·5	51·9	1·07	5½	—	1½	6	19½	47	47	40½	1,426	2
„ 21	29·859	46·5	25·0	37·8	50·8	0·35	36	13	45	30½	7½	12	5	19	494	
„ 28	29·544	54·5	27·5	40·7	48·9	0·88	20	10	6	4½	44	51	19½	13	560	
Dec. 5	29·233	58·0	41·0	47·6	47·8	1·61	1	—	—	7	65½	75	16½	4	1,454	2
„ 12	29·272	50·0	31·0	41·2	47·3	0·54	½	1½	41	28½	38	30	8	3½	828	
„ 19	29·118	49·0	35·0	42·3	46·5	1·38	—	2	23½	24½	28½	39	32	21½	576	
„ 26	29·555	46·0	45·2	45·7	45·7	1·13	1	2	25	9½	6	4½	4½	4½	626	
	Totals					33.64	392	214½	1,125½	1,108	1,311½	1,206½	1,523	1,563	51,697	
Mean	29.526	60.8	38.6	51.8	50.8	0.65									Highest	

Table 5.

The population of the borough at each census period.

Census of	*1801	*1811	*1821	*1831	*1841	1851	1861	1871	1881	1891	1901	191
Ecclesto	1,302	1,384	1,931	3,259	6,247	–	–	–	–	–	–	–
Sutton	1,770	2,114	2,329	3,173	4,095	–	–	–	–	–	–	–
Parr	1,183	1,405	1,523	1,942	3,310	–	–	–	–	–	–	–
Windle	3,252	4,294	4,820	5,825	6,918	–	–	–	–	–	–	–
St. Helens	7,673	9,297	10,603	14,199	20,570	25,086	35,135	45,348	57,940	72,413	84,410	96,35

* Previous to 1831, the populations given are those of Eccleston, Sutton, Parr, and Windle, and are not strictly comparable to those of the present borough.

Table 6.

Population of the various wards as shown by census returns.

Wards.	Area in Statute Acres (Land and Inland Water).	Families or Separate Occupiers.		POPULATION.				Institutions, Large Establishments, Vessels, etc., not (included in cols. 4 & 6).	
		1901	1911	1901	1911				
					Persons	Males	Females	Number	Population.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
St. HELENS....	7,284	15,390	17,833	84,410	96,351	50,309	46,242	28	1,981
North Eccleston..	235·43	—	2,253	10,931	12,252	6,425	5,827	—	—
South Eccleston..	621·02	—	2,327	8,235	11,873	6,036	5,837	—	—
Central	94·4	—	1,077	5,235	6,336	3,467	2,870	12	309
North Windle	697·08	—	2,446	11,457	12,188	6,057	6,131	—	—
South Windle	67·11	—	1,533	8,315	8,279	4,261	4,018	1	36
Hardshaw	342·08	—	2,169	9,080	11,529	6,125	5,398	6	250
East Sutton	1,312·31	—	2,179	9,254	11,384	6,186	5,398	3	133
West Sutton	2,129·15	—	1,953	9,254	10,304	5,278	5,026	3	1,040
Parr	1,484·33	—	2,195	10,014	12,209	6,481	5,728	1	130

Table 5.

The population of the borough at each census period.

Census of	*1801	*1811	*1821	*1831	*1841	1851	1861	1871	1881	1891	1901	1911
Eccleston ..	1 362	1,584	1.931	3,259	6,247	–	–	–	–	–	–	–
Sutton.....	1.776	2,114	2,329	3,173	4.095	–	–	–	–	–	–	–
Parr	1,183	1,405	1 523	1.942	3.310	–	–	–	–	–	–	–
Windle	3,252	4,294	4.820	5,825	6.918	–	–	–	–	–	–	–
St. Helens..	7,573	9,397	10.603	14,199	20.570	25,660	38,135	45,548	57.940	72,413	84,410	96,550

* Previous to 1851, the populations given are those of Eccleston, Sutton, Parr, and Windle, and are not strictly comparable to those of the present borough.

Table 6.

Population of the varions wards as shown by census returns.

WARDS.	Area in Statute Acres (Land and Inland Water).	Families or Separate Occupiers.		POPULATION.				Institutions, Large Establishments, Vessels, etc., 1911 (included in cols. 4 & 6).	
				1901	1911				
		1901	1911	Persons	Persons	Males	Females	Number	Population.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
ST. HELENS....	7,284	15,390	17,833	84,410	96,551	50.309	46,242	28	1,981
North Eccleston...	235·43	—	2,253	10,551	12,252	6,425	5,827	—	—
South Eccleston...	621·62	—	2,337	8,835	11,873	6,036	5,837	—	—
Central	94·4	—	1,077	5,235	6,336	3,457	2,879	12	369
North Windle	697·08	—	2,446	11,457	12,188	6,057	6,131	—	—
South Windle	67·11	—	1,533	8,315	8,279	4,261	4,018	1	59
Hardshaw	342·68	—	2,160	9,690	11,526	6,128	5,398	6	250
East Sutton	1,312·31	—	2,179	9,524	11,584	6,186	5,398	3	133
West Sutton	2,429·15	—	1,653	9,524	10,304	5,278	5,026	5	1,040
Parr	1,484·53	—	2,195	10,014	12,209	6,481	5,728	1	130

Table 7.

The age and sex distribution of the population at the census taken in 1911.

	Males	Females		Males.	Females
All Ages ...	30,309	16,242			
Under 1 year ...	1,344	1,301	Under 5 years ...	6,462	6,285
1 and under 2 ...	1,250	1,269	5 and under 10 ...	5,918	5,767
2 „ 3 ...	1,348	1,325	10 „ 15 ...	5,419	5,332
3 „ 4 ...	1,276	1,208	15 „ 20 ...	5,165	4,475
4 „ 5 ...	1,244	1,182	20 „ 25 ...	4,755	4,021
5 „ 6 ...	1,178	1,146	25 „ 30 ...	4,271	3,773
6 „ 7 ...	1,234	1,213	30 „ 35 ...	4,001	3,440
7 „ 8 ...	1,206	1,187	35 „ 40 ...	3,635	3,080
8 „ 9 ...	1,150	1,097	40 „ 45 ...	2,812	2,487
9 „ 10 ...	1,150	1,124	45 „ 50 ...	2,424	2,154
10 „ 11 ...	1,106	1,091	50 „ 55 ...	1,917	1,690
11 „ 12 ...	1,083	1,077	55 „ 60 ...	1,411	1,345
12 „ 13 ...	1,103	1,084	60 „ 65 ...	910	953
13 „ 14 ...	1,062	1,041	65 „ 70 ...	652	651
14 „ 15 ...	1,065	1,039	70 „ 75 ...	349	478
15 „ 16 ...	1,033	946	75 „ 80 ...	141	231
16 „ 17 ...	1,058	887	80 „ 85 ...	51	64
17 „ 18 ...	1,036	862	85 „ 90 ...	12	14
18 „ 19 ...	1,081	878	90 „ 95 ...	4	2
19 „ 20 ...	937	902	95 „ 100 ...	—	—
20 „ 21 ...	951	835	100 years and upwards ...	—	—

Table 7.

The age and sex distribution of the population at the census taken in 1911.

	Males	Females		Males.	Females
All Ages	50,309	46,242			
Under 1 year ...	1,344	1,301	Under 5 years ...	6,462	6,285
1 and under 2 ...	1,250	1,269	5 and under 10 ...	5,918	5,767
2 ,, 3 ...	1,348	1,325	10 ,, 15 ...	5,419	5,332
3 ,, 4 ...	1,276	1,208	15 ,, 20 ...	5,165	4,475
4 ,, 5 ...	1,244	1,182	20 ,, 25 ...	4,755	4,021
5 ,, 6 ...	1,178	1,146	25 ,, 30 ...	4,271	3,773
6 ,, 7 ...	1,234	1,213	30 ,, 35 ...	4,001	3,440
7 ,, 8 ...	1,206	1,187	35 ,, 40 ...	3,635	3,080
8 ,, 9 ...	1,150	1,097	40 ,, 45 ...	2,812	2,487
9 ,, 10 ...	1,150	1,124	45 ,, 50 ...	2,424	2,154
10 ,, 11 ...	1,106	1,091	50 ,, 55 ...	1,917	1,690
11 ,, 12 ...	1,083	1,077	55 ,, 60 ...	1,411	1,345
12 ,, 13 ...	1,103	1,084	60 ,, 65 ...	910	953
13 ,, 14 ...	1,062	1,041	65 ,, 70 ...	652	651
14 ,, 15 ...	1,065	1,039	70 ,, 75 ...	349	478
15 ,, 16 ...	1,033	946	75 ,, 80 ...	141	231
16 ,, 17 ...	1,058	887	80 ,, 85 ...	51	64
17 ,, 18 ...	1,036	862	85 ,, 90 ...	12	14
18 ,, 19 ...	1,081	878	90 ,, 95 ...	4	2
19 ,, 20 ...	957	902	95 ,, 100 ...	—	—
20 ,, 21 ...	951	835	100 years and upwards	—	—

Table 8.

The population of the various institutions in the borough.

Institution.	1911.						1901.					
	Persons.	Special Inmates (Patients, Pupils, etc.)		Officials and their Families.		Total Persons.	Total.	Special Inmates (Patients, Pupils, etc.)		Officials and their Families.		Total Persons.
		Males.	Females.	Males.	Females.			Males.	Females.	Males.	Females.	
Country Asylum (part of) Banstead	814	393	421	—	19	833	940	393	457	60	30	940
Brookwood Hospital	60	44	16	—	—	60	50	24	26	—	—	50
St. Helens Hospital	88	64	24	3	3	94	122	57	65	3	3	128
Isolation Hospital	69	33	36	2	3	74	101	33	68	2	3	106
Blackbrook House Industrial School for Roman Catholic Girls	111	111	—	—	—	111	151	151	—	—	—	151
* dwellings							132					132

Table 8.

The population of the various institutions in the borough.

Institution.	1911.							1914.						
	Special Inmates (Patients, Paupers, Lunatics, etc.)			Officials and their Families.			Total.	Special Inmates (Patients, Paupers, Lunatics, etc.)			Officials and their Families.			Total.
	Persons	Males	Females	Persons	Males	Females	Persons	Persons	Males.	Females	Persons	Males.	Females	Persons
County Asylum (part of) Rainhill.....	814	388	426	121	43	78	935	813	386	427	133	40	93	946
Providence Hospital..	69	44	25	32	—	32	101	52	37	15	18	—	18	70
St. Helens Hospita ..	88	64	24	37	2	35	125	94	—	—	39	2	37	133
Isolation Hospital....	65	32	33	40	2	38	105	60	31	29	41	2	39	101
Blackbrook House Industrial School for Roman Catholic Girls	111	—	111	19	—	19	130	120	—	120	12	—	12	132

Table 9.

The number of empty houses in the borough in March, 1915.

WARD.	Females vacant.	Number closed as unfit for habitation.	Number above shops vacant.	Number of large houses vacant.	Number of houses for working classes vacant.	Number of houses for the working classes in course of erection.
North Ecclesfield...	3	1	2	0	1	6
South Ecclesfield...	13	0	1	7	6	15
Central	10	13	23	0	4	0
North Windle.....	11	0	0	10	1	26
South Windle.....	5	1	4	0	0	2
Hardsham.....	20	3	14	0	3	2
East Sutton	8	0	2	0	6	25
West Sutton	15	6	1	1	7	15
Parc.....	24	14	3	0	7	3

Table 10.

Number of persons per house according to census returns.

Average number of persons per inhabited building.		Average number of persons per family.		
1901	1911	1901	1911	
		All dwellings.	All dwellings.	Ordinary dwelling houses.
5·80	5·19	5·18	5·11	5·31

Table 11.

The number of unmarried, married, and widowed persons per thousand of each sex, aged 20 years and upwards, according to census returns.

Males.			Females.		
Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
330	591	59	229	667	104

Table 12.

Classification of buildings according to census returns.

	1901	1911.									
		Total buildings used as Dwellings.	Ordinary dwelling houses.	Blocks of Flats.	Shops.	Hotels, Inns, and Public Houses.	Offices, Warehouses, Workshops & Factories.	Institutions.	Others.	Vessels, Sheds, Vagrants, &c.	Separate Flats (included in Col 5)
Number Inhabited..	15,061	17,585	16,410	1	954	185	1	28	6	—	1
Separate Occupiers..	15,390	17,833	16,652	1	957	186	1	28	6	2	1
Population	84,410	96,551	88,398	4	4,897	1,201	7	2,003	33	8	4
Uninhabited	815	392	338	—	51	1	1	1	—	—	—
Being built.....	123	57	56	—	1	—	—	—	—	—	—

BUILDINGS NOT USED AS DWELLINGS.

Places of Worship.	Government and Municipal Buildings.	Shops.	Offices.	Warehouses, Workshops, and Factories.	Theatres, and other places of Amusements.
56	13	497	98	163	3

Table 13.

The number of persons per tenement as shown by census figures.

	1901	1911
Total Population	84,410	96,551
Total Families or Separate Occupiers, "Private" or Other	15,390	17,833
Population in "Private Families"	—	94,320
Number of Private Families	—	17,772
Tenements with more than two occupants per room :—		
Number, 1832. Population, all ages		16,018
Do. under 10 years of age ...		5,694
Percentage of Population in "Private Families" living more than two in a room		17·0

TABLE 13—Continued.

No. of rooms per Tenement.	No. of children under 10 years of age	Number of persons in private families (or tenements). 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15 & up	Total number of private families (or tenements).
		Number of private families (or tenements)															
1	0	26	17	6	2	—	—	—	—	—	—	—	—	—	—	—	51
	1	—	3	12	—	—	—	—	—	—	—	—	—	—	—	—	15
	2	—	—	3	8	—	—	—	—	—	—	—	—	—	—	—	11
	3	—	—	—	—	3	1	—	—	—	—	—	—	—	—	—	4
	4	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		26	20	21	10	3	2	—	—	—	—	—	—	—	—	—	82
2	0	47	137	47	21	6	5	1	—	—	—	—	—	—	—	—	264
	1	—	2	76	22	9	3	2	—	1	—	—	—	—	—	—	115
	2	—	—	4	42	17	13	3	—	—	1	—	—	—	—	—	80
	3	—	—	—	—	36	11	6	3	1	—	—	—	—	—	—	57
	4	—	—	—	—	1	16	6	5	2	—	—	—	—	—	—	30
	5	—	—	—	—	—	—	1	3	—	—	—	—	—	—	—	4
	6	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
		47	139	127	85	69	48	19	12	4	1	—	—	—	—	—	551
3	0	36	407	271	200	128	59	25	11	—	—	—	—	—	—	—	1.137
	1	—	4	403	158	125	76	45	16	8	—	—	1	—	—	—	831
	2	—	—	5	314	182	111	83	36	23	2	2	—	—	—	—	738
	3	—	—	—	3	204	128	110	71	33	12	1	1	—	—	—	561
	4	—	—	—	—	2	110	90	53	47	18	6	1	—	—	—	327
	5	—	—	—	—	—	—	26	20	19	10	2	1	—	—	—	78
	6	—	—	—	—	—	—	—	2	1	1	2	—	—	—	—	7
	7	—	—	—	—	—	—	—	—	4	*1	—	1	—	—	—	2
		36	411	679	676	621	482	379	209	131	44	12	7	—	—	—	3,081
4	0	57	586	530	443	299	182	91	39	12	4	—	—	—	—	—	2,243
	1	—	3	538	257	203	175	135	91	31	12	2	2	—	—	—	1,509
	2	—	—	5	405	275	210	187	113	57	33	7	6	1	—	—	1,299
	3	—	—	—	5	289	214	210	134	99	43	12	3	2	1	—	1,012
	4	—	—	—	—	5	151	111	146	106	60	26	11	2	1	—	619
	5	—	—	—	—	—	—	43	40	39	22	20	12	3	1	—	180
	6	—	—	—	—	—	—	—	6	4	7	5	3	2	1	—	28
	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		57	589	1.073	1.110	1.131	932	777	569	348	181	72	37	10	4	—	6890
Total 1–4	—	166	1.159	1.300	1.875	1.824	1.464	1.175	709	483	226	84	44	10	4	—	11.204
5	—	39	312	536	668	650	509	532	309	272	186	116	61	19	6	3	4.328
6	—	11	114	154	187	208	187	100	111	93	46	40	19	8	2	3	1.343
7	—	3	30	51	82	64	44	46	44	23	14	7	4	2	1	1	410
8	—	—	15	28	43	45	34	23	21	18	7	8	4	1	2	1	250
9	—	—	6	17	19	16	12	12	4	5	6	2	—	—	1	—	100
10 and upwards	—	—	2	17	16	19	24	17	14	14	8	1	2	2	1	—	137
Total.	—	219	1.638	2.103	2.830	2.855	2.364	1.909	1.374	908	493	258	134	42	17	8	17.772

Tenements of five rooms and upwards, with more than two persons per room.

No. of rooms per tenement.	Number of children under 10 years of age in private families (or tenements). 0	1	2	3	4	5	6	7	8	9	10	Total number of private families (or tenements).	POPULATION. All ages.	Children under 10 years of age.
	Number of private families (or tenements).													
5	11	4	11	25	34	32	8	2	—	—	—	116	1270	32
	12	—	2	6	15	18	7	6	—	—	—	81	612	19
	13	—	—	1	—	10	5	2	1	—	—	19	247	7
	14	—	—	1	—	2	1	2	—	—	—	6	84	2
	15	—	—	—	—	—	—	3	—	—	—	3	45	—
6	13	—	—	3	1	1	3	—	—	—	—	8	104	2
	14	—	—	—	1	—	1	—	—	—	—	2	28	—
	15	—	—	1	—	—	2	—	—	—	—	3	45	—
7	15	—	—	—	—	—	—	—	—	—	—	1	15	—

*This family included eight children under ten years of age.

TABLE 13—*Continued.*

No. of Rooms per Tenement.	No. of children und'r 10 yrs of age	Number of persons in private families (or tenements). 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15 & up	Total number of private families (or Tenements).	I
		Number of private families (or tenements)																
1	0	26	17	6	2	—	—	—	—	—	—	—	—	—	—	—	51	
	1	—	3	12	—	—	—	—	—	—	—	—	—	—	—	—	15	
	2	—	—	3	8	—	—	—	—	—	—	—	—	—	—	—	11	
	3	—	—	—	—	3	1	—	—	—	—	—	—	—	—	—	4	
	4	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	
	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
		26	20	21	10	3	2	—	—	—	—	—	—	—	—	—	82	
2	0	47	137	47	21	6	5	1	—	—	—	—	—	—	—	—	264	
	1	—	2	76	22	9	3	2	—	1	—	—	—	—	—	—	115	
	2	—	—	4	42	17	13	3	—	—	1	—	—	—	—	—	80	
	3	—	—	—	—	36	11	6	3	1	—	—	—	—	—	—	57	
	4	—	—	—	—	1	16	6	5	2	—	—	—	—	—	—	30	
	5	—	—	—	—	—	—	1	3	—	—	—	—	—	—	—	4	
	6	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	
		47	139	127	85	69	48	19	12	4	1	—	—	—	—	—	551	1.
3	0	36	407	271	200	128	59	25	11	—	—	—	—	—	—	—	1,137	3.
	1	—	4	403	153	125	76	45	16	8	—	—	1	—	—	—	831	3.
	2	—	—	5	314	162	111	83	36	23	2	2	—	—	—	—	738	3.
	3	—	—	—	3	204	126	110	71	33	12	1	1	—	—	—	561	3.
	4	—	—	—	—	2	110	90	53	47	18	6	1	—	—	—	327	2.
	5	—	—	—	—	—	—	26	20	19	10	2	1	—	—	—	78	
	6	—	—	—	—	—	—	—	2	1	1	1	2	—	—	—	7	
	7	—	—	—	—	—	—	—	—	4	*1	—	1	—	—	—	2	
		36	411	679	670	621	482	379	209	131	44	12	7	—	—	—	3,681	17.
4	0	57	586	530	443	299	182	91	39	12	4	—	—	—	—	—	2,243	8.
	1	—	3	538	257	263	175	135	91	31	12	2	2	—	—	—	1,509	7.
	2	—	—	5	405	275	210	187	113	57	33	7	6	1	—	—	1,299	7.
	3	—	—	—	5	289	214	210	134	99	43	12	3	2	1	—	1,012	6.
	4	—	—	—	—	5	151	111	146	106	60	26	11	2	1	—	619	4.
	5	—	—	—	—	—	—	43	40	39	22	20	12	3	1	—	180	1.
	6	—	—	—	—	—		—	6	4	7	5	3	2	1	—	28	
	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		57	589	1,073	1,110	1,131	932	777	569	348	181	72	37	10	4	—	6890	36.
Total 1–4	—	166	1,159	1,900	1,875	1,824	1,464	1,175	790	483	226	84	44	10	4	—	11,204	56.
5	—	39	312	536	608	659	599	532	390	272	186	116	51	19	6	3	4,328	25.
6	—	11	114	154	187	208	187	160	111	93	46	40	19	8	2	3	1,343	7.
7	—	3	30	51	82	64	44	40	44	23	14	7	4	2	1	1	410	2.
8	—	—	15	28	43	45	34	23	21	18	7	8	4	1	2	1	250	1.
9	—	—	6	17	19	16	12	12	4	5	6	2	—	—	1	—	100	
10 and upwards	—	—	2	17	16	19	24	17	14	14	8	1	2	2	1	—	137	
Totals.	—	219	1,638	2,703	2,830	2,835	2,364	1,959	1,374	908	493	258	124	42	17	8	17,772	94.

Tenements of five rooms and upwards, with more than two persons per room.

No. of rooms per tenement.	Number of persons per tenement	Number of children under 10 years of age in private families (or tenements) 0	1	2	3	4	5	6	7	8	9	10	Total number of private families (or tenements).	POPULATION. All ages.	Under 10
		Number of private families (or tenements).													
5	11	4	11	25	34	32	8	2	—	—	—	—	116	1276	343
	12	—	2	5	15	16	7	6	—	—	—	—	51	612	192
	13	—	—	1	—	10	5	2	1	—	—	—	19	247	86
	14	—	—	1	—	2	1	2	—	—	—	—	6	84	27
	15	—	—	—	—	—	—	3	—	—	—	—	3	45	18
6	13	—	—	3	1	1	3	—	—	—	—	—	8	104	28
	14	—	—	—	1	—	1	—	—	—	—	—	2	28	8
	15	—	—	1	—	—	2	—	—	—	—	—	3	45	12
7	15	—	—	—	—	—	—	—	—	—	—	—	1	15	1

*This family included eight children under ten years of age.

Table 14.

Proportion, per 1,000 families, of families consisting of—

1 person	2 persons	3 persons	4 persons	5 persons	6 persons	7 persons	8 persons	9 persons	10 persons	11 persons	12 persons or more
12	92	152	150	160	133	110	77	51	28	15	11

Table 15.

Proportion, per 1,000 tenements, of tenements consisting of—

1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms	8 rooms	9 rooms	10 rooms or more
5	31	207	387	243	76	23	14	6	8

Table 16.

Average number of occupants per room in tenements, consisting of—

1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms	8 rooms	9 rooms	1 to 3 rooms
2·39	1·77	1·61	1·32	1·16	0·96	0·80	0·73	0·61	1·24

These tables are also taken from the census returns of 1911.

Table 14.

Proportion, per 1,000 families, of families consisting of—

1 person	2 persons	3 persons	4 persons	5 persons	6 persons	7 persons	8 persons	9 persons	10 persons	11 persons	12 persons or more.
12	92	152	159	160	133	110	77	51	28	15	11

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1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms	8 rooms	9 rooms	10 rooms ormore
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Average number of occupants per room in tenements, consisting of—

1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms	8 rooms	9 rooms	1 to 9 rooms
2·39	1·77	1·61	1·32	1·16	0·96	0·80	0·73	0·61	1·24

These tables are also taken from the census returns of 1911.

Table 17.

Returns of the Board of Trade Labour Exchange.

	Number of applications for employment.	Number of individuals making such application.	Number of vacancies notified.	Number of vacancies filled.	Number of applicants placed in other districts
Men	2,629	1,963	2,273	1,328	61
Women ...	1,405	997	497	317	65
Boys	90	86	107	59	5
Girls	731	557	197	160	10
Total ...	4,855	3,603	3,074	1,864	141

Table 18.

The number of the various types of sanitary conveniences existing in the borough.

Year.	Water closet.	Tub and pail closet.	Privy midden.	Total.
1907 ...	6,106	7,150	5,154	18,409
1908 ...	6,503	7,120	4,907	18,530
1909 ...	6,718	7,071	4,795	18,584
1910 ...	7,041	7,028	4,616	18,685
1911 ...	7,626	6,863	4,338	18,827
1912 ...	9,205	5,734	4,019	18,958
1913 ...	10,495	5,058	3,542	19,095
1914 ...	12,316	4,058	2,829	19,203

Table 19.

The number of conversions to the water carriage system completed each year since 1904.

	Privies.	Tub and pail closets.	Total.
1904	69	67	136
1905	80	64	144
1906	47	19	66
1907	237	125	362
1908	243	24	267
1909	106	38	144
1910	179	33	212
1911	270	129	399
1912	301	691	992
1913	460	646	1,106
1914	691	967	1,658

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1912 ...	9,205	5,734	4,019	18,958
1913 ...	10,493	5,058	3,542	19,093
1914 ...	12,316	4,058	2,829	19,203

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1911	270	129	399
1912	301	691	992
1913	460	646	1,106
1914	691	967	1,658

Table 20.

Number of notices served.

	1905	1906	1907	1908	1909	1910	1911	1912	1913	19
To clean choked drains and w.c.'s	387	477	459	502	858	424	813	225	337	3
,, repair or relay defective drains	159	161	109	112	102	91	58	87	107	
,, drain dwelling-houses	10	0	0	0	3	2	6	40	10	
,, disconnect and ventilate drains	137	155	110	60	62	24	5	10	3	
,, disconnect downspouts	32	26	24	35	29	10	5	8	10	
,, repair or lengthen w.p. to slopstones ..	64	47	59	130	86	54	33	42	18	1
,, provide w.p. to slopstones	43	23	16	33	25	29	60	20	29	
,, provide slopstones	21	41	31	44	32	23	55	27	29	
,, repair w.c.'s, baths, basins, lavatories and cisterns	70	47	76	128	92	132	171	88	121	2
,, repair roofs of dwelling-houses ..	119	107	98	154	119	257	161	120	209	1
,, cleanse backyards, privies, & passages ..	50	36	41	76	74	19	16	11	10	
,, cleanse and whitewash filthy dwellings..	35	62	31	42	24	36	19	30	28	
,, provide doors to privies, pail closets, and ashpits	176	228	303	188	188	330	340	211	182	1
,, repair or re-hang doors to pail closets, ashpits and privies	280	105	202	321	373	105	328	205	322	1
,, repair privies and ashpits	129	85	109	91	138	221	16	33	56	
,, repair eaves and downspouts	121	133	147	167	173	232	105	174	103	1
,, provide eaves and downspouts	115	59	95	90	78	141	119	138	79	
,, repair pavement, etc., in backyards ..	213	165	211	398	318	323	6	113	174	2
,, re-hang windows	204	36	81	8	7	9	4	5	29	
,, repair pavement and floors in dwelling-houses	59	76	75	100	65	179	145	179	139	2
,, remove fowls, pigeons, etc., from near dwellings	9	9	8	19	3	9	9	9	12	
,, remove pigs	23	13	10	15	10	15	14	14	10	
,, remove rubbish	24	20	18	46	52	7	8	6	6	
,, remove manure	17	11	12	20	10	14	7	3	17	1
,, reconstruct middensteads	4	23	8	14	9	1	2	4	8	
,, clean foul ditches and cesspools ..	28	22	17	6	39	11	4	12	14	
,, provide or repair ashbozes	236	264	247	262	328	54	17	42	78	
,, remove nuisance due to overcrowding	20	20	12	30	11	36	36	24	20	
,, replaster walls or ceilings of dwellings	70	86	62	173	107	288	209	248	164	2
,, prevent dampness in dwellings.. ..	25	26	22	41	25	74	18	21	72	
,, remove sheds, etc., from backyards ..	10	9	8	5	3	7	8	4	8	
,, remedy defects in bakehouses	24	23	25	85	31	17	7	5	2	
,, remedy defects in workshops	15	10	16	30	20	22	9	12	42	
,, remedy defects in cowsheds & dairies	21	10	24	1	2	15	10	4	7	
,, provide water supply	11	0	0	0	0	31	1	5	33	
,, remedy miscellaneous nuisances ..	173	133	170	257	205	285	207	187	144	2
,, convert to water carriage	102	118	381	264	169	332	761	1,128	2,446	1,8
Totals	3,862	2,852	3,508	4,136	3,670	4,209	3,903	3,300	5,033	4,1

Table 20.

Number of notices served.

	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
To clean choked drains and w.c.'s	387	477	459	502	358	424	313	225	337	320
,, repair or relay defective drains	169	161	109	112	102	91	58	87	107	62
,, drain dwelling-houses	10	0	0	0	3	2	6	40	10	3
,, disconnect and ventilate drains	137	155	140	60	62	24	5	10	3	1
,, disconnect downspouts	32	26	24	35	29	10	5	8	10	0
,, repair or lengthen w.p. to slopstones ..	64	47	59	139	86	54	33	42	48	113
,, provide w.p. to slopstones	43	23	16	33	25	29	60	20	29	11
,, provide slopstones	21	41	34	44	32	53	55	27	29	10
,, repair w.c.'s, baths, basins, lavatories and cisterns	70	47	76	123	92	132	171	88	121	258
,, repair roofs of dwelling-houses	119	107	98	154	119	257	161	126	209	159
,, cleanse backyards, privies, & passages ..	50	36	41	76	74	19	16	11	10	5
,, cleanse and whitewash filthy dwellings..	33	62	31	42	24	36	19	30	23	30
,, provide doors to privies, pail closets, and ashpits	476	228	393	438	488	330	340	211	182	103
,, repair or re-hang doors to pail closets, ashpits and privies	289	105	202	321	373	405	328	205	322	143
,, repair privies and ashpits	129	85	109	91	138	221	16	33	56	52
,, repair eaves and downspouts	121	133	137	167	173	232	195	174	103	169
,, provide eaves and downspouts	115	59	95	90	78	141	119	138	79	85
,, repair pavement, etc., in backyards ..	213	165	211	398	318	323	6	113	174	214
,, re-hang windows	204	36	81	8	7	9	4	5	29	82
,, repair pavement and floors in dwelling-houses	59	76	75	100	65	179	145	179	139	219
,, remove fowls, pigeons, etc., from near dwellings	9	9	8	19	3	9	9	9	12	27
,, remove pigs	23	13	10	15	10	15	14	14	10	18
,, remove rubbish	24	20	18	46	52	7	8	6	6	11
,, remove manure	17	11	12	20	10	14	7	3	17	12
,, reconstruct middensteads	4	23	8	14	9	1	2	4	8	2
,, clean foul ditches and cesspools ..	28	22	17	6	39	11	4	12	14	4
,, provide or repair ashboxes	536	264	527	532	328	54	17	42	78	27
,, remove nuisance due to overcrowding	20	29	12	30	11	36	36	24	20	34
,, replaster walls or ceilings of dwellings	79	86	62	173	107	288	209	248	164	274
,, prevent dampness in dwellings.. ..	25	26	22	41	25	74	48	21	72	87
,, remove sheds, etc., from backyards ..	10	9	8	5	3	7	8	4	8	4
,, remedy defects in bakehouses	24	23	25	35	31	17	7	5	2	7
,, remedy defects in workshops	15	10	16	39	20	22	9	12	42	22
,, remedy defects in cowsheds & dairies	21	10	24	1	2	15	10	4	7	4
,, provide water supply	11	0	0	0	0	31	1	5	33	1
,, remedy miscellaneous nuisances ..	173	153	170	257	205	285	297	187	144	206
,, convert to water carriage	102	118	381	264	169	322	764	1,128	2,446	1,882
Totals	3,862	2,895	3,508	4,430	3,670	4,209	3,505	3,500	5,093	4,451

Table 21.

Observations for nuisances from black smoke: percentages of offences discovered.

1903	22·1
1904	16·9
1905	14·9
1906	11·7
1907	11·7
1908	8·0
1909	4·8
1910	8·2
1911	6·8
1912	2·5
1913	0·0
1914	0·0

Table 22.

Number of animals slaughtered and amount of diseased meat destroyed.

	Abattoir.				Private slaughter houses.			
	Killed.	Diseased.		Weight in lbs.	Killed.	Diseased.		Weight in lbs.
		Tuberculosis.	Other diseases.			Tuberculosis.	Other diseases.	
Beasts	3,910	338	256	29,383	259	3	19	81
Calves	291	0	0	0	18	0	0	0
Sheep	1,938	0	13	0	311	0	0	0
Pigs	3,926	74	36	1,105	2,121	25	10	617

About 5,775 lbs. of fish, 319 lbs. game, and a considerable amount of fruit were found to be unsound and were destroyed.

Table 21.

Observations for nuisances from black smoke: percentages of offences discovered.

1903	22·1
1904	16·9
1905	14·9
1906	11·7
1907	11·7
1908	8·0
1909	4·8
1910	8·2
1911	6·8
1912	2·5
1913	0·0
1914	0·0

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Number of animals slaughtered and amount of diseased meat destroyed.

	Abattoir.				Private slaughter houses.			
	Killed.	Diseased.		Weight in lbs.	Killed.	Diseased.		Weight in lbs.
		Tuberculosis.	Other diseases.			Tuberculosis.	Other diseases.	
Beasts	3,910	338	256	29,383	259	3	19	84
Calves	291	0	0	0	48	0	0	0
Sheep	1,938	0	13	0	344	0	0	0
Pigs	3,526	74	36	4,105	2,421	25	10	617

About 5,775 lbs. of fish, 319 lbs. game, and a considerable amount of fruit were found to be unsound and were destroyed.

Table 23.

The results of analyses of milk samples.

Per Cent.		FAT.										Total.
		Under 2·7	2·8	2·9	3·0	3·1	3·2	3·3	3·4	3·5	Over 3·5	
NON-FATTY SOLIDS.	Under 8·1						1	1		2		4
	8·2											
	8·3											
	8·4			1			2				2	6
	8·5					2			1		10	13
	8·6			3				1		1	12	17
	8·7				2	2		1	2	1	11	19
	8·8	2		1	2	2	3	3	1	2	16	32
	8·9		1	1	1	2	4	1	1	1	22	34
	9·0				2	4	3		5	4	19	37
	Over 9·0					8	8	6	5	5	29	60
Total...		2	2	6	7	15	16	12	15	16	121	212

Table 24.

Results of analyses of other foods.

	Number of samples			Number of samples	
	Examined.	Adulterated		Examined.	Adulterated
Milk	212	15	Sugar	6	0
Butter	12	0	Mustard	—	—
Cheese	17	0	Confectionery & Jam	—	—
Margarine	2	0	Pepper	9	0
Lard	7	0	Wine	—	—
Bread	—	—	Beer	—	—
Flour	1	0	Spirits	—	—
Tea	14	0	Drugs	—	—
Coffee	8	0	Other articles ...	15	4
Cocoa	—	—	Total	303	19

Table 23.

The results of analyses of milk samples.

Per Cent.		FAT.										Total.
		Under 2·7	2·8	2·9	3·0	3·1	3·2	3·3	3·4	3·5	Over 3·5	
NON-FATTY SOLIDS.	Under 8·1						1	1		2		4
	8·2											
	8·3											
	8·4		1	1			2				2	6
	8·5					2			1		10	13
	8·6			3				1		1	12	17
	8·7				2	2		1	2	1	11	19
	8·8	2		1	2	2	3	3	1	2	16	32
	8·9		1	1	1	2	4	1	1	1	22	34
	9·0				2	4	3		5	4	19	37
	Over 9·0					3	3	5	5	5	29	50
Total...		2	2	6	7	15	16	12	15	16	121	212

Table 24.

Results of analyses of other foods.

	Number of samples			Number of samples	
	Examined.	Adulterated		Examined.	Adulterated
Milk...	212	15	Sugar	6	0
Butter	12	0	Mustard	—	—
Cheese	17	0	Confectionery & Jam	—	—
Margarine	2	0	Pepper	9	0
Lard	7	0	Wine	—	—
Bread	—	—	Beer	—	—
Flour	1	0	Spirits	—	—
Tea	14	0	Drugs	—	—
Coffee	8	0	Other articles ...	15	4
Cocoa	—	—	Total	303	19

Table 25.

Property concerning which action was taken previous to 1914.

SITUATION.	NATURE OF ACTION.	PRESENT CONDITION.
1–13, Bolton Street	Inspected, but not represented as unfit	Occupied-defects existing.
64–78, Bold Street	Inspected and represented, but no closing order made	" "
23–29, Mount Street	" " " "	" "
38–60, Hills Moss Road	Closed under Housing and Town Planning Act, Feb., 1913	" "
11–23, Parr Street	" " " " Sept. 1913	Demolished.
1, 4 Court, Parr Street	" " " " "	Occupied-defects existing.
25 back, 25 front, Parr Street	" " " " "	" "
27, 29 front, 31 front, Parr Street	" " " " "	" "
1 and 2, 5 Court, Parr Street	" " " " "	" "
56, 58, Parr Street	" " " " "	" "
92–100, Parr Street	Inspected but not represented, no closing order made	" "
102—110, Parr Street	" " " " "	" "
74–76, Parr Street	Closed under Housing and Town Planning Act	" "
1–11, Roughley Square	Inspected, but not represented as unfit	" "
8–10, Wood Street	" " " "	Alterations being carried out.

Table 25.

Diagram showing which areas were taken over by Local Authorities in 1914.

STREET.	NOTE AS TO AREAS.	PRESENT CONDITION.
1–43, Bedford Street	Taken as footway only	Occupied-dwelling-houses
45–49, High Street	" "	" "
51–55, Mount Pleasant	" "	" "
56–60, Hill View Road	Taken as footway only, but no closing order made.	Occupied-dwelling-houses
62–66, Hill View Road	Taken as footway only, but no closing order made.	Occupied-dwelling-houses
11–23, Park Street	Taken as footway only, but no closing order made.	Occupied-dwelling-houses
1, 3, 5, (Court), Park Street	" "	" "
25, Park Street	" "	" "
27, 29, (Court), 31, (Court), Park Street	" "	" "
1 and 2, (Court), Park Street	" "	" "
95, 97, Park Street	" "	" "
99–101, Park Street	" "	" "
103–111, Park Street	" "	" "
47–57, Park Street	" "	" "
1–11, Rodney Street	" "	" "
9–19, Wood Street	" "	" "

Taken over as footway only, but not widened.

Table 28.

Property concerning which action was taken during 1914.

SITUATION OF PREMISES	Action taken under: Housing and Town Planning Acts, 1909	Action taken under: St. Helens Improvement Acts, 1864	Action taken under: St. Helens Corporation Act, 1913	Date of Representation by Medical Officer	DATE OF CONSIDERATION BY COMMITTEE.	DATE OF CLOSING ORDER	DATE OF DEMOLITION ORDER	PRESENT CONDITION: Unoccupied: Defects Remedied	Unoccupied: Defects Existing	Occupied: Defects Remedied	Occupied: Defects Existing	Demolished	
72–74, Victoria Street			†	24 Dec., 1913	24 Dec., 1913.	—	6 Jan., 1914				†		Converted into Workshops
6,											†		
8,					28 Jan., 1914, 11 Feb. 1914						†		
10, front, 10, back									†				
12, front, 12, back					28 Jan., 1914, 26 Feb., 1914				†		†		
14,											†		
16,									†				
18,		†							†				
20, Mount				28 Jan., 1914	28 Jan. 1914	18 April.			†				
22, St				28 Jan., 1914	11 Feb., 1914						†		12
24,											†		
26,											†		
28,											†		
30,											†		
32,											†		
27, Liverpool Street			†							†			
9,									†				
11,									†				
13,											†		
15,											†		
17,											†		
21,									†				
23,		†		28 Jan., 1914	28 Jan., 1914, 11 Feb., 1914	4 Mar., 1914			†				
25,											†		
29, Liverpool Street							Closing Order determined 23 Sept.			†			
31,										†			
32,					28 Jan., 1914 11 Feb., 1914	Work done. Withdrawn- 22 April.				†			
33,					28 Jan., 1914 11 Feb.,1914	4 Mar., 1914	"			†			
35,													
5,										†			
7,						1 April				†			
9, Anne Street		†		28 Jan., 1914	28 Jan., 1914, 11 Feb., 1914	Work done				†			
11,						Withdrawn				†			
13,					28 Jan., 1914 Work done					†			
15,					11 Feb., 1914 Withdrawn					†			
17,					25 Mar., 1914 22 April.					†			
19,						Work done Withdrawn				†			
3–5, John Street		†		28 Jan., 1914	28 Jan., 1914 11 Feb., 1914	4 Mar., 1914					†		
29–31, Derbyshire Hill Road	†			28 Jan., 1914	28 Jan., 1914	—	4 Feb., 1914					† †	
Ashton Green Cottage, Derbyshire Hill Road	†			"	"	—	"					†	
4,												†	
6, Newton Road	†			"	"	"	"					†	
13,												†	
15,												†	
1,												†	
2, front, 2 back												† †	
3,												†	
5, Broad Oak												†	
6, Hollow	†			"	"		"					†	
7,												†	
9,												†	
11,												†	
12,						18 April					†		
14,											†		
16, Liverpool		†		11 Feb., 1914	11 Feb., 25 Mar., 1914	6 May					†		
18, Street						1st April					†		
20,					" "	6 May					†		
22,					" "	6 May					†		
2, Anne Street		†		11 Feb., 1914	11 Feb., 1914	6 May			†				
24,											†		
26, Edward Street						18 April					†		
28,											†		
12,		†		26 Feb., 1914							†		
14, Crook Street											†		
1,											†		
2, 1 Court,				26 Feb., 1914	26 Feb., 1914	26 Feb., 1914					†		
3, Liverpool Street	†										†		
4,											†		
1,											†		
3,											†		
4,											†		
5,											†		
6,											†		
7,											†		
8, Short Street	†			26 Feb., 1914	26 Feb., 1914	26 Feb. 1914					†		
9,											†		
10,											†		
11,											†		
12,											†		
13,											†		
14,											†		
16,											†		
9,											†		
11, Sandfield Crescent	†			"	"	"					†		
174, Westfield Street			†	"	"	—	26 Feb. 1914					†	
71, front, Parr Stocks						Demolition	1 April, 1914		†				
71, back, Road	†					Order determined 23 Sep.	Corporation to demolish						
12,									†				
14,									†				
16, Bold Street	†			Closing Order determined 25 Mar.					†				
18,									†				
20,									†				
8, Bath Street		†		25 Mar., 1914							†		
10,				25 Mar., 1914	25 Mar., 1914						†		
1,					6 May, 1914	—					†		
2,					27 May, 1914						†		
3, Back Bath Street		†			23 Sept., 1914						†		
4,											†		
5,											†		
8, front,									†				
8, back, Tickle Street		†		22 April.	22 April — 27 May	1 July			†				
62 front,										†			
62 back,										†			
64 front, Water Street		†		"	"	3 June				†			
64 back,										†			
8, front,										†			
8, back, Eccleston St.		†		"	"	3 June				†			

Table 28—Continued.

SITUATION OF PREMISES	Action taken under Housing and Town Planning Act, 1909	Action taken under St. Helens Improvement Act, 1901	Action taken under St. Helens Corporation Act, 1911	Date of Representation by Medical Officer	DATE OF CONSIDERATION BY COMMITTEE.	DATE OF CLOSING ORDER	DATE OF DEMOLITION ORDER	PRESENT CONDITION: Unoccupied — Dwelling Demolished	Unoccupied — Dwelling Retaining	Occupied — Dwelling Demolished	Occupied — Dwelling Retaining	Demolished
1, 2, 3, 4, 5, Jockey Brow		†		22nd April	22nd April 13 May 27 May						†	
142, 144, Duke Street		†		"	"	3 June				†	†	
15, 17, 28, 30, 32, 34, Fern Street / Victoria Street	†					Work done, Closing Order determined 22 April				†		
138, 140, Duke Street	†			"	22 April Owner required to demolish within a year.						†	
1, 2, 5 Court, Duke Street	†										†	
45, Delves	†			22 April	22 April	22 April			†			
3, Bath Street		†										†
Building adjoining		†										†
3, Bath Street				27 May	27 May	3 June						†
12, 13, 14, 2 Court, Crab Street		†										†
65 front, 65 back, College Street	†			27 May	27 May	3rd June, 1914.			†		†	
Cottage behind 59 College St.	†			"	"	"					†	
67, 69, 77, 79, 81, 83, College Street	†			"	"	"					†	
5, 7, 9, 11, 13, 15, Crab Street	†			"	"	"					†	
1 and 2, 1 Court, Crab St.	†			"	"	"					†	
1, 2, 3, 6, 7, 8, 9, 10, 11, 15, 16, 2 Court, Crab Street	†			"	"	"					†	
7, back South Street	†			"	"	"					†	
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, Barbers' Court		†		24 June	24 June, 22 July, 23 Sept.						†	
41, 43, Barbers' Street		†		"	" " "						†	
10, Vernon Street		†		"	" " "						†	
27, Parr Street			†	"	"		1st July				†	
2, 3, 1 Court, College Street	†			22 July	22 July	August 5.					†	
2, 3, 4, Parr Court	†			"	"	"					†	
3, 5, 7, Bridgewater Street	†			"	"	"					†	
28, 30, 32, 34, Phythian Street	†			"	"	"					†	
7, 8, 9, 10, Ravenhead Passage	†			"	"	"					†	
83, Chancery Lane	†					23 Sept. Closing Order determined		†			†	
83, back Chancery Lane	†				23 Sept.		Demolition Order not made.					
52, Parr Street	†				23 Sept.	Demolition Order October 30	Closing Order determined 25 Nov.				†	
42, 44, Barber Street	†			23 Sept., 1914	23 Sept. 28 Oct.						†	
12, 14, Vernon Street	†			"	" "						†	
8 front, 8 back, 10 front, 10 back, Phythian Street	†			"	" " " "						†	
89, Peter Street					"				†			
12, 14, 16, 20, Duke Street	†			"	" "						†	
1, 2, Delph	†			"	" "						†	
Cottage, Washway Lane	†			"	" "						†	
7, 9, Parr Street			†	25 Nov.	25 Nov.		Dec. 2, 1914					†

Table 27.

Defects discovered in factories.

Defective water closet cisterns and dirty basin	1
Insufficient sanitary conveniences	2
No partitioning of sanitary conveniences	3
No screen to sanitary conveniences	3
No separate approach to sanitary conveniences...	2

Table 28.

Defects discovered in workshops.

Overcrowding	1
Defective walls	2
Limewashing of walls and ceilings required	6
Insufficient water closet accommodation	1
Defective roof of workroom	1

Table 27.

Defects discovered in factories.

Defective water closet cisterns and dirty basin	1
Insufficient sanitary conveniences	2
No partitioning of sanitary conveniences	3
No screen to sanitary conveniences	3
No separate approach to sanitary conveniences...	2

Table 28.

Defects discovered in workshops.

Overcrowding	1
Defective walls	2
Limewashing of walls and ceilings required	6
Insufficient water closet accommodation	1
Defective roof of workroom	1

Table 29.

HOME OFFICE TABLES.

1.—Inspection.

Including inspections made by sanitary inspectors or inspectors of nuisances.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories ... ... (Including Factory Laundries.)	28	13	—
Workshops ... ... (Including Workshop Laundries.)	256	9	—
Workplaces	17	1	—
Total	301	23	—

Table 30.

2.—Defects found.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
Nuisances under the Public Health Acts:—*				
Want of cleanliness	1	1	—	—
Want of ventilation	0	0	—	—
Overcrowding	1	1	—	—
Want of drainage of floors	0	0	—	—
Other nuisances	1	1	—	—
Sanitary accommodation.—insufficient	3	2	—	—
Sanitary accommodation.—unsuitable or defective ..	10	8	—	—
Sanitary accommodation.—not separate for sexes ..	0	0	—	—
Offences under the Factory & Workshop Acts: Illegal occupation of underground bakehouses (s. 101)	0	0	—	—
Breach of special sanitary requirements for bakehouse (ss. 97 to 100).	5	5	—	—
Other offences	2	2	—	—
Total	23	20	—	—

* Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

Table 29.

HOME OFFICE TABLES.

1.—Inspection.

Including inspections made by sanitary inspectors or inspectors of nuisances.

Premises.	Number of Inspections.	Number of Written Notices.	Number of Prosecutions.
Factories ... ... (Including Factory Laundries.)	28	18	—
Workshops ... ... (Including Workshop Laundries.)	256	9	—
Workplaces	17	1	—
Total	301	28	—

Table 30.

2.—Defects found.

Particulars.		Number of Defects. Found.	Remedied.	Referred to H.M. Inspector.	Number of Prosecutions
Nuisances under the Public Health Acts:—					
Want of cleanliness		1	1	—	—
Want of ventilation		0	0	—	—
Overcrowding		1	1	—	—
Want of drainage of floors		0	0	—	—
Other nuisances		1	1	—	—
Sanitary accommodation	insufficient	3	2	—	—
	unsuitable or defective ..	10	8	—	—
	not separate for sexes ..	0	0	—	—
Offences under the Factory & Workshop Acts:					
Illegal occupation of underground bakehouses (s. 101)		0	0	—	—
Breach of special sanitary requirements for bakehouses (ss. 97 to 100).		3	3	—	—
Other offences		2	2	—	—
Total		23	20	—	—

* Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

Table 31.

3.—Home work.

Nature of Work.	OUTWORKERS' LISTS, SECTION 107. Lists received from Employers. Sending twice in the year. Lists	Outworkers: Contractors.	Outworkers: Workmen	Sending once in the year. Lists	Outworkers: Contractors.	Outworkers: Workmen	Notices served on Occupiers as to keeping or sending lists.
1	2	3	4	5	6	7	8
Wearing Apparel—Making, etc.	14	—	34	1	4	1	8
Cleaning and washing	—	—	—	—	—	—	—
Household linen	—	—	—	—	—	—	—
Lace, lace curtains and nets	—	—	—	—	—	—	—
Curtains and furniture hangings	—	—	—	—	—	—	—
Furniture and upholstery..	—	—	—	—	—	—	—
Electro-plate	—	—	—	—	—	—	—
File making	—	—	—	—	—	—	—
Brass and brass articles ..	—	—	—	—	—	—	—
Fur pulling	—	—	—	—	—	—	—
Cables and chains ..	—	—	—	—	—	—	—
Anchors and grapnels ..	—	—	—	—	—	—	—
Cart gear	—	—	—	—	—	—	—
Locks, latches and keys..	—	—	—	—	—	—	—
Umbrellas, etc.	—	—	—	—	—	—	—
Artificial flowers	—	—	—	—	—	—	—
Nets, other than wire nets..	—	—	—	—	—	—	—
Tents	—	—	—	—	—	—	—
Sacks	—	—	—	—	—	—	—
Racquet and tennis balls	—	—	—	—	—	—	—
Paper, etc., boxes, paper bags	—	—	—	—	—	—	—
Brush making	—	—	—	—	—	—	—
Pea picking	—	—	—	—	—	—	—
Feather sorting	—	—	—	—	—	—	—
Carding, etc. of buttons etc	—	—	—	—	—	—	—
Stuffed toys	—	—	—	—	—	—	
Basket making	—	—	—	—	—	—	—
Chocolates and sweetmeats	—	—	—	—	—	—	—
Cosaques, Christmas crackers, Christmas Stockings etc.	—	—	—	—	—	—	—
Textile weaving	—	—	—	—	—	—	—
TOTAL ..	14	—	34	1	4	1	8

Table 31.

3.—Home work.

OUTWORKERS, LISTS SECTION 107.

Name of Work.	Lists received from Employers.			Number of Outworkers on corresponding lists.
	Number living in the Town.		Number living out in the Country.	
	Lists.	Outworkers.	Lists.	Outworkers.
		Contractors. Men. Women.		Contractors. Men. Women.
1	2	3 4 5	6	7 8
Artificial flowers	—	— — —	—	— — —
Baskets, mats, &c.	—	— — —	—	— — —
Beads, bugles, &c.	—	— — —	—	— — —
Boots and shoes	—	— — —	—	— — —
Brushes and mats	—	— — —	—	— — —
Buttons, studs, &c.	—	— — —	—	— — —
Cardboard boxes	—	— — —	—	— — —
Carpets, rugs, &c.	—	— — —	—	— — —
Chains	—	— — —	—	— — —
Clothing	—	— — —	—	— — —
Corsets	—	— — —	—	— — —
Cutlery	—	— — —	—	— — —
Electro-plate	—	— — —	—	— — —
Embroidery and lace	—	— — —	—	— — —
Feathers	—	— — —	—	— — —
Fur	—	— — —	—	— — —
Gloves	—	— — —	—	— — —
Hair	—	— — —	—	— — —
Hats and caps	—	— — —	—	— — —
Jewellery	—	— — —	—	— — —
Lace	—	— — —	—	— — —
Locks, keys, and hinges	—	— — —	—	— — —
Mantles, &c.	—	— — —	—	— — —
Nets	—	— — —	—	— — —
Pens	—	— — —	—	— — —
Pins	—	— — —	—	— — —
Shirts	—	— — —	—	— — —
Stays	—	— — —	—	— — —
Toys	—	— — —	—	— — —
Umbrellas, &c.	—	— — —	—	— — —
Watches and clocks	—	— — —	—	— — —
Other articles	—	— — —	—	— — —
Total	14	— 34	1	4 1 8

Table 32.

4.—Registered workshops.

Important classes of workshops, such as workshop bakehouses may be enumerated here.	Workshops on the Register (s. 131) at the end of the year. (1)	Number. (2)
	Dressmakers and mantle making	48
	Milliners	20
	Tailors	13
	Hosiery Knitters	8
	Joiners, builders, cabinet-makers and plumbers, etc.	18
	Blacksmiths, wheelwrights, coach builders and masons	11
	Weighing machine repairers	2
	Cloggers and boot repairers	54
	Cycle makers	2
	Cooper	1
	Tripe Dresser	2
	Herbal Brewer	2
	Pearl Ash Manufacturer	1
	Seltzogene, charge maker	1
	Tea wrapping	1
	Drysalter	1
	Leadlight maker	2
	Cab washing	2
	Saddler	1
	Knackers Yard	1
	Sundries	12
	Ice Cream Makers	3
	Total number of Workshops on Register	206

Table 33.

5.—Other matters.

Class. 1		Number. 2
Matters notified to H.M. Inspector of Factories :—		
Failure to affix Abstract of the Factory and Workshop Acts (S. 133, 1901)		
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory and Workshops Acts (S. 5, 1901)	Notified by H.M. Inspector	26
	Reports of Action taken sent to H.M. Inspector.	25
Other		10
Underground Bakehouses (S. 101) :—		
Certificates granted during the year		—
In use at the end of the year		1

Table 32.

4.—Registered workshops.

Workshops on the Register (s. 131) at the end of the year. (1)	Number. (2)
Dressmakers and mantle making	43
Milliners	20
Tailors	15
Hosiery Knitters	8
Joiners, builders, cabinet-makers and plumbers, etc. ..	18
Blacksmiths, wheelwrights, coach builders and masons ..	11
Weighing machine repairers	2
Cloggers and boot repairers	34
Cycle makers	2
Cooper	1
Tripe Dresser	2
Herbal Brewer	2
Pearl Ash Manufacturer	1
Soltzogene, charge maker	1
Tea wrapping	1
Drysalter	1
Leadlight maker	2
Cab washing	2
Saddler	1
Knackers Yard	1
Smithies	12
Ice Cream Makers	3
Total number of Workshops on Register	206

Underground bakehouses on which inspections were made during the year.

Table 33.

5.—Other matters.

Class. 1		Number. 2
Matters notified to H.M. Inspector of Factories :—		
Failure to affix Abstract of the Factory and Workshop Acts (S. 133, 1901)		
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory and Workshops Acts (S. 5, 1901)	Notified by H.M. Inspector..	38
	Reports of Action taken sent to H.M. Inspector.	25
Other		10
Underground Bakehouses (S. 101) :—		
Certificates granted during the year		—
In use at the end of the year		1

Table 34.

Admissions, discharges, and deaths during 1914, Peasley Cross Isolation Hospital.

DISEASE.	Patients in hospital 1st Jan. 1914		Admitted.		Discharged.		Died.		Remaining in hospital on 1st Jan. 1915.	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Scarlet fever ..	23	25	134	158	136	167	2	3	19	13
Diphtheria ..	—	3	38	68	30	56	5	4	3	11
Enteric fever ..	1	1	12	13	11	11	—	3	2	—
Erysipelas ..	—	—	—	2	—	—	—	—	—	2
Puerperal fever	—	—	—	11	—	7	—	2	—	2
Other diseases ..	7	—	59	34	46	31	2	—	18	3
Phthisis	7	—	—	—	*7	—	—	—	—	—
Totals ..	38	29	243	286	230	272	9	12	42	31
	67		529		502		21		73	

*Transferred to Eccleston Hall Sanatorium.

Table 35.

Total and average number of days spent by patients in hospital.

Disease.	Scarlet fever.	Diphtheria	Enteric fever.	Phthisis.	Other diseases	Total.
Total days	14,474	2,832	1,131	14,122	2,893	35,452
Average duration in days per patient treated	43·2	26·7	49·5	112·0	22·1	54·1

Table 36.

Percentage of cases of infectious diseases removed to hospital.

	1910.	1911.	1912.	1913.	1914.
Scarlet fever	85·9	81·4	85·6	82·8	87·1
Diphtheria	69·4	74·8	69·6	70·9	88·3
Enteric fever	87·8	94·0	93·0	100·0	92·5
Puerperal fever	100·0	18·1	50·0	50·0	64·7
Erysipelas	5·0	5·2	7·5	4·0	1·8
Phthisis	0·0	0·8	70·0	34·3	55·5
Ophthalmia	0·0	0·0	0·0	0·0	11.5
Other diseases	0.0	0.0	0.0	1.1	0.0

Table 34.

Admissions, discharges, and deaths during 1914, Pensley Cross Isolation Hospital.

DISEASE.	Patients in hospital 1st Jan. 1914		Admitted.		Discharged.		Died.		Remaining in hospital on 1st Jan. 1915.	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Scarlet fever ..	23	25	134	158	136	167	2	3	19	13
Diphtheria ..	—	3	38	68	30	56	5	4	3	11
Enteric fever ..	1	1	12	13	11	11	—	3	2	—
Erysipelas ..	—	—	—	2	—	—	—	—	—	2
Puerperal fever	—	—	—	11	—	7	—	2	—	2
Other diseases ..	7	—	59	31	46	31	2	—	18	3
Phthisis	7	—	—	—	*7	—	—	—	—	—
Totals ..	38	29	243	286	230	272	9	12	42	31
	67		529		502		21		73	

*Transferred to Eccleston Hall Sanatorium.

Table 35.

Total and average number of days spent by patients in hospital.

Disease.	Scarlet fever.	Diphtheria	Enteric fever.	Phthisis.	Other diseases	Total.
Total days	14,474	2,882	1,181	11,122	2,859	35,452
Average duration in days per patient treated	48·2	26·7	49·5	112·0	22·1	54·1

Table 36.

Percentage of cases of infectious diseases removed to hospital.

	1910.	1911.	1912.	1913.	1914.
Scarlet fever	85·9	81·4	85·6	82·8	87·1
Diphtheria	89·4	74·8	69·6	70·9	88·3
Enteric fever	87·8	94·0	93·0	100·0	92·5
Puerperal fever	100·0	18·1	50·0	50·0	64·7
Erysipelas	5·0	3·2	7·5	4·0	1·8
Phthisis	0·0	0·8	70·0	34·3	55·5
Ophthalmia	0·0	0·0	0·0	0·0	11·5
Other diseases	0·0	0·0	0·0	1·1	0·0

Table 37.

Amount of clothing, etc., disinfected during 1914.

Hospital clothing and bedding	4,552
Blankets, sheets, and rugs	3,660
Pillows and cushions	2,265
Beds	760
Other articles of clothing	4,756
Library books	395
Other articles	2,275
Blankets and rugs for soldiers	9,600
Articles of clothing for soldiers	1,000
Total ...	29,263

Table 38.

Investigations carried out in the municipal laboratory.

Specimens.	Number received	Results.	
		Positive	Negative
Diphtheria—swab	477	107	370
Typhoid fever—blood	78	21	57
Tuberculosis—sputum	263	76	187
Ringworm—hair	93	59	34
Other specimens	36	...	...
Total	947	263	648

Table 37.

Amount of clothing, etc., disinfected during 1914.

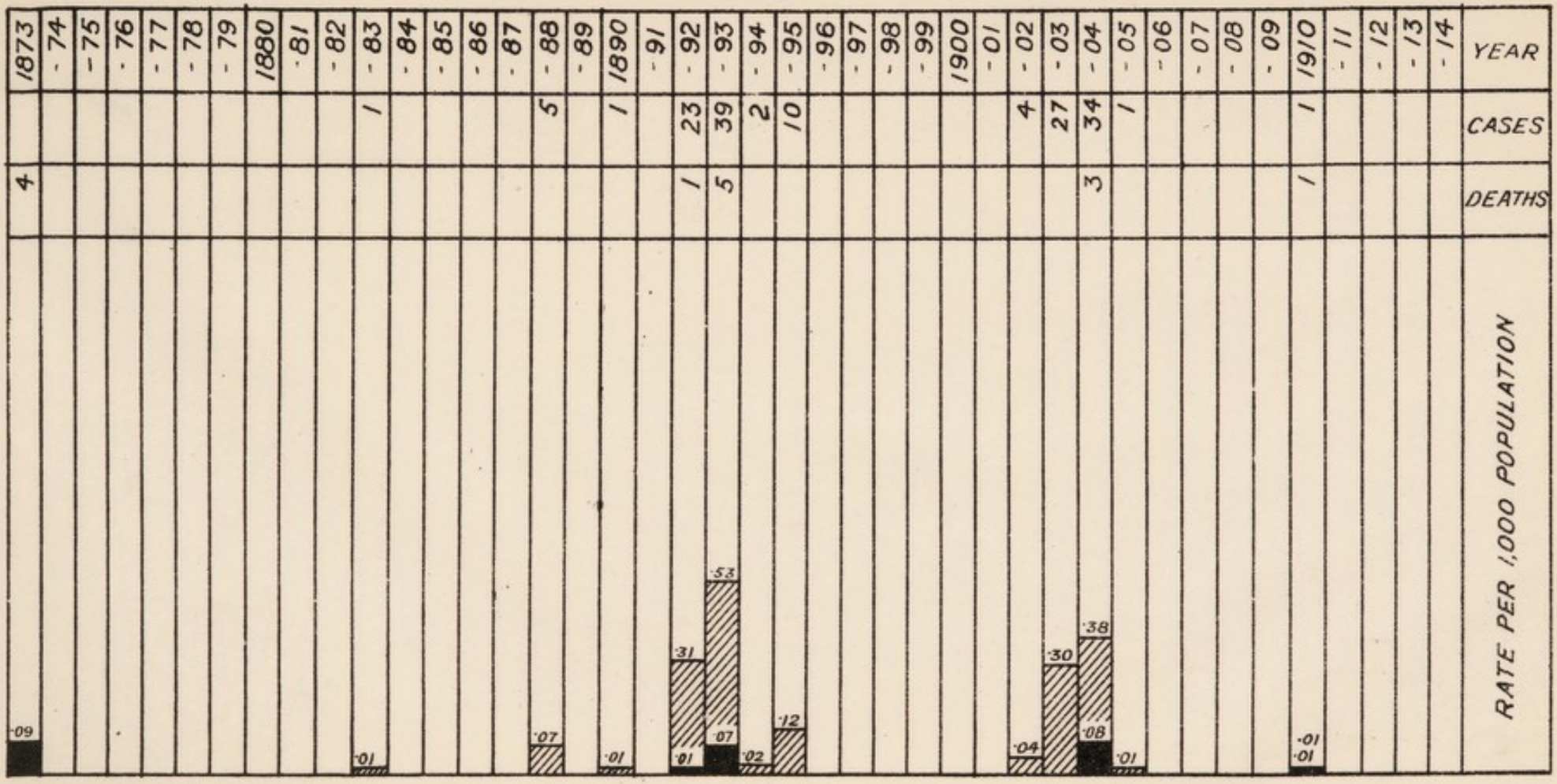
Hospital clothing and bedding	4,552
Blankets, sheets, and rugs	3,660
Pillows and cushions	2,265
Beds	760
Other articles of clothing	4,755
Library books	395
Other articles	2,275
Blankets and rugs for soldiers	9,600
Articles of clothing for soldiers	1,000
Total ...	29,262

Table 38.

Investigations carried out in the municipal laboratory.

Specimens.	Number received	Results. Positive	Results. Negative
Diphtheria—swab	477	107	370
Typhoid fever—blood	78	21	57
Tuberculosis—sputum	263	76	187
Ringworm—hair	93	59	34
Other specimens	36	...	...
Total	917	263	648

DIAGRAM SHOWING ATTACK RATE AND DEATH RATE FROM SMALLPOX.



The Attack Rate is represented by the Shaded Columns and the Death Rate by the Black Columns.

DIAGRAM SHOWING ATTACK RATE FROM SMALLPOX.

YEAR	CASES	DEATHS	RATE PER 1,000 POPULATION
1874			
1873			
1872			
1871			
1870	1	1	0.9
1869			
1868			
1867			
1866			
1865	1		1.0
1864	34	3	30.8
1863	15		13.6
1862	4		3.6
1861			
1860			
1859			
1858			
1857			
1856			
1855	10		9.1
1854	5		4.5
1853	33	2	30.0
1852	12	1	10.9
1851			
1850	1		0.9
1849			
1848	2		1.8
1847			
1846			
1845			
1844			
1843	1		0.9
1842			
1841			
1840			
1839			
1838			
1837			
1836			
1835			
1834			
1833	4		3.6

The Attack Rate is represented by the Shaded Columns.
and the Death Rate by the Black Columns.

Table 40.

Vaccination returns since 1897.

YEAR.	1 Births.	2 Vaccinated.	3 Insusceptible.	4 Dead.	5 Con. Obje't'r	6 Postponed.	7 Removed	8 Unaccounted	Percentage not Vaccinated including Columns 5, 6, 7, 8
1897	*3,209	2,680	11	390	4	7	110	7	4·9
1898	*3,238	2,696	15	383	14	1	103	15	4·6
1899	*3,126	2,625	32	346	10	3	94	16	4·8
1900	*3,148	2,654	10	367	5	12	82	18	4·2
1901	3,157	2,639	4	391	11	29	59	24	4·4
1902	3,245	2,788	4	342	7	12	58	34	3·8
1903	3,391	2,977	8	325	2	6	62	11	2·6
1904	3,375	2,940	7	341	10	10	42	25	2·8
1905	3,259	2,923	3	270	6	10	29	18	2·1
1906	3,137	2,733	5	318	8	12	39	22	2·8
1907	3,185	2,810	9	257	24	19	49	17	3·7
1908	3,260	2,858	18	248	70	11	35	20	4·5
1909	3,103	2,720	8	241	81	9	33	11	4·7
1910	3,165	2,731	3	255	131	3	23	19	6·0
1911	3,229	2,750	9	277	148	5	26	14	6·5
1912	3,154	2,646	4	249	216	12	23	4	8·7
1913	3,190	2,499	6	296	339	14	27	9	13·0

*The above Returns are for St. Helens Sub-District of the Prescot Union, which does not include quite the whole of the Borough.

Table 41 (this table is printed on the following page).

Table 42.

Classification according to age of the cases of and deaths from diphtheria.

Ages.	Under 1 year	1—5	5—15	15—25	25—45	45—65	65 & over.
Cases	3	45	44	20	7	1	0
Deaths.....	0	8	0	0	0	0	0

Table 40.

Vaccination returns since 1897.

YEAR.	1 Births.	2 Vaccinated.	3 Insusceptible.	4 Dead.	5 Condemned. Obj'd'r	6 Post-poned.	7 Removed	8 Re-accounted	Percentage not Vaccinated including Columns 5, 6, 7, 8
1897	*3,209	2,680	11	390	4	7	110	7	4·9
1898	*3,238	2,696	15	383	14	1	103	15	4·6
1899	*3,126	2,625	32	346	10	3	94	16	4·8
1900	*3,148	2,651	10	367	5	12	82	18	4·2
1901	3,157	2,639	4	391	11	29	59	24	4·4
1902	3,245	2,788	4	342	7	12	58	34	3·8
1903	3,391	2,977	8	325	2	6	62	11	2·6
1904	3,375	2,940	7	311	10	10	42	25	2·8
1905	3,259	2,923	3	270	6	10	29	18	2·1
1906	3,137	2,733	5	318	8	12	39	22	2·8
1907	3,185	2,810	9	257	24	19	45	17	3·7
1908	3,260	2,858	18	248	70	11	35	20	4·5
1909	3,103	2,720	8	241	81	9	33	11	4·7
1910	3,165	2,731	3	255	131	3	23	19	6·0
1911	3,229	2,750	9	277	148	5	26	14	6·5
1912	3,134	2,646	4	249	216	12	23	4	8·7
1913	3,190	2,439	6	298	339	14	27	9	13·0

*The above Returns are for St. Helens Sub-District of the Prescot Union, which does not include quite the whole of the Borough.

Table 41 (this table is printed on the following page).

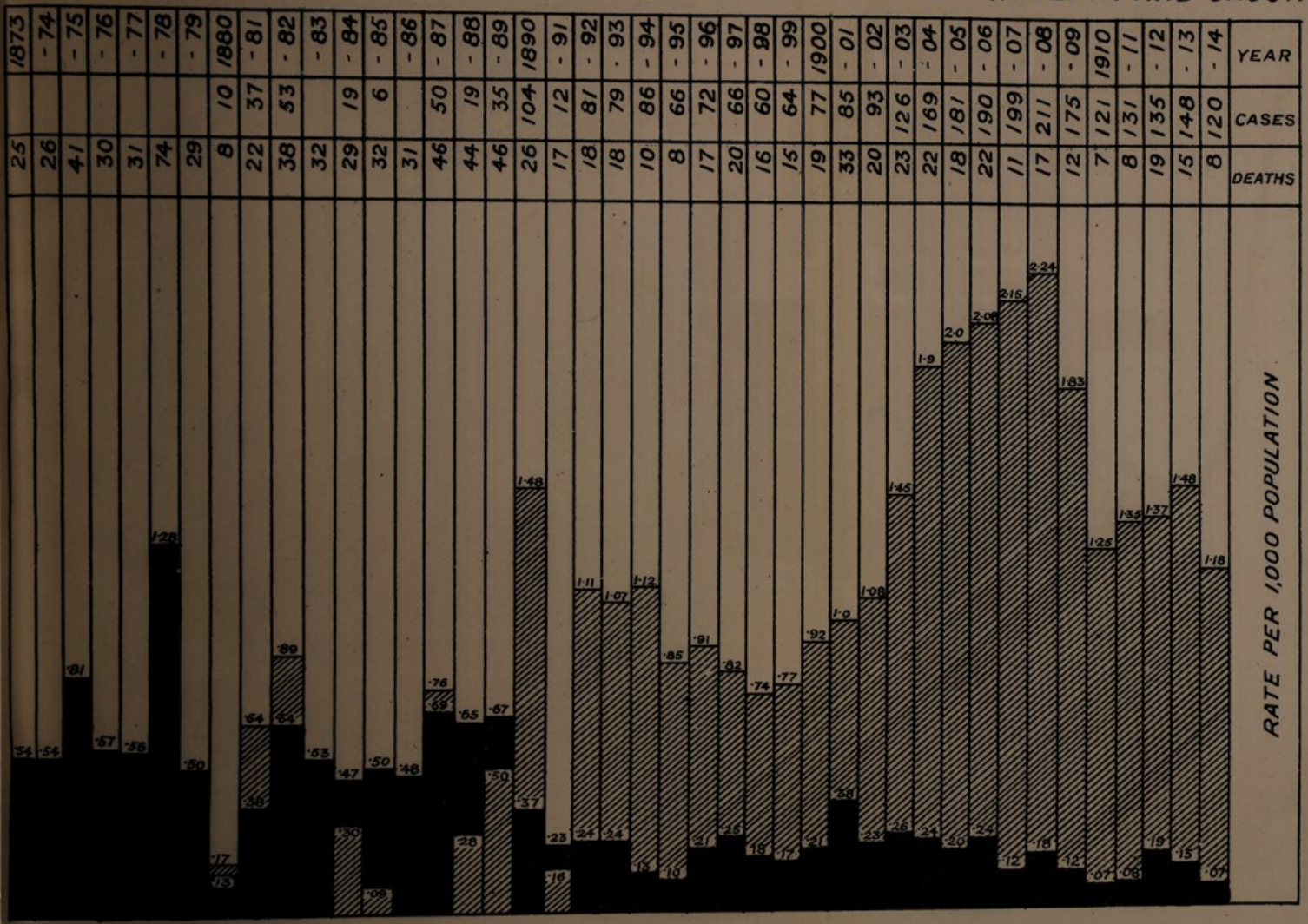
Table 42.

Classification according to age of the cases of and deaths from diphtheria.

Ages.	Under 1 year	1—5	5—15	15—25	25—45	45—65	65 & over
Cases	3	45	44	20	7	1	0
Deaths.....	0	8	0	0	0	0	0

Table 41.

DIAGRAM SHOWING ATTACK RATE AND DEATH RATE FROM DIPHTHERIA AND CROUP.



The Attack Rate is represented by the Shaded Columns.
and the Death Rate by the Black Columns.

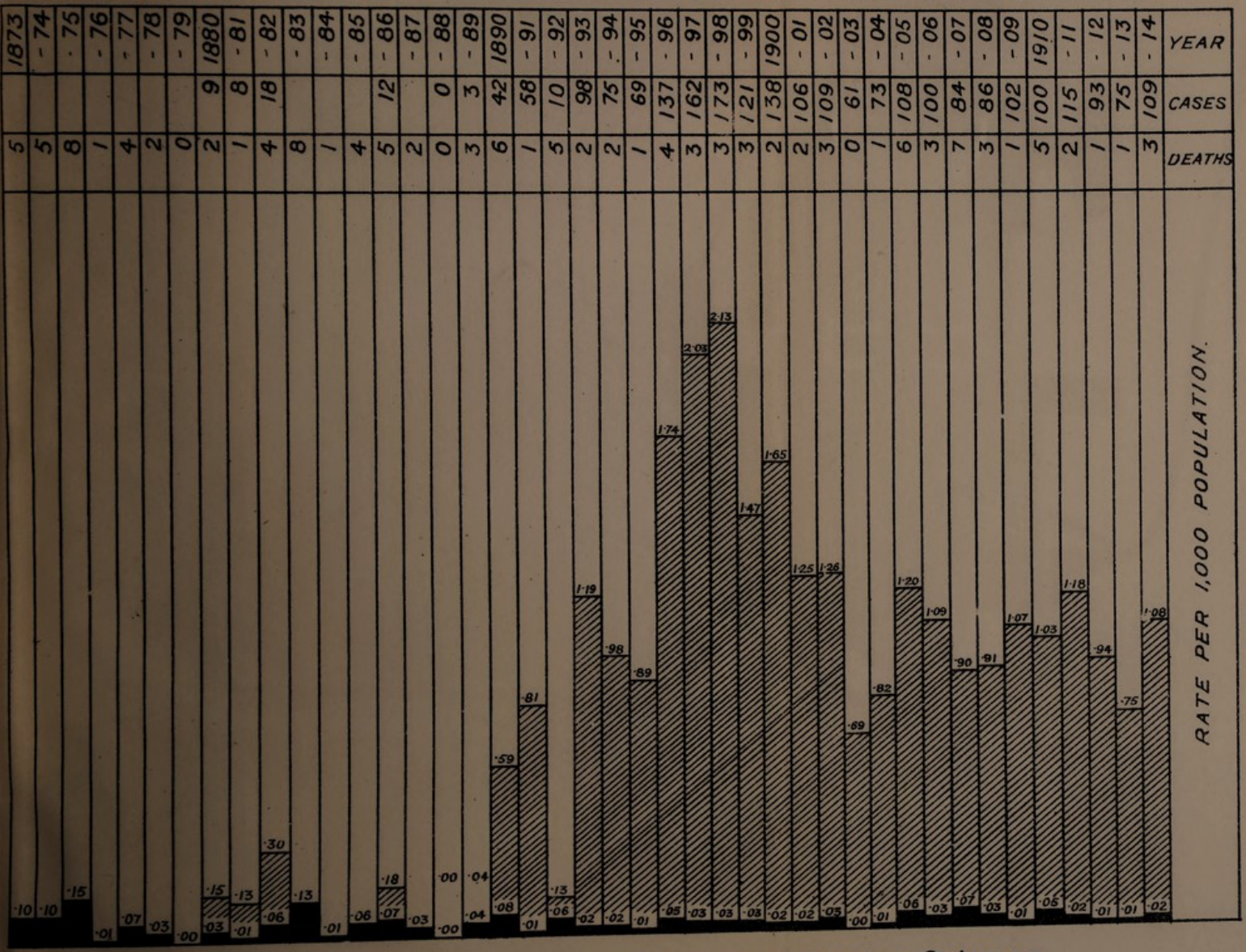
Table 43.

DIAGRAM SHOWING ATTACK RATE AND DEATH

The Attack Rate is represented by the
and the Death Rate by the Black Col

Table 43.

DIAGRAM SHOWING ATTACK RATE AND DEATH RATE FROM ERYSIPELAS.



The Attack Rate is represented by the Shaded Columns and the Death Rate by the Black Columns.

Table 44.

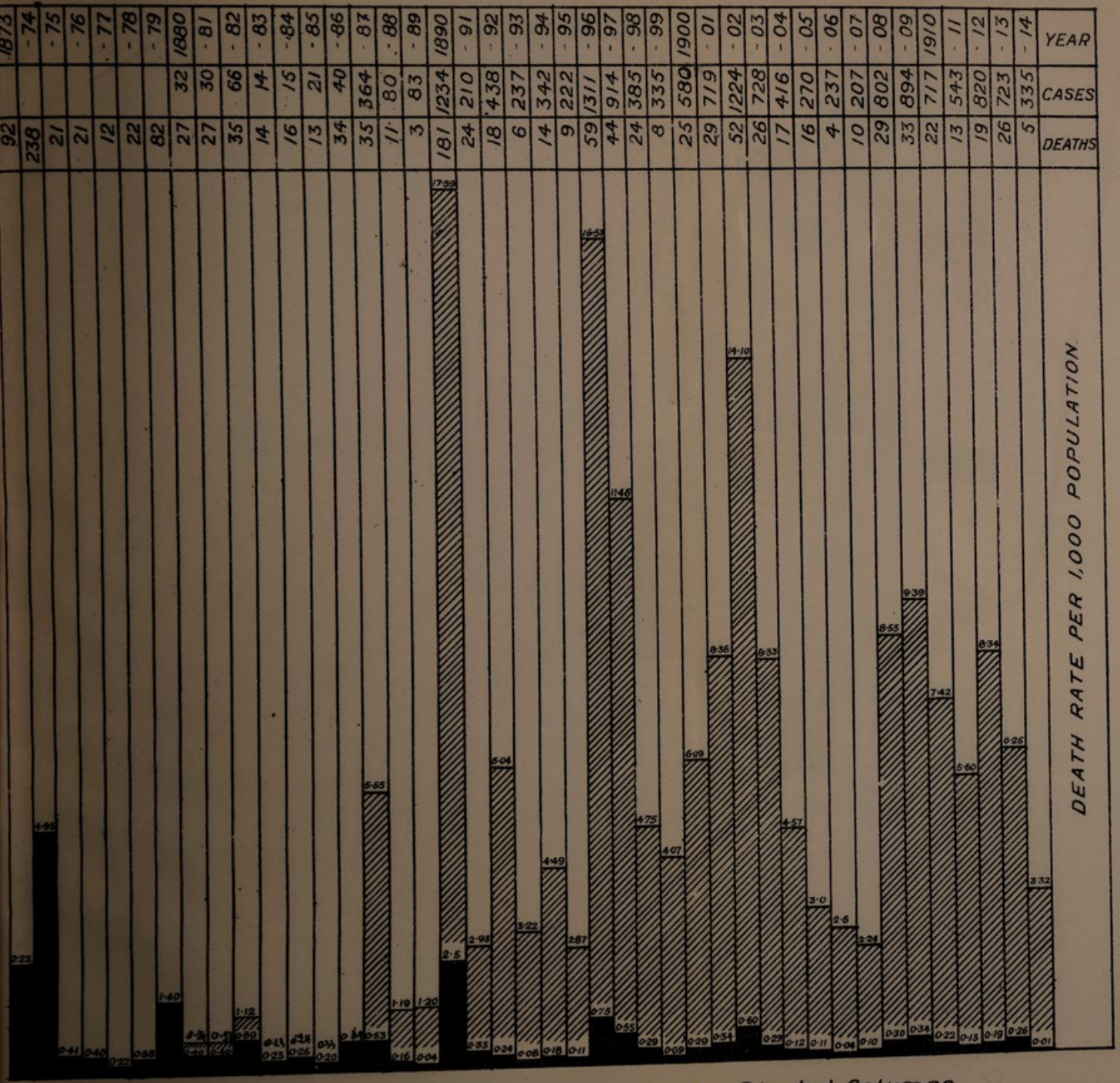
DIAGRAM SHOWING ATTACK RATE AND DEATH RA

1880	35	30	28	32	4	28	12	15	34	32	18	11	2	181	45	16	26	18	1	4	46	26	8	54	52
1880	35	30	28	32	4	28	12	15	34	32	18	11	2	1524	510	163	1311	439	155	345	555	1311	416	382	289
1880	35	30	28	32	4	28	12	15	34	32	18	11	2	1880	510	163	1311	439	155	345	555	1311	416	382	289
1880	35	30	28	32	4	28	12	15	34	32	18	11	2	181	45	16	26	18	1	4	46	26	8	54	52

The Attack Rate is represented by t
and the Death Rate by the Black Colu

Table 44.

DIAGRAM SHOWING ATTACK RATE AND DEATH RATE FROM SCARLET FEVER.



The Attack Rate is represented by the Shaded Columns and the Death Rate by the Black Columns

Table 44.

DIAGRAM SHOWING ATTACK RATE AND DEATH RA

The Attack Rate is represented by t
and the Death Rate by the Black Colu

Table 45.

Classification according to age of the cases of and deaths from scarlet fever.

Ages.	Under 1 year.	1—5	5—15	15—25	25—45	45—65	65 & over.
Cases	6	90	217	14	7	1	0
Deaths	0	3	1	0	0	0	0

Tables 46, 47, 48, are diagrams printed on the following pages.

Table 49.

Classification according to age of deaths from measles.

Ages.	Under 1 year.	1—2	2—5	5—15	15—25	25 and over.
Deaths	6	8	9	2	0	0
Death-rate per 1,000 of the population at these ages	2.2	3.1	1.1	0.9	—	—

Table 50, 51, are diagrams printed on the following pages

Table 52.

Classification according to age of the deaths from diarrhœa and enteritis.

Ages.	Under 1 year	1–2	2–5	5–15	15–25	25–45	45–65	65 and upw'ds
Deaths....	67	26	1	2	0	1	1	1

Table 53 is a diagram printed on the following pages.

Table 45.

Classification according to age of the cases of and deaths from scarlet fever.

Ages.	Under 1 year.	1—5	5—15	15—25	25—45	45—65	65 & over.
Cases	6	90	217	14	7	1	0
Deaths	0	3	1	0	0	0	0

Tables 46, 47, 48, are diagrams printed on the following pages.

Table 49.

Classification according to age of deaths from measles.

Ages.	Under 1 year.	1—2	2—5	5—15	15—25	25 and over.
Deaths	6	8	9	2	0	0
Death-rate per 1,000 of the population at these ages	2.2	3.1	1.1	0.9	—	—

Table 50, 51, are diagrams printed on the following pages

Table 52.

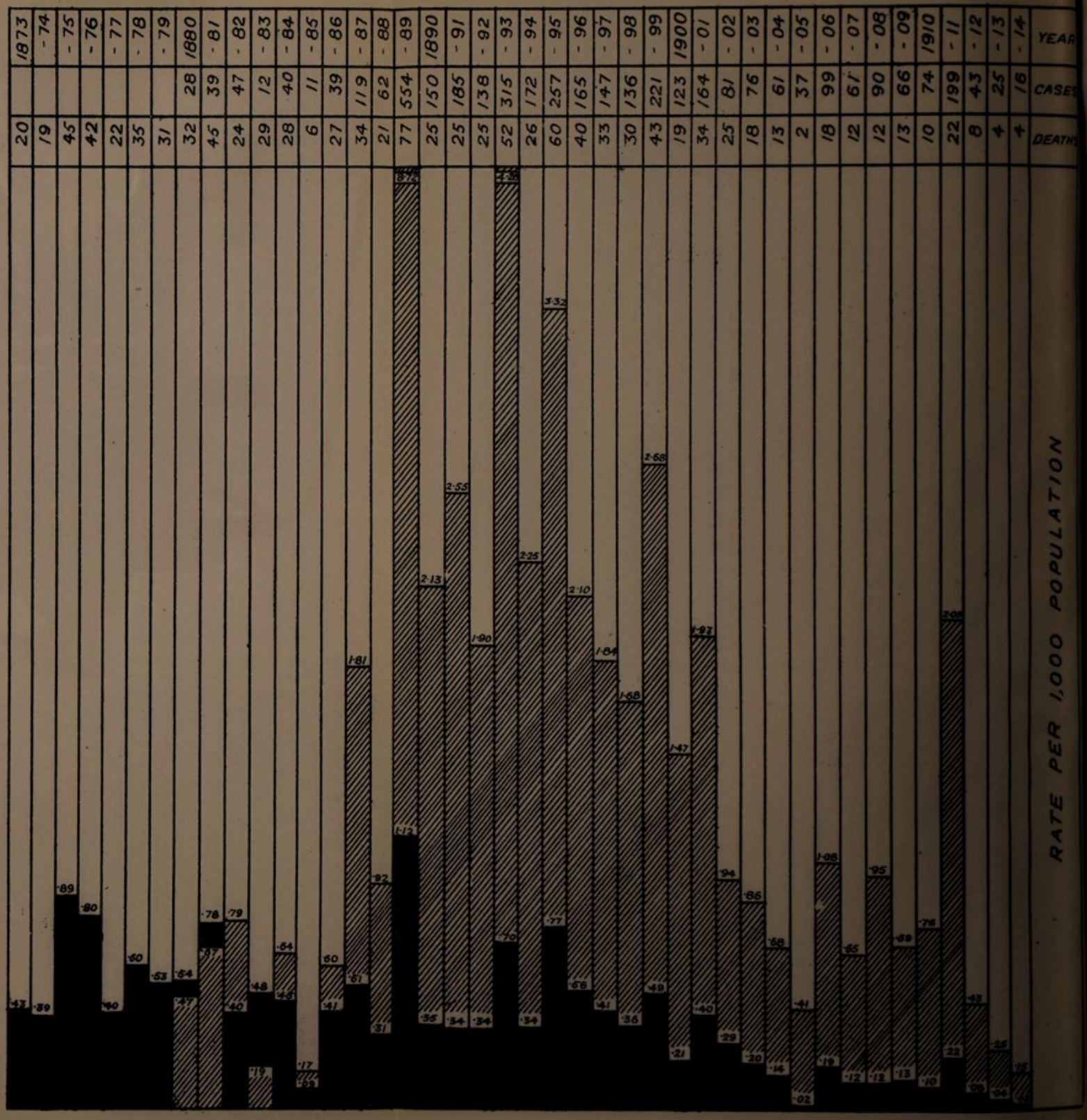
Classification according to age of the deaths from diarrhœa and enteritis.

Ages.	Under 1 year	1–2	2–5	5–15	15–25	25–45	45–65	65 and upw'ds
Deaths....	67	26	1	2	0	1	1	1

Table 53 is a diagram printed on the following pages.

Table 46.

DIAGRAM SHOWING ATTACK RATE AND DEATH RATE FROM TYPHOID FEVER



The Attack Rate is represented by the Shaded Columns.
and the Death Rate by the Black Columns.

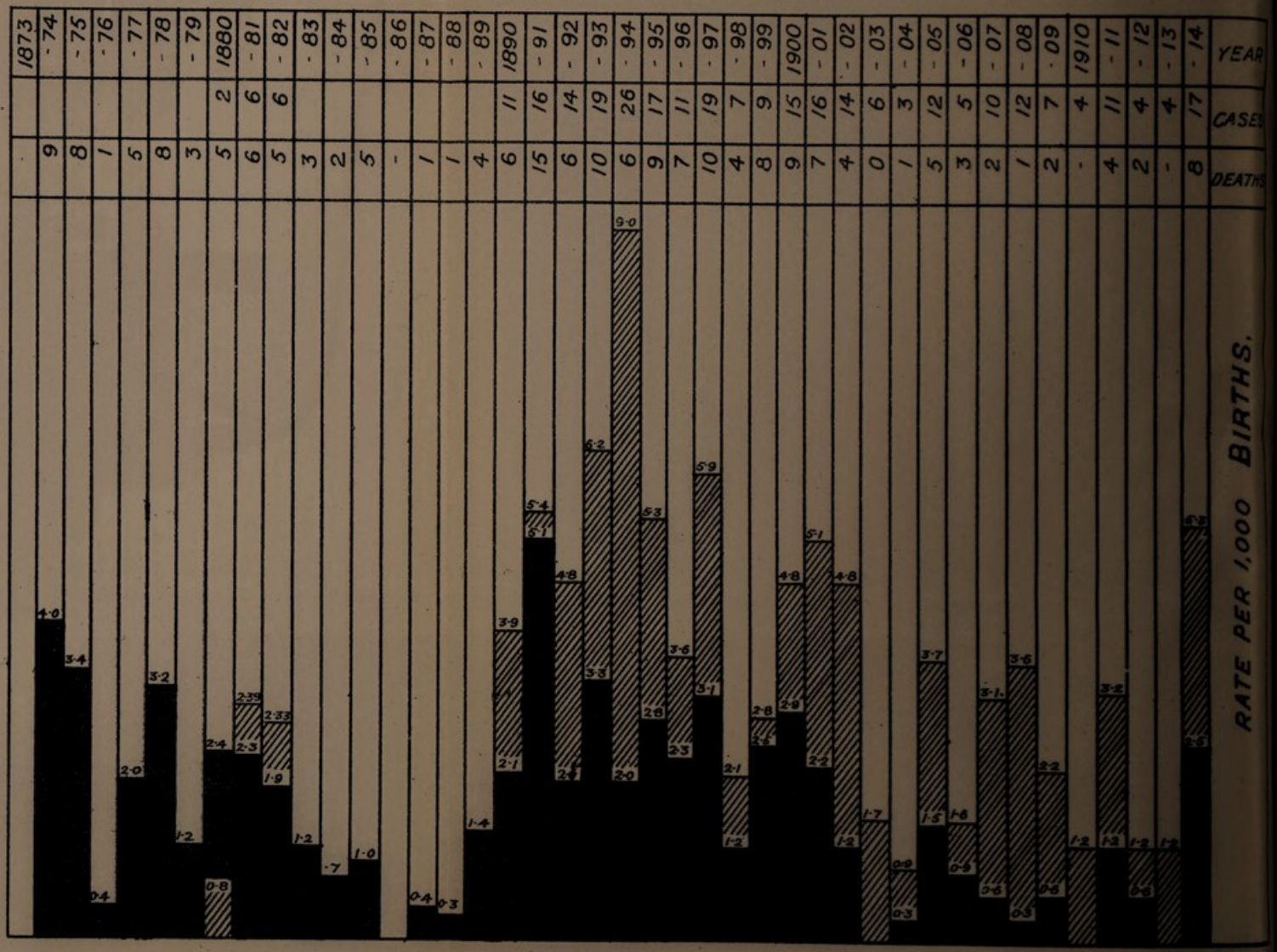
Table 47.

RATE AND DEATH RATE FROM PUERPERAL FEV

is represented by the Shaded Columns
are by the Black Columns.

Table 47.

DIAGRAM SHOWING ATTACK RATE AND DEATH RATE FROM PUERPERAL FEVER.



The Attack Rate is represented by the Shaded Columns and the Death Rate by the Black Columns.

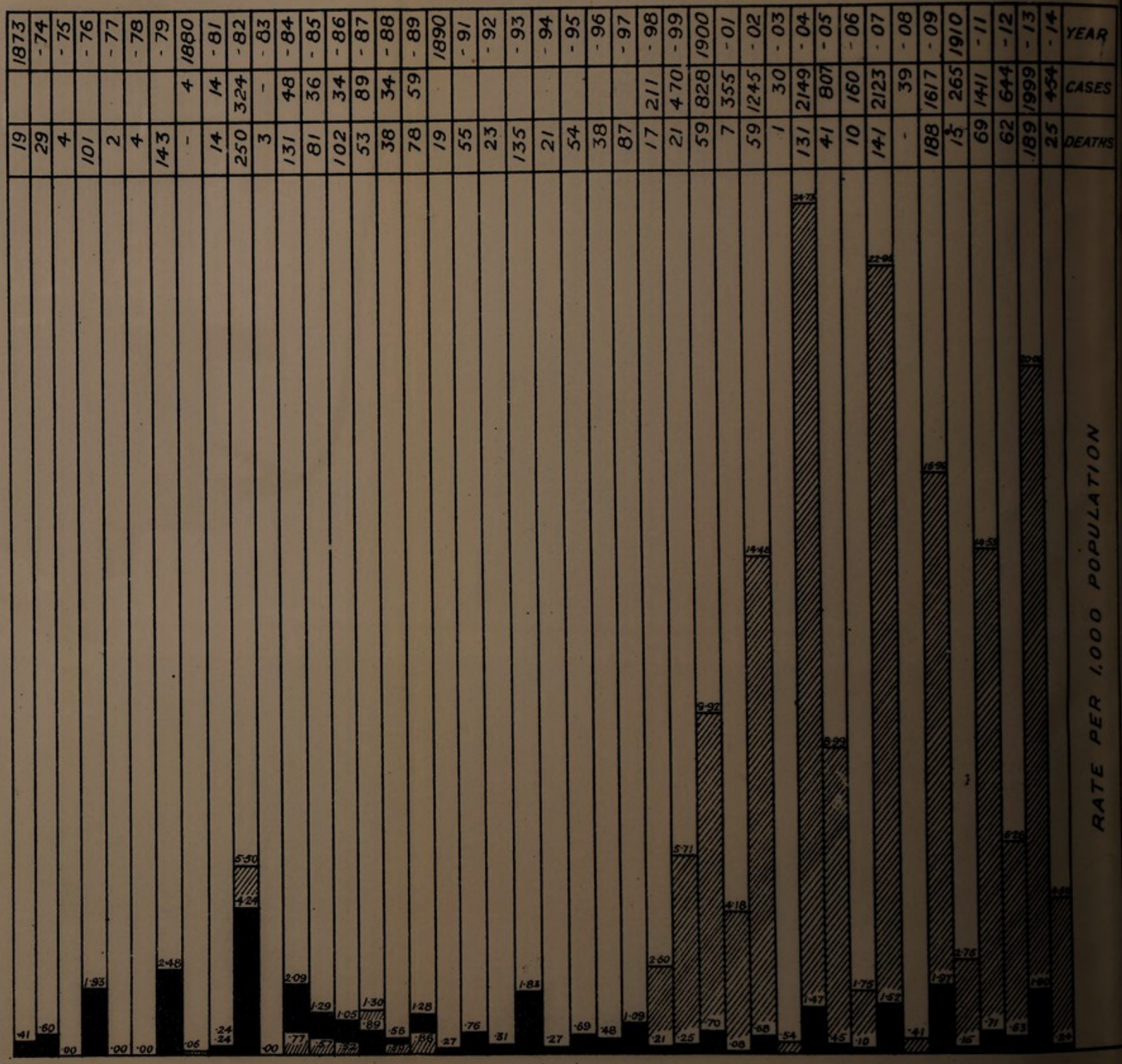
Table 48.

TACK RATE AND DEATH RATE FROM MEASLES

s represented by the Shaded Columns
te by the Black Columns.

Table 48.

DIAGRAM SHOWING ATTACK RATE AND DEATH RATE FROM MEASLES.



The Attack Rate is represented by the Shaded Columns.
and the Death Rate by the Black Columns.

Table 88.

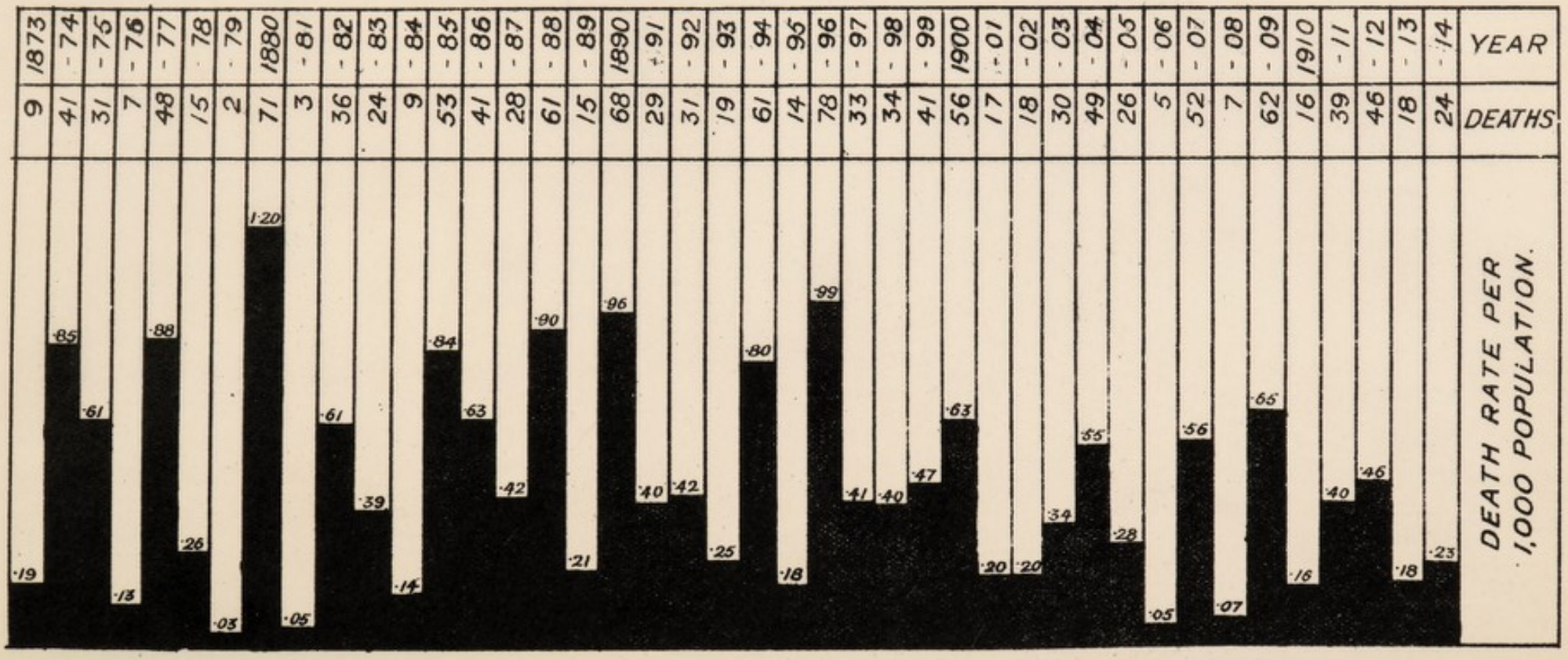
DIAGRAM SHOWING THE DEATH RATE FROM WHOOPING COUGH.

YEAR	DEATHS	DEATH RATE PER 1,000 POPULATION.
1847 - 51	14	1.19
1852 - 56	12	1.01
1857 - 61	7	1.13
1862 - 66	44	.88
1867 - 71	12	.34
1872 - 76	5	.92
1877 - 81	17	1.52
1882 - 86	3	.84
1887 - 91	35	.91
1892 - 96	24	.65
1897 - 1901	6	.14
1902 - 06	22	.58
1907 - 11	25	.64
1912 - 16	14	.36
1917 - 21	58	1.51
1922 - 26	19	.48
1927 - 31	35	.85
1932 - 36	58	1.45
1937 - 41	31	.76
1942 - 46	65	1.61
1947 - 51	39	.96
1952 - 56	13	.30
1957 - 61	18	.41
1962 - 66	14	.32
1967 - 71	7	.16
1972 - 76	25	.57
1977 - 81	2	.04
1982 - 86	32	.73
1987 - 91	44	.99
1992 - 96	30	.67
1997 - 2001	18	.40
2002 - 06	17	.37
2007 - 11	39	.84
2012 - 16	33	.70
2017 - 21	34	.72
2022 - 26	40	.84
2027 - 31	41	.86
2032 - 36	14	.29
2037 - 41	32	.66
1891 - 1901	18	.37
1901 - 11	19	.39
1911 - 21	65	1.33
1921 - 31	54	1.10
1931 - 41	18	.36
1941 - 51	6	.12

The Black Columns represent the Death Rate.

Table 50.

DIAGRAM SHOWING THE DEATH RATE FROM WHOOPING COUGH.



The Black Columns represent the Death Rate.

Table 81

DIAGRAM SHOWING THE DEATH RATE FROM DIARRHŒA AND ENTERITIS.

YEAR	DEATHS	DEATH RATE PER 1,000 POPULATION.
1871 - 72	45	
72 - 73	111	
73 - 74	101	
74 - 75	46	
75 - 76	77	
76 - 77	121	
77 - 78	92	
78 - 79	133	
79 - 80	25	
1880 - 81	131	
81 - 82	92	
82 - 83	98	
83 - 84	69	
84 - 85	121	
85 - 86	32	
86 - 87	122	
87 - 88	101	
88 - 89	59	
89 - 90	38	
1890 - 91	17	
91 - 92	77	
92 - 93	58	
93 - 94	131	
94 - 95	82	
95 - 96	101	
96 - 97	59	
97 - 98	121	
98 - 99	140	
1899 - 00	16	
00 - 01	114	
01 - 02	52	
02 - 03	20	
03 - 04	52	
04 - 05	120	
05 - 06	38	
06 - 07	102	
07 - 08	32	
08 - 09	52	
09 - 10	12	
1910 - 11	20	
11 - 12	220	
12 - 13	64	
13 - 14	120	
14 - 15	86	

Table 51.

DIAGRAM SHOWING THE DEATH RATE FROM DIARRHŒA AND ENTERITIS.

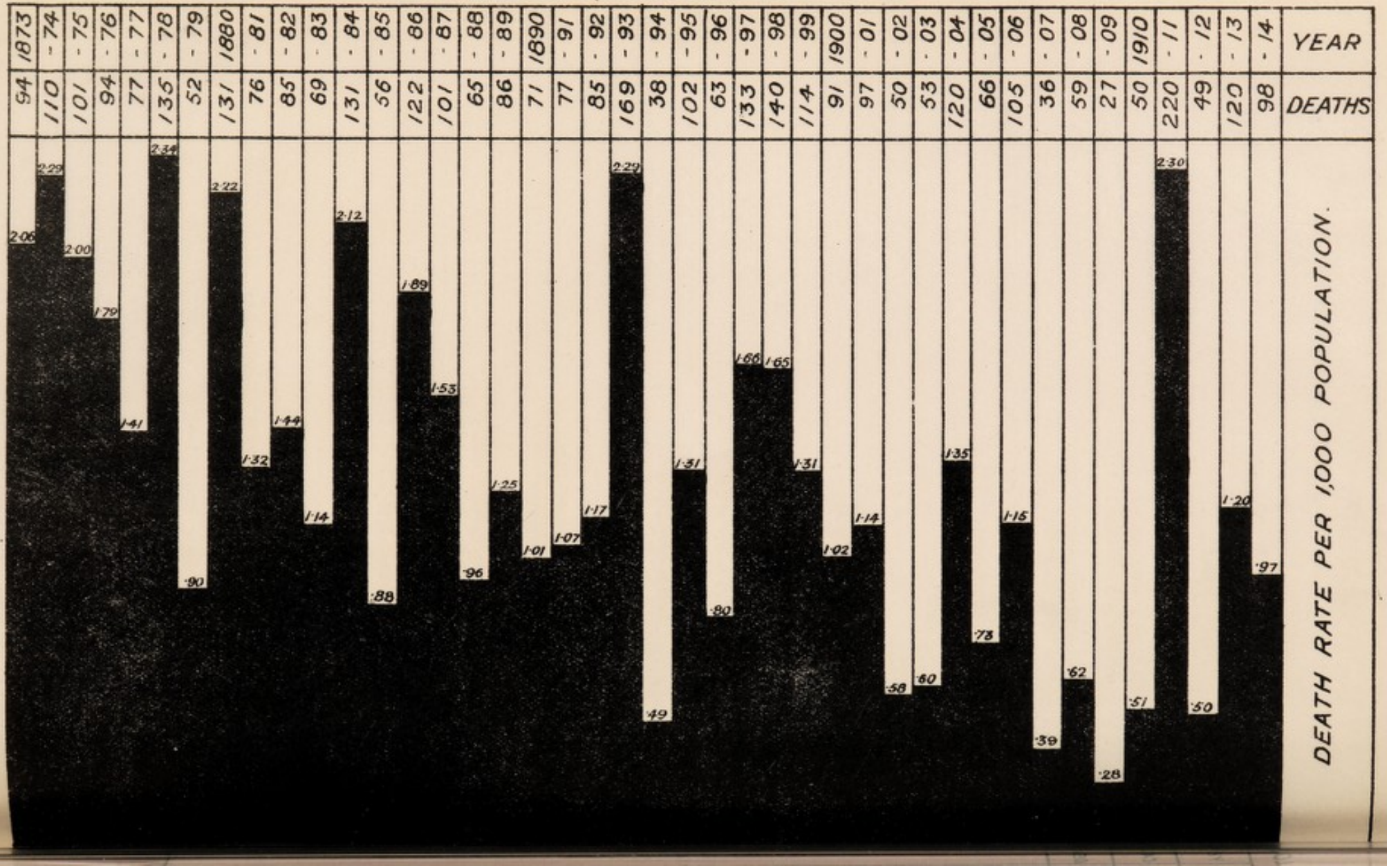


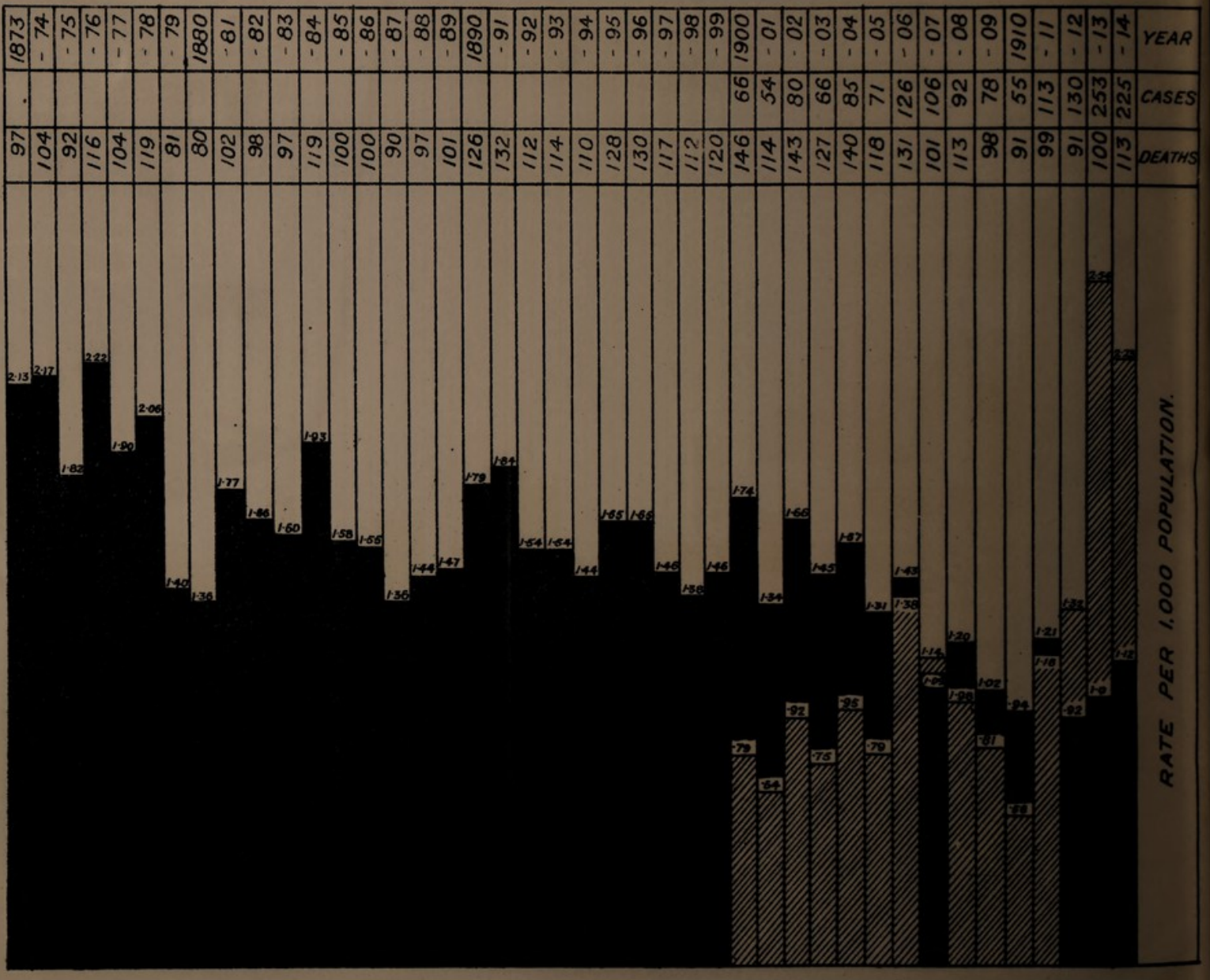
Table 83.

DEATH RATE FROM PULMONARY TUBERCULO

resented by the Shaded Columns
the Black Columns

Table 53.

DIAGRAM SHOWING ATTACK RATE AND DEATH RATE FROM PULMONARY TUBERCULOSIS



The Attack Rate is represented by the Shaded Columns and the Death Rate by the Black Columns.

Table 54.

Classification according to age of the cases of pulmonary tuberculosis.

	0–1	1–5	5–15	15–25	25–35	35–45	45–55	55–65	65 up.
Males	2	3	17	24	17	25	20	12	1
Females	2	2	34	16	25	10	13	1	1
Totals ..	4	5	51	40	42	35	33	13	2

Table 55.

The interval between the notification of cases of pulmonary tuberculosis and death.

Weeks.		Weeks.							Months.												
Interval.	Under 1 week.	1–2	2–3	3–4	4–5	5–6	6–7	7–8	8–9	9–10	10–11	11–12	Over 12
Number of Cases ..	8	1	7	3	4	4	2	2	15	7	3	2	3	2	3	1	3	0	11

Table 56 is a diagram given on the following page.

Table 57.

Classification according to age of the cases of non-pulmonary tuberculosis.

Ages.	Under 1 year	1–5	5–15	15–25	25–35	35–45	45–55	55–65	Over 65	Total
Males	7	10	47	10	3	4	1	1	..	83
Females	7	14	19	8	3	1	..	..	..	52
Total	14	24	66	18	6	5	1	1	..	135

Table 54.

Classification according to age of the cases of pulmonary tuberculosis.

	0–1	1–5	5–15	15–25	25–35	35–45	45–55	55–65	65 up.
Males	2	3	17	24	17	25	20	12	1
Females	2	2	34	16	25	10	13	1	1
Totals...	4	5	51	40	42	35	33	13	2

Table 55.

The interval between the notification of cases of pulmonary tuberculosis and death.

Weeks.	Weeks.								Months.										
Interval.	Under 1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	Over 12
Number of Cases ..	8	1	7	3	4	4	2	2	15	7	3	2	3	2	3	1	3	0	11

Table 56 is a diagram given on the following page.

Table 57.

Classification according to age of the cases of non-pulmonary tuberculosis.

Ages.	Under 1 year	1–5	5–15	15–25	25–35	35–45	45–55	55–65	Over 65	Total
Males	7	10	47	10	3	4	1	1	..	83
Females	7	14	19	8	3	1	..	..	..	52
Total	14	24	66	18	6	5	1	1	..	135

INFANTILE MORTALITY RATE.—STHELENS AND ENGLAND AND WALES.-1813-1914.

The Black Columns represent the Death Rate.

YEAR	DEATHS	1,000 POPULATION DEATH RATE PER
1813		NOT GIVEN
- 14	58	
- 15	34	
- 16	28	
- 17	42	
- 18	34	
- 19	35	
- 20	28	
- 21	34	
- 22	34	
- 23	35	
- 24	41	
- 25	35	
- 26	34	
- 27	34	
- 28	50	
- 29	39	
- 30	41	
- 31	34	
- 32	34	
- 33	34	
- 34	34	
- 35	34	
- 36	34	
- 37	34	
- 38	34	
- 39	34	
- 40	34	
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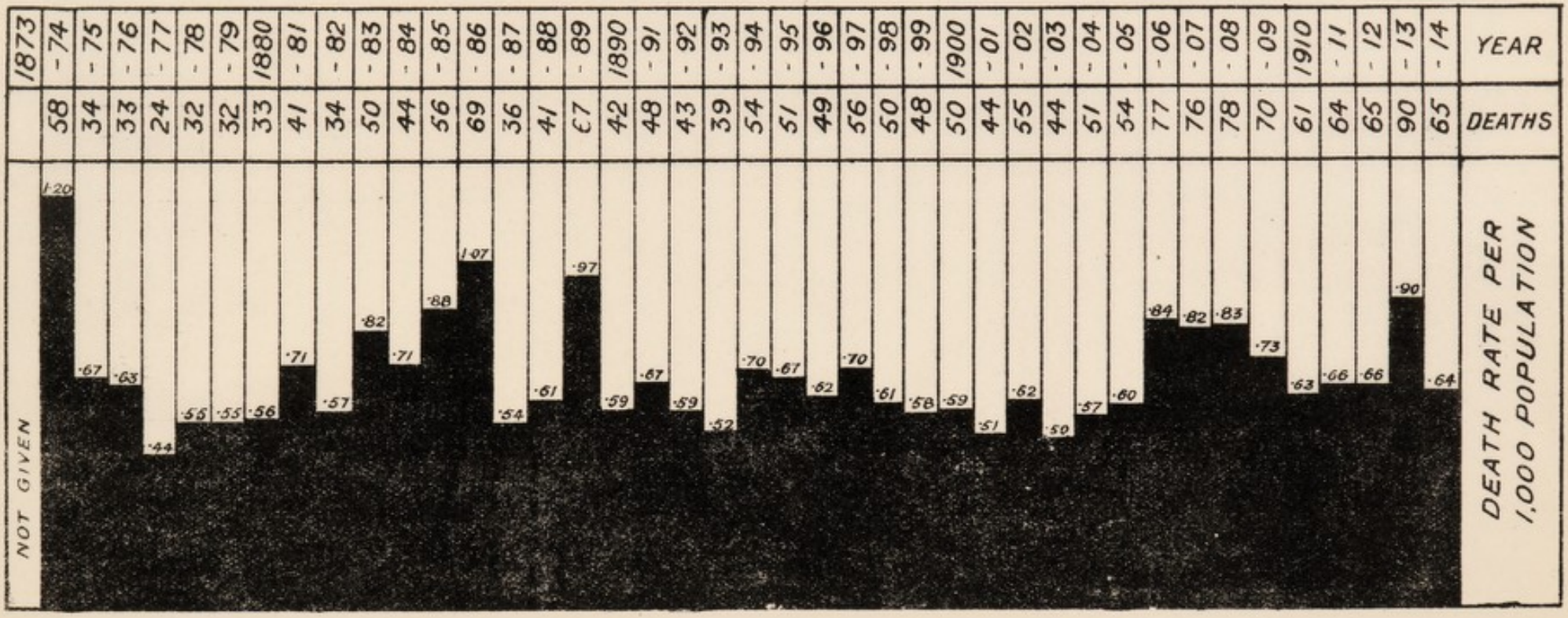
- 88	34	
- 89	34	
- 90	34	
- 91	34	
- 92	34	
- 93	34	
- 94	34	
- 95	34	
- 96	34	
- 97	34	
- 98	34	
- 99	34	
1900	34	

DIAGRAM SHOWING THE DEATH RATE FROM TUBERCULOSIS OF OTHER PULMONARY

Table 88.

Table 56.

DIAGRAM SHOWING THE DEATH RATE FROM FORMS OF TUBERCULOSIS OTHER THAN PULMONARY.



The Black Columns represent the Death Rate.

INFANTILE MORTALITY RATE.—ST. HELENS AND ENGLAND AND WALES - 1873-1914

Table 88.

The admissions and discharges at Eccleston Hall.

	Remaining in Dec. 31st, 1913.		Admitted during 1914.		Discharged during 1914.		Died during 1914.		Left without permission.		Dismissed for unsatisfactory behaviour.		Remaining in on Dec. 31st, 1914.	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
A. (Early cases) ...	0	2	6	6	4	9	0	0	0	0	0	0	2	2
B. (Intermediate cases)	5	8	24	10	14	10	3	1	1	1	0	0	6	6
C. (Late cases)	3	1	34	21	3	4	15	11	4	0	1	0	14	7
D. (Observation cases).	0	0	2	0	1	4	0	2	0	0	0	0	1	3

Table 58.

The admissions and discharges at Eccleston Hall.

	Remaining in on Dec. 31st, 1913.		Admitted during 1914.		Discharged during 1914.		Died during 1914.		Left without permission.		Dismissed for unsatisfactory behaviour.		Remaining in on Dec. 31st, 1914.	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
A (Early cases). ...	0	2	6	9	4	9	0	0	0	0	0	0	2	2
B. (Intermediate cases).	5	8	24	10	14	10	3	1	1	1	5	0	6	6
C. (Late cases)	3	1	34	21	3	4	15	11	4	0	1	0	14	7
D. (Observation cases).	0	0	2	9	1	4	0	2	0	0	0	0	1	3

Table 58a.

Analysis of the present condition of patients discharged from Eccleston Hall.

	Condition on discharge.		Present condition.				
	Death hastened	Improved	Condition maintained	Satisfactory and at work	Satisfactory but not at work	Unsatisfactory	Dead
A	12	1	—	5	6	1	—
B	21	2	8	10	3	8	1
C	2	5	5	1	3	4	1
D	4	1	—	3	—	1	—
Totals	39	9	13	19	12	14	2

Table 59.

Age and sex classification of new cases of tuberculosis attending the dispensary.

	Pulmonary.		Other Forms.		Totals.	
	Males.	Females.	Males.	Females.	Males.	Females.
1—5.....	1	3	6	4	7	7
5—15.....	29	64	33	31	62	85
15—25.....	16	13	7	6	23	19
25—35.....	24	13	—	3	24	16
35—45.....	20	7	—	—	20	7
45—55.....	8	7	1	—	9	7
55—65.....	2	2	—	—	2	2
65 upwards..	—	—	—	—	—	—
Totals	100	99	47	44	147	143

Table 59a.

Number of attendances at the tuberculosis dispensary during 1914.

	Pulmonary	Other forms.
Number of old cases attending on 31st Dec., 1913 ...	78	14
Number of new cases during the year 1914	192	91
Number of attendances during the year	1263	656

Table 58a.

Analysis of the present condition of patients discharged from Eccleston Hall.

	Condition. on discharge.			Present condition.				
	Much Improved	Improved	Condition Unchanged	Satisfactory and at work	Satisfactory not working	Un-satisfactory	Dead	Lost sight of
A	12	1	—	5	6	1	—	1
B	21	2	8	10	3	8	7	3
C	2	5	5	1	3	4	1	3
D	4	1	—	3	—	1	—	1
Totals	39	9	13	19	12	14	8	8

Table 59.

Age and sex classification of new cases of tuberculosis attending the dispensary.

	Pulmonary.		Other Forms.		Totals.	
	Males.	Females.	Males.	Females.	Males.	Females.
1—5.....	1	3	6	4	7	7
5—15.....	29	54	33	31	62	85
15—25.....	16	13	7	6	23	19
25—35.....	24	13	—	3	24	16
35—45.....	20	7	—	—	20	7
45—55.....	8	7	1	—	9	7
55—65.....	2	2	—	—	2	2
65 upwards..	—	—	—	—	—	—
Totals	100	99	47	44	147	143

Table 59a.

Number of attendances at the tuberculosis dispensary during 1214.

	Pulmonary	Other forms.
Number of old cases attending on 31st Dec., 1913 ...	78	14
Number of new cases during the year 1914 ...	... 192	91
Number of attendances during the year ...	...1263	655

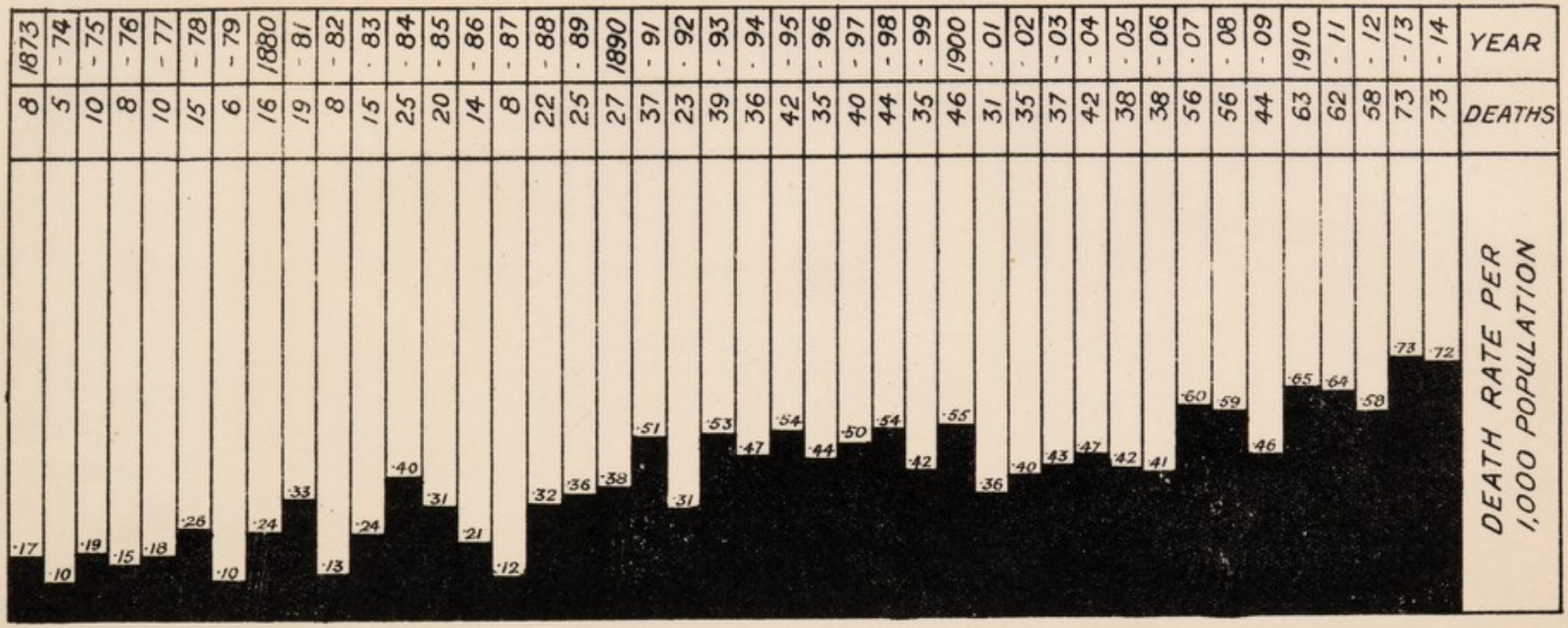
Table 60.

DIAGRAM SHOWING THE DEATH RATE FROM CANCER AND MALIGNANT DISEASE.

YEAR	DEATHS	DEATH RATE PER 1,000 POPULATION
1813 - 14	8	.11
15	5	.10
16 - 17	10	.18
18 - 19	8	.12
1820 - 21	10	.18
22 - 23	12	.19
24 - 25	15	.26
26 - 27	9	.10
1828 - 29	19	.34
30 - 31	13	.22
32 - 33	8	.13
34 - 35	15	.24
1836 - 37	12	.18
38 - 39	14	.21
40 - 41	8	.11
42 - 43	18	.25
1844 - 45	21	.27
46 - 47	25	.31
48 - 49	24	.29
50 - 51	31	.36
52 - 53	35	.38
54 - 55	38	.39
1856 - 57	52	.49
58 - 59	41	.38
60 - 61	51	.45
62 - 63	43	.36
1864 - 65	44	.34
66 - 67	52	.38
68 - 69	64	.44
70 - 71	60	.39
72 - 73	65	.41
74 - 75	85	.52
76 - 77	74	.43
78 - 79	74	.42
1880 - 81	89	.49
82 - 83	94	.50
84 - 85	96	.50
86 - 87	104	.53
88 - 89	112	.56
1890 - 91	134	.66
92 - 93	132	.64
94 - 95	152	.72
96 - 97	154	.72
98 - 99	161	.74
1900 - 01	174	.79
02 - 03	183	.82
04 - 05	194	.85
06 - 07	208	.89
08 - 09	220	.92
1910 - 11	229	.93
12 - 13	245	.97
14 - 15	258	1.00
16 - 17	272	1.03
18 - 19	284	1.05
1920 - 21	299	1.08
22 - 23	312	1.11
24 - 25	328	1.15
26 - 27	341	1.17
28 - 29	356	1.21
30 - 31	369	1.23
32 - 33	384	1.26
34 - 35	398	1.29
1936 - 37	412	1.31
38 - 39	427	1.34
40 - 41	441	1.36
42 - 43	456	1.39
44 - 45	470	1.41
1946 - 47	485	1.44
48 - 49	499	1.46
50 - 51	514	1.49
52 - 53	528	1.51
54 - 55	543	1.53
1956 - 57	557	1.56
58 - 59	572	1.58
60 - 61	586	1.60
62 - 63	601	1.62
64 - 65	615	1.64
1966 - 67	630	1.66
68 - 69	644	1.68
70 - 71	659	1.70
72 - 73	673	1.72
74 - 75	688	1.74
1976 - 77	702	1.76
78 - 79	717	1.78
80 - 81	731	1.80
82 - 83	746	1.82
84 - 85	760	1.84
1986 - 87	775	1.86
88 - 89	789	1.88
90 - 91	804	1.90
92 - 93	818	1.92
94 - 95	833	1.94
1996 - 97	847	1.96
98 - 99	862	1.98
2000 - 01	876	2.00
02 - 03	891	2.02
04 - 05	905	2.04
06 - 07	920	2.06
08 - 09	934	2.08
2010 - 11	949	2.10
12 - 13	963	2.12
14 - 15	978	2.14
16 - 17	992	2.16
18 - 19	1007	2.18
2020 - 21	1021	2.20
22 - 23	1036	2.22
24 - 25	1050	2.24
26 - 27	1065	2.26
28 - 29	1079	2.28
30 - 31	1094	2.30
32 - 33	1108	2.32
34 - 35	1123	2.34
2036 - 37	1137	2.36
38 - 39	1152	2.38
40 - 41	1166	2.40
42 - 43	1181	2.42
44 - 45	1195	2.44
2046 - 47	1210	2.46
48 - 49	1224	2.48
50 - 51	1239	2.50
52 - 53	1253	2.52
54 - 55	1268	2.54
2056 - 57	1282	2.56
58 - 59	1297	2.58
60 - 61	1311	2.60
62 - 63	1326	2.62
64 - 65	1340	2.64
2066 - 67	1355	2.66
68 - 69	1369	2.68
70 - 71	1384	2.70
72 - 73	1398	2.72
74 - 75	1413	2.74
2076 - 77	1427	2.76
78 - 79	1442	2.78
80 - 81	1456	2.80
82 - 83	1471	2.82
84 - 85	1485	2.84
2086 - 87	1500	2.86
88 - 89	1514	2.88
90 - 91	1529	2.90
92 - 93	1543	2.92
94 - 95	1558	2.94
2096 - 97	1572	2.96
98 - 99	1587	2.98
2100 - 01	1601	3.00

Table 60.

DIAGRAM SHOWING THE DEATH RATE FROM CANCER AND MALIGNANT DISEASE.



The Black Columns represent the Death Rate.

Table 61.

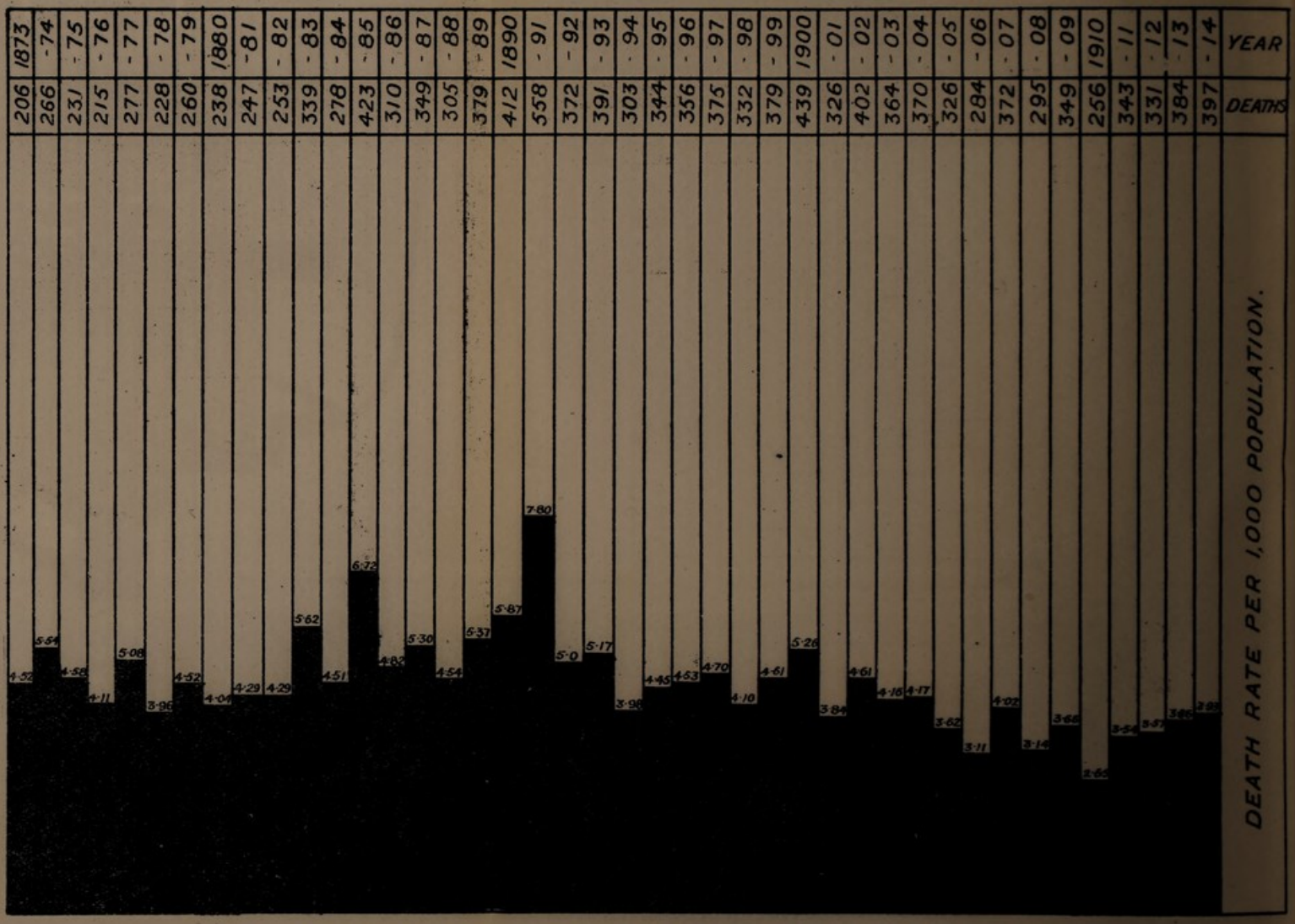
DEATH RATE FROM BRONCHITIS &c.

YEAR	DEATH
1851 - 55	315
56 - 60	328
61 - 65	361
66 - 70	303
71 - 75	347
76 - 80	326
81 - 85	312
86 - 90	335
91 - 95	312
96 - 1900	434
01 - 05	350
06 - 10	405
11 - 15	324
16 - 20	350
21 - 25	310
26 - 30	350
31 - 35	384
36 - 40	315
41 - 45	348
46 - 50	343
51 - 55	321
56 - 60	284
61 - 65	267

Is represented by the Black Columns.

Table 61.

DIAGRAM SHOWING DEATH RATE FROM BRONCHITIS &c.



The Death Rate is represented by the Black Columns.

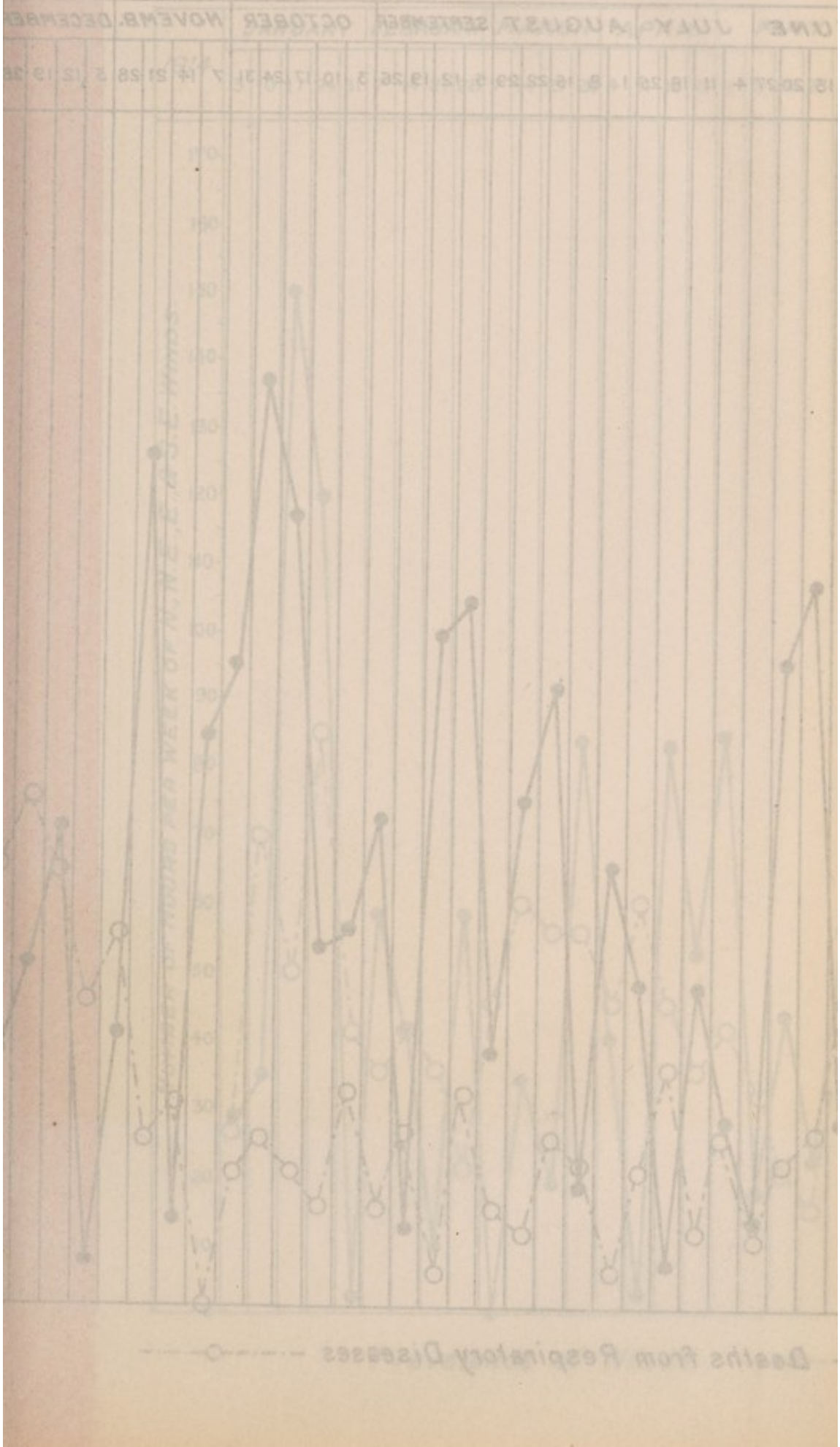


Table 62.

CHART SHOWING THE PREVALENCE OF CERTAIN WINDS, AND THE DEATHS FROM RESPIRATORY DISEASES DURING THE YEAR 1914.

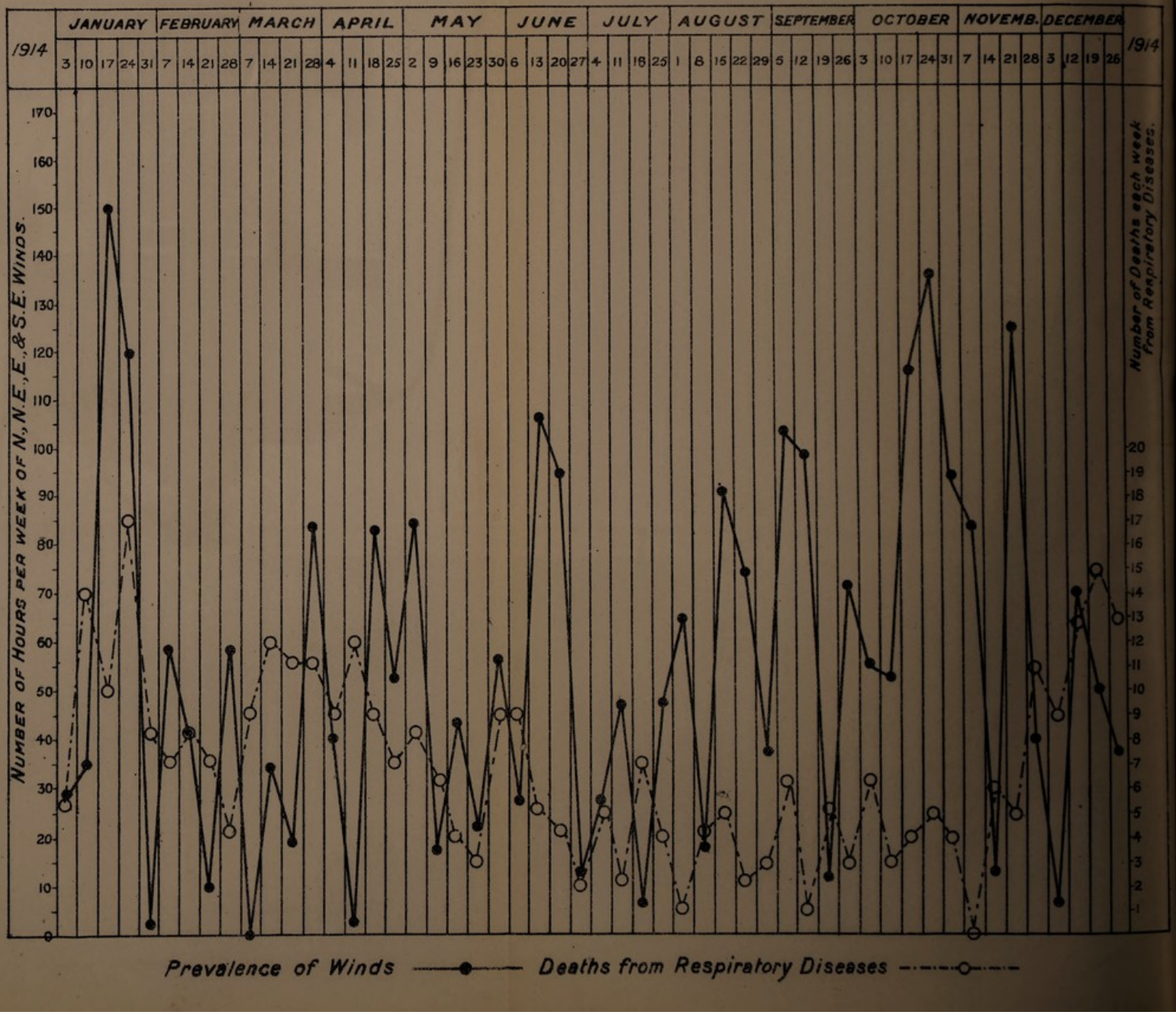


Table 63.

Number of births attended by midwives.

Year.	trained midwives.	untrained midwives.	Total.
1906	1,520	1,294	2,814
1907	1,739	1,245	2,984
1908	1,778	1,368	3,146
1909	1,789	1,293	3,082
1910	1,908	1,152	3,060
1911	2,009	1,185	3,194
1912	2,153	1,061	3,214
1913	2,296	983	3,279
1914	2,305	930	3,235

Table 64.

Number of still births notified, and number buried in the cemeteries.

Years	1906	1907	1908	1909	1910	1911	1912	1913	1914
Number of still-births notified	119	107	111	123	87	95	95	149	64
Number buried in cemeteries	127	131	125	129	138	101	116	144	139

Table 65 is a diagram printed on the following page.

Table 66.

Rate of infant mortality in the various wards.

	Number of deaths.	Death-rate per 1,000 births.
North Eccleston	58	135
South Eccleston	56	116
Central	43	201
North Windle	24	77
South Windle	38	160
Hardshaw	59	165
East Sutton	57	120
West Sutton	43	124
Parr	86	178

Table 63.

Number of births attended by midwives.

Year.	trained midwives.	untrained midwives.	Total.
1906	1,520	1,294	2,814
1907	1,739	1,215	2,954
1908	1,778	1,368	3,146
1909	1,789	1,293	3,082
1910	1,908	1,152	3,060
1911	2,009	1,185	3,194
1912	2,153	1,061	3,214
1913	2,296	983	3,279
1914	2,305	930	3,235

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Years	1906	1907	1908	1909	1910	1911	1912	1913	1914
Number of still-births notified	119	107	111	123	87	95	95	119	61
Number buried in cemeteries	127	131	125	129	138	101	116	111	139

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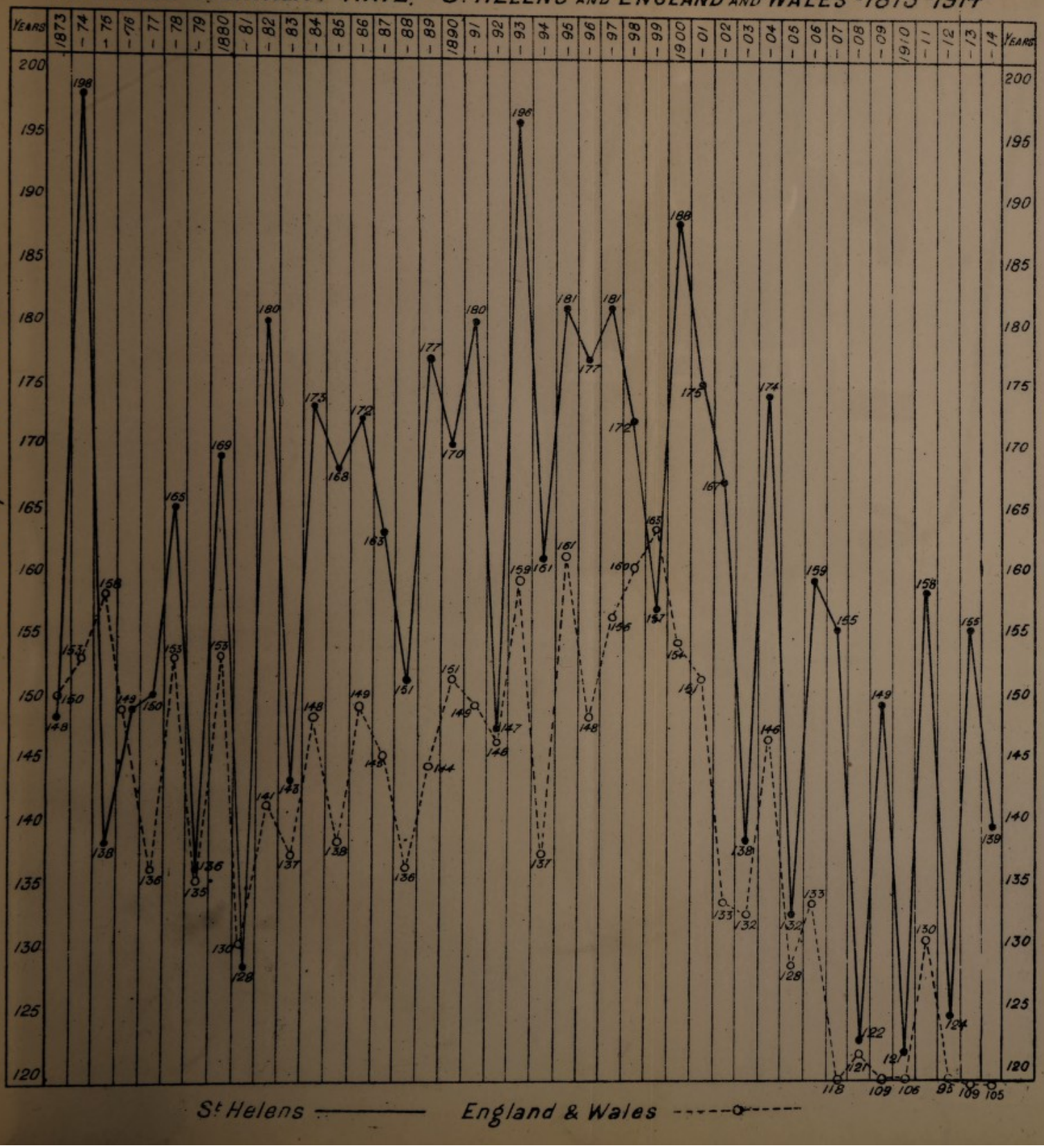
	Number of deaths.	Death-rate per 1,000 births.
North Ecclesston	58	135
South Ecclesston	56	116
Central	13	201
North Windle	24	77
South Windle	38	160
Hardshaw	39	165
East Sutton	57	120
West Sutton	43	124
Parr	86	178

INFANTILE MORTALITY RATE.—St HELENS AND ENGLAND AND WALES -1873-1914



INFANTILE MORTALITY RATE — ST HELENS
St Helens
England

Table 67.

LOCAL GOVERNMENT BOARD TABLE I.

Vital statistics of whole district during 1914 and previous years.

Year.	Population estimated to Middle of each Year.	Births.			Total Deaths Registered in the District.		Transferable Deaths		Nett Deaths belonging to the District.			
		Uncorrected Number.	Nett.						Under 1 year of age.		At all Ages.	
			Number.	Rate.	Number.	Rate.	of Non-residents registered in the District.	of Residents not registered in the District.	Number.	Rate per 1,000 Nett Births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1909	95,161	3,050	—	32·0	1,707	17·9	93	148	457	149	1,762	18·5
1910	96,523	3,158	—	32·7	1,357	14·0	73	123	384	121	1,407	14·5
1911	96,870	3,204	3,247	33·5	1,707	17·6	83	149	515	158	1,773	18·3
1912	98,159	3,103	3,137	31·9	1,429	14·5	76	68	389	124	1,521	15·4
1913	99,460	3,177	3,199	32·16	1,811	18·20	107	182	497	155	1,886	18·96
1914	100,775	3,326	3,357	33·31	1,602	15·89	98	219	464	138	1,723	17·09

Table 67.

LOCAL GOVERNMENT BOARD TABLE 1.

Vital statistics of whole districts during 1911 and previous years.

YEAR.	Population estimated to middle of each year.	Births registered.		Deaths registered.		Deaths of Residents registered in Institutions in the District.		Deaths of Residents not belonging to the District registered in Institutions therein.		Deaths of Residents belonging to the District registered in Institutions beyond the District.		Deaths of Residents belonging to the District registered in Institutions beyond the District.		Deaths of Residents belonging to the District registered in Institutions beyond the District.	
		Number.	Rate.	Number.	Rate.	Number.	Rate.	Number.	Rate.	Number.	Rate.	Number.	Rate.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1914	100,332	3,350	33·31	3,324	33·09	1,995	12·80	99	510	404	132	1,153	11·48		
1913	99,800	3,132	35·10	3,100	34·74	1,811	18·59	101	185	604	192	1,980	19·80		
1912	98,120	3,103	31·6	3,131	31·9	1,459	14·2	30	98	389	151	1,351	13·7		
1911	98,240	3,504	33·2	3,541	33·5	1,301	13·8	83	149	612	196	1,333	18·3		
1910	98,253	3,122	35·1	—	—	1,321	14·0	33	153	384	151	1,102	14·2		
1909	97,101	3,080	35·0	—	—	1,301	13·9	83	142	421	149	1,205	18·2		

Table 68.

Statistics for St. Helens since 1883.

ARS.	Population.	Birth Rate.	Death Rate.	Zymotic Death Rate.	Infantile Mortality Rate.	Rate of Persons Married.	DEATHS FROM							
							Small Pox.	Measles.	Scarlet Fever	Typhoid Fever.	Typhus Fever.	Diarrhœa.	Whooping Cough.	Diphtheria.
883	60,263	40·69	21·65	2·5	143	—	0	3	14	31	1	69	24	11
884	61,584	42·50	24·16	5·3	173	—	0	131	16	33	2	131	9	11
885	62,932	39·93	23·32	3·5	168	—	0	81	13	7	1	56	53	11
886	64,311	40·70	22·46	5·2	172	—	0	102	34	28	0	122	41	10
887	65,718	37·00	21·69	3·9	163	—	0	53	35	34	0	101	28	11
888	67,158	39·20	19·80	3·1	151	—	0	38	11	22	0	65	61	21
889	68,628	39·86	23·50	4·18	177	—	0	78	3	81	1	85	15	29
890	70,132	38·90	25·43	5·3	170	—	0	19	181	24	1	74	68	13
891	71,509	40·80	26·02	3·0	180	—	0	54	24	26	0	78	29	9
892	72,399	40·2	21·0	2·64	147	—	1	23	18	25	0	84	31	12
893	73,576	41·3	24·4	5·4	196	—	5	135	6	52	0	168	19	16
894	*76,112	37·8	18·3	2·21	161	14·6	0	21	14	26	2	38	61	10
895	77,288	40·9	21·8	3·10	181	13·0	1	54	9	59	0	101	14	8
896	78,482	38·7	20·9	3·73	177	13·2	0	38	59	40	0	63	78	17
897	79,694	40·0	21·8	4·3	181	14·2	0	87	44	33	0	133	33	20
898	80,926	40·3	19·9	3·2	172	14·2	0	17	24	30	0	140	34	16
899	82,176	38·3	20·4	2·9	157	13·0	0	21	8	43	0	114	41	15
900	83,445	37·1	22·8	3·2	188	13·0	0	59	25	19	0	91	56	19
901	84,734	36·9	19·7	2·56	175	13·9	0	7	29	34	0	95	17	3
902	86,043	37·4	19·7	2·60	167	11·4	0	59	52	25	0	50	18	20
903	87,372	39·1	17·5	1·72	138	13·0	0	1	26	18	0	53	30	23
904	88,722	37·4	20·9	3·96	174	12·9	3	131	17	13	0	120	49	22
905	89,843	36·05	17·2	1·88	132	11·7	0	41	16	2	0	66	26	18
906	91,153	33·9	17·3	1·79	159	11·9	0	10	4	18	0	105	5	22
907	92,476	34·1	18·3	2·87	155	13·6	0	145	10	12	0	36	52	11
908	93,812	35·2	16·0	1·32	122	12·3	0	0	29	12	0	59	7	17
909	95,161	32·0	18·5	3·5	149	12·7	0	188	33	13	0	27	62	12
910	96,523	32·7	14·5	1·26	121	13·1	1	15	22	10	0	51	16	7
911	96,870	33·5	18·3	3·03	158	12·7	0	69	13	22	0	143	39	8
912	98,159	31·96	15·5	1·76	124	14·0	0	62	19	8	0	49	46	19
913	99,460	32·16	18·9	3·74	155	14·6	0	189	26	4	0	120	18	15
914	100,775	33·31	17·09	1·62	138	14·1	0	25	5	4	0	98	24	8

*Borough extended

Table 68.

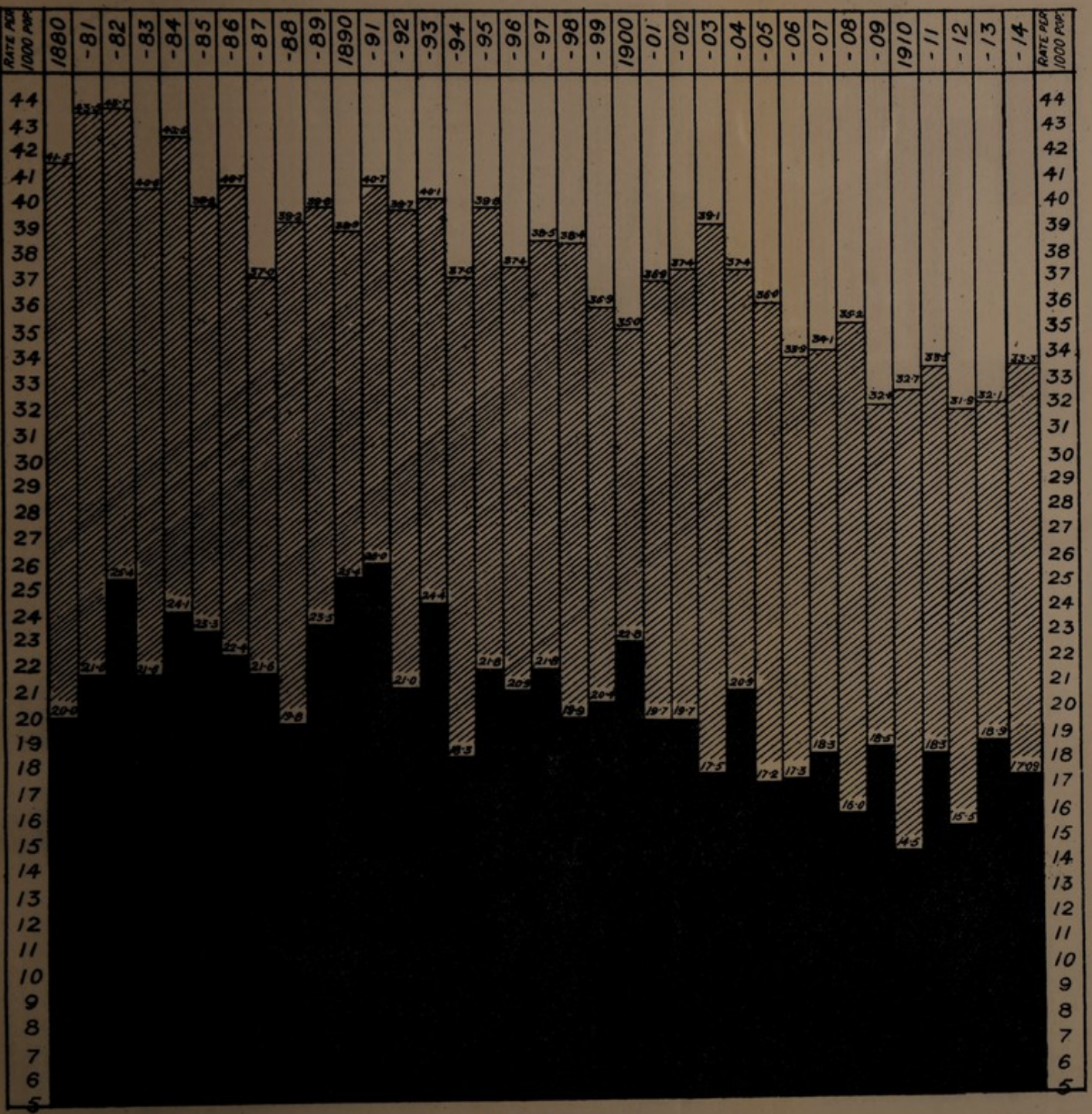
Statistics for St. Helena since 1883.

YEARS.	Population.	Birth Rate.	Death Rate.	Annual Rate of Increase per cent.	Marriages.	DEATHS FROM						
						Zymotic.	Fever.	Bronchitis, Pneumonia, &c.	Heart Disease.	Diarrhœa.	Cerebro-Spinal Disease.	Old Age.
1883	00,203	40.00	21.05	2.5	—	0	3	14	31	1	09	24	11
1884	01,284	42.50	24.16	2.3	—	0	131	16	33	2	131	0	11
1885	02,032	30.03	23.32	3.5	—	0	81	13	7	1	36	33	11
1886	04,311	40.70	22.46	2.2	—	0	102	34	28	0	122	41	10
1887	05,718	32.00	21.09	3.0	—	0	33	33	34	0	101	28	11
1888	07,158	30.20	10.80	3.1	—	0	38	11	22	0	05	01	21
1889	08,058	30.86	23.50	4.18	—	0	78	7	81	1	85	15	20
1890	10,132	38.00	25.43	5.3	—	0	10	181	24	1	74	68	13
1891	11,200	40.80	26.02	3.0	—	0	54	24	20	0	78	20	0
1892	12,200	40.2	21.0	2.04	—	1	23	18	25	0	84	31	12
1893	13,210	41.3	24.4	2.4	—	5	133	6	52	0	108	19	19
1894	*10,112	31.8	18.3	2.31	161	17.9	0	21	14	26	2	38	01	10
1895	11,288	40.0	21.8	3.10	181	13.0	1	54	6	50	0	101	14	8
1896	78,482	38.1	20.0	3.13	177	13.2	0	38	50	40	0	63	78	17
1897	79,004	40.0	21.8	4.3	181	14.2	0	87	44	33	0	133	33	20
1898	80,020	40.3	19.0	3.2	172	14.2	0	17	24	30	0	140	34	16
1899	82,160	38.3	20.4	2.0	151	13.0	0	21	8	42	0	114	41	15
1900	83,442	31.1	22.8	3.2	188	13.0	0	59	25	10	0	01	59	19
1901	84,734	30.0	10.1	2.36	172	13.0	0	7	20	34	0	05	17	3
1902	86,043	32.4	10.1	2.00	102	11.4	0	30	32	25	0	50	18	20
1903	87,372	30.1	17.5	1.72	138	13.0	0	1	20	18	0	53	30	23
1904	88,722	32.4	20.0	3.06	174	12.0	3	131	17	13	0	120	40	22
1905	89,843	30.05	17.2	1.88	132	11.1	0	41	16	2	0	66	26	18
1906	91,153	33.0	17.3	1.70	150	11.0	0	10	4	18	0	105	5	22
1907	92,476	34.1	18.3	2.87	155	13.0	0	145	10	12	0	36	52	11
1908	93,812	35.2	10.0	1.32	122	12.3	0	0	20	12	0	50	7	17
1909	95,161	32.0	18.2	3.2	140	12.1	0	188	33	13	0	21	02	12
1910	96,523	32.1	14.2	1.26	121	13.1	1	15	22	10	0	51	10	1
1911	96,870	33.2	18.3	3.03	158	12.1	0	09	13	22	0	143	39	8
1912	98,150	31.06	15.2	1.76	124	14.0	0	62	10	8	0	40	46	10
1913	00,460	32.16	18.0	3.14	155	14.0	0	180	26	4	0	120	18	15
1914	100,112	33.11	17.00	1.62	138	14.1	0	25	5	4	0	08	24	8

*Increase extended

Table 69.

BIRTH RATE, DEATH RATE AND RATE OF NATURAL INCREASE. ST HELENS 1880-1914



The Black portion represents the DEATH RATE.
The Shaded portion represents the RATE OF NATURAL INCREASE, or the excess of the Birth Rate over the Death Rate.
The BIRTH RATE is represented by the shaded portion PLUS the black portion.
The death rates are not corrected for age & sex distribution.

Table 69.

BIRTH RATE, DEATH RATE AND RATE OF NATURAL

The Black portion represents the DEATH RATE.
The Shaded portion represents the RATE OF NATURAL
the Birth Rate over the Death Rate.
The BIRTH RATE is represented by the shaded p

Table 70.

BIRTH RATE – ST HELENS, 1873-1914.

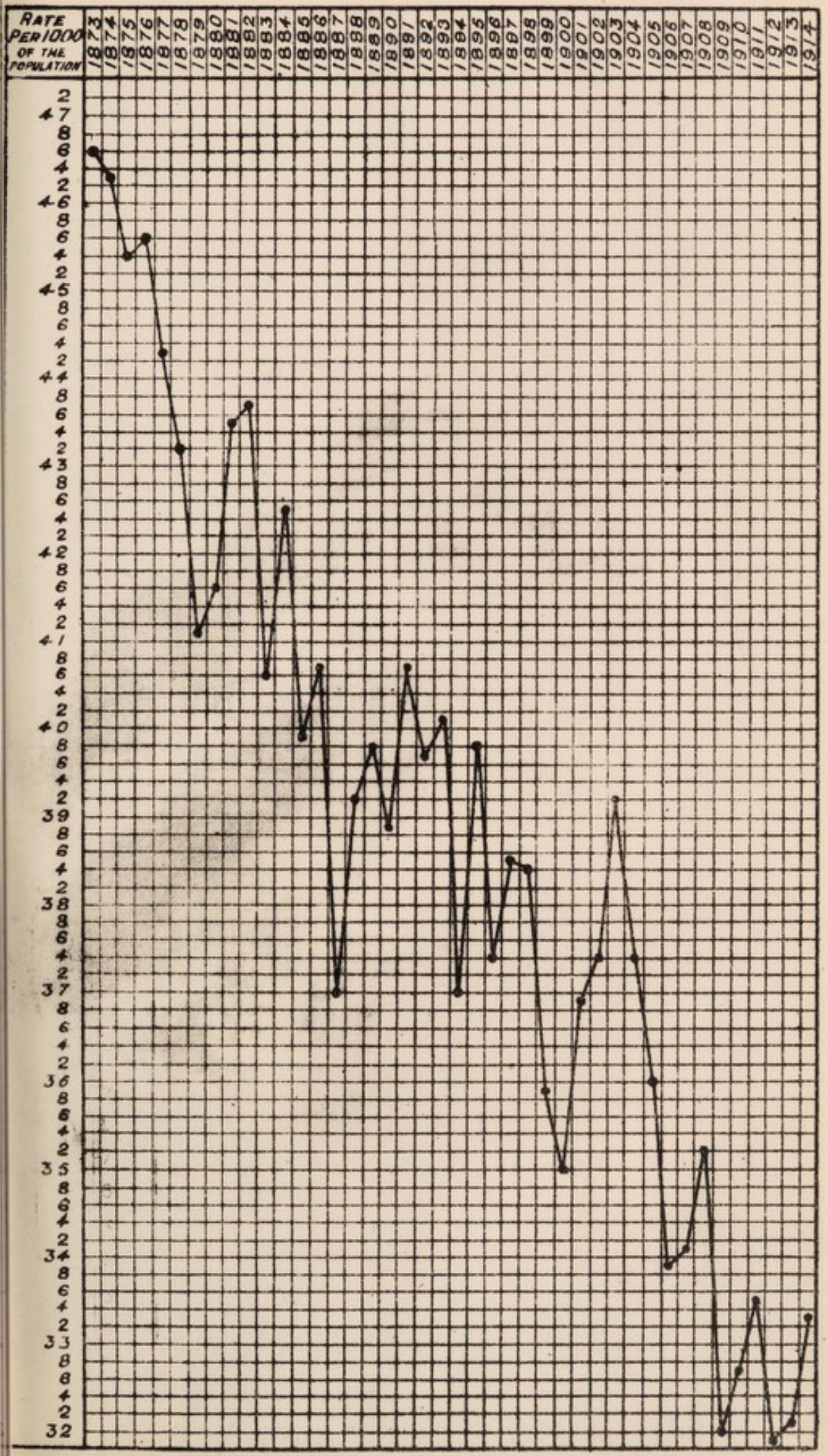


Table 70.

BIRTH RATE – St HELENS. 1873-1914.

Table 71.

Birth-rates in the various wards.

Wards.	Number of births.	Birth-rate per 1,000.
North Eccleston	426	33·1
South Eccleston.	481	37·4
Central	214	34·8
North Windle	309	24·7
South Windle	237	28·2
Hardshaw	356	30·0
East Sutton	474	38·0
West Sutton	346	32·0
Parr	483	37·3

Table 72.

Number of illegitimate births.

Years.....	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Number of illegitimate births	90	69	67	76	75	76	76	68	70	87	80	84	71	108	84	96	97
Proportion per 1,000 population	1·11	0·83	0·80	0·90	0·87	0·86	0·85	0·75	0·76	0·94	0·85	0·88	0·73	1·11	0·85	0·96	0·96

Table 73.

Number of marriages.

...rs.....	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
...nber of ...rriages..	602	563	576	591	578	569	576	529	544	632	579	608	637	617	691	730	706
...rriage rate ...er 1,000 ...pulation..	14·20	13·00	13·00	13·94	11·42	13·02	12·98	11·76	11·93	13·6	12·3	12·7	13·1	12·7	14·09	14·6	14·01

Table 71.

Birth-rates in the various wards.

Wards.	Number of births.	Birth-rate per 1,000.
North Eccleston	126	33·1
South Eccleston.	181	37·4
Central	214	31·8
North Windle	309	24·7
South Windle	237	28·2
Hardshaw	356	30·0
East Sutton	174	38·0
West Sutton	346	32·0
Parr	483	37·3

Table 72.

Number of illegitimate births.

Year.....	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Number of illegitimate births	90	99	97	78	75	76	76	68	76	87	80	84	71	105	84	96	97
Proportion per 1,000 population	1·11	0·83	0·80	0·90	0·87	0·86	0·85	0·75	0·76	0·94	0·85	0·88	0·73	1·11	0·85	0·96	0·96

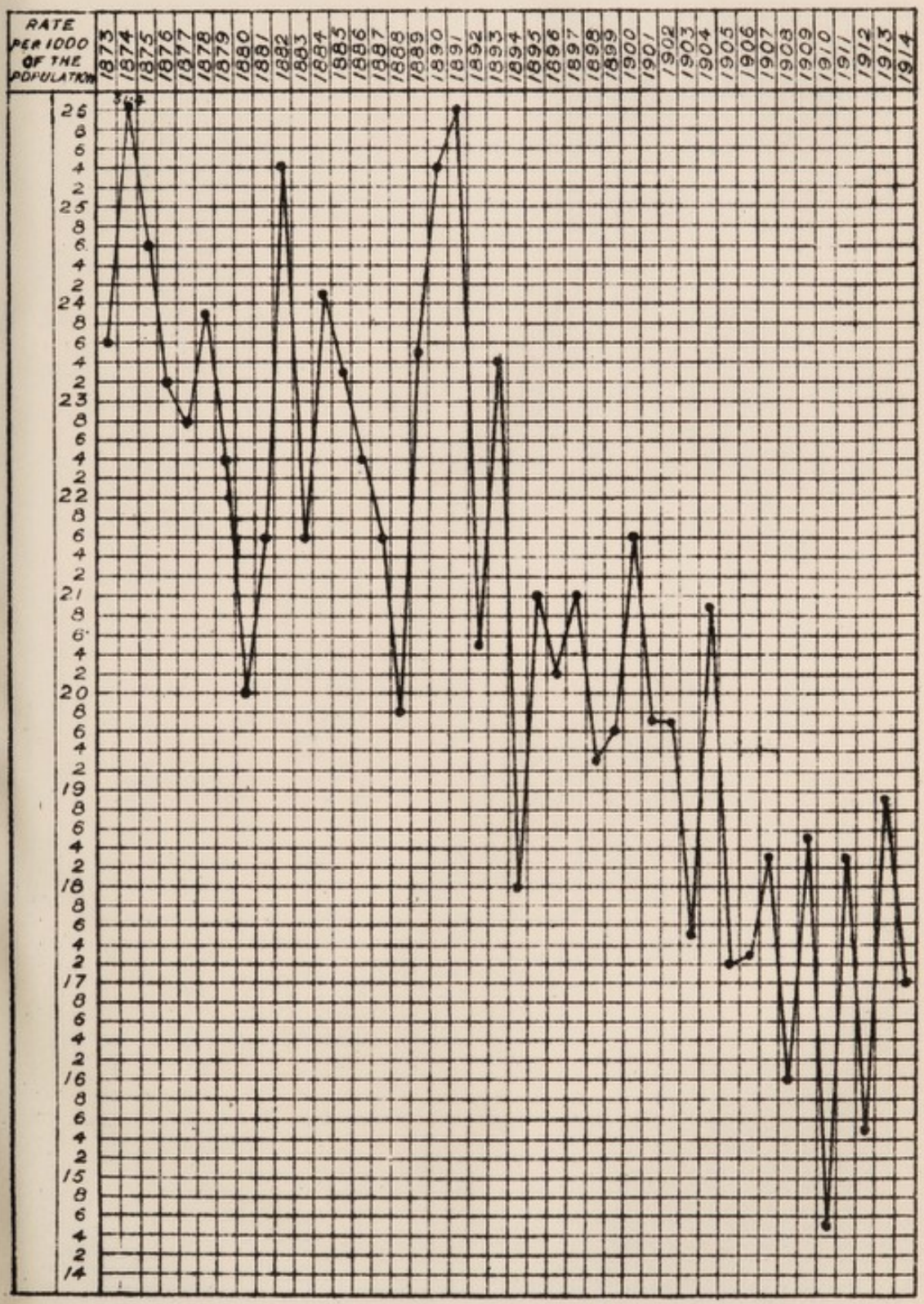
Table 73.

Number of marriages.

Year.....	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Number of marriages..	602	563	576	591	578	569	576	529	541	632	579	608	627	617	691	739	706
Average rate per 1,000 population..	14·20	13·00	13·00	13·34	11·42	13·02	12·98	11·76	11·93	13·64	12·32	13·12	13·84	14·12	15·14	16·34	15·91

Table 74.

DEATH RATE - ST HELENS, 1873 - 1914.



The death rate is not corrected for age & sex distribution.

Table 74.

DEATH RATE - ST HELENS, 1873-1914.

The death rate is not corrected for age & sex distribution.

Table 76.

Death rates in the various wards.

Wards.	Number of deaths	Death rate per 1000
North Eccleston	213	16·6
South Eccleston	183	14·2
Central	163	26·5
North Windle	189	15·1
South Windle	146	17·4
Hardshaw	226	19·0
East Sutton	171	13·7
West Sutton	170	15·7
Parr	262	20·3

Table 76.

Death rates in the various wards.

Wards.	Number of deaths	Death rate per 1000
North Ecclesfield	213	16·6
South Ecclesfield	183	14·2
Central	163	26·3
North Windle	189	15·1
South Windle	146	17·4
Hardshaw	226	19·0
East Sutton	171	13·7
West Sutton	170	15·7
Parr	262	20·3

Table 77.

LOCAL GOVERNMENT TABLE III.

Causes of, and ages at, death during year 1914.

Causes of Death.		Nett Deaths at subjoined ages.									Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District.
		All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	
All causes	Certified	1,663	437	163	82	69	85	205	342	280	268
	Uncertified	60	27	2	2	3	2	4	10	10	1
Enteric Fever		4	—	—	—	3	1	—	—	—	4
Small-pox		—	—	—	—	—	—	—	—	—	—
Measles		25	6	8	9	2	—	—	—	—	—
Scarlet Fever		5	—	1	2	2	—	—	—	—	5
Whooping Cough		24	10	8	5	1	—	—	—	—	—
Diphtheria and Croup		8	—	5	3	—	—	—	—	—	8
Influenza		19	3	2	—	—	1	4	7	2	2
Erysipelas		3	1	—	—	—	—	—	2	—	—
Phthisis(PulmonaryTuberculosis)		113	1	3	1	10	24	46	27	1	9
Tuberculous Meningitis		15	1	5	7	2	—	—	—	—	1
Other Tuberculous Diseases		50	13	10	9	10	4	4	—	—	7
Cancer, malignant disease		73	—	—	—	—	2	11	42	18	7
Rheumatic Fever		6	—	—	—	1	1	2	2	—	1
Meningitis		27	7	5	7	3	1	1	3	—	4
Organic Heart Disease		89	1	1	1	2	7	14	43	20	17
Bronchitis		197	49	18	2	—	2	8	55	63	12
Pneumonia (all forms)		170	42	32	21	9	11	23	25	7	40
Other diseases of Respiratory organs		30	8	4	1	—	3	5	8	1	2
Diarrhœa and Enteritis		98	67	26	1	2	—	1	1	—	4
Appendicitis and Typhlitis		10	—	—	—	2	3	2	2	1	4
Cirrhosis of Liver		17	—	—	—	—	—	5	9	3	4
Alcoholism		2	—	—	—	—	—	1	1	—	1
Nephritis and Bright's Disease		52	1	2	2	2	1	10	18	16	21
Puerperal Fever		8	—	—	—	—	4	4	—	—	4
Other accidents and diseases of Pregnancy and Parturition		9	—	—	—	—	2	7	—	—	1
Congenital Debility and Malformation,including Premature Birth		182	170	8	3	1	—	—	—	—	4
Violent Deaths, excluding Suicide		52	—	6	2	8	7	12	12	5	28
Suicides		7	—	—	—	—	1	4	2	—	—
Other Defined Diseases		411	79	20	7	11	12	41	90	151	79
Diseases ill-defined or unknown		17	5	1	1	1	—	4	3	2	—
		1,723	464	165	84	72	87	209	352	290	269
Sub-Entries. included in above figures.	Cerebro-spinal Meningitis	2	—	1	—	—	—	—	1	—	—
	Poliomyelitis	1	—	1	—	—	—	—	—	—	—
	Cerebral Hæmorrhage	74	—	—	—	1	2	6	28	37	—
	Senility	70	—	—	—	—	—	—	1	69	—
	Pneumonia	99	11	14	7	7	11	22	24	3	34
	Venereal Disease	19 *	2	1	—	—	—	4	9	3	—

*This figure does not include any deaths from premature birth, marasmus, &c.

Table 77.

LOCAL GOVERNMENT TABLE III.

Causes of, and ages at, death during year 1911.

Causes of Death.	All Ages	Under 1 year.	1 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 35 years.	35 and under 45 years.	45 and under 55 years.	55 and under 65 years.	65 and under 75 years.	75 years and upwards.	Deaths of persons admitted to Institutions from other districts.
All Causes { Certified	1,663	137	163	82	69	85	205	345	342	280	208	
{ Uncertified	60	27	2	2	3	2	4	10	10	10	1	
Enteric Fever	4	—	—	—	3	1	—	—	—	—	4	
Small-pox	—	—	—	—	—	—	—	—	—	—	—	
Measles	25	6	8	9	2	—	—	—	—	—	—	
Scarlet Fever	5	—	1	2	2	—	—	—	—	—	—	
Whooping Cough.....	24	10	8	5	1	—	—	—	—	—	—	
Diphtheria and Croup	8	—	5	3	—	—	—	—	—	—	—	
Influenza	10	3	2	—	—	1	1	1	1	2	—	
Erysipelas.....	3	1	—	—	—	—	—	—	—	—	2	
Phthisis(Pulmonary Tuberculosis)	113	1	3	1	10	24	16	27	21	9	1	
Tuberculous Meningitis	15	1	5	7	2	—	—	—	—	1	—	
Other Tuberculous Diseases	30	13	10	3	10	4	4	—	—	—	—	
Cancer, malignant disease	73	—	—	—	—	2	11	42	18	7	—	
Rheumatic Fever	6	—	—	—	1	1	2	2	—	1	—	
Meningitis.....	27	7	5	7	3	1	1	3	—	4	—	
Organic Heart Disease	80	1	1	1	2	7	14	13	20	17	4	
Bronchitis.....	107	40	18	2	—	2	8	22	63	12	—	
Pneumonia (all forms).....	170	42	32	21	9	11	23	25	7	10	—	
Other diseases of Respiratory organs	30	8	4	1	—	3	5	8	1	2	—	
Diarrhœa and Enteritis	98	67	26	1	2	—	1	1	—	1	—	
Appendicitis and Typhlitis	10	—	—	—	2	3	2	2	1	4	—	
Cirrhosis of Liver	17	—	—	—	—	—	5	9	3	4	—	
Alcoholism	2	—	—	—	—	—	1	1	—	1	—	
Nephritis and Bright's Disease	52	1	2	2	2	1	10	18	16	21	1	
Puerperal Fever	8	—	—	—	—	4	4	—	—	—	—	
Other accidents and diseases of Pregnancy and Parturition ..	9	—	—	—	—	2	7	—	—	1	—	
Congenital Debility and Malformation,including Premature Birth	182	170	8	3	1	—	—	—	—	4	—	
Violent Deaths, excluding Suicide	52	—	6	2	8	7	12	12	5	28	—	
Suicides.....	7	—	—	—	—	1	4	2	—	—	—	
Other Defined Diseases	411	76	20	7	11	12	41	90	131	79	—	
Diseases ill-defined or unknown	17	5	1	1	1	—	4	3	2	—	—	
	1,723	464	165	84	72	87	208	352	290	269		
Sub-Entries, included in above figures.	Cerebro-spinal Meningitis.....	2	—	1	—	—	—	—	1	—	—	
	Poliomyelitis.....	1	—	1	—	—	—	—	—	—	—	
	Cerebral Hæmorrhage.....	74	—	—	—	1	2	6	25	37	—	
	Senility	70	—	—	—	—	—	—	1	69	—	
	Pneumonia	99	11	14	7	7	11	22	24	3	34	
	Venereal Disease ...	18 *	2	1	—	—	—	4	9	3	—	

* This figure does not include any deaths from premature birth, marasmus, &c.

Table 78.

Plans deposited and approved by the Health Committee.

	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
For Dwelling-houses	353	509	299	206	128	139	143	199	305	212
,, Other buildings	21	17	25	18	8	17	29	14	27	13
,, Alterations to existing buildings	85	43	43	34	34	45	20	31	29	30
Total.....	459	569	367	258	170	201	192	244	361	255

The wards of the borough in which dwelling houses have been erected during the years mentioned.

Year.	North Eccleston	South Eccleston	Central	North Windle	South Windle	Hardshaw	East Sutton	West Sutton	Parr	Total
1904	105	53	7	37	18	47	59	1	70	395
1905	19	93	1	44	16	90	42	10	54	366
1906	11	51	—	31	13	31	73	24	39	260
1907	22	38	—	26	—	22	77	3	29	219
1908	2	52	—	4	2	27	22	—	20	127
1909	—	36	—	10	—	10	6	3	10	75
1910	2	31	—	10	—	24	18	—	25	110
1911	14	20	—	—	—	30	75	26	12	177
1912	35	28	—	4	—	26	28	58	1	180
1913	10	31	—	—	3	19	14	99	6	182
1914	10	42	—	9	16	14	20	63	29	203

Table 79.

Account of magisterial proceedings taken during 1914.

9th Jan., 1914 ..	For selling adulterated milk	Fined £5 and costs.
30th Mar., 1914..	Unoccupied and ruinous building, No. 27, Liverpool Street	Withdrawn. Work carried out and practically completed to satisfaction of Medical Officer of Health.
4th May, 1914..	Offence under Section 1 of the Fabrics (Misdescription) Act, 1913.....	Fined 20/– and costs.
4th May, 1914..	Offence against Fabrics (Misdescription) Act, 1913	Fined 20/– and costs.
25th May, 1914..	Offences against Sub-sections 2 and 3 of Section 1 of the Shops Act, 1912.....	Fined 10/– and costs in each of two cases.
29th May, 1914..	Offence under section 122 of the Children Act, 1908.....	Fined 2/6 and costs or 7 days.
29th May, 1914..	Do. do. ..	Do. do.
29th May, 1914..	Do. do. ..	Fined 7/6 and costs or 7 days.
5th June, 1914..	Unlawfully assaulting a school nurse	Fined 10/– and 11/6 costs.
10th Aug., 1914..	Offences against Section 80 of the St. Helens Corporation Act, 1911, with respect to Ice Cream.	Fined 2/6 and costs in one case, and costs in the other case.
14th Aug., 1914..	For selling adulterated milk	Each defendant fined £1 and costs
27th Nov., 1914..	For selling adulterated milk	Dismissed on payment of costs, 17/–.....

Table 78.

Plans deposited and approved by the Health Committee.

	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
For Dwelling-houses	353	309	290	206	128	139	143	199	305	213
,, Other buildings	21	17	25	18	8	17	20	14	27	13
,, Alterations to existing buildings	85	43	42	34	34	45	20	31	29	30
Total.....	459	369	357	258	170	201	183	244	361	255

The wards of the borough in which dwelling houses have been erected during the years mentioned:

Year.	Exception-ally low	Exception-ally high	Council	North Ward	South Ward	Hardshaw	East Ward	West Ward	Total
1904	105	58	7	87	18	47	59	1	70	382
1905	19	98	1	44	16	90	42	10	64	366
1906	11	61	—	81	18	81	78	24	89	260
1907	22	38	—	26	—	22	77	8	29	219
1908	2	52	—	4	2	27	22	—	20	127
1909	—	36	—	10	—	10	6	8	10	75
1910	2	31	—	10	—	24	18	—	25	110
1911	14	20	—	—	—	30	75	26	12	177
1912	85	28	—	4	—	26	28	58	1	180
1913	10	31	—	—	3	19	14	99	6	182
1914	10	12	—	9	16	14	20	68	29	203

Table 79.

Account of magisterial proceedings taken during 1914.

9th Jan., 1914..	For selling adulterated milk	Fined £5 and costs.
30th Mar., 1914..	Unoccupied and ruinous building, No. 27, Liverpool Street	*Withdrawn.* Work carried out and practically completed to satisfaction of Medical Officer of Health.
4th May, 1914..	Offence under Section 1 of the Fabrics (Misdescription) Act, 1913.....	Fined 20/- and costs.
4th May, 1914..	Offence against Fabrics (Misdescription) Act, 1913	Fined 20/- and costs.
23rd May, 1914..	Offence against Sub-sections 2 and 3 of Section 1 of the Shops Act, 1912.....	Fined 10/- and costs in each of two cases.
29th May, 1914..	Offence under section 122 of the Children Act, 1908.....	Fined 2/6 and costs or 7 days.
29th May, 1914..	Do. do. ..	Do. do.
29th May, 1914..	Do. do. ..	Fined 7/6 and costs or 7 days.
5th June, 1914..	Unlawfully assaulting a school nurse	Fined 10/- and 11/6 costs.
10th Aug., 1914..	Offence against Section 80 of the St. Helens Corporation Act, 1911, with respect to Low Cream.	Fined 2/6 and costs in one case, and costs in the other case.
14th Aug., 1914..	For selling adulterated milk	Each defendant fined £1 and costs
27th Nov., 1914..	For selling adulterated milk	Dismissed on payment of costs, 17/- .....

Table 80.

LOCAL GOVERNMENT BOARD TABLE IV.

INFANTILE MORTALITY DURING THE YEAR, 1914.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSES OF DEATH.	UNDER 1 WEEK.	1-2 WEEKS.	2-3 WEEKS.	3-4 WEEKS.	TOTAL UNDER 1 MONTH	1-3 MONTHS.	3-6 MONTHS.	6-9 MONTHS.	9-12 MONTHS.	Total Deaths under 1 year.
All causes (Certified ...	95	22	17	16	150	62	85	78	62	437
All causes (Uncertified	12	—	1	1	14	8	2	2	1	27
Small-pox	—	—	—	—	—	—	—	—	—	—
Chicken-pox	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	2	4	6
Scarlet fever	—	—	—	—	—	—	—	—	—	—
Whooping-Cough	—	—	—	—	—	2	4	1	3	10
Diphtheria and Croup	—	—	—	—	—	—	—	—	—	—
Erysipelas	—	—	—	—	—	1	—	—	—	1
Tuberculous Meningitis	—	—	—	—	—	—	—	—	1	1
Abdominal Tuberculosis.	—	—	—	—	—	—	2	3	5	10
Other Tuberculous Dis'ses.	—	—	—	—	—	—	2	1	1	4
Meningitis (*not Tuber'lo's*)	1	—	—	—	1	1	2	3	—	7
Convulsions	8	6	3	5	22	8	5	8	3	46
Laryngitis	—	—	—	—	—	—	—	—	—	—
Bronchitis	1	—	2	1	4	11	15	12	7	49
Pneumonia (all forms)	—	1	1	1	3	3	12	11	13	42
Diarrhœa	1	—	—	1	2	4	10	7	6	29
Enteritis	—	—	1	1	2	4	11	10	11	38
Gastritis	—	—	—	1	1	5	1	1	1	9
Syphilis	—	1	—	—	1	—	1	—	—	2
Rickets	—	—	—	—	—	—	—	—	—	—
Suffocation, overlying	—	—	—	—	—	—	—	—	2	2
Injury at birth	5	—	—	—	5	—	—	—	—	5
Atelectasis	4	1	—	—	5	—	—	—	—	5
Congenital Malformations	3	4	2	—	9	1	3	1	—	14
Premature birth	54	2	2	2	60	6	2	—	—	68
Atrophy, Debility and Marasmus	26	6	7	3	42	18	13	12	3	88
Other Causes	4	1	—	2	7	6	4	8	3	28
	107	22	18	17	164	70	87	80	63	464

Nett Births in the year—legitimate 3,260 illegitimate 97

Nett Deaths in the year—legitimate 445 illegitimate 19

Table 80.

LOCAL GOVERNMENT BOARD TABLE IV.

INFANTILE MORTALITY DURING THE YEAR 1914.

Deaths from stated Causes in *Weeks* and *Months* under One *Year* of *Age*.

CAUSES OF DEATH.	1 week	1-3 weeks	3-5 weeks	1-2 months	2-3 months	3-6 months	6-9 months	9-12 months	Total Deaths under 1 year
All causes { Certified ...	95	22	17	16	150	62	85	78	62	437
{ Uncertified	12	—	1	1	14	8	2	2	1	27
Small-pox	—	—	—	—	—	—	—	—	—	—
Chicken-pox	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	2	4	6
Scarlet fever	—	—	—	—	—	—	—	—	—	—
Whooping-Cough	—	—	—	—	—	2	4	1	3	10
Diphtheria and Croup	—	—	—	—	—	—	—	—	—	—
Erysipelas	—	—	—	—	—	1	—	—	—	1
Tuberculous Meningitis	—	—	—	—	—	—	—	—	1	1
Abdominal Tuberculosis	—	—	—	—	—	—	2	3	5	10
Other Tuberculous Dis'ses	—	—	—	—	—	—	2	1	1	4
Meningitis (not Tuber'lo's)	1	—	—	—	1	1	2	3	—	7
Convulsions	8	6	3	5	22	8	5	8	3	46
Laryngitis	—	—	—	—	—	—	—	—	—	—
Bronchitis	1	—	2	1	4	11	15	12	7	49
Pneumonia (all forms)	—	1	1	1	3	3	12	11	13	42
Diarrhœa	1	—	—	1	2	4	10	7	6	29
Enteritis	—	—	—	1	1	2	4	11	10	28
Gastritis	—	—	—	—	1	1	5	1	1	9
Syphilis	—	1	—	—	1	—	1	—	—	2
Rickets	—	—	—	—	—	—	—	—	—	—
Suffocation, overlying	—	—	—	—	—	—	—	—	2	2
Injury at birth	5	—	—	—	5	—	—	—	—	5
Atelectasis	4	1	—	—	5	—	—	—	—	5
Congenital Malformations	3	4	2	—	9	1	3	1	—	14
Premature birth	54	2	2	2	60	6	2	—	—	68
Atrophy, Debility and Marasmus	26	6	7	3	42	18	13	12	3	88
Other Causes	4	1	—	2	7	6	4	8	3	28
	107	22	18	17	164	70	87	80	63	464

Nett Births in the year—legitimate 3,260 illegitimate 97

Nett Deaths in the year—legitimate 445 illegitimate 19

Table 81.

LOCAL GOVERNMENT BOARD TABLE II.

Cases of Infectious Disease notified during the year 1914.

Notifiable Disease.	Number of Cases Notified.								Total Cases Notified in each Locality. (*e.g.* Parish or Ward) of the District.									Total cases removed to Hospital.
	At all Ages.	At Ages—Years.							North Eccleston.	South Eccleston.	Central.	North Windle.	South Windle.	Hardshaw.	East Sutton.	West Sutton.	Parr.	
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65	65 and upwards.										
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous croup)	120	3	45	44	20	7	1	..	13	11	5	19	4	14	14	18	22	106
Erysipelas	109	2	7	8	16	31	38	7	15	13	16	18	6	11	9	6	15	2
Scarlet Fever	335	6	90	217	14	7	1	..	34	37	10	64	14	40	61	27	48	292
Typhus Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	27	..	3	8	6	7	3	..	3	..	2	3	..	4	8	4	3	25
Relapsing Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever	17	..	..	..	6	11	..	..	2	2	1	4	..	1	4	..	3	9
Cerebro-spinal Meningitis	2	..	1	..	..	..	1	..	1	..	..	..	..	..	..	1	..	..
Poliomyelitis	1	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Ophthalmia Neonatorum	74	73	1	..	..	..	..	..	4	..	1	8	2	11	25	2	21	9
Pulmonary Tuberculosis	225	4	5	51	40	77	46	2	35	31	26	19	14	20	12	*41	27	109
Other forms of Tuberculosis	135	14	24	66	18	11	2	..	30	16	14	6	10	14	13	15	17	6
Totals	1,045	102	177	394	120	151	92	9	137	110	75	142	50	115	146	114	156	558

* Eighteen of these cases were notified from Rainhill Asylum.

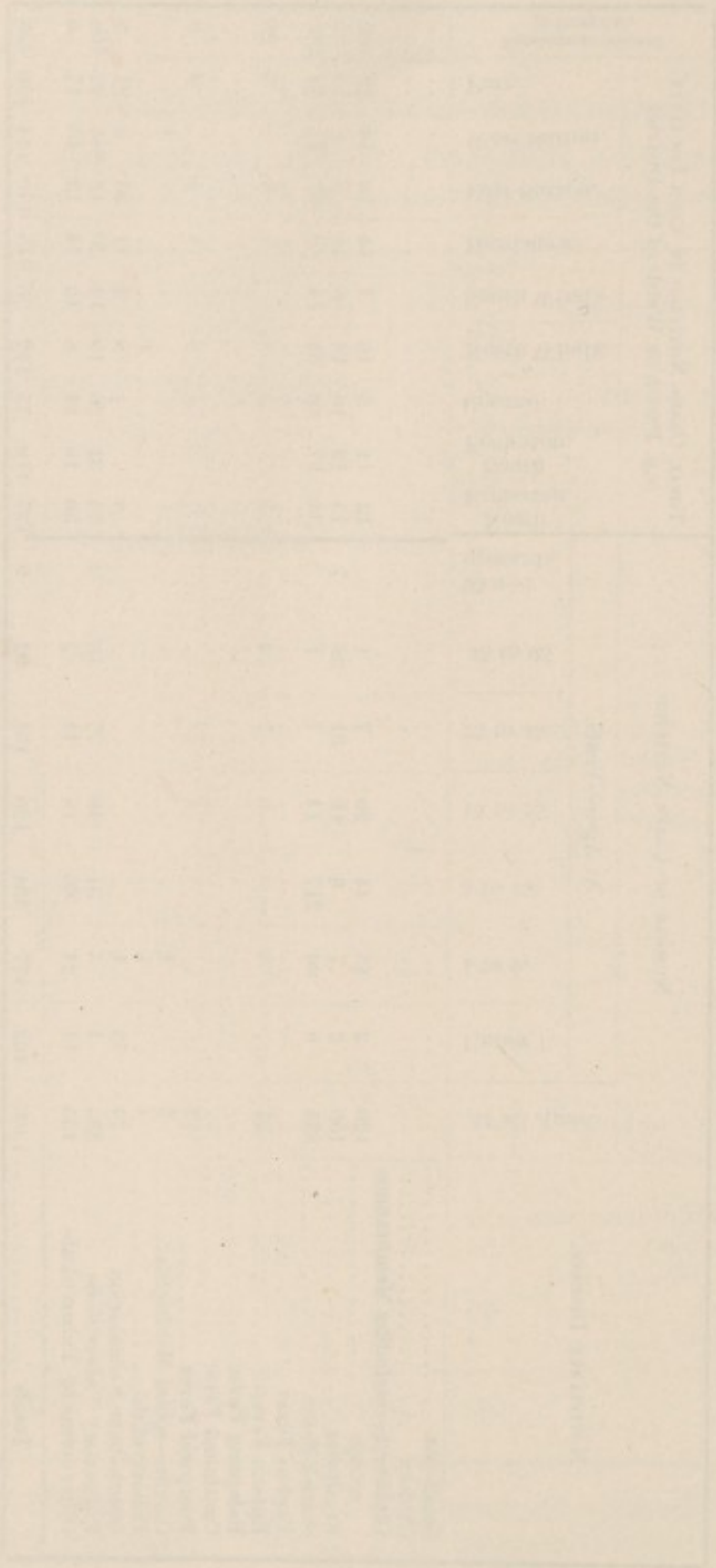
Table 81.

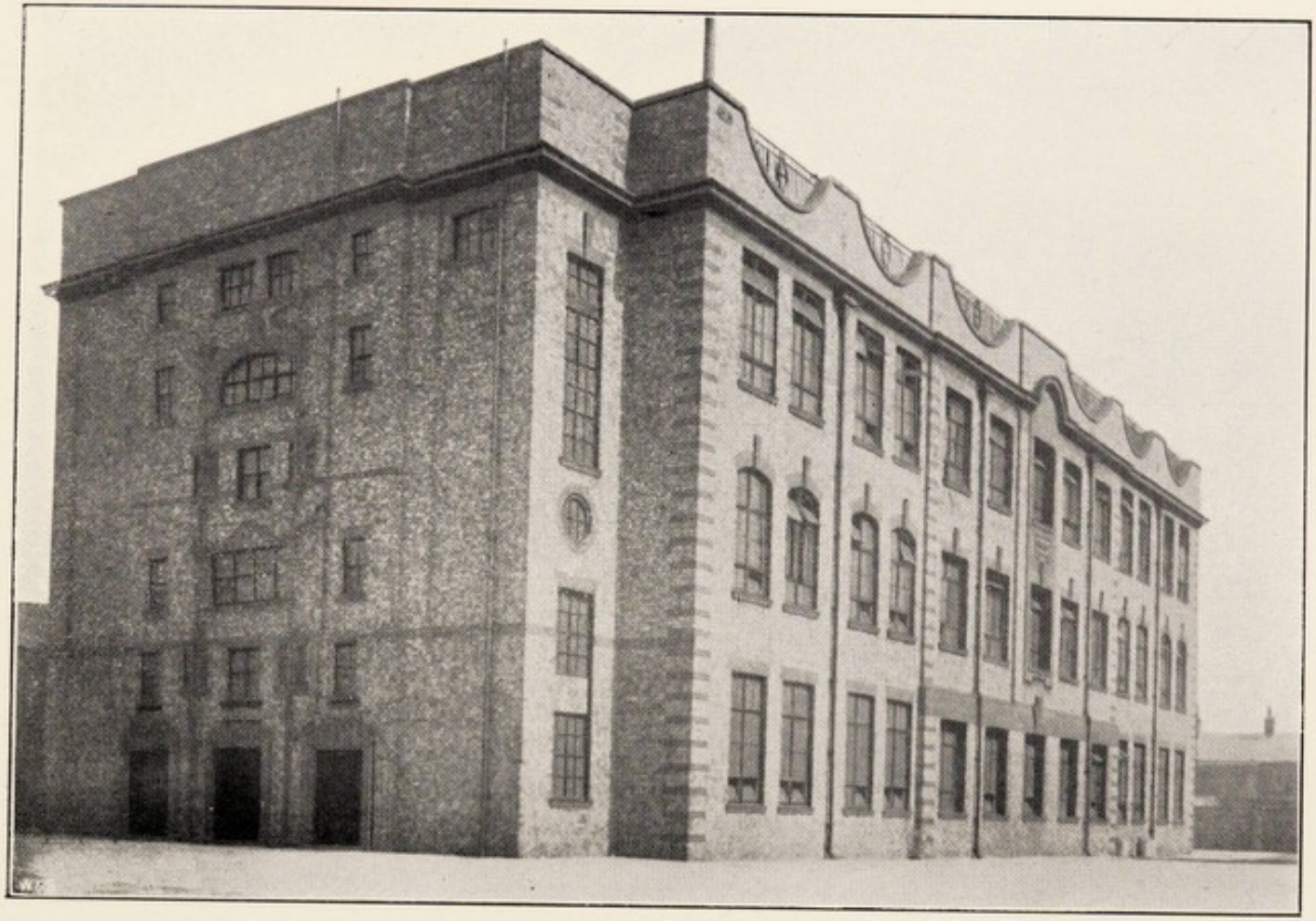
LOCAL GOVERNMENT BOARD TABLE II.

Cases of Diphtheria Notified during the year 1911.

Small-pox	Total Cases Notified during the year 1911.	Ages.	Cases in each Month.												Deaths at subjoined Ages.											
			Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Under 1 year.	1 and under 2.	2 and under 3.	3 and under 4.	4 and under 5.	5 and under 15.	15 and under 25.	25 and under 35.	35 and under 45.	45 and under 55.	55 and under 65.	65 and upwards.
Diphtheria (including Membranous Croup)	1,045	At all Ages	78	87	84	74	82	76	74	77	82	84	84	83	11	6	3	2	1	1	1	1	1	1	1	1
	1,045	Under 1 year	78	87	84	74	82	76	74	77	82	84	84	83	11											
	1,045	1 and under 5	78	87	84	74	82	76	74	77	82	84	84	83		6	3	2	1							
	1,045	5 and under 15	78	87	84	74	82	76	74	77	82	84	84	83						1						
	1,045	15 and under 25	78	87	84	74	82	76	74	77	82	84	84	83							1					
	1,045	25 and under 35	78	87	84	74	82	76	74	77	82	84	84	83								1				
	1,045	35 and under 45	78	87	84	74	82	76	74	77	82	84	84	83									1			
	1,045	45 and under 55	78	87	84	74	82	76	74	77	82	84	84	83										1		
	1,045	55 and under 65	78	87	84	74	82	76	74	77	82	84	84	83											1	
	1,045	65 and upwards	78	87	84	74	82	76	74	77	82	84	84	83												1
Typhus Fever	1	At all Ages												1												
	1	1 and under 5												1												
Enteric Fever	22	At all Ages	1	1	1	1	2	2	2	2	2	2	2	3	1											
	22	1 and under 5	1	1	1	1	2	2	2	2	2	2	2	3												
	22	5 and under 15	1	1	1	1	2	2	2	2	2	2	2	3												
	22	15 and under 25	1	1	1	1	2	2	2	2	2	2	2	3												
	22	25 and under 35	1	1	1	1	2	2	2	2	2	2	2	3												
	22	35 and under 45	1	1	1	1	2	2	2	2	2	2	2	3												
	22	45 and under 55	1	1	1	1	2	2	2	2	2	2	2	3												
	22	55 and under 65	1	1	1	1	2	2	2	2	2	2	2	3												
	22	65 and upwards	1	1	1	1	2	2	2	2	2	2	2	3												
Erysipelas	190	At all Ages	14	16	16	15	17	16	16	16	16	16	16	16	2					1	1	1	1	2	3	2
	190	1 and under 5	14	16	16	15	17	16	16	16	16	16	16	16												
	190	5 and under 15	14	16	16	15	17	16	16	16	16	16	16	16												
	190	15 and under 25	14	16	16	15	17	16	16	16	16	16	16	16												
	190	25 and under 35	14	16	16	15	17	16	16	16	16	16	16	16												
	190	35 and under 45	14	16	16	15	17	16	16	16	16	16	16	16												
	190	45 and under 55	14	16	16	15	17	16	16	16	16	16	16	16												
	190	55 and under 65	14	16	16	15	17	16	16	16	16	16	16	16												
	190	65 and upwards	14	16	16	15	17	16	16	16	16	16	16	16												
Scarlet Fever	1,228	At all Ages	102	104	103	101	102	101	101	101	101	101	101	101	6	3	1	1	1	1	1	1	1	1	1	1
	1,228	1 and under 5	102	104	103	101	102	101	101	101	101	101	101	101												
	1,228	5 and under 15	102	104	103	101	102	101	101	101	101	101	101	101												
	1,228	15 and under 25	102	104	103	101	102	101	101	101	101	101	101	101												
	1,228	25 and under 35	102	104	103	101	102	101	101	101	101	101	101	101												
	1,228	35 and under 45	102	104	103	101	102	101	101	101	101	101	101	101												
	1,228	45 and under 55	102	104	103	101	102	101	101	101	101	101	101	101												
	1,228	55 and under 65	102	104	103	101	102	101	101	101	101	101	101	101												
	1,228	65 and upwards	102	104	103	101	102	101	101	101	101	101	101	101												

* Exclusive of cases sent to hospital from other districts.





Windle Pilkington Council School.

SCHOOL HYGIENE.

PREFACE.

TO THE CHAIRMAN AND MEMBERS
OF THE EDUCATION COMMITTEE.

LADIES AND GENTLEMEN,

I beg to submit the following report, which deals with the work of medical inspection, following up and treatment of children attending the elementary schools, carried out during the year under the general direction of your medical officer.

In the period under review, treatment has been obtained for more than 80 per cent. of the children found to be suffering from disease or defect—ample evidence of the success which has attended the establishment of the school clinic.

The urgent necessity for increasing the scope of dental treatment led to the appointment of a whole-time school dentist.

A systematic campaign to improve the state of cleanliness of the children was set on foot early in the year and has already shown satisfactory results.

I have pleasure in acknowledging the cordial co-operation of the Secretary for Education.

I am, Ladies and Gentlemen,
Your obedient Servant,
JOSEPH CATES.

March 27th, 1915.

THE SANITARY CONDITION OF THE SCHOOLS.

At the beginning of 1914 there were in the borough under the control of the Education Committee 39 schools with 83 departments. Six were provided schools and 33 non-provided. There was accommodation for 22,865 children, 20,170 being on the roll, with an average attendance of 17,903.

At the end of the year the number on the roll was 20,205, and the average attendance 18,034.

The number of children under five years of age attending school in December was 802.

As regards site, surroundings and general sanitation, the schools vary considerably, the newer will bear comparison with any of a similar size; on the other hand some of the older schools are in most respects very undesirable. A complete inspection will be made of each school, and the reports, together with suitable recommendations be placed before the Education Committee. As each school will be dealt with in turn, it will suffice on this occasion to refer briefly in general terms to one or two matters. The schools are provided with water from the public supply for drinking and washing purposes.

The cloakroom arrangements, even in the more modern schools, are not perfect, and doubtless assist in the spread of contagious disease. In the older buildings a passage is often used for hanging clothes.

Unfortunately trough closets are common in the older schools in the borough; both from an educational and hygienic point of view this type of convenience should be replaced by separate pedestal water-closets.

ARRANGEMENTS FOR MEDICAL INSPECTION.

Co-Relation of the Services.

The school medical officer is medical officer of health, and the assistant medical officers of health are assistant school medical officers. The nurses on the medical officer's staff devote a portion of their time to duties connected with the Notification of Births Act and the inspection of midwives. There is, therefore, intimate co-ordination of the two services. The actual inspection is mainly carried out by the assistant school medical officers, assisted by the school nurses. The clerical work, which is very considerable in amount, is performed by the clerks of the medical officer's department.

Method of Inspection.

About a month before the inspection of a school, a letter is sent to the head teacher, together with appropriate forms, asking for the names and certain other information concerning children that (1) have entered school for the first time since the previous inspection; (2) are twelve years of age; (3) are more than twelve years of age, and have not been inspected as leavers; (4) appear to the teacher to be mentally or physically abnormal, or neglected.

As soon as the forms are returned to the office, they are compared with the records of inspection, and for each child who has not been previously examined a new card is made out by the teachers. A nurse then visits the school and arranges with the head teacher the details for the inspection. An invitation to attend at the examination is issued to the parents of each child and also a card asking for information about past illnesses. The cards are returned by the child at the time of inspection. The weighing and measuring is carried out by a nurse, who also records certain other particulars. This preliminary work is done at the time of the medical inspection, which always takes place during school hours on school premises.

School Arrangements.

A weighing machine and height standard has to be taken to the various schools; this arrangement is unsatisfactory and must, to some extent, interfere with the accuracy of the apparatus.

Derangement of school work, arising from medical inspection, is very slight. A class-room or teachers' room is generally used for the examination.

Attendance of Parents.

About 23 per cent. of the parents accepted the invitation to be present at the examination of their children.

Co-operation of School Officers.

The teachers generally afford all the help in their power, many of them are enthusiastic in the work. Teachers possess a mine of valuable information concerning the capabilities and environment of the children entrusted to their charge, and the school medical officer is glad to have this opportunity of expressing his appreciation of their ready assistance.

The school attendance officers do not take part in the actual inspection. They however render material aid by making out a weekly return of children who are absent from school on alleged medical grounds and who do not produce a satisfactory medical certificate, by reporting cases of infectious disease and by tracing children who have moved to other districts in the borough. They also make an inquiry into the financial circumstances of parents of children treated at the clinic and collect the allocated payments.

The following visits were made during the year

By the school medical officers—

To schools and departments	362
To the homes of children	179

By the school nurses—

To schools and departments	2,509
To the homes of children	7,363

The Principle on which Children have been Selected for Inspection.

As required by the Board of Education, two groups of children have been examined, namely, those entering school and those twelve years of age, and also a number of special cases.

The Classification of the Children examined is set out in table 1, on page 150.

The name of every child suffering from a defect of sufficient importance to be brought to the notice of the parents, is entered on a special card and filed for following up and re-examination. If, at the time of medical inspection, the case appears suitable for immediate attention at the clinic, arrangements are made for the necessary treatment. Every case is followed up by the school nurses, who encourage the parents to obtain medical advice or, where the home circumstances warrant it arrange for attendance at the clinic. After treatment a re-examination is made by the school medical officers on the occasion of their next visit to the school attended by the child.

Table 2 shows the number of serious defects found in systematic and special examinations, and brought to the notice of the parents.

The average time per head occupied by inspection.

The average time taken to inspect each child was about five minutes.

Re-examination in the Schools by the Medical Officers.

On re-visiting a school, all children found defective at the previous visit, except those suffering from decayed teeth, unclean heads, and those at the time excluded owing to infectious disease, are now re-examined.

Personal History.

Table 3 shows the extent to which the children examined were stated to have suffered from the more common infectious diseases.

Heights and Weights.

The average heights and weights of all the children systematically examined during the year is given in table 4, and as a comparison the figures obtained as a result of the examination of about half-a-million children.

The children are weighed and measured in their ordinary indoor clothing without boots or shoes. As regards the weights some degree of error is bound to arise from the machine used and from the varying amount of clothes worn.

NUTRITION.

The estimation of the state of nutrition of a child is perhaps the most difficult and at the same time the most important observation the medical inspector is called upon to make. In considering the question there is to be taken into account the relationship between the height and weight of the child, its general demeanour, the texture of the muscles, and the appearance of the skin. A well nourished child has height and weight in normal proportion, an alert carriage, firm muscles, with a due covering of fat, and a healthy elastic condition of the skin.

Malnutrition is one of the most serious physical defects from which a child can suffer. Serious in itself as a frequent index of constitutional weakness or disease, it not uncommonly betokens parental ignorance and unhygienic conditions in the home.

Defective nutrition doubtless depends on many factors, but it is safe to assert that in the vast majority of cases the causes are preventible. Chief among them appear to be:—

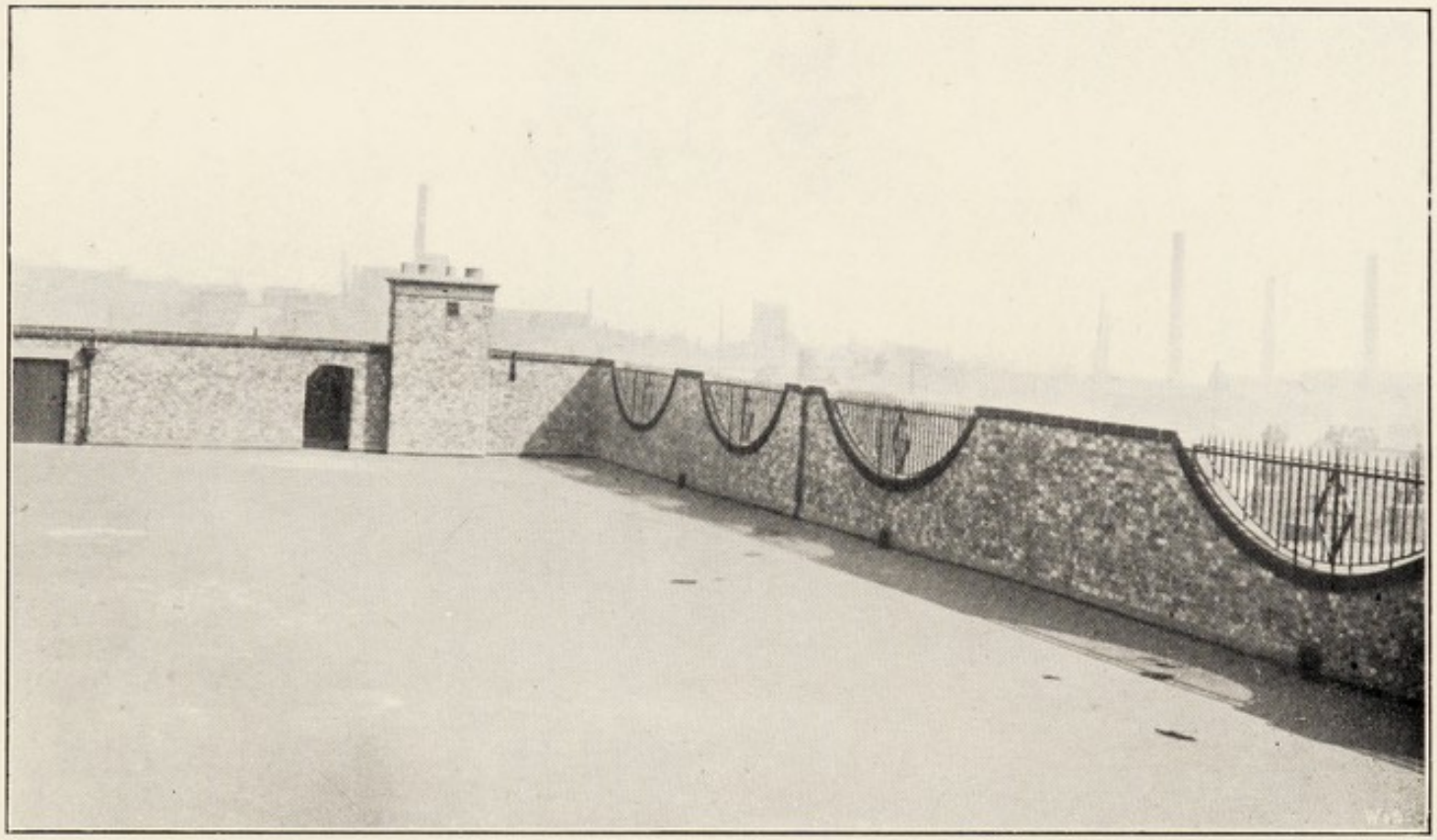
Insanitation. Undoubtedly the outstanding cause of death and disease among children is defective sanitation, either in the house, its immediate surroundings or in the locality. The injurious effect of conditions such as insufficient accommodation for washing, absence of proper storage accommodation for food, unpaved yards, offensive and insanitary privy midden or tub and pail closets, large uncovered ashpits, deficient circulation of light and air, infrequent removal of house refuse, insufficient and infrequent cleaning of streets and passages, the keeping of animals in back yards, are beyond question. The consequence may be seen in an excessive death-rate from diarrhœal diseases and in the prevalence of preventible illness occurring in childhood. It should be clearly realised that a high death-rate implies a high rate of damage among survivors. For every infant that succumbs there are many who just manage to survive, but are left as battered wrecks on the ocean of life. The permanent crippling effect of disease is as yet imperfectly appreciated.

Domestic Overcrowding. Domestic overcrowding is responsible for a large proportion of the minor ailments affecting childhood. Children are anæmic, ill-nourished and puny because they have insufficient room in which to live, impure air to breathe, and unclean, unsuitable and improper food to eat.

An ample period of sleep in the fresh air is absolutely necessary if a child is to maintain a healthy condition. Malnutrition is likely to be prevalent in towns where it is not uncommon to see children thronging the doorsteps and streets until nine o'clock at night or an even later hour.

Parental ignorance. Distinct from indifference and wilful neglect, parental ignorance a cause of a large proportion of the present infant mortality. This ignorance is displayed in several directions. Absence of knowledge allows persons suffering from communicable disease to marry. It is probable that parents would refuse to live under insanitary conditions were they to realise the injurious effect of overcowding and filth on the lives of their children. A proper appreciation of the dangers involved would prevent mothers from engaging in employment likely to injure the physical conditions of their offspring, but unfortunately in many instances poverty overrules other considerations. Few mothers understand the significance of certain symptons of disease which may occur during pregnancy, and may, unless effective treatment is carried out jeopardise both their own lives and the lives of their children. The simple rules of life related to the hygiene of pregnancy are as yet little known. The effects of ignorance are manifest in the mismanagement of infants and young children, at present rife throughout the country. Breast feeding is discontinued unduly early or is supplemented by unsuitable articles of food. Dirty feeding bottles, of a shape preventing efficient cleaning are still extensively used. Children, improperly and insufficiently clothed, are exposed to climatic conditions which would be unsuitable for a healthy infant; or are taken to picture palaces and places of amusement totally unfit for them. A large number of the deaths which occur every year from diarrhœa and similar diseases are due to want of knowledge, first, as regards the importance of breast feeding, and secondly of the risk to infant life of dirty, contaminated diet. Children are allowed to crawl about on the dirty surfaces of floors and yards, or to pick up pieces of food which have fallen in the street. When disease occurs there is a failure to realise the meaning of certain urgent symptoms, and a delay in obtaining medical advice.

Poverty. At the root of the causes of an excessive death-rate amongst infants lies poverty; but it is likely that the direct and immediate effects of poverty are not so important as certain conditions associated with it. Poverty is often the determining factor in the industrial employment of mothers, the engagement of unskilled and untrained midwives, and in the type of dwelling occupied. Houses of low rental are generally situated in insanitary areas where numerous unfavourable influences are at work. Insufficient and unsuitable food, want of clothing and bedding, inability to procure articles necessary to maintain a reasonable standard of cleanliness; in other words, those conditions comprised in the term "home comforts" all lead to the physical disability of the mother, leave her with very little reserve to meet any complications which may arise at the time of confinement, and injuriously affect the health of her child.



Roof playground at Windle Pilkington School.

In classifying the results of the examination the children were divided into four groups.

(1) Excellent—children whose nutrition was in every way satisfactory.

(2) Normal—children whose nutrition was less satisfactory, but with no definite signs of malnutrition.

(3) Subnormal—children showing some signs of malnutrition.

(4) Bad—children concerning whose malnutrition there could be no question.

Children coming under the fourth category were followed up and where deficiency of food appeared to be the cause of the defect, a recommendation was made for free meals.

Table 5 shows the percentage of children in the various classes.

For practical purposes the important feature is the large number of children below normal and badly nourished.

Clothing and Footgear.

Notice was taken at the time of examination of the state of clothing and footgear.

Table 6 shows the percentage of children whose clothing or footgear was insufficient or unsatisfactory.

The manner in which the children are clothed is a reliable index to the sanitary condition of a district. It is rare to find a ragged, illshod or barefooted child coming from a clean healthy home. Unfortunately it is a matter of frequent comment that in this district there is an unusually large proportion of dirty, unkempt children. Doubtless the conditions of employment of parents have an important bearing in this question. Where the bread-winner daily returns home with clothing covered with grime, it is difficult to maintain a reasonable standard of cleanliness in the house.

Cleanliness of the Head.

Three classifications were made :—

(1) Clean hair having neither nits nor vermin.

(2) Hair showing nits only.

(3) Hair containing vermin.

Among 3,606 children systematically examined the results were as shown in tables 7 and 8.

During 1914, a carefully organised systematic campaign has been carried on to reduce the high percentage of verminous children among those attending the elementary schools. In the past it has been customary only to examine the state of the hair of the children due for systematic inspection, namely those entering and leaving school, with the result that the condition of cleanliness of about two-thirds of the school population was unknown. The prevalence of vermin among children is somewhat analagous to an outbreak of infectious disease. Many cases may be caused by contact with a common source of infection. One child persistently verminous can spread lice throughout a class. It is to be regretted that in some instances the children receive the infection from their parents. Under the St. Helens Corporation Act, 1911, the local sanitary authority has power to cleanse verminous adults, and two women were compelled to cleanse themselves during the year.

At the beginning of 1914 it was arranged that nurses should examine every three months the person and clothing of every child attending the elementary schools. A notice with suitable instructions is sent to the parents of children whose hair contains vermin or a considerable number of nits, the children so affected are re-examined at the end of a week and unless the condition has been remedied a warning intimation is issued; about seven days later a further re-inspection is carried out and the parents of children still remaining verminous are in due course served with a statutory notice informing them that unless the child is properly cleansed within 24 hours the cleansing will be effected by the local authority. A visit by a nurse is made to a house in cases where compulsory cleansing is likely to be required and disinfection of the house and bedding is carried out.

Table 8a shows the number of notices issued during the year and the number of children cleansed by the local authority. Proceedings were taken in three cases for allowing children who had been compulsorily cleansed again to become verminous, and a woman who assaulted a nurse while removing a child to the cleansing station was fined 10/- and 11/6 costs.

Although the scheme has been in force only a year a very marked improvement has taken place in the condition of the children.

Evidence of body vermin was discovered in 0·8 per cent of the children systematically examined. Table 9 shows the extent to which the bodies were found to be dirty or verminous.

As all the parents were given notice of the date of inspection it must be assumed that the condition was due to neglect.

Teeth.

In the summer of 1914 the local authority appointed a whole time dentist in order that dental inspection and treatment might be undertaken on a more comprehensive scale. Owing to the fact that over 90 per cent. of the children had unsound teeth, it was clearly impossible for one dental surgeon to attempt to treat more than a portion of the cases needing attention. As a beginning therefore it was decided to examine only those between six and eight years of age. Table 10 shows the extent of the disease found in the children medically examined and also in those inspected by the school dentist.

Nose and Throat.

The defect commonly met with consists of enlargement of the tonsils, and adenoids, frequently associated with mouth breathing. The condition is a serious one likely to lead to far-reaching ill-effects, such as deafness, malformations of the nose and throat, bronchitis, deformity of the chest, and general weakness, with predisposition to infectious disease. It is often stated that the child will "grow out of the condition." To some extent this may be true, but by the time it has occurred incalculable injury will most likely have been done to the physical and mental development of the child.

The treatment of the condition is preventive and curative. Fresh air, breathing exercises, improvement of the health and local applications will in slight cases often effect a cure. For the remainder a simple operation is necessary; it is essential that after-care should be given in order that a proper method of breathing may be acquired, but instruction alone, however well given, is not sufficient; ample food, rest and open-air treatment is required, in a word, attendance at an open-air school.

The percentage of children suffering from defects of the nose and throat is shown in table 11a.

Chronic Nasal Catarrh.

In many of the infants examined, and in a proportion of the seniors, a considerable amount of rhinitis was present. Few infants possess a pocket handkerchief, and practically none knows how to use it. A course of pocket handkerchief drill throughout the schools would do much to prevent this ailment.

Glandular Enlargements.

The lymphatic glands situated about the head and neck not infrequently show signs of enlargements. This is generally due to some chronic infection of the mouth, throat, or scalp.

Treatment must be both local and general; the former includes the removal of the source of infection, decayed teeth, enlarged tonsils, and verminous condition of the scalp. General measures comprise the inculcation of a higher standard of personal cleanliness, and improvements in the hygiene of the home and of the school.

Table 11b shows the extent of the disease among 4,102 children.

Eye Disease and Defective Vision.

Disease of the external eye usually takes the form of sore eyelids or inflammation of the conjunctiva or cornea. The more common ailment, sore eyelids, is a condition frequently associated with proverty and neglect. The daily use of a simple ointment, fresh air, and ample food will in the majority of instances, soon effect a cure, yet it is not uncommon to see these cases drag along for months and even years until permanent damage to the sight has resulted.

The prevalence of disease and defects of the eyes in the children examined is set out in tables 12 and 13.

Deafness and Ear Discharge.

Table 14 shows the percentage of children suffering from well marked deafness or ear discharge; conditions likely to impose a serious hindrance on the educational progress of a child.

Some alteration has been effected in the method of examining for the presence of deafness, and the test known as the "forced whisper" is now always employed.

Ear discharge is often closely related to deafness. An attack of measles or scarlet fever in a child who suffers from enlarged tonsils and adenoids not unfrequently is the origin of ear discharge which may last for years. The reason for the chronicity of the complaint is two fold; in the first place to effect a cure, removal of the tonsils and adenoids is often necessary, and secondly persistent daily treatment by syringing must be carried out. The disease is a serious one, not only entailing danger to the life of the child, and risk of permanent deafness, but inflicting unnecessary inconvenience upon other children in the class owing to the offensive nature of the discharge; some cases are definitely infectious.

Speech.

A defect of speech was present in certain of the children examined, the usual defect was stammering. The details are given in table 15.

Most cases of defective speech can be improved and many cured by appropriate treatment; a special class for children suffering from this condition would be likely to yield good results.

Mental and Nervous Disease.

A record of children found to be suffering from mental defect or disease of the nervous system is given in tables 16 and 17.

Heart and Circulation.

Of the children inspected, two were found to be suffering from organic disease of the heart, this condition in children is almost always due to attacks of rheumatism or rheumatic fever. Unfortunately the symptoms are generally insidious, sore throats, "growing pains," headache, and feverishness, frequently overlooked by the parents or treated as a trivial ailment. Close allied to rheumatic fever is chorea, or St. Vitus' dance, a disease equally important as regards the serious effect it may have upon the heart. Children suspected suffering from rheumatism in any of its various manifestations require special care and supervision at school, and are particularly suitable for the attendance at an open air school or similar institution. Other figures are given in table 18.

Tuberculosis.

Among 4,102 children systematically examined 3 instances of pulmonary tuberculosis were discovered, and 7 had signs suggestive of the disease.

Ten children were found to be affected with tuberculosis of the glands, being 0·46 per cent. of those examined.

Of the children systematically inspected, two were suffering from tuberculous disease of the bones or joints.

Table 19 shows the number of children examined and the percentage of cases of tuberculosis discovered.

The total number of children suffering from tuberculosis known at present to the medical department, is 224. Twenty-two deaths from tuberculosis in children of school age occurred during the year. It is certain that the extent of the disease among children is as yet unknown.

There is need for a residential institution at which education in a certified school might be provided, so that patients could remain under appropriate treatment for a sufficient period without loss of education.

Other Diseases of the Lungs.

The extent of the diseases of the respiratory organs, discovered amongst the children examined is shown in table 20.

Deformities.

Tables 21 and 22 give a classification of the children amongst those systematically inspected found to be deformed.

Diseases of the Skin.

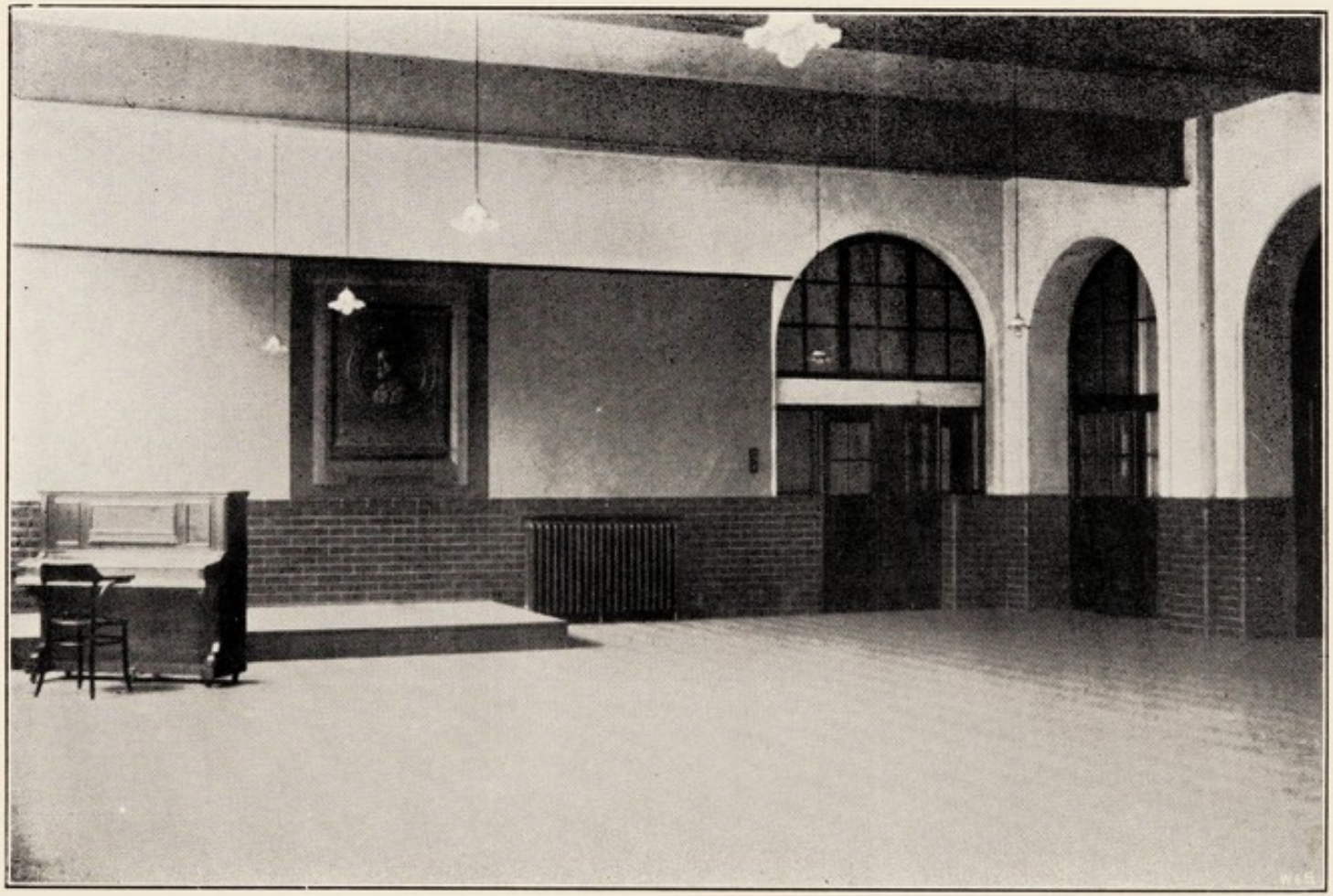
Table 23 gives an analysis of the diseases of the skin, discovered during the inspection of 4,102 children

Although a systematic 'class to class' examination of all the children attending the elementary schools is now being carried out by the nurses four times a year, very few cases of ringworm have been found. It may be said therefore that the disease is somewhat uncommon in the district.

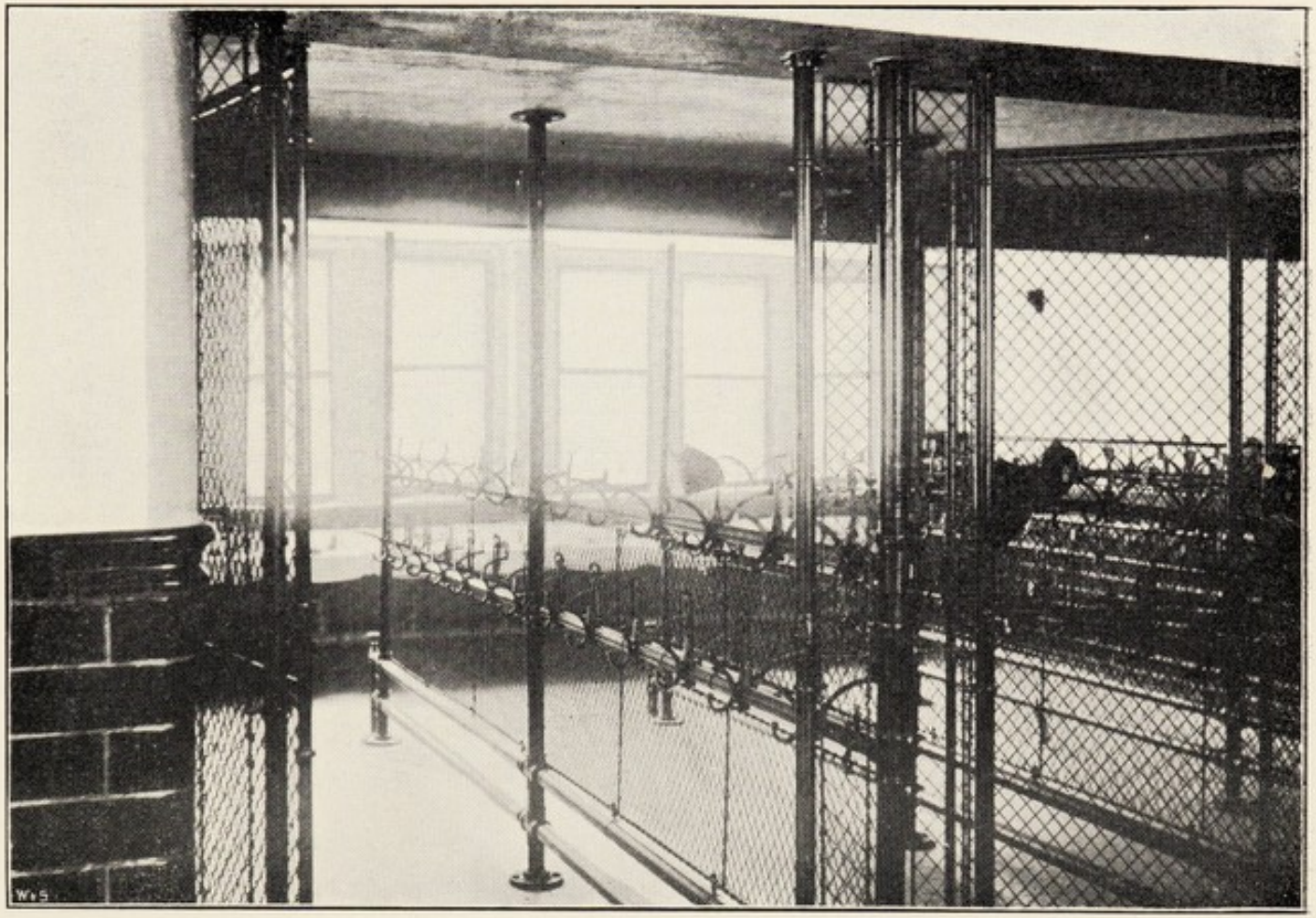
Infectious Disease.

Table 24 sets out the cases of infectious disease discovered amongst children actually attending school.

A classification of certain other diseases found among the children examined is given in table 25.



The Hall of the Windle Pilkington School.



Cloak rooms at Windle Pilkington School.

INSPECTION CLINIC.

An inspection clinic has been held in the medical officer's department at the town hall since 1906, and an increasing number of cases has been seen there each year, in fact, the work of the inspection clinic is growing to such an extent that the necessity of providing further accommodation has already arisen. Children attend for examination on Wednesdays from 3–0 to 5–30, and on Saturdays from 9–0 to 11. Some overcrowding not infrequently occurs, but it is attempted to prevent this as much as possible by giving a specified time for the attendance of certain children. This arrangement, however, although desirable, can not obviate the necessity of a large airy waiting room, since school teachers, attendance officers and parents, knowing that the clinic is open at stated periods, send up children concerning whose condition they wish for information.

During 1914, 1,616 children were seen at the clinic, a total of 3,107 attendances being made. The children were sent to the clinic by the following agencies :—

School Attendance Officers.....	424
Teachers	343
Medical Officer's Department	363
Parents	198
Medical Practitioners	50
Children's Care Committee	3
Fresh Air Fund	20
Other Agency	228

Table 26 shows the conditions from which the children were suffering.

Of the children, 719, or 45 per cent were not receiving medical attention. The remainder were being treated as follows :—

By private practitioners	296
By hospitals	67
By parents	240
By tuberculosis dispensary.....	92
By other agencies.....	294

The value of an inspection clinic in any well-organised scheme for the inspection and treatment of school children is beyond dispute. It may be looked upon as a clearing-house, and a means whereby the medical officer can obtain a knowledge of the condition of children absent from school. More complete examination can be carried out there than is generally possible in school premises.

THE TREATMENT CLINIC.

In October, 1913, a centrally situated, complete and well equipped school clinic was opened by the Local Authority. The diseases to be treated were those affecting the eyes, ears, nose and throat, and teeth ; ringworm of the scalp by means of X-rays and also minor ailments, together with such other diseases as might be approved from time to time by the Committee.

The treatment of the children at the clinic is generally carried out by private practitioners appointed by the Local Authority. There is a whole time school dentist. Minor ailments, however, are treated by nurses acting under the directions of the school medical officer. The supervision of the medical, surgical and dental work done at the clinic is in the hands of the school medical officer who is directly responsible to the Committee. The medical practitioners are part-time officers, each attending at the clinic for one half-day-per week.

It was decided that children suffering from disease or defect should be classified into three groups according to the financial circumstances of the home. Cases found to be 'necessitous' are treated free of cost. A fee not exceeding two shillings is recovered from the parents of those 'partially necessitous'; while children that are 'non-necessitous' are as a rule not accepted for treatment. Children found on inspection to be defective and obviously necessitous or partially necessitous are sent direct to the clinic, and in this way very little delay occurs between inspection and treatment.

The premises comprising the clinic consists of, on the ground floor a waiting room, a room for the clerk dispenser, a consulting room and room for the treatment of eye defects, and a small room fitted up as a surgery for minor ailments. On the first floor are a dental room, an operating room, a recovery room and two rooms given over for the X-ray treatment of ringworm; part of the same building, but distinct from the school clinic, is used as a tuberculosis dispensary. The treatment of minor ailments is carried out daily from 9 to 10, of dental cases from 9-30 to 4-30. One sitting of two and a half hours per week is devoted to each of the other diseases.

During the year under consideration, the number of cases dealt with is given in table 27.

Table 28 shows the nature and extent of the dental treatment.

FOLLOWING UP AND RE-EXAMINATION.

The following up of children discovered at the time of medical inspection to be suffering from diseases or defect is entirely carried out by nurses in the medical officer's department and the re-examination of the cases treated is performed by the assistant medical officers. Towards the latter part of 1913 the various duties usually performed by the health visitors and school nurses were so allocated that by placing each nurse in charge of a district a considerable amount of overlapping was avoided and the saving of time thus effected allowed a more comprehensive system of after-care to be adopted.

The following table shows the rapid extension which has taken place in the work of home visitation of defects.

Year.	1909	1910	1911	1912	1913	1914
Number of home visits by nurses to follow up cases of defect or disease.....	2,623	2,409	3,248	2,737	4,548	7,363

ACTION TO DETECT AND PREVENT THE SPREAD OF INFECTIOUS DISEASE.

On the occurrence of notifiable infectious disease in a school child or in a house from which a child attends school, an exclusion notice is sent to the parents, the school attendance department and the head teacher, and a re-admission form is issued when the child or home becomes free from infection. A complete set of notices relating to each case makes up one page in the register. It is, therefore easy to see at any particular moment the number of children excluded from school and the date of exclusion or re-admission. Teachers are instructed to notify at once to the medical officer of health all cases or suspected cases of infectious or contagious disease coming to their knowledge. Books of suitable forms have been provided for the purpose. The number of notifications received from teachers during the year is given in table 29.

With regard to non-notifiable infections such as measles, whooping cough, ringworm, and scabies a similar method of exclusion and re-admission is adopted. In the past it was customary to exclude children from school for definite periods and to allow return to school automatically on the expiration of the time stated on the certificate. This method of procedure although convenient has many disadvantages. In the first place a child may not be free from infection at the time when it is due to return to school or may be fit to return before the date stated on the exclusion form, on the other hand a serious illness may prevent attendance at the inspection clinic and thereby prevent an extension of the period of exclusion being granted. It was therefore decided in all cases to exclude until cured; this alteration of necessity involves a vast increase in the work of re-examination and following up, but makes far much greater efficiency.

No school or department was closed during 1914 on account of infectious disease.

Measles was prevalent in the district during the first quarter of the year. Children excluded from school by the medical officer are not permitted to return until a re-admission notice has been issued by him, except in the case of a certain number of children who are excluded by him for a definite period.

RE-EXAMINATION.

During 1914, 1,608 children were re-examined in school by the medical officers, 961 were found to have received satisfactory treatment, 412 unsatisfactory treatment, and 235 were untreated.

SUMMARY OF TREATMENT.

Table 30 shows that over 82 per cent. of the children found defective have received treatment during the year. This is an extremely satisfactory figure, reflecting considerable credit in the staff of the medical officer's department.

ADMINISTRATION OF THE PROVISION OF MEALS ACT.

The provisions of this Act and also those of the Acts relating to medical inspection and treatment are administered by the Central Children's Care Committee. Necessitous cases are reported to the district care committees by head teachers and others. Inquiries are then made concerning the circumstances of the parents. If the children cannot be properly fed by the parents owing to unfavourable home conditions, tickets for free breakfasts are given by the head teachers.

Breakfasts are provided at three centres, namely, Higher Grade, Merton Bank, and Robins Lane. The meals are prepared at the centres. They are served by paid attendants under the supervision of teachers who voluntarily give their time to the work. The dietary consists of cocoa with milk, bread and margarine or oatmeal porridge, with syrup or milk on alternative mornings. Breakfasts only are provided.

The total number of meals given during the year was 22,199. Meals provided during school holidays are paid out of a voluntarily contributed fund.

The average total cost per meal is 1·42 pence, while the average cost per meal for food only is 0·95 of a penny.

AN ACCOUNT OF MISCELLANEOUS WORK.

At the request of the Education Committee, 47 scholarship candidates were medically examined, and under regulations made by the Committee relating to teachers absent from duty, medical certificates were granted on 29 occasions.

The clerical work arising out of medical inspection and treatment is of necessity very heavy. During 1914, 10,645 exclusion notices, 3,297 readmission notices, 1,300 preliminary notices, 437 final notices, 1,500 dental notices, 12,350 miscellaneous notices and 450 letters were sent out from the medical officer's department, and the compilation of figures for this report involved on the clerical staff a considerable amount of unpaid work outside the usual office hours.

TEACHING OF HYGIENE AND TEMPERANCE.

No general scheme for the teaching of these subjects has been adopted in the borough. In some of the schools, however, the work is performed by individual teachers. Physical and breathing exercises are carried out in each school. No arrangements have yet been made for open-air schools, school camps, or similar institutions. The consideration of a comprehensive scheme, has been deferred by the Local Authority.

WORK OF THE CHILDREN'S CARE COMMITTEE.

A District Care Committee composed of members of the Education Committee, teachers, and those particularly interested in the work is attached to each school for the purpose of exercising supervision over appropriate cases. At the time of their inception it was thought that it might be feasible for the greater part of the following up of medical defects to be carried out by the District Committees. The re-organisation of the duties of the nurses in the medical officer's department made it possible somewhat to lighten the load of the Committees, who became free to devote more time to other work no less important. Advice is offered to parents concerning suitable employment for children leaving school, after care is given to mentally and physically defective children, and those ill-clad and underfed. In these and various other directions the Committees willingly perform a very valuable service in promoting the health and comfort of a proportion of the children attending the elementary schools in the borough.

ACCOUNT OF CHILDREN MENTALLY AND PHYSICALLY DEFECTIVE.

In view of the provisions of the Mental Deficiency Act, 1913, it was decided to institute a census of all children of school age, whether attending or absent from school, who were thought to be defective. A careful enquiry carried out by the school attendance officers and teachers seemed to show that there were in the borough four imbeciles, ninety-five mentally defective, thirty-one epileptics, and four hundred and thirty-five physically defective. A medical examination of all these cases was then carried out with the following results.

	Imbecile.	Mentally defective.	Epileptic.	Physically defective.
Imbeciles	1	2	...	1
Mentally defectives	3	49	...	3
Dull or backward	...	35	...	...
Epileptic	...	...	19	...
Doubtful Epileptics	...	...	3	...
Deaf and Dumb	...	...	...	3
Blind	...	...	...	5
Suitable for Open-Air School	...	...	...	176
Not examined	...	2	1	16
No defect discovered	...	7	8	32
Cripples	...	...	...	85
Suitable for ordinary schools	...	...	...	114
	4	95	31	435

From these figures it will be seen that there are 4 imbeciles, 55 mentally defective, and 35 children who are extremely dull or backward. 85 are so crippled as to be unsuitable for education in an ordinary elementary school. 3 are deaf and dumb and 5 are blind.

The following children, not included in the census returns have been discovered in the course of a medical inquiry at the various schools, or in other ways :—

Imbeciles	2
Mentally defectives	6
Epileptics	1
Cripples	17
Suitable for Open-Air School	72

There are at least 248 children urgently in need of treatment at an open-air school, 102 who should attend a cripple school, 20 who should be taught at a special institution provided for epileptics, 5 who are suitable for an institution for the blind and 3 for a deaf and dumb school. 61 should attend a school for children mentally defective and 6 an institution for imbeciles. 35 are dull and backward to an extent rendering difficult their instruction at an ordinary school.

A further classification as follows was made of children thought to be suitable for fresh-air and cripple schools.

For Fresh-Air Schools.

Tubercular Lungs	52
,, Glands	11
,, Peritoneum	14
,, Abscesses	4
Lupus	6
Bronchitis	6
Suspected Phthisis	40
Asthma	2
Anæmia and Malnutrition	57
Anæmia due to Illnesses	10
Nervous Debility	3
Chorea	20
Backward, due to bad health	5
Corneal ulcers associated with Malnutrition	9
Rickets	3
Delicate children with tubercular parents	4
Old tubercular bone disease	1
Blood poisoning	1
	248

For Cripple School.

Tubercular Hip	13
,, Spine	10
,, Knee	5
,, Ankle	4
,, Elbow	1
Lupus, leg	1
Injuries to Hip with deformity	6
Amputations (lower limbs)	2
Chronic Osteomyelitis	2
Extensive Burn Scars	1
Infantile Paralysis	15
Heart Disease	16
Rickets	11
Poly-arthritis	2
Kyphosis	3
Club Foot	2
Spastic Paraplegia	3
Spina Befida	1
Congenital Malformations	4
	102

The committee authorized the Secretary for Education and the Medical Officer to visit various institutions and open-air schools and to prepare a scheme for the provision of the necessary accommodation for the children unable to benefit by instruction at an ordinary school or likely to improve under open-air conditions. The outbreak of war caused the consideration of the question to be deferred.

Eleven defective children are maintained by the local Education Authority in special schools, four are blind and seven are deaf and dumb.

APPENDIX.

DENTAL HYGIENE.

BY

BERNARD R. TOWNEND, L.D.S.

Temporary School Dentist.

Although much may be done to improve the condition of children's teeth by means of dental clinics and treatment centres, there still remains the great fact that we are not striking at the root of the trouble. We are only trying to cure; the prevention problem still lies in repose.

Why do teeth decay? This is the question that one is asked.

The pathology of dental caries is in broad outlines a comparatively simple matter. Dental caries progresses in two stages, first the destruction of the enamel, then the destruction of the dentine, followed by exposure and death of the dental pulp, leading on to various symptoms, sometimes slight, sometimes alarming. The destruction of the enamel is a purely chemical action caused by the acids formed by fermenting foodstuffs, particularly carbohydrates. Starch, for instance, is broken down by the saliva into dextrose, maltose and dextrin. The dextrose and maltose are acted on by bacteria—lactic acid with traces of other acids is formed. These acids dissolve away the enamel, thus exposing the dentine. The dentine is then acted on both by the acid and also by liquifying bacteria. Thus it follows that the great cause favouring the commencement and progression of dental caries is undue retention of carbohydrates in the mouth, especially in the crevices of or between the teeth.

The undue retention of fermentable carbohydrates in the mouth arises principally from the nature of the food, and dietectic habits. Fibrous and acid foods such as meat, vegetables and fruit, do not cling round the teeth, they stimulate the saliva and need thorough mastication. On the other hand soft food, as doughy bread, sweet biscuits, etc. receive little mastication, are swallowed only partly insalivated, and by virtue of their sticky nature, cling round the teeth in great quantities. This is borne out by the fact that caries is more prevalent and severe among the upper and

middle classes than in the lower strata of society, mainly due to the fact that the children of the lower classes live on coarser food. Here is a more or less typical diet table for a child, an example of a diet calculated to cause caries.

Diet Table (*Sim Wallace*).

Breakfast.—Porridge and milk, bread and marmalade, then a supplementary breakfast a few hours later, of a glass of milk and a sweet biscuit.

Dinner.—Mashed potatoes and gravy, milk and milk pudding, jam roll or preserved fruit.

Supper.—Bread and milk or bread and jam, cocoa and cake, and perhaps a supplementary supper on retiring of a biscuit and a glass of milk.

It is difficult to outline a typical diet, as the age and taste naturally play so large a part in eating, but it may be pointed out that all sticky carbohydrates, (bread, biscuits, thick sugary articles, etc.) should always be taken at the beginning or middle, never at the end of a meal, which should be finished with some food of a cleansing nature such as fresh fruit.

Sim Wallace suggests the following as a typical diet for a child.

Breakfast.—Fish, bacon, toast and butter, coffee or tea.

Luncheon.—Meat or poultry, potatoes, salad, well-baked milk pudding, fresh fruit, and water.

Supper.—Rusks, toast, or bread rolls and butter, chicken or fish, water, milk and water or tea, fresh fruits.

Whatever the solid food, it should always be followed with water as a last ingredient of a meal.

If food of this nature were taken, the arrangement of the teeth normal and the general conditions of living on a more natural plan, it is fairly safe to say that caries of the teeth would be a comparatively rare disease. The pernicious effects of irregularities, slight and severe, are balanced to a great extent by the judicious use of a tooth brush.

Tooth brushes are seldom used, and when used, are frequently abused. The teeth should be brushed on all surfaces and in a direction from the gums to the teeth, that is, upwards in the lower, and downwards in the upper jaw, *not* crossways, as this tends to damage and destroy the enamel.

The brush should be of medium stiffness, with long serrated bristles. The powder or paste should be slightly rough but not gritty. The gums also should be brushed, thus inducing a healthy flow of blood in them.

Retention of fermenting food is often caused by irregularities of the teeth, forming unnatural crevices where food may collect.

Irregularity of the teeth is much more obscure in its origin and much more difficult to treat than caries. An extremely common cause of sometimes gross irregularities is adenoids. Adenoids should be treated as early as possible in the child's life, to ensure a functional dental outfit. Long retained temporary teeth often cause a permanent tooth to assume a faulty positon, hence the vital importance of periodical dental inspection, whether the child suffers from toothache or not.

The importance of regular inspection, cannot be too thoroughly impressed. When caries has commenced, frequently one finds that a tooth affected may give rise to no acute sensations of pain ; but is the seat of a slight chronic inflammation leading to soreness. Owing to this the child refrains from masticating at that side of the mouth, and it is quite a common occurrence to find caries attacking a number of teeth at one side of the mouth, with the other side of the mouth quite normal and healthy.

If all the above precautions were taken with our children's teeth, namely :—proper nutrition, with a suitable diet at regular intervals, thorough cleansing of the teeth, early treatment of nasal obstructions, it is quite safe to say that the percentage of children with carious teeth, would drop from where it is now—at something like ninety—to well below twenty per cent.

Then with the intervention of school clinics, etc., treating that twenty per cent., we could ensure a population of school children with perfectly healthy mouths.

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Table I.

Number of Children inspected 1st January, 1914, to 31st December, 1914.

	Entrants.					Leavers.			Total.
Age ...	4	5	6	7	Total.	12	13	Total.	
Boys	332	589	93	16	1030	736	63	799	1,829
Girls	276	612	70	21	979	732	66	798	1,777
	608	1,201	163	37	2,009	1,468	129	1,597	3,606

Special Cases..... 496	Re-examinations..... 1,608

Table 2.

The defects in respect of which directions were given for treatment.

	Routine Cases.	Per.-centage.	Special Cases.	Per-centage.
Number of children examined	3,606	..	496	..
Number recommended for treatment	562	15·6	230	46·4
Defects requiring treatment—				
Enlarged tonsils	177	4·9	22	4·43
Adenoids.....	196	5·4	55	11·08
Other throat and nose defects	17	0·5	13	2·62
Defective eyesight	149	4·1	106	21·37
Squint	59	1·6	10	2·01
External eye disease	28	0·8	25	5·04
Discharging ears	30	0·8	9	1·80
Deafness	45	1·2	10	2·01
Heart Disease	3	0·1	1	0·20
Anæmia	25	0·7	6	1·20
Bronchitis.....	1	0·03	..	..
Suspected phthisis	4	0·11	..	..
Diseases of nervous system	..	..	4	0·80
Tuberculosis	1	0·03	..	..
Ringworm	1	0·03	..	..
Badly fitting and unsuitable spectacles..	4	0·11	1	0·20
Other diseases or defects	22	0·6	9	1·80
	762	22·0	271	54·56

Table 3.

Personal History.

	Number of cases inquired into.	Number of cases which have not had an infectious disease.	PREVIOUS ILLNESSES					
			Measles	Whooping Cough	Chicken Pox	Scarlet Fever	Diphtheria	Other Diseases
Entrants	2009	227	1,306	587	362	155	30	191
Percentage		11·2	65·0	29·2	18·0	7·7	1·5	9·5
Leavers	1,597	63	1,325	493	344	294	65	172
Percentage	..	3·9	82·9	30·8	21·5	18·4	4·0	10·7

Table 4.

Average height and weight.

		St. Helens.		Average Standard of Anthropometric Committee.	
		Height in inches.	Weight in pounds.	Height in inches.	Weight in pounds.
4 years.	Boys	38·7	36·15	38·46	37·3
	Girls	37·3	34·9	38·26	36·1
5 years.	Boys	39·8	37·8	41·0	39·9
	Girls	38·1	36·5	40·8	39·6
6 years	Boys	41·2	40·1	44·0	44·4
	Girls	40·8	38·4	42·8	41·7
7 years.	Boys	42·9	41·9	45·9	49·7
	Girls	42·1	40·1	44·4	47·5
12 years	Boys	55·6	70·2	55·0	76·7
	Girls	53·7	69·6	55·6	76·4
13 years	Boys	54·5	74·2	56·9	82·6
	Girls	56·1	78·4	57·7	87·2

Table 5.

Nutrition.

	Number of children examined.	EXCELLENT.				NORMAL.				BELOW NORMAL				BAD.			
		Boys.	Girls.	Total	per cent.	Boys.	Girls.	Total.	Per cent.	Boys.	Girls.	Total	Per cent.	Boys.	Girls.	Total	Per cent.
Entrants..	2,009	28	49	77	3·8	532	486	1,018	50·7	391	362	753	37·5	79	82	161	8·0
Leavers ..	1,597	55	76	131	8·2	416	395	811	50·8	273	258	531	33·2	55	69	124	7·8

Table 6.

Clothing and Footgear.

	Entrants. Number examined .... 2,009.				Leavers. Number examined, 1597.			
	Boys.	Girls.	Total	Per Cent.	Boys	Girls	Total	Per Cent.
Clothing .. Satisfactory ..	949	942	1,891	94·1	771	746	1,517	95·0
Unsatisfactory	81	37	118	5·9	28	52	80	5·0
Footgear . Satisfactory ..	1,011	965	1,976	98·3	784	785	1,569	98·3
Unsatisfactory	19	14	33	1·7	15	13	28	1·7

Table 7.

Cleanliness of the head.

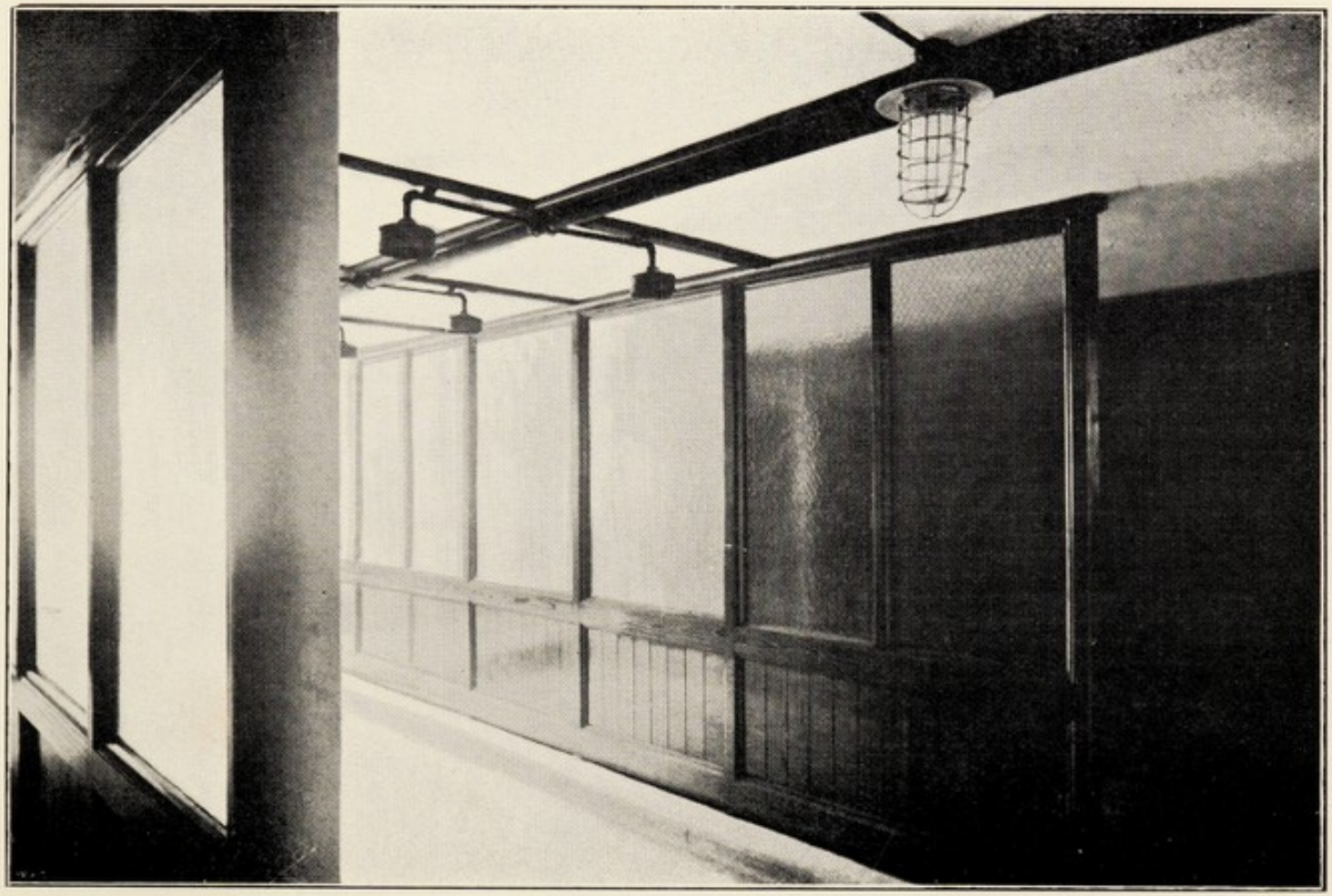
	Entrants. Number examined, ... 2009.				Leavers. Number examined, 1,597			
	Boys.	Girls.	Total	Per Cent.	Boys.	Girls.	Total.	Per Cent.
Clean	934	612	1,546	76·9	749	369	1,118	70·0
Nits only	74	335	409	20·4	43	413	456	28·6
Pediculi.....	6	23	29	1·4	2	11	13	0·8

Table 8.

Cleanliness of the head.

	Entrants.						Leavers.					
	Boys	Per Cent.	Girls	Per Cent.	Total	Per Cent.	Boys	Per Cent.	Girls	Per Cent.	Total	Per Cent.
No. examined	1,030	..	979	..	2,009	..	799	..	798	..	1,597	..
Clean	934	90·7	612	62·6	1,546	76·9	749	93·7	369	46·2	1,118	70·0
Nits only ..	74	7·2	335	34·2	409	20·4	43	5·5	413	51·8	546	28·6
Pediculi....	6	0·6	23	2·3	29	1·4	2	0·2	11	1·4	13	0·8
Dirty	16	1·5	9	0·9	25	1·3	5	0·6	5	0·6	10	0·6

View of class rooms at Windle Pilkington School.



Spray baths at Windle Pilkington School.

Table 8a.

Number of Notices served concerning children who were verminous.

Preliminary notices	1,300
Final notices	238
Children cleansed by Local Authority	81

Table 9.

Cleanliness of the body.

	Entrants. Number examined ....2,009.				Leavers. Number examined, 1,597.			
	Boys.	Girls.	Total	Per Cent.	Boys	Girls.	Total	Per Cent.
Clean	1,022	977	1,999	99·5	788	793	1,581	99·0
Dirty	5	5	10	0·5	11	5	16	1·0
Pediculi present	3	3	6	0·3	7	1	8	0·5

Number of children badly bitten by fleas or vermin	61	34

Table 10.

Teeth.

	Entrants. Number examined .. 2,009.				Leavers. Number examined .. 1,597			
	Boys	Girls	Total	Per Cent.	Boys.	Girls.	Total	Per Cent.
Sound	226	243	469	23·4	131	156	287	17·9
Less than four decayed	512	497	1,009	50·2	447	440	887	55·6
Four or more decayed	292	239	531	26·4	221	202	423	26·5
Sepsis	44	38	82	4·8	43	31	74	4·6

Number of children of ages 6—8 inspected by school dentist	527
Number found to be suffering from defective teeth	475
Percentage with sound teeth	9·8

Table IIa.

Nose and Throat.

	Entrants. Number examined, 2,009.				Leavers. Number examined, 1,597.				Special Cases. Number examined 496.	
	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys and Girls.	Per Cent.
No defect	781	812	1,593	79·2	686	687	1,373	85·9	406	81·8
Mouth breathers	55	30	85	4·2	44	33	77	4·8	6	1·2
Tonsils: Slightly enlarged	92	49	141	7·0	32	36	68	4·3	2	0·4
Tonsils: much enlarged .	28	21	49	2·4	25	35	60	3·8	20	4·0
Adenoids: slight	48	37	85	4·2	35	26	61	3·8	7	1·4
Adenoids: marked	6	2	8	0·4	2	1	3	0·2	48	9·7

Table IIb.

Glandular enlargements.

	Entrants. Number examined. 2,009.				Leavers. Number examined, 1,597				Special Cases. Number examined 496.	
	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys and Girls	Per Cent.
No disease	684	654	1,338	66·6	667	648	1,315	82·44	495	99·8
Enlarged glands	346	325	671	33·4	131	150	281	17·50	1	0·2
Gland scars	..	..	..	..	1	..	1	0·06	..	..

Table I2a.

Squint.

	Entrants. Number examined. 2,009.				Leavers. Number examined. 1,597.				Special Cases. Number examined, 496	
	Boys	Girls	Total	Per Cent	Boys	Girls	Total	Per Cent.	Boys and Girls.	Per Cent.
No defect	1,020	966	1,986	98·8	786	790	1,576	98·7	475	95·8
Defect present.....	10	13	23	1·2	13	8	21	1·3	21	4·2

Table 12b.

External Eye Disease.

	Entrants. Number examined, 2,009.				Leavers. Number examined, 1,597.				Special Cases. Number examined 496	
	Boys.	Girls.	Total.	Per cent.	Boys.	Girls.	Total.	Per cent.	Boys & Girls.	Per cent.
No disease	997	953	1,950	97·1	790	781	1,571	98·4	467	94·1
Blepharitis	10	18	28	1·4	2	11	13	0·8	22	4·5
Conjunctivitis	11	4	15	0·7	3	3	6	0·4	3	0·6
Corneal Opacities	3	2	5	0·2	2	2	4	0·2	..	..
Other disease.... ..	9	2	11	0·6	2	1	3	0·2	4	0·8

Table 13.

Vision.

	Leavers.				Special Cases.	
	Boys.	Girls	Total	Per Cent.	Boys and Girls	Per Cent.
Number examined	799	798	1,597	..	496	..
6/6 each eye (normal vision) ...	635	623	1,258	78·7	390	78·6
6/6 R	30	35	65		17	
L	28	36	64		9	
6/9 R	41	43	84		9	
L	38	45	83		13	
6/12 R	35	30	65		18	
L	35	27	62		23	
6/18 R	17	26	43	21·3	28	21·4
L	24	21	45		26	
6/24 R	18	20	38		21	
L	15	19	34		14	
6/36 R	13	12	25		10	
L	13	18	31		9	
6/60 R	6	6	12		7	
L	7	5	12		3	
6/0 R	4	4	8		1	
L	4	3	7		4	
				100·0		100·0

Table 14a.
Hearing.

	Leavers.				Special Cases.	
	Boys	Girls	Total	Per Cent.	Boys and Girls	Per Cent.
Number examined	799	798	1,597	..	496	..
20 feet each ear (normal hearing).	754	735	1,489	93·2	480	96·7
20 feet R	7	8	15	..	5	..
L	13	14	27		6	
10 feet R	24	36	60	6·8	1	3·3
L	20	36	56		2	
5 feet R	14	18	32		10	
L	12	14	26	..	8	
				100·0		100·0

Table 14b.
Ear disease.

	Entrants. Number examined, 2,009.				Leavers. Number examined, 1,597.				Special Cases Number examined 496.	
	Boys	Girls	Total	Per cent.	Boys	Girls	Total	Per Cent.	Boys and G'rls	Per Cent.
No disease	986	944	1,930	96·1	740	772	1,512	94·6	484	97·6
Obstruction R.	11	9	20	1·0	7	7	14	0·8	7	1·4
Obstruction L.	8	14	22	1·0	7	4	11	0·7	7	1·4
Otorrhœa R.	9	1	10	0·5	15	10	25	1·5	1	0·2
Otorrhœa L.	10	10	20	1·0	29	7	36	2·2	1	0·2
Other diseases	7	2	9	0·4	2	1	3	0·2	3	0·6

Table 15.
Speech.

	Entrants. Number examined, 2,009.				Leavers. Number examined, 1,597.				Special Cases. Number examined, 496.	
	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys and Girls	Per Cent.
No Defect	998	955	1,953	97·21	784	796	1,580	98·9	489	98·6
Defective Articulation	31	24	55	2·74	9	2	11	0·7	6	1·2
Stammering	1	..	1	0·05	..	..	6	0·4	1	0·2

Table 16.

Mental Condition.

	Entrants. Number examined, 2,009.				Leavers. Number examined, 1,597.				Special Cases. Number examined, 496.	
	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys and Girls	Per Cent.
Normal	1,026	978	2,004	99·75	794	793	1,587	99·4	489	98·6
Backward or dull	4	1	5	0·25	5	5	10	0·6	3	0·6
Mentally deficient	..	..	..	..	..	..	..	..	4	0·8

Table 17.

Nervous System.

	Entrants. Number examined, 2,009.				Leavers. Number examined, 1,597.				Special Cases. Number examined, 496.	
	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys and Girls	Per Cent.
No disease	1,029	978	2,007	99·9	799	797	1,596	99·94	492	99·2
Epilepsy	1	..	1	0·05	..	..	..	..	1	0·2
Chorea	..	1	1	0·05	..	..	..	..	..	..
Other disease	..	..	..	..	..	1	1	0·06	3	0·6

Table 18.

Heart and Circulation.

	Entrants. Number examined, 2,009.				Leavers. Number examined, 1,597.				Special Cases. Number examined, 496.	
	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys and Girls	Per Cent.
No disease	1,005	957	1,962	97·7	776	770	1,546	96·8	489	98·6
Organic disease	..	..	..	..	2	..	2	0·15	1	0·2
Functional disease	..	..	..	..	1	2	3	0·2	..	..
Anæmia	25	22	47	2·3	19	25	44	2·7	6	1·2
Other defect	..	..	..	..	1	1	2	0·15	..	..

Table 19.

Tuberculosis.

	Entrants. Number examined, 2,009.				Leavers. Number examined, 1,597.				Total.	
	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Cases	Per cent.
Pulmonary.										
Lungs	..	1	1	0·05	..	2	2	0·13	3	0·18
Non-Pulmonary.										
Glandular	2	7	9	0·40	..	1	1	0·06	10	0·46
Bones and joints	1	..	1	0·05	..	1	1	0·06	2	0·11
Other forms	..	1	1	0·05	1	..	1	0·06	2	0·11
	3	9	12	0·55	1	4	5	0·31	17	0·86

Table 20.

Lungs.

	Entrants. Number examined, 2,009.				Leavers. Number examined, 1,597.				Special Cases. Number examined, 496.	
	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent	Boys and Girls	Per Cent
No disease	990	936	1,926	95·9	788	787	1,575	98·61	496	100·0
Bronchitis	37	40	77	3·8	7	9	16	1·0	..	..
Tuberculosis	..	1	1	0·05	..	2	2	0·13	..	..
Tuberculosis suspected	3	2	5	0·25	2	..	2	0·13	..	..
Other disease	..	..	..	..	2	..	2	0·13	..	..

Table 21.

Deformities.

	Entrants. Number examined, 2,009.				Leavers. Number examined, 1,597.				Special Cases. Number examined 496.	
	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys and Girls	Per Cent.
No deformity	1,025	976	2,001	99·6	795	797	1,592	99·7	495	99·8
Deformity present	5	3	8	0·4	4	1	5	0·3	1	0·2

Table 22.

Rickets.

	Entrants. Number examined, 2,009.				Leavers. Number examined, 1,597.				Special Cases. Number examined, 496.	
	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys and Girls.	Per Cent.
No disease	1,010	971	1,981	98·6	797	796	1,593	99·76	492	99·2
Slight	14	4	18	0·9	2	1	3	0·18	..	..
Marked	6	4	10	0·5	..	1	1	0·06	4	0·8

Table 23.

Skin.

	Entrants. Number examined, 2,009.				Leavers. Number examined, 1,597.				Special Cases. Number examined, 496.	
	Boys	Girls	Total	Per Cent.	Boys	Girls	Total	Per Cent.	Boys and Girls	Per Cent.
No disease	1,011	966	1,977	98·40	784	791	1,575	98·62	492	99·2
Ringworm body	1	1	2	0·10	1	..	1	0·06	..	..
Ringworm, head	5	2	7	0·35	5	..	5	0·31	..	..
Impetigo	10	7	17	0·85	6	5	11	0·70	2	0·4
Scabies	..	1	1	0·05	..	..	..	..	..	..
Other diseases	3	2	5	0·25	3	2	5	0·31	2	0·4

Table 24.

Infectious Disease.

	Entrants.	Leavers.
Whooping Cough	3	..
Chicken-pox	2	..
Scarlet fever	1	..
Mumps	..	1

Table 25.

Other Diseases.

Old dislocation of elbow	1	Pharyngitis	1
Deflected Septum	8	Rupture	1
Cyst in wrist	1	Torticollis	1
Injury to leg	1	Infantile paralysis	2
Injury to face	1	Seborrhœa	1
Old facial paralysis	2	Enlarged turbinate	1
Slight hare lip	1	Incontinence of Urine	1
Subdental Abscess	1	Tibial Osteitis	1

Table 26.

Classification of defects among children attending the inspection clinic.

Head.	
Sores	29
Other diseases	16
Skin.	
Ringworm, scalp	97
Ringworm, body	139
Scabies	85
Impetigo	61
Sores	25
Psoriasis	7
Eczema	24
Other diseases	25
Throat and Nose Defects.	
Enlarged tonsils and adenoids	44
Enlarged tonsils	60
Adenoids	57
Other diseases	18
Glands.	
Enlarged	23
Abscess	11
Eyes.	
Conjunctivitis	52
Blepharitis	27
Ulcers	21
Squint	44
Defective vision	148
Other diseases	24
Ears.	
Discharge	9
Deafness	8
Other diseases	14
Mental Conditions.	
Mentally defective	3
Imbeciles	1
Heart.	
Organic disease	4
Anæmia	82
Others	9
Lungs.	
Bronchitis	31
Suspected phthisis	46
Other diseases	19
Nervous System.	
Epilepsy	11
Chorea	18
Paralysis	4
Others	5
Tuberculosis.	
Phthisis	17
Glands	11
Bones and joints	11
Abdomen	9
Skin	7
Rickets	5
Kidney Disease	1
General Debility	16
Rheumatism	9
Other Diseases	228

Table 27.

Classification of cases treated at the School Clinic during 1914.

	Treatment carried on from previous year.	New Cases.	Treatment completed.	Treatment not completed at the end of the year.	Partially treated.
Eye defects	12	311	302	21	..
Nose and throat defects	23	290	304	9	..
Diseases of the teeth	12	714	647	30	49
Ringworm of scalp	19	66	75	10	..
Eczema of scalp	0	3	2	1	..
Minor ailments	15	252	237	30	..

Table 28.

Dental inspection and treatment.

AGES	Number inspected in schools		Number requiring treatment		Number treated at school clinic		Extraction		Anæsthetics		Fillings		Miscellaneous	
	Boys	Girls	Boys	Girls	Boys	Girls	Temporary	Permanent	Local	Nitrous Oxide	Amalgam	Cement	Pulp Treatment	Scalings & Dressings
5 and under 6.	..	..	..	..	5	3	41	..	5	3	3	3	..	..
6 „ 7.	131	132	116	112	115	120	935	1	151	78	248	30	..	15
7 „ 8.	129	135	124	123	184	154	1,507	48	249	87	286	18	2	64
8 „ 9	..	..	..	..	47	38	383	34	48	25	48	9	..	38
9 „ 10.	..	..	..	..	4	5	35	14	5	4	1	..	..	3
10 „ 11.	..	..	..	..	6	4	27	17	6	4	..	..	..	..
11 „ 12.	..	..	..	..	4	3	12	10	4	3	..	..	..	..
12 „ 13.	..	..	..	..	1	3	2	14	1	3	..	..	..	..
	260	267	240	235	366	330	2,938	138	469	207	586	60	2	120

Table 29.

Notifications by teachers of infectious and contagious disease in school children during 1914.

Measles	388
Mumps	1021
Whooping cough	86
Chicken-pox	160
Scarlet fever	48
Diphtheria	17
Ringworm	106
Scabies	22
Other diseases	511
	2,359

Table 30.

Treatment of Defects of Children during 1914.

CONDITION.	No. of defects found for which Treatment was considered necessary.			No. of defects for which no report is available.	No. of defects Treated.	Results of Treatment.			No. of defects not treated.	Per cent. of defects treated.
	From previous year	New Cases	Total			Remedied.	Improved.	Unchanged.		
Nose and Throat	277	443	720	21	619	549	40	30	80	86·0
External Eye disease .	40	120	160	3	155	120	25	10	2	97·0
Ear disease	56	67	123	3	115	57	45	13	5	93·5
Teeth.....	1,243	482	1,725	3	696	650	49	..	1,023	40·3
Heart and Circulation..	1	6	7	..	7	..	4	3	..	100·0
Lungs	7	3	10	..	7	..	4	3	3	70·0
Nervous System	2	..	2	..	2	1	1	..	..	100·0
Skin	20	164	184	1	179	178	1	..	4	97·3
Rickets.....	..	3	3	..	1	..	1	..	2	33·3
Deformities	2	3	5	1	4	2	1	1	..	80·0
Tuberculosis—										
Non Pulmonary ..	8	11	19	1	18	2	14	2	..	94·7
Speech.....	1	1	2	1	..	..	..	1	..	..
Mental Condition.....	..	..	..	..	..	..	..	..	..	..
Vision and Squint	252	435	687	18	628	570	48	10	41	91·3
Hearing.....	4	42	46	3	38	19	15	4	5	82·6
Miscellaneous	32	50	82	2	78	27	43	8	2	95·1
TOTAL	1,945	1,830	3,775	57	2,547	2,175	291	85	1,167	82·9

Table 31.

Numerical Return of all Exceptional Children in the Area.

			Boys	Girls	Total
Blind. (including partially blind).		Attending Public Elementary Schools ...	6	9	15
		Attending certified schools for the blind..	—	—	4
		Not at school	—	—	—
Deaf and Dumb. (including partially deaf).		Attending Public Elementary Schools...	19	21	40
		Attending certified schools for the deaf	—	—	7
		Not at school	—	—	—
Mentally Deficient.	Feeble Minded.	Attending Public Elementary Schools...	—	—	58
		Attending certified schools for mentally defective children	—	—	—
		Notified to the Local (Control) Authority during the year	—	—	—
		Not at school	2	1	3
	Imbeciles	At school	—	—	6
		Not at school	—	—	4
	Idiots.				
Epileptics.		Attending Public Elementary Schools...	—	—	20
		Attending certified schools for Epilepties..	—	—	—
		Not at School	—	—	—
Physically Defective.	Pulmonary Tuberculosis	Attending Public Elementary Schools. ..	17	13	30
		Attending certified schools for Physically Defective Children	—	—	—
		Not at school	30	35	65
	Other forms of Tuberculosis	Attending Public Elementary schools....	51	38	89
		Attending certified schools for Physically Defective children	—	—	—
		Not at school	18	22	40
	Cripples other than Tubercular	Attending Public Elementary Schools ...	—	—	90
		Attending Certified schools for Physically Defective children	—	—	—
		Not at school	—	—	12
Dull or Backward*		Retarded 2 years	—	—	—
		Retarded 3 years	—	—	—

* Judged according to age and standard.

INDEX.