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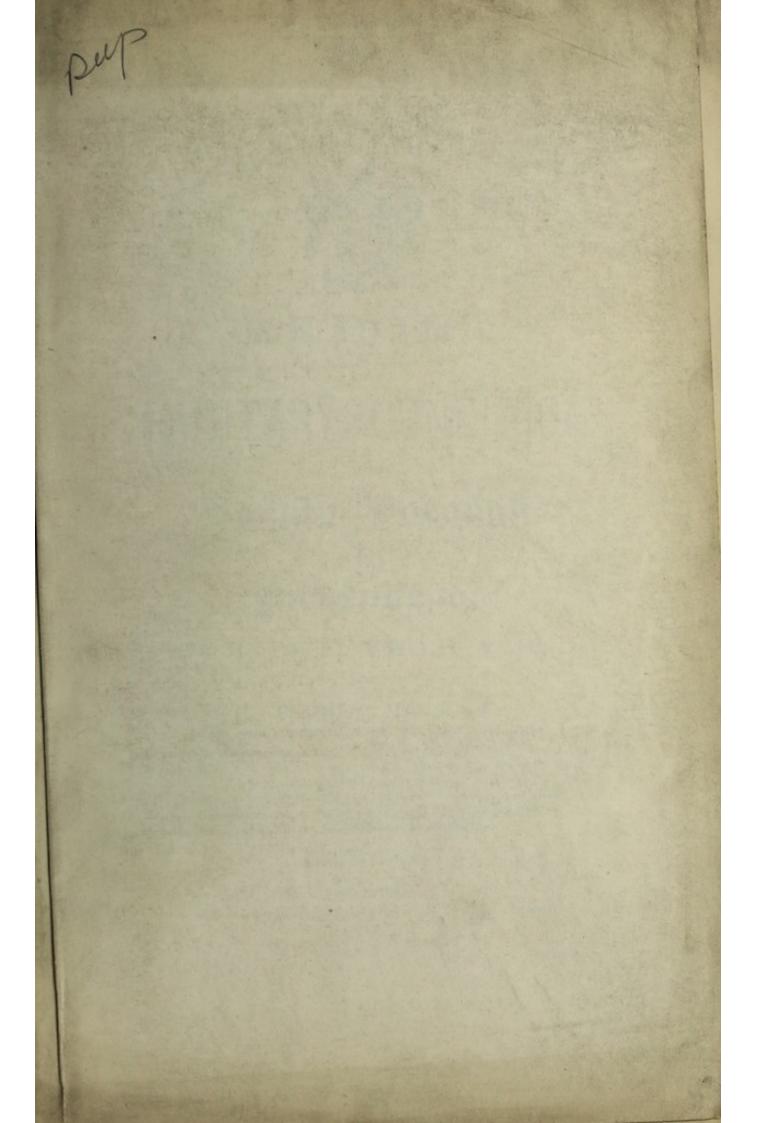
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# REPORT

ON THE

# SANITARY CONDITION

OF THE

# County Borough

OF

# Birkenhead,

FOR THE YEAR 1899,

BY

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#### BIRKENHEAD:

WILSON & JONES, PRINTERS AND STATIONERS, 70 ARGYLE STREET.

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OF THE

## BIRKENHEAD TOWN COUNCIL,

1899-1900.

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AND

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(JAMES GAMLIN, Esq.)

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\*Members of the Health Sub-Committee.

†Members of the Hospital Sub-Committee.

### OFFICIALS

OF THE

# PUBLIC HEALTH DEPARTMENT, 1899.

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R. Sydney Marsden, D.Sc., M.B., Mast. Surg., Dip. Pub. Hlth., F.R.S. and F.R.P.S., Edin., F. Inst. Chem., &c.

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\*William Dawson, Assoc. San. Inst.

Chief Clerk.
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District Sanitary Inspectors.

\*WILLIAM FITZGERALD. \*JOHN LEE. \*H. T. TAYLOR. \*W. H. TILSTON.

Inspector of Workshops and Bakehouses.
Henry Mountfield.

Inspector of Back Passages and Ashpits.

\*Albert Billinghame.

Inspector of Common Lodging Houses and Houses let in Lodgings.
WILLIAM SCOTT.

Disinfecting Inspector.
ISAAC TAYLOR.

Keeper of Disinfecting House.

John Nobes.

Disinfecting Labourers.

ROBERT NIELD. JOHN JACKMAN.

Those marked thus \* have passed the examination of the Sanitary Institute or the Scottish Sanitary Institute.

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To the Mayor, Aldermen, and Council of the County Borough of Birkenhead.

GENTLEMEN.

In accordance with the duty which annually devolves upon me, I have the honour of submitting to you my Eighth Report to the Health Committee on the Health of Birkenhead, viz., that for the year 1899.

The Report will be found to contain a detailed account of the work done by the Public Health Department during the year under review, and I trust it may meet with the same favourable reception which has always been given on previous occasions.

I have the honour to be, Gentlemen, Your obedient servant,

R. SYDNEY MARSDEN,

MEDICAL OFFICER OF HEALTH.

Public Health Department,

Town Hall, Birkenhead,

10th April, 1900.

## COUNTY BOROUGH OF BIRKENHEAD

### DURING 1899.

## SHORT SUMMARY,

Area in Acres 3,850, or a little more t	han 6	squar	e miles.
No. of Inhabited Houses, Dec. 31st			20,632
Population (at Midsummer)			114,376
Rateable Value		£	537,316
1d. in the £ yields for General Purposes			£2,175
1d. in the £ yields for Sanitary Purposes			£2,025
Number of Persons per Acre (Density of Popu	lation	)	29.70
Birth Rate per 1,000 living			31.73
Death Rate do			19.35
Zymotic Death Rate do			2.86
Deaths of Children under 1 year of age to 1,00	0 Birt	ths	185
Percentage of Uncertified Deaths			0.67
Percentage of Children successfully vaccinated			84.33

### THE SANITARY CONDITION

OF THE

# COUNTY BOROUGH OF BIRKENHEAD

DURING 1899.

# Report of the Medical Officer of Health to the Health Committee.

In presenting my Eighth Annual Report on the Sanitary Condition of Birkenhead, which deals with the year 1899, I regret that I am unable to give so favourable an account of the public health as it was my privilege to do last year, the death-rate having increased from 17.5 in 1898 to 19.3 in 1899. There seems, however, to have been no special cause for this increase, but a slightly greater fatality amongst all classes of disease during the year; and this has been general in its distribution throughout the country, the average death-rate of the thirty-three principal towns having also advanced from 19.0 in 1898 to 20.2 in 1899. It will be seen therefore, that in spite of the advance above indicated, our death-rate compares favourably with those of the other large towns.

In writing my successive Annual Reports it has been my custom to draw attention to such injurious conditions as existed from time to time, and which seemed to me to require the special attention of the Committee; and also as to such steps as have been taken for their improvement. I do not propose to repeat these in my present Report, as what I said on the subject last year still holds good.

In the succeeding pages will be found details of the work carried on by the Public Health Department, together with the vital and mortal statistics of the Borough during the year under consideration, as follows:—

# THE WORK OF THE PUBLIC HEALTH DEPARTMENT DURING 1899.

Ordinary Sanitary Operations.—The ordinary sanitary operations of the Department have continued to receive unremitting attention. House-to-house inspections of the cottage property in the Borough have been regularly made. Gulleys and passage drains have been periodically cleansed, public fountains, &c., have been scoured and kept in order, and the systematic removal of ashpit refuse at stated intervals has been carefully superintended.

Summary of Nuisances, &c.—The summary of nuisances investigated and dealt with during 1899 is as follows:—

			1899.
Number of nuisances reported			6383
Number abated without formal notice			602
Number of formal notices given			5781
Number abated after formal notice as	nd wit	thout	
proceedings			5771
Number of cases in which proceedings	were t	aken	
for ordinary nuisances			10
Number abated after proceedings			10
Number of cases in which summonses v	were is	ssued	
for non-payment of disinfecting	expe	nses.	
Amounts and costs received in ea	ach ca	se	1

Number of cases in which proceedings were taken
for keeping a common lodging house in
an improper manner, in accordance with
Bye-Law 8 0
House disinfecting notices 1737
Under Infectious Diseases (Prevention) Act 1250
Nuisances at houses let in lodgings 40
Nuisances at common lodging houses 3
Notices for cleansing of filthy house 25
A brief statement of the other measures taken in 1899 for
correcting or getting rid of whatever appeared to be prejudicial
to health is subjoined.
Sanitary defects reported by the Inspectors and
referred for the action of the Borough
Surveyor 450
Houses or parts of houses specially disinfected by
sulphurous acid or other disinfectants 2111
Notice to whitewash and efficiently cleanse milk-
houses, cowsheds and dairies, given and
complied with 325
Offensive privies ordered for conversion into water-
closets 150
Parcels of infected bedding and clothes disinfected
at the Disinfecting House 363
Parcels of infected or discarded bedding and
clothes destroyed 298
Carcases of dogs and cats &c. removed from pools
or waste land and buried 152
Deposits of putrid fish and other objectionable
refuse removed 9
Total 3858

In addition to the above,

- 377 excavations were made for the purpose of testing the condition of house drains.
- 276 smoke tests were applied to drains of premises reconstructed under the supervision of this Department.
  - 62 water tests were applied to drains.
- 399 smoke tests were applied to the drains of new buildings, in conjunction with the Borough Surveyor's Department.
  - 14 library books were taken and destroyed from houses where infective diseases had been notified to exist.

It will be seen from the above that the Department is kept well at work, and there is a very large increase in the work to be performed, this is in part due to the new Acts of Parliament which have come into force since 1st January, 1892, to the ever-increasing population and consequent greater crowding, and also on account of the more thorough manner in which examinations are now made. The latter tends to the advantage of the public, both as regards health and comfort, and every effort is made to keep down public or private nuisances dangerous to the community.

District Inspections.—The following is a statement of the work done by the District Inspectors of Nuisances and the Disinfecting Inspector during 1899.

				and Re	evisits made tary Proper	e to
District I.—In	specto	r Fitzgerald			5199	
,, II.—	,,	Lee			3586	
,, III.—	,,	H. T. Tayl	or		3760	
,, IV.—	,,	W. H. Tils	ston		3867	
Disinfecting In	spect	or Isaac Tayl	or		8712	
		Total			25124	

Smoke Nuisances.—Sixteen observations were taken of the smoke emitted from the factory and other chimneys of the Borough during the year 1899.

In five cases the Health Committee felt called upon to prosecute the offenders against the Acts, and in all of these cases penalties and costs were imposed by the magistrates.

The reduction of the smoke nuisance is one which is very carefully watched by the Inspectors, and much benefit has resulted in the past by their vigilance in this matter.

# Inspection of Common Lodging Houses and Houses let in Lodgings.

The following is a statement of the work performed during the year 1899 by the Inspector of Common Lodging Houses and Houses let in Lodgings, viz:—

#### REGISTERED COMMON LODGING HOUSES.

Day Inspections	 	 	 757
Night Inspections	 	 	 99

There has been one addition to the register during the year, and at present the total number of registered lodging houses is eleven.

#### REGISTERED HOUSES LET IN LODGINGS.

Day Inspections	 	 	 4229
Night Inspections	 	 	 9

Fourteen additional houses were put on the register after being properly measured up, and duly certified as fit for the purpose. The total number of houses let in lodgings on the register at the end of 1899 was 576.

Overcrowding and Cellar-occupation.—Though the repression of overcrowding and cellar-occupation presents exceptional difficulties, much has been accomplished in the past year. Four cellar dwellings were reported by the Inspector, and in every case suppressed.

## FACTORY AND WORKSHOP ACTS, 1878 to 1891.

In connection with the carrying out of the provisions of these Acts, the following is a statement of the work done by the Inspector during the year, viz:—

- 1476 visits have been made to workshops.
  - 480 visits have been made to bakehouses.
    - 37 workshops, including 2 bakehouses, have been placed on the register during the year, making a total of 674 up to the end of 1899, of which 77 are bakehouses and 33 are confectioners' shops.
    - 20 workshops have been closed.
    - 26 workshops have been transferred to more suitable premises.
- 372 nuisances in connection with workshops have been reported and abated.
  - 61 notices have been served for the abatement of nuisance arising out of defective drainage, and 12 for inefficient ventilation.
  - 80 notices to cleanse and limewash the workshops have been served and complied with.
  - 45 occupiers of workshops have limewashed their premises under inspection, but without waiting for the formal notice.
    - 2 underground bakehouses have been altered and reconstructed so as to improve the sanitary arrangements.
    - 1 case of overcrowding has been reported and stopped.

- 30 new workshops and removals have been notified to H.M.
  Inspector of Factories as referred to in section 3, subsection 3, of the Act.
- 7 workshops have been provided with w.c. accommodation, where none previously existed.

Lists of out-workers have been carefully kept, and notices in the form prescribed by the Secretary of State, as given in my Report for 1892 (pp. 57 and 58) have been served when necessary.

Bakehouses.—The duties involved in carrying out the provisions of the Acts relating to the sanitary condition of bakehouses have been put under a special Inspector, and during the year 480 visits have been made to bakehouses, and very special attention has been paid to the keeping of the bakehouses in a clean and healthy state, free from all effluvia from drains, privies, and other nuisances. Many sanitary defects have been discovered and remedied. Great attention has also been paid to see that a proper water supply is provided for each bakehouse, and that efficient ventilation can be secured; whilst regular limewashing has been required and enforced in every case.

There has been a very great improvement secured by this systematic inspection.

## "Shop Hours Act, 1892."

In carrying out the provisions of this Act the Inspector has paid 600 visits to different shops, and the occupiers' names and addresses have been placed upon a register specially kept for the purpose, together with the date of his visits.

#### The Hours of Barmaids.

The Shop Hours Act gives power to the Sanitary Authorities to restrict the hours of barmaids also to 74 hours per week. In some hotels, as I have remarked in former years, these girls are required to follow their occupation for upwards of 100 hours a

week, which is altogether too long. I would again call attention to the fact that I consider it desirable that the benefits of the Act should be extended to these girls, and recommend the matter to the serious consideration of the Authority.

#### Laundries.

130 visits were made during the year to the 19 laundries at present on the register.

Ashpits, &c.—A good deal of interest has been taken in this subject during the year, and I may remind you that the question as to the number of privies and compound middens in the Borough was carefully gone into in 1893, and it was then estimated that at Midsummer of that year the approximate number still in existence within the Borough was about 2721.

The Health Committee has been dealing with these middens year after year as opportunities have arisen, and during the past year 150 have been converted into water-closets and dry ashpits, properly covered in and ventilated, and provided with efficient doors and fastenings.

Since the above number of 2721 compound middens was estimated, there have been 2139 conversions ordered; thus leaving a balance of 582 remaining to be dealt with at the end of the year. But in addition to those abolished under notice a large number have been done away with by the owners themselves, and I estimate that not more than 400 privies now remain.

Public Urinals.—From time to time I have called the attention of the Committee to the insufficient accommodation in the form of public urinals which is provided in the Borough; and which leads to the objectionable use of many passages and other places for such purposes, creating thereby a serious nuisance and a number of insanitary spots which ought not to exist if the subject was properly grappled with. I can only again repeat the statement so that the matter may not be lost sight of.

I am glad to say that some effort has been made to provide these conveniences during the year, but considerably more will have to be done in this direction before the town is at all adequately provided for.

### Open Sewer-Ventilators in the Road.

During the year 1899 the number of complaints received regarding nuisances arising from the effluvia from the "sewer-ventilators," which form a direct communication between the public sewers and the streets, has again been very large.

A special Committee has now been appointed to consider the subject, but up to the end of the year it had made no report, so I make no comments except to repeat that I am still of the same opinion as expressed in my last annual report, viz., that surface grids are a distinct nuisance.

## Water Supply.

It is important for the health and well-being of the community that a proper and full supply of water should be obtainable. The water supply of Birkenhead is obtained from deep wells sunk in the new red sandstone, the water-bearing stratum being covered by an impermiable bed of clay varying from about 2-ft. 6in. to 60-feet in thickness. The water is pure, as pumped, according to the analyst's reports. No form of filtration is used. The supply is constant, and there has been no change in the supply or the quality of the water since its inauguration.

It will be seen by referring to the following table that at the present time the average supply, per head, per day is no less than eighteen gallons, a very satisfactory amount.

The quality of the water supplied is also excellent, and is obtained from the new red sandstone at three different pumping stations from an average depth of 207 feet.

I am indebted to the Water Engineer (Mr. W. A. Richardson, C.E.) for the following table of extracts from his Annual Reports, showing at a glance the amount of water delivered in the townships of Birkenhead, Claughton, and Tranmere, for various purposes, for the year ending March 25th, 1899.

	Sewer Flushing	Street Watering	Trade per Meter	Work- shops	Water for domestic use	Estimated population of Birken- head, Claughton and Tranmere townships	rate per head per day of popula- tion for domestic	Average rate per head per day of popula- tion for domestic use, allowing 5°/o for slip of pump
YEAR	Gallons	Gallons	Gallons	Gallons	Gallons		Gallons	Gallons
1899	7732960	11056400	277313450	500500	700618694	105923	18-12	17:22

The Statistics for the years 1885 to 1898 were given in my Report for 1898.

# Seizure and Destruction of Unwholesome Meat, Fish, and Vegetables.

The Meat and Food Inspector (Mr. John M. Carnie) has furnished the following particulars of meat, &c., unfit for human food, seized and destroyed during 1899.

The total weight of the meat taken amounted to 299,275 lbs., but of this a large proportion was voluntarily surrendered by the butchers, they having called the Inspector's attention to it.

As in all recent years, a considerable proportion of the meat taken was on premises in connection with the Foreign Animals Wharf, Woodside; and of 1254 calves taken many were newly born animals, or calves taken away after the slaughter of the mother from cows landed at Woodside. The total number of oxen killed at Woodside and inspected by us during 1899 was 193,770, and of sheep five, but a very large number of sheep were killed at Wallasey, within our jurisdiction, of which I have no return. At the Abattoirs in New Chester Road there were killed 760 beasts, 10,554 sheep and lambs, 460 calves, and 4593 pigs.

Tuberculosis.—During the year  $36\frac{1}{2}$  carcases of beasts, weighing 27,864 lbs., 15 carcases of pigs, weighing 2,455 lbs., and 9,945 lbs of offal were destroyed through being affected with tuberculosis; the total amount weighing 40,424 lbs.

The following tables having reference to the subject of tuberculosis are continued.

Tranmere Abattoirs.

Year.	Number of Cattle Slaughtered.	Number affected with Tuberculosis.	Number of Cows affected.
1892	809	33	30
1893	404	8	8
1894	443	10	9
1895	757	15	12
1896	685	5	5
1897	557	11	9
1898	632	13	5
1899	760	33	3

Tranmere Abattoirs.

Year.	Estimated Number of Cattle slaughtered from Cheshire and Wales.	Number affected with Tuberculosis.
1892	409	33
1893	300	8
1894	243	10
1895	357	15
1896	285	5
1897	333	11
1898	350	17
1899	360	3

At the Abattoirs there were 4,593 pigs killed, 15 of which were affected with tuberculosis, 9 of these coming from Cheshire, 1 out of Wales. In the case of sheep, but very few are affected; thus in 1899 there were 10,554 sheep and lambs killed, not one of which was affected with tuberculosis; there were also 460 calves slaughtered.

Woodside and Wallasey Lairages.

Year.	Number of Cattle Inspected by us.	Number affected with Tuberculosis.	Number of Carcases taken for Tuberculosis.	Number of cases where only the offal or other parts were taken.
1894	202,047	4	2	2
1895	178,798	11	7	4
1896	223,014	53	12	41
1897	241,717	113	26	87
1898	204,892	258	49	209
1899	193,770	230	13	87

Proceedings taken under the "Sale of Food and Drugs Acts, 1875 and 1879, and Margarine Act, 1887."

The Chief Inspector of Nuisances (Mr. William Dawson) gives the following summary of proceedings taken under these Acts during 1899.

The total number of samples taken during the year was 87, viz.—Butter 24, Cheese 6, Coffee 7, Lard 11, Milk 31, Mustard 7, and Vinegar 1.

Out of the above, 5 samples of Milk were reported adulterated by the Public Analyst, and proceedings were taken in respect of each case, the results of which are as follows, viz.—

Quarter Ending		rter Ending		Quarter Ending		Quarter Ending No.		No.	Article.		Amount of Adulteration.	Penalty imposed excluding Costs.	
March Decem.		::	::	262 303 312 316 317	Milk Milk Milk Milk Milk		7 per cent. of water 5 per cent. of water 17 per cent. of water 23 per cent. of water 14 per cent. of water	5 0 0 1 1 3 8 12	0 0 0				

The Milkhouses.—The regulation of dairies, cowsheds, and milk-shops, and the supervision of milk-sellers, has had systematic attention for a number of years. Special care is taken that the ventilation, lighting, cleansing, draining, and water supply of premises used for milk-trade are thoroughly efficient. Towards the close of the year 1888, new regulations for the more efficient control of the trade were drafted, and these were approved and made by the Town Council, acting as the Local Authority for the Borough, on January 2nd, 1889. A copy of these regulations was appended to the Report for 1888, and printed copies are supplied free to dairymen, milk-shop keepers, &c. The register of milk-sellers is revised week by week. The total number of milk-shops is 166, in addition there are 21 cowsheds, and 45 farmers resident outside the Borough, registered to purvey milk inside the Borough.

Twice every year notice is sent to all the milk-sellers requiring that the walls and ceilings of every room in the occupation of Registered Milk-sellers, used for storage or sale of milk, shall be lime-washed twice every year, that is to say, in March and September; but if the walls are painted, then they must be washed and thoroughly cleansed twice every year, in March and September.

## Meteorological Results.

By way of introduction to the remarks it is proposed to make on the noteworthy features of the meteorology of the year, the following tabular statement is submitted of the mean temperature and atmospheric pressure, and the amount of rainfall in each month of 1899. It has kindly been prepared by W. E. Plummer, Esq., M.A., F.R.A.S., Director of the Observatory, Bidston Hill, Birkenhead, who also furnishes particulars weekly of the daily observations taken under his directions, from which Table IV. in the appendix is compiled, and also the information on which the remarks with reference to meteorological conditions and epidemics are based.

	1899			Mean Tempera- ture	Mean Barometer	Rainfall 1 ft. above ground
				o	Inches	Inches
January				41.0	29-742	2.926
February				41.1	29-821	1:459
March				42.9	30:047	1.110
April				46:4	29:781	2-258
May	**			50.2	30:006	2.206
June			***	59.5	30.068	2.993
July				61-2	30.068	2-225
August		**	**	63.7	30.080	2.200
September	**	**	**	55-7	29.808	3.493
October	4.4		**	49.5	30.019	2.917
November	**	**		48.8	30.082	1.086
December			**	36.7	29.854	2.934

The meteorological results show as follows:-

Barometer.—The mean barometer of 1899 (29.953 inches) was higher than in recent years. The monthly mean was high in January, July and September. It was low in February, April, May and October. The highest reading during the year was on the 15th of January, when 30.60 inches was reached. The lowest barometer touched was 28.76 on November 25th.

Temperature.—The mean Temperature in 1899 was 50·33 degrees F., about the mean yearly temperature in the locality. The severest weather was experienced in the first quarter and last month of the year. There was freezing, more or less, on seven days in January, twelve days in February, and ten days in March, and on two days in November, and fifteen in December, the temperature being very low during the whole of this month. The lowest temperature reached at any time during 1899 was 20·6 degrees F. on December 13th and 14th. The highest temperature reached was 85·0 degrees F. on the 24th of August.

Rainfall.—The rainfall in 1899 (27.713 inches) was higher than last year, and above the average. The number of hours at which rain fell during the year was 695 as compared with 678 last year, which is about the yearly average. The heaviest fall on any single day was on August 28th (0.962 inches).

Wind.—The average wind force in 1899 was at a rate of 15.81 miles an hour, somewhat lower than last year, but about the local average. The most rapid motion of air during any single hour of the year was on January 12th—on this day the rate of wind per hour was from 14 miles to 83 miles. The rate for the whole twenty-four hours of the day was 1,138 miles, a very exceptional rate, and a storm of some severity, giving a mean hourly motion of air of 47.4 miles. There were seven hours in the year in which there was no wind—these calm hours occurred on February 24th, June 12th, July 5th and 31st, August 2nd and 23rd; 58.16 per cent. of the winds were westerly, including due south, a percentage about the average.

Humidity of the Air.—The mean difference between the wet and dry bulb of the thermometer in 1899 was 49.80, about the average.

Cloud.—The proportion of cloud to clear sky is estimated twice daily. In 1899 the proportion was 64.99 per cent. This percentage is less than the mean proportion.

Relative Mortality of different portions of the year. -The year's meteorology naturally introduces the next subject to be considered, viz.: - the distribution of the mortality over the four quarters, as the relative mortality of different portions of the year must necessarily be affected by the atmospheric conditions which have marked its progress. Of the sum of the deaths registered in Birkenhead and Claughton, 362 were entered to the first quarter, 292 to the second, 368 to the third, and 316 to the fourth; of the sum of the deaths in Tranmere and Oxton, 178 appear in the first quarter, 129 in the second, 160 in the third, and 161 in the fourth. In Bebington the numbers of deaths registered in the four quarters were respectively 14, 4, 8, and 11; and in the Union Hospital and Workhouse the numbers 57, 51, 46, and 57. Expressed in death rates per thousand living, the mortality of the whole Borough in 1899 was 21.3 in the first quarter, 16.6 in the second quarter, 20.3 in the third quarter, and 19.06 in the fourth quarter.

The connection between Meteorological Conditions and Epidemics.—In endeavouring to trace any connection between Meteorological Conditions and Epidemics, it is obvious that there are only two circumstances likely to have any effect. First, temperature, and secondly, rainfall or humidity; and with regard to the first, since the temperature curve will always have a maximum in the summer, and a minimum in the winter, it seems more important to consider the variations of temperature from the normal condition than the absolute temperature itself. Exceptional circumstances cannot be explained by ordinary phenomena, and the weekly variations of both temperature and rainfall, from the regular amounts have therefore been tabulated. These variations are set down in the following table.

Weekly Return of Cases of Scarlet Fever, Measles, Typhoid, and Diphtheria notified during 1899, and the weekly variations of Temperature and Rainfall.

No. of	Parama	Persons of	Number of	1	NT6	No of
week	Excess	Excess of	Number of cases of	No. of cases	No. of	No. of
since	of rain in	temp. in	scarlatina	of measles	cases of	cases of diphtheria
Jan. 1st.		degrees F.		reported	typhoid	diphtheria
1899	inches	r.	reported		reported	reported
177000						
	in.	0				
1	-·06	+1.4	9	1	0	5
2	-11	+4.2	2 4	7	9	1
3	+.92	+6.6	3	9	5	î
4	+.88	-2.1	6	3	6	8
5	29	-5.0	4	3	1	5 1 1 8 5
6	+.41	+1.6	0	3	3	0
7	+.07	+3.3	6	4	3	5
6 7 8	39	-0.1	6	4	2	4
9	39	-1.4	4	11	1	3
10	+.01	-0.8	11	10	. 1	3 4 1
11	42	+5.4	5	17	6	1
12	—·29	-7.5	5	7	3	1 3
13	+.17	+4.9	12	1	2	3
14	+.02	+3.8	3	8	2	1
15	+.61	-2.8	4	13	4	1 1 0 1 2 0 1
16	23	-4.0	4	7 9	1 3	1 1
17	+:17	+0.3	3 2	4	2	9
18 19	12 + · 22	-0.4	8		0	ő
20	+ 22	0.0	7	7 12	3	1
21	+:40	-4.5	4	6	1	0
22	- 42	+0.7	2	3	6	0 1 2 2 2 0
23	45	+2.8	2 3	14		2
24	49	+2.2	3	8	2 2 2 2	2
25	+1.00	+2.4	4	6	2	0
26	+.90	-0.3	1	13	2	4
27	08	+1.9	2	16	5	0
_28	+:12	+0.9	2	25	2 2	2 1
29	41	+2.2	1	14	5	0
30	22	-0.4	2	27	5	0
31	75	+3.3	7	20 20	4	0
32	58 53	+0·4 +2·2	4	15	9	1
33 34	53 77	+7.2	3	12	16	0
35	+1.06	+2.1	1	13	13	1
36	-:53	+2.9	2	14	12	4
37	37	+1.3	1	35	6	1
38	+.29	-2.0	3	62	13	0
39	+.23	-3.5	2	97	15	1
40	+.04	-3.1	6	118	12	5
41	-16	-1.1	7	137	13	3 0
42	88	-1.2	5	167	9	
43	-17	+2.4	2 2 2 8	175	13	1 0 3 1
44	+:12	+4.3	2	177	5	9
45	- '22	+5.6	2	184	6	1
46	-·73	+3.6	8	185	3	
47	- '74	+4.7	5 6	192	6	î
48	-:48	+8.8	2	164	8	1 0 5
49	+·29 -·48	+3·7 -10·6	1	166 107	5	5-
50 51	48	-5.0	1	70	1	1
52	+ 95	-2.9	3	46	5	1
UA	1 00	20	1	10	1	

#### PREVALENCE OF ZYMOTIC SICKNESS DURING 1899.

Notification of Cases of Dangerous Infectious Diseases.—The 75th section of the Birkenhead Corporation Act, 1881, which requires householders and medical men in attendance to notify cases of dangerous infectious diseases to the Sanitary Authority, gives facilities for supplementing the statement of the mortality from zymotic diseases with a statement of cases of sickness due to some of the chief zymotic diseases, month by month, as they were reported. The diseases the Authority understand by the term "dangerous infectious diseases" are—

Small-pox Measles German Measles Scarlatina Diphtheria Membranous Croup Fevers Typhus
Typhoid
Continued
Relapsing
Puerperal Septicæmia
Cholera

The cases notified appear in the following return, showing that 3068 cases were notified during the year, being a large increase on the number notified last year. This was chiefly due to a widely spread epidemic of measles, particularly prevalent during the last four months of the year.

The following Table gives the number of Notifications of Dangerous Infectious Diseases in each month of the year.

1899	Smallpox	Measles	German	Scarlatina	Diphtheria	Typhus Fever	Typhoid	Puerperal Fever.	Fever	Cholera	Croup	TOTAL
January February March April May June July August September October November December		20 17 42 35 33 38 92 67 - 235 693 765 424	1 1 4 3 4 1 1 2 1 1	18 14 38 13 22 12 8 14 11 22 22 11	18 12 10 4 3 8 3 1 6 8 6 7		20 -10 -12 -11 -8 -11 -18 -41 -50 -50 -26 -18 	1 1 2  1  1  2 2	:::::::::::::::::::::::::::::::::::::::		2 6	80 55 109 66 71 72 125 124 305 775 823 463

and the next Table the number of cases of the different diseases notified in each year since 1882, when compulsory notification came into force.

The statement is as follows:-

Year	Smallpox	Measles	German Measles	Scarlatina	Diphtheria	Typhus	Typhoid	Fever	Croup	Cholera	TOTAL
1882		615		152	9	99	86	25		1	987
1883	3	548		169	19	42	76	17			874
1884	131	941		277	13	17	74	9		1	1463
1885	24	1001		556	21	1	38	2 4 4			1643
1886	6	595	10	617	24	18	58	4			1332
1887		1334	12	914	21	8	142				2435
1888		819	4	438	36	13	234	1 1			1546
1889		1057	13	262	30		191	1			1554
1890		1620	17	247	35	64	182	1			2166
1891		524	38	180	28	38	197	2			1007
1892	12	1542	5	218	25	10	150	4 9			1966
1893	15	540	11	421	77	4	221	9			1298
1894	12	1818	16	379	133	7	194	6			2565
1895	3	258	32	430	142	3	192	12	9		1081
1896		2166	35	606	115		149	6	1		3078
1897		1141	5	630	80	2	152	17	1		2028
1898	1	589	9	643	190	1	243	17	3 6		1696
1899		2461	23	205	86	1	275	11	6		3068

The Disinfecting House.—Good service continues to be rendered by the Disinfecting House in Prince Edward Street. Mattresses, palliasses, beds, pillows, bolsters, woollen clothing, and fabrics from infected rooms are brought here and disinfected by super-heated steam. The bedding and clothing are fetched and delivered by the Corporation Officers in light covered vans provided for the purpose. Occasionally, when the bedding is exceptionally foul, it is destroyed at the disinfecting house furnace, and replaced or allowed for at the cost of the Authority. There is a man specially appointed to take charge of the apparatus; and a Disinfecting Inspector to supervise the disinfection of premises, the removal and delivery of bedding, &c.

The Refuse Destructors.—There are now two refuse destructors, one in New Chester Road and one in Cleveland Street.

A description of these has appeared in my former reports, and I feel that it is unnecessary to say more about them here.

#### VITAL AND MORTAL STATISTICS FOR THE YEAR.

Area.—The Borough has an area of 3850 acres, or a little more than six square miles.

Population.—The population of the Borough of Birkenhead on the 30th of June, 1899, was according to the estimate of the Registrar-General, 115,162, an addition to the estimated population on the 30th of June, 1898, of 1973 persons, of which 1237 represents the excess of births over deaths or natural increase.

Before accepting this estimate as correct, and taking it as the basis of our calculations for the different birth and death rates, &c., in our vital statistics for the year, we must look closer into the matter and see whether this estimate corresponds with the estimate arrived at by other means from information obtainable within the Borough. If we do this we shall find that the Registrar-General's estimate for 1899 is too large by about 766.

The following are the statistics on which I make this statement:—

In 1891, at the time the census was taken, there were in Birkenhead 17,495 inhabited houses with an average of 5.7 individuals per house, giving a population of 99,857. Since that time, however, there have been 1840 new houses built and 332 houses demolished up to Midsummer, 1899, or taking the one from the other an addition of 1508 houses to the total number in the Borough. To get at the actual number of inhabited houses at Midsummer, 1899, wants a little further calculation, thus:—

Number of inhabited houses at time of census  Number of uninhabited do do  Number of houses built since census, less those demolished	1,545
Total number of houses in the Borough, 30th June, 1899	
Total number of inhabited houses do	20,066

Allowing the same number of persons per house as was found to exist at the time of the census return, viz., 5.7, and multiplying this by the number of inhabited houses, we shall

arrive at a more accurate estimate of the population than by the method adopted by the Registrar-General. In this way  $5.7 \times 20,067 = 114,376$ , a difference of 766 on these two estimates.

In calculating the rates, &c., contained in the following tables, I have therefore taken this revised estimate as my basis.

Population, Area in Acres, and Density of Population.—The next table shows the population of the several townships forming the Borough as given in the census of 1891, and the estimated population at Midsummer, 1899, the area in acres, and the number of persons per acre, as follows:—

Townships	Popula- tion at Census 1891	Population at Midsummer 1899	Area in Acres	Persons per Acre
Birkenhead	58287 3510	66762 4020	1279 <sup>3</sup> 438 <sup>3</sup>	52°16 9°16
Oxton	30680 4429	35141 5073	1071 814	32·80 6·23 13·72
Higher Bebington (part of)	2951	3380	2464	
Birkenhead Borough	99,857	114,376	3850	29.70

Uninhabited Property in the Borough.—I am indebted to the Chief Constable (W. S. Davies, Esq.) for the particulars contained in the following table, showing the amount of uninhabited property in the town during the year:—

Return of Un	ninhabited Proper	rty in	the I	Borough,	1898-9	99.
	District.	Private Houses	Shops	Cottages	Dock Cottages	Total
For the Half-year ending 31st December,	Birkenhead	48	60	92		200
1898.	Claughton and Oxton	48	2	33	64	147
1000.	Tranmere & Bebington	72	15	86	**	173
	Total for Borough,.	168	77	211	64	520
	Birkenhead	87	100	122		309
For the Half-year	Claughton and Oxton	40	2	8	77	127
ending 30th June, 1899.	Tranmere & Bebington		14	94		162
1000.	Total for Borough	181	116	224	77	598
	Birkenhead	64	60	86		210
For the Half-year	Claughton and Oxton		3	13	84	132
ending 31st December, 1899.	Tranmere & Bebington		21	63		171
1000.	Total for Borough	183	84	162	84	513

It will be seen from the above that the number of uninhabited premises on the 31st December, 1899, was 7 less than that for the half-year ending 31st December, 1898. The fact that 433 new houses were built and 28 old houses pulled down during the year must also be taken into account, making an actual addition of 405 houses during the year. The number of uninhabited and unoccupied premises on the 30th June, 1899, was 482 houses and 116 shops, or 598 altogether.

The total number of inhabited houses on the 31st December, 1899, was 20,119, or 53 more than on the 30th June.

The number of new houses built during the last nine years is 2083, as shown in the following table, for which I am indebted to the Borough Surveyor. The number of houses demolished during the same period being 249.

The total number of houses in the Borough on the 31st December, 1899, was approximately 20,774, and the approximate estimate of warehouses, schoolrooms, &c, in the Borough is 1268, as estimated by the Police Authorities.

## Number of New Houses erected in the Borough, 1891-99.

January	1st to December 31st,	1891	87
,,	,,	1892	99
,,	,,	1893	108
,,	,,	1894	139
,,	,,	1895	175
,,	- ,,	1896	255
"	,,	1897	349
,,	,,	1898	438
,,	,,	1899	433
		Total	2083

The number of houses demolished during 1899 was 28. Number demolished from January 1st, 1891, to December 31st, 1899, was 346.

The number of new houses built from January 1st to June 30th, 1899, was 190, and the number demolished 14. The number built from July 1st to December 31st was 243, and the number demolished was 14.

Births and Deaths in Birkenhead.—During the year 1899 the returns of the local registrars recorded 3451 births and 2214 deaths in the Borough of Birkenhead. The natural increase in the population in 1899 was therefore 1237. Of the births 1759 were males and 1692 were females; of the deaths 1137 were males and 1077 were females.

Further particulars as to the births and deaths in the Borough in 1899, that is to say, the number registered in each quarter of the year, and the number referred to each township, are given in the table subjoined. The births and deaths in the premises belonging to the Union are entered separately.

BIRTHS	1st Qr. 2nd		2nd	nd Qr. 3rd Q		Qr.	Qr. 4th Qr.		1899		Total
DIRTHS	M.	F.	м.	F.	M.	F.	M.	F.	м.	F.	Tota
Birkenhead	270 5 183 4 6 8	256 9 118 7 7 7	305 6 141 8 5 6	278 6 160 11 3 10	278 11 121 4 6 4	244 6 130 11 3 4	260 12 141 8 14 3	259 3 147 11 3 4	1113 34 536 24 31 21	1037 24 555 40 16 20	2150 58 1091 64 47 41
Birkenhead Borough	426	399	471	468	424	398	438	427	1759	1692	3451

DEATHS	1st Qr. 2n		2nd	and Qr. 3rd		rd Qr. 4th		th Qr. 1		899.	Total
DEATHS	м.	F.	м.	F.	M.	F.	м.	F.	м.	F.	1000
Birkenhead	183 6 76 1 8 40	162 11 91 10 6 17	139 4 58 0 1 21	144 5 67 4 3 30	189 4 88 6 2 23	169 6 60 6 6 6 23	159 4 73 7 7 7 38	152 1 76 5 4 19	670 18 295 14 18 122	627 23 294 25 19 89	1297 41 589 39 37 211
Birkenhead Borough	314	297	223	253	312	270	288	257	1137	1077	2214

Birth-rates and Death-rates in Birkenhead.—The annual rates, per 1000 living, of births and deaths, for the whole incorporated area, and the townships within it, appear in the next table.

1000	Annua per 1000	l Rate Living
1899	Births.	Deaths
Birkenhead	32·2 14·4 31·04 12·6 13·9	19·4 10·1 16·7 7·6 10·9
Birkenhead Borough including B. and D. in Union premises	30:17	19:35

The birth-rate for 1899 is 0.17 per 1000 lower than last year, and 2.05 per 1000 lower than the average birth-rate during the ten years preceding. The death-rate is 1.85 per 1000 higher than that recorded last year, and 0.15 per 1000 lower than the average death-rate for the preceding ten years.

The death-rate of Birkenhead township being 2.7 per 1000 living higher than the death-rate in Tranmere, and 9.3 per 1000 higher than that of Claughton, is in part accounted for by the much greater density of population in Birkenhead. The death-rates of Oxton and Bebington being low is in part due to these being practically rural districts, to the easy circumstances of most of the inhabitants, and the large proportion of domestic servants and unmarried adults therein.

The next table shews the estimated population of Birkenhead, the density of population and the number of births, deaths and zymotic deaths, and also the birth and death-rates deducible from these figures for this year. These figures for the years 1878 to 1898 were given in my report for the latter year.

	Estimated	Persons		THS.	DEA	ATHS.	Zyмотю	DEATHS.	
Year	Population at Midsummer acre.		Number of Births	Birth rate per 1000 per annum	per 1000 of Donthe		Number of Deaths	Death rate per 1000 per annun	
1599	114376	29.70	3451	31.72	2214	19:35	328	2.86	

The proportion of Deaths of Infants under One year to the Births registered.—The proportion in Birkenhead Borough in 1899 was equal to 185 per 1000, which is considerably above the average (169) for ten years—1889-98—but below that recorded last year, when it was 186. In the thirty-three great cities and boroughs in England and Wales, amongst which Birkenhead is classed, the proportion of deaths under one year to births registered in 1899 was 181. It varied greatly in the different towns, ranging from 154 in Croydon to 255 in Preston.

Birth-rates and Death-rates in the thirty-three great towns in England.—In order that the birth-rates and death-rates of the Borough of Birkenhead in 1899 may be compared with the corresponding rates of the most populous cities and boroughs in England, the following table has been compiled from the Registrar General's Quarterly Returns of Births, Deaths, and causes of Death in London and the other great towns, 1899. The table gives the estimated population of the thirty-three large towns and the estimated number of persons per acre in each at Midsummer, 1899. The birth-rates and death-rates are for the fifty-two weeks ending 31st December, 1899.

Out of the whole number of cities and boroughs in this list sixteen had lower birth-rates and fifteen lower death-rates than Birkenhead. The birth-rate of the gross population of the great cities and boroughs was nearly the same (0.3 greater) as that of Birkenhead, and the same may be said of the death-rate which was 0.3 per 1,000 living higher than the corresponding rate in Birkenhead. The population of Birkenhead it will be noted is greater than nine on the list of great towns.

The birth-rate of the thirty-three towns in 1899 (30·2) is lower than the mean rate of the ten preceding years, 1887-98, and lower than last year (30·3). The death-rate of the thirty-three towns in 1899 (20·2) is 1·2 per 1,000 higher than last year (19·0), but below the average rate in the preceding ten years (21·5).

Thirty-three Great Towns-Population, Persons to Acre, Births, Deaths, &c., for the Year 1899.

(As estimated by the Registrar General.)

-				-	-	-	_	-	_	_	_	_	_	_		_	_	_	-	-		-		_	-	_	_	_	-
10	Year .	Deaths of C under one age to 1000	181	167	197	173	197	158	181	166	181	179	195	162	185	181	506	500	587	189	255	150	181	171	194	175	175	193	
	١,٠١	sourraid	18728	4196	465	192	333	355	169	73	857	142	290	38	II.	265	982	429	202	130	270	200	556	397	570	341	119	170	
		Fever.	2472 1668	804	E	24	192	- 34	19	00 9	125	50	115	15	100	56	2.2	1-0	55	41	39	170	46	7.1	82	142	200	53	
	·qBno	V)-griqoodW	4345 2625	1720	101	19	3:	119	119	800	166	97	98	90	800	43	222	66	17.	25	200	000	9	161	57	144	98	87	
from	.8	Diphtheri	4551	1961	188	61	121	00 00	19	141	111	960	24 00	3 00	210	11	83	0.0	58	25	68	0 10	25	328	460	65	50 O	53	
Deaths from	rer.	Searlet Fer	1520	868	19	10	120	120	00 ;	11	98	18	5 6 6	8 83	100	355	45	65	16	23	11	96	106	64	91	33	988	58	
I		Measles	5231 3088	2143	181		52	41	=:	00	197	000	138	3	010	88	703	211	88	4	7:	13	92	157	550	120	91	8	
	·x	od-linas	145	00	:	: :	:	: :	:	:	: :	:	: :	: :	:-		:	:	: :	:	:	:		:		141	:	:	
	motic	Deaths fro Principal Zy Discases	31992	11228	1049	307	192	595	385	276	1522	271	797	174	9363	511	2130	999	491	980	165	146	549	1178	1583	826	362	415	
	ate	Principal Nymotic Diseases.	3.02	2.48	1.56	2.20	3.51	1.86	2.06	25.56	96-51	01.6	0.00	1.65	25.43	3.18	3.95	9.16	4.82	2 67	1.70	1.20	2.33	62.2	4.33	39.88	5.00	1.85	
	Annual Rate per 1000 Living	Deaths.	20.2	19.8	12.0	19.0	19.7	18.5	15.4	21.8	8.03	17.9	50.0	16.9	19.32	19.9	24.6	20.00	19.6	19.1	16.9	18.3	18.4	1.61	07.00	19.3	18.8	9.03	
	Del	Births.	30.2	29.4	25.1	6.16	26.5	20.5	28.6	35.3	34.3	29.1	58.6	28.1	35.6	6.65	35.6	24.8	25.3	27.0	93.0	23.1	23.4	30.6	34.6	04.30	9.98	31.4	
		Deaths.	229731 140042	68968	1916	2329	2180	5840	2857	1985	10701	1953	4772	1796	16686	3218	13347	3078	2214	2579	1671	1779	4344	8090	7980	4008	1997	4687	
		Births.	343294 210174	133120	3204	8028	4980	9845	5309	8123	17609	3290	6910	2984	22490	4838	17692	8732	2818	3643	9374	2248	9099	12987	12446	5003	3880	7164	
	Estimated Population	Midsummer 1899	11404408 6858656	4546752	127759	128226	190741	320911	185826	88821	514956	113266	239384	106401	634212	162221	543902	150772	1130811	135154	108464	97721	236241	423889	361169	145619	106552	228625	
			rowns	:	: :		: :	:	: :		: :	:		:	: :	: :	:		: :	: ::	: :	: :	: ::	:	: :	:	: :		
		CITIES AND BOROUGHS.	33 Towns 32 Provincial Towns	London	Crovdon .		Portsmouth Plymouth	Bristol	Cardiff	Wolverhampton	Birmingham	Norwich Loiostor	Nottingham	Derby	Liverpool	Bolton	Manchester	Oldham	Burnley	Bluckburn	Freston	Halifax	Bradford	Leeds	Sheffield	Sundenland	Gnteshead	Newcastle-on-Tyne	
-							_	-	_	_			_	-	-	-	-	-	_			_	-	-	-	-	-		_

Tabular Statements.—In the appendix to this Report are tabular statements of the year's mortality within the Borough, classified according to the diseases, ages, and localities, a weekly register of deaths and of meteorolgical results, a monthly summary of deaths from all causes and zymotic diseases, with the rates per 1,000 per annum, together with a table specifying the occupation or "description" of each person whose death was entered during the year, a return of deaths in the Birkenhead Union Hospital and Workhouse, and a sketch map of the town showing the boundaries of the wards, &c.

Table I. shows the deaths registered in the whole Borough during 1899, arranged with reference to the age at which death occurred in each case. They are disposed in four sub-tablesthe deaths in the townships of Birkenhead and Claughton in the first, deaths in Tranmere (exclusive of the Union premises) and Oxton in the second, the deaths in the incorporated portion of Higher Bebington in the third, and the deaths in the Union Hospital and Workhouse in the fourth. The deaths of infants are entered up in three columns—those under one year, those of one year and under two years, and those turned two years and under five. Then follow the deaths of children and young persons, those turned five years and under twenty; and of adults those turned twenty and under forty, and those turned forty and under sixty. In the last two columns are the deaths of old people, those turned sixty and under eighty, and those of eighty and upwards. Reference to this table will show that, of the gross local mortality for 1899, the deaths of infants under one year of age accounted for 640, those over one year but under five years of age 306, children and young persons 134, adults 637, old people sixty years of age and upwards 496. In the township of Birkenhead and Claughton 435 deaths occurred among infants. 207 in children over one and under five, 82 among children and young persons, 374 among adults, and 240 among old persons. In Tranmere and Oxton the number of deaths of infants under one year was 193, of those under five and over one year 93, of children and young persons 37, of adults 149, and of old people 155.

In Bebington Ward there were 5 deaths of infants under one year, three over one and under five years, 6 of children and young persons, 9 of adults, and 14 of old people.

The relative proportion of deaths in 1899 among the infants, children and young persons, adults and old people, to the whole number of deaths, in certain sub-divisions of the borough, in the premises controlled by the Guardians of the Poor, and in the entire incorporated area, is readily shown in tabular form, thus:—

PERCENTAGE OF DEATHS AT CERTAIN	Under	A	60 years				
Ages to Total Deaths.	Year	1-5	5-20	20-60	and upwards		
Birkenhead and Claughton	19.6	9.3	3.7	16.8	10.8		
Tranmere and Oxton	8.7	4·2 0·1	1.6	6.7	7·0 0·6 3·8		
Union Hospital and Workhouse	0.3	0.1	0.4	4.7	3.8		
Birkenhead Borough	28.9	13.8	6.02	28.7	22.4		

In this respect the local mortality compares favourably with the mortality in most great cities and boroughs. The local mortality for 1899 also compares favourably with the local mortality during the decade 1889-98. The percentages taken out for Bebington have little significance, the number of deaths being so small.

Table II. is the weekly register of deaths in the Borough of Birkenhead for 1899. The deaths are entered as in Table I., into four sub-tables, representing Birkenhead and Claughton, Tranmere and Oxton, Bebington, and the Union Hospital and Workhouse. Table III. is a summary of the weekly register of deaths. Table IV. is a Weekly Condensed Register of Meteorological Results. Table V. is a Lunar Monthly Table of deaths from all causes, and Zymotic Diseases, with the rates per 1,000 per annum. Table VI. a street register of deaths; and Table VII. a register giving the description of those who died.

The Classification of Death Causes.—The causes of death, as they appear in Tables I. and II. in the appendix, are systematically classified according to the principles laid down by the late Dr. W. Farr, the nosology being that adopted by the

Registrar-General until within the last few years, which experience has shown to be well suited for statistical purposes. The death causes are arranged under classes and orders, the latter corresponding to the families of Natural History. Genera, or what in diseases would be varieties, are not distinguished. All death causes are thus conveniently classified under 116 heads some of which, however, include diseases very distinct from one another.

At the beginning of Table I. are the totals of deaths from all causes, and on the next line the totals of deaths from specified causes. The deaths which it is necessary to refer to unspecified causes are not only those ascribed, in legal phraseology, to "visitation of God" or "natural causes," but also those which, with almost equal vagueness, are classified as due to "tumour," "coma," &c. The deaths from specified causes are then divided into five classes. Class I. (the zymotic) embraces all diseases, either epidemic, endemic, or contagious, which are induced by some specific body, or by want of, or by the bad quality of food. The diseases coming under Class II. (constitutional or cachectic) appear to be due to a bad habit of body, and are sometimes hereditary. Class III takes in diseases the effects of which are manifest in disturbing or obliterating the function of particular organs or systems. Class IV. includes the conditions tending to produce death, which are the incidental results of the formative, reproductive, and nutritine processes. Class V. groups together all deaths which are the evident and direct result of physical or chemical forces.

Of the 2214 deaths registered in the Borough during 1899, 2212 were ascribed to specified causes; that is to say 328 to zymotic diseases, 378 to constitutional diseases, 1117 to local diseases, 328 to developmental diseases, and 61 to violence. The proportion of deaths from zymotic diseases, to the whole number of deaths was thus 14.8 per cent. The proportions which deaths ascribed to zymotic diseases bear to deaths from all causes is, however, a matter of no great significance, as of course the general death-rate varies considerably from year to year, and

any increase in the fatality of non-zymotic diseases, such as phthisis or pneumonia (which are closely allied to zymotic diseases) makes the proportion of deaths from zymotic diseases compare more favourably.

An accurate estimate of the relative mortality from zymotic diseases, and from the other four classes of death-causes just referred to, can only be made by taking out the death-rate per 1000 living, as respects each of the five classes. This has been done, and the results are displayed in the following table. Parallel with the column containing the death-rates for 1899 are the corresponding mean death-rate for 1889 to 1898.

		nnual Death-rat per 1000 Living		
CLASSES	1889-98 <b>A</b> verage	1899		
Zymotic Diseases	3:06	2:86		
Constitutional Diseases	2:79	3:30		
Local Diseases	9:66	9:76		
Developmental Diseases	3.05	2:86		
Violent Deaths	0.57	0:53		

This table shows that the death-rate as regards zymotic diseases in 1899 was below the average of the last ten years by 0.20 per 1000. The constitutional death-rate was slightly above the mean by 0.51, and local diseases 0.10 above the average for the last ten years. The death-rate as regards developmental diseases was 0.19 lower than the mean rate. The proportion of deaths due to violence was 0.04 below the mean.

Deaths from Zymotic Diseases.—The deaths from zymotic diseases include 135 by what have been termed the chief zymotics (certain diseases belonging to the miasmatic order), viz., measles 50, scarlatina 5, diphtheria 21, membranous croup 6, fevers 49, and puerperal septicæmia 4. The remaining 193 were entered to what have been called minor zymotics (diseases less prevalent, less fatal, or less obviously zymotic in character), viz., whooping cough 82, erysipelas 6, influenza 23, dysentery 5, diarrhæa 71, syphilis 5, and stricture of urethra 1. The mortality from the chief zymotics in 1899 was equal to a death-rate of 1·18 per 1,000 living, as against 1·43 in 1898 and 1·25 in 1897.

### Relative Fatality of Chief Zymotic Diseases.

The following table shows at a glance the relative fatality of the chief zymotic diseases for the year.

	D	eaths	s from	m Z	ymot	ie D	iseas	es.			Death	rate pe	er 1000	living.	191	
Year	Smallpox	Measles	Scarlatina	Diphtheria	Whooping	Typhus Fever	Typhoid	Diarrhœa	Smallpox	Measles	Scarlatina	Diphtheria	Whooping	Typhus Fever	Typhoid Fever	Diarrhea
1899		50	5	21	82	1	48	71	0.00	0.43	0.04	0.18	0.71	0.00	0.41	0.62

The figures for the years 1878 to 1898 were given in my Report for 1898.

The mortality from measles and scarlet fever was lower than the average, and the mortality from typhoid considerably higher.

Constitutional, Local, and Developmental Diseases and Death Rates—Having given the death-rates in Birkenhead in respect of the five classes into which death-causes have been divided, and the principal and other zymotics, a table is now submitted showing the death-rates in the Borough as respects the orders under which the death-causes belonging to Classes II., III, and IV. have been grouped. Parallel with the column containing the rates of 1899 are the mean death-rates in the ten years of 1889-98.

CONSTITUTIONAL, LOCAL, AND	Annual De per 1000	
DEVELOPMENTAL DISEASES.	1889-98 Average	1899
Dietetic Diseases	0.12	0.51
Parasitic Diseases	0.00	0.00
Diathetic Diseases	0.76	1.23
Tubercular Diseases	1.97	1.85
Diseases of Nervous System, Organs of Circulation ,, Respiratory Organs, Digestive Organs	2·49 1·27 3·95 1·27	1.96 1.77 3.53 1.89
" Urinary Organs	0.43	0.45
,, Organs of Generation	0.03	0.00
,, Organs of Locomotion	0.05	0.04
" Integumentary System	0.06	0.09
Developmental Diseases of Children	0.78	0.65
" ,, Adults	0.02	0.02
,, Old People	1.01	1.01
Diseases of Nutrition	1.18	1.11

The four orders under which constitutional diseases are arranged have little in common except that in typical diseases in each order new morbid products are deposited. Twenty-five deaths took place from dietetic diseases during 1899, viz.—inanition 6, alcoholism 9, purpura 2, and rickets 8. Diathetic diseases account for 141 deaths, of which 91 were due to cancer, 4 to rheumatism, 8 to anæmia, 5 to mortification, 3 to dropsy, 28 were ascribed to tumour, and 2 to gout. All but 32 out of the 141 were deaths of adults. Tubercular diseases account for 212 deaths, of which 171 were due to phthisis pulmonalis, 21 to hydrocephalus, 19 to tabes mesenterica, and 1 to hæmoptysis. 161 of the deaths in this order were of children and young persons, and 51 of adults. The diathetic disease death-rate of 1899 is 0.47 above the local mean rate, and the tubercular disease death-rate of 1899 is considerably below the local mean rate.

Of the eight orders under which Local diseases have been arranged, the first four account for an overwhelming proportion of the mortality referred to this class. The deaths from diseases of the brain and nervous system in 1899 were 225; the deaths from diseases of the heart and blood vessels were 203; the deaths from diseases of the respiratory organs were 404; and the deaths from diseases of the digestive organs were 217. The deaths entered to diseases under the remaining four orders were 68. the 1117 deaths from local diseases, 440 were of infants under five years of age, and 61 were of children and young persons over five years and under twenty. It will be seen that the death-rate as regards diseases of the respiratory organs and nervous system in 1899 was considerably below that of the mean rate. The deathrate as regards diseases of the organs of circulation in 1899 has increased to a point higher than at any period previously recorded in the Borough. The death-rates in respect of diseases of the digestive and urinary organs in 1899 were also about the mean rates.

Of the deaths caused in Class IV., 66 were ascribed to socalled developmental diseases of children, *i.e.*, premature birth 54, malformations 1, and teething 11; to old age 115; and to diseases of nutrition, that is, atrophy, debility, and marasmus, 128. The death-rates for 1899 in this class do not compare unfavourably with the corresponding local mean rates. The number of deaths ascribed to old age is about the average, and the number ascribed to the diseases of nutrition are considerably less than the mean. There is some reason to believe that the number of deaths due to child-birth is under-stated year by year; many deaths in child-bed being certified to secondary causes, "peritonitis," "convulsions," &c.

Of the total number of deaths registered during 1899, 25 males and 56 females survived the age of 80; this works out at the rate of 1.12 per cent. and 2.52 per cent. respectively.

Inquests.—The number of inquests held during 1899 was 153, thus 6.91 per cent. of the sum of the deaths in the Borough formed the subject of official enquiries. Of these inquests, 104 were in the township of Birkenhead, 38 were in Tranmere, 3 in Oxton, 4 in Bebington, and 4 was held in the Workhouse; 85 were on the bodies of males, and 68 on the bodies of females In 1898 the number of inquests held was 135, in 1897—149, in 1896—153, in 1895—165, and in 1894—146. Out of the 153 inquests held, 8 were upon the bodies of infants whose death was due to asphyxia, owing to being overlain. It is a pity that this form of death in children cannot be more stringently dealt with. The present method of dealing with cases of the kind does not tend to reduce their number or frequency.

Deaths not Certified.—Not all the death causes which are classified represent diseases or symptoms observed and certified by medical men in attendance during the last illness, or verdicts following official investigation. A significant proportion of the death causes are entered in the register on the doubtful testimony of deceased persons' relatives or friends, or fellow lodgers. The registrars have, therefore, been required to mark in the returns furnished, every death not certified by a registered practitioner, or made the subject of a coroner's inquest. In 1899, out of the 2,214 deaths registered, 15 (8 males and 7 females) were marked "not certified," that is 0.67 per cent. 3 of these uncertified deaths took place in the township of

Birkenhead, 11 in Tranmere, and 1 in Claughton. 3 of these deaths were of infants under one year of age. The causes of the 15 deaths were entered in accordance with the statements of persons giving information to the registrars as follows:—

Heart Disease, Syncope			1
Acute Congestion of Liver, Pericarditis, and	nd Cra	mp	
of Heart			1
Hypertrophy of the Liver, General Dropsy			1
Apoplexy			1
Phthisis and Dropsy			2
Heart Disease			2
Premature Birth			2
Convulsions			1
Bronchitis and Heart Disease			1
Inflammation of Brain and Convulsions			1
Hæmorrhage from Lung			1
Acute Phthisis			1

though how such conclusions were arrived at does not appear, and I consider such deaths ought not to be registered without a Coroner's certificate.

The proportion of uncertified deaths to the sum of the deaths was as already stated, 0.67 per cent. as compared with 0.80 per cent. in 1898.

Deaths classified according to Localities.—Tables I, II., III., IV., and V., in the appendix, having been fully discussed, are followed by Table VI., in which the deaths registered during 1899 are classified according to the localities in which they occurred. The Street Register is divided into three parts—the part marked "A" including the streets and places in the old Birkenhead Improvement District; the part marked "B" the streets and places in Tranmere and Oxton; and the part marked

"C" the streets and places in the incorporated portion of Bebington. Opposite each street or place is the number of deaths from all causes and from zymotic diseases, registered as occurring in that street or place during the year. In the headings to the different parts of this Table (and in Tables I., II., and III.) the names of townships are not placed as indicating the locality referred to, but the names of wards. Thus the old Improvement District appears as Cleveland, Claughton, Grange, and Argyle Wards; Tranmere and Oxton appear as Oxton, Egerton, Clifton, and Mersey Wards; and the portion of Bebington incorporated appears as Bebington Ward. As it was felt that particulars of the number of deaths from all causes, zymotic diseases, and causes not certified, in each ward, would prove interesting, and as the Street Register does not afford this information, the Table here submitted has been drawn up.

18	99	fr	om lauses	Zyn	s from notic eases	Car	s from ises rtified	Inqu	of of uests
		м.	F.	м.	F.	м.	F.	м.	у.
Cleveland	Ward	 203	173	26	26	1 1	1	25	8
Claughton	**	 18	23	4	2	1			
Grange	**	 298	273	47	42			21	21
Argyle	11	 169	181	26	36	1		14	15
Oxton	**	 14	25	3	2				3
Egerton	**	 73	79	8	15	2	2 4	6	5
Clifton	***	 160	150	27	28	2	4	11	3
Mersey	***	 62	65	14	8	1		7	6
Bebington	"	 18	19	3	3				4
Birkenhead I cluding deat premises		1137	1077	162	166	8	7	85	68

This table will, with the Street Register, furnish all the information that can be required on the subject. It is well to note that the streets opposite which the highest death totals appear are not the streets in which the mortality was really the highest. In 1899, as in past years, the sickness and mortality was most prevalent in the smaller streets and alleys inhabited by the very poor.

The following table shows the relative mortality of the wards during 1899.

	1899		Population at Census 1891.	Estimated Population at Midsummer 1899	General Death-rate per 1000 Living	Zymotic Death-rate per 1000 Living
Cleveland	Ward	 	 17345	19868	18.9	2.61
Claughton	,,	 	 3510	4020	10.1	1.49
Grange	**	 	 25353	29039	19.6	3.06
Argyle	**	 	 15589	17855	19.6	3.47
Oxton	"	 	 4429	5073	7.6	0.98
Egerton	"	 	 9987	11440	13.5	2.01
Clifton	**	 	 15091	17285	17:9	3.18
Mersey	11	 	 5602	6416	19.7	3.42
Bebington	"	 	 2951	3380	10.9	1.77
Birkenhea deaths in			99857	114376	19:35	2.86

The deaths in the Borough Hospital, instead of being entered as occurring in Cleveland Ward, have been referred to the wards from which the patients who died were received. Similarly, the deaths in the Birkenhead and Wirral Children's Hospital and Lying-in Hospital have not been entered to Grange Ward and Argyle Ward respectively, but as occurring in the wards from which the patients who died were received. It will be seen that the ward showing the highest zymotic death-rate in 1899 was Argyle Ward. The highest death-rate was in Mersey Ward, and that all the three wards in the township of Birkenhead show a high death-rate compared with the wards in the remainder of the Borough, except Mersey Ward, which has a similar class of population.

General and Zymotic Death-rate, month by month, throughout the year.—Table V. in the appendix shows the general and zymotic mortality, month by month, throughout the year. The general death-rate was highest in the month ending March 25th, 23·9, and lowest in the month ending July 15th, 13·6. The zymotic death-rate ranged from 4·54 in September to 1·70 in July.

Descriptions of those who died during 1899.—The last of the tables appended, Table VII., gives a "description" of all those whose deaths have been registered during the year with the exception of the deaths taking place at the Union Hospital and Workhouse. The information is furnished in each case by the

person registering the death, and is doubtless trustworthy. The table may be of some use in supplying the material for a rough estimate of the effects of the year's mortality on the community, i.e., the local loss sustained by the professional and commercial classes, the artisan and labouring classes, and that largest class of all, the non-productive. Those also employed in any recognised form of skilled or unskilled labour may here see the number of deaths in 1899 in the ranks of fellow-workers in the Borough. The number of bread-winners removed by death from the local community in 1899 is computed thus:-The first two columns of Table VII. are cast and added together, and from this is subtracted the sum of those described as annuitants, pensioners, ladies and gentlemen of independent means, retired tradesmen &c., or whose occupation is "unknown." It does not, of course, follow that everyone described as belonging to any particular trade or calling was necessarily working for a living within a reasonable time of his or her decease, or that everyone described as a son daughter, wife, or widow was non-productive, or merely occupied with domestic duties. Still, a proximately correct estimate of those among the deceased who were self-supporting and familysupporting, as distinguished from those who were wholly dependent, or only partially self-supporting. The number of those who must have been wholly dependent on others may be computed from figures in the age table.

Illegitimacy.—Statistics relating to illegitimacy are important, not merely on account of the bearing which such a subject has upon the social life of the community, but also with a view ultimately of showing to some extent the influence which illegitimacy exerts upon the "chances of life" of infants, as it is well known that the death-rate of illegitimate children is considerably greater than that of those born in wedlock. I have thought it desirable, therefore, to continue these statistics in this report, as the subject is one of some interest.

The following table gives the total number of legitimate and illegitimate births, with the rate per 1000 of births and per 1000

living, and statistics relative to the deaths of such children under one year of age.

Illegitimate Birth and Death Rates, 1899.

Registrar's	Esti- mated	Bus	тнѕ		TIMATE THS	Total deaths of	Deaths of Illegitimate	Proportion of deaths of Illegitimates
Sub-District	Population 1899.	Legit- imate	Illegit- imate	to 1000 living	to 1000 births	children under one year of age	children under one year of age	to total deaths under one year of age
Birkenhead Tranmere,Oxton, Claughton, and	66762	2092	58	0.86	27.7	428	33	12.9
Bebington	47614	1238	63	1.32	50.8	205	17	12.0
Total	114376	3330	121	1.05	36.3	633	50	12.6

It will be seen from the above that for every 1000 legitimate births registered during the year 175 deaths of legitimate children under one year of age took place, whilst for every 1000 illegitimate births registered during the same period no less than 413 deaths of illegitimate children under one year of age took place. In other words, 41.3 per cent of the illegitimate children born died within the first year of life. These numbers are higher by 1 per cent than those for last year, but are very far from satisfactory.

Vaccination.—Mr. John Carter, Clerk to the Board of Guardians of the Birkenhead Poor Law Union, has kindly supplied me with the following latest completed information relative to vaccination in the District, viz:—

Returns as to the vaccination of children born during the year from 1st July, 1898, to 30th June, 1899.

Births	Success- fully Vaccin- ated	Insus-	Had Small- pox	Died Unvac- cinated	Number in respect of whom certificates of con- scientious objection has been received	Postponed by Medical	Districts the	unknown or which can- not be	In Abey- ance
3562	3004	34	nil	409	10	31	25	43	6

The percentage of children successfully vaccinated out of the total number of births was therefore 84.33 as compared with 85.23 last year and 86.32 in the 1897—a very good record.

The number of deaths of unvaccinated children, viz: 409, gives a percentage of 11.48 as compared with 10.23 last year.

Pauperism.—The latest information obtainable is for the year Michaelmas, 1898, to Michaelmas, 1899. The cost of relief during this period was as follows, viz:—

In maintenance in year ended Michaelmas, 1899 was	£11727	2	3
Out-door relief (including non-resident and boarded-out paupers)	7974	11	$10\frac{1}{2}$
Total	£19701	14	11/2

The lowest number of In-door Poor in any week during 1899 was 755, and the highest number 931.

The lowest number of Out-door poor in any week during 1899 was 1406, and the highest number 1586.

Marriages.—The number of marriages in the whole of the Superintendent Registrar's District of Birkenhead during the year 1899 was 1157, giving an annual rate per 1000 living of 10·11 as compared with 9·40 last year. There were 93 marriages more during 1899 than in the previous year, an increase of 8.03 per cent

## HOUSING OF THE WORKING CLASSES ACT, 1890.

Under the provision of this Act, on the 18th July, 1899, I made a representation under Part II. of the Act respecting the insanitary condition of the premises, Nos. 37, 39, 41, 43, 45 and 47 Hope Street. These premises, generally, were in a very insanitary and delapidated condition. They have since been entirely demolished.

On the 10th October, 1899, I made a representation under Part II. of the Act, respecting the condition of the premises, Nos. 6, 8, 10, 12, 14, 16 Birch Road, 1, 2, 3, 4 Hall's Yard, four cottages known as Hughes' Cottages, and 1, 2, 3, 4, 5, 6, 7 and 8 Hawthorne Cottages at Oxton, which were in a state so dangerous and injurious to health as to be unfit for human habitation. These premises are to be partly demolished, and the rest re-arranged and made sanitary.

On the 10th October, 1899, I made a representation under the same part of the Act respecting premises, Nos. 114 and 118 Market Street, and the houses adjoining known as 1 to 16 Brunswick Avenue, and although at the close of the year these houses had not yet been demolished, I have reason to believe that by the time I have to write another annual report these may have been done away with also.

On the 14th November, 1899, I made another representation under the same part of the Act, respecting Nos. 118, 120 and 122 Well Lane, and No. 241 Church Road, Tranmere. These premises have now been entirely demolished.

Thus it will be seen a considerable amount of work in Sanitary administration and improvements was accomplished during the year, and the results I think must be satisfactory to the Health Committee.

I am, Gentlemen,

Your obedient servant,

R. SYDNEY MARSDEN,

MEDICAL OFFICER OF HEALTH.

Public Health Department,
Town Hall,

10тн Мау, 1900.

and the same of th A CONTRACTOR OF THE PARTY OF TH

# THE INFECTIOUS DISEASES HOSPITAL, FLAYBRICK HILL.

### Report for the Year 1899.

### HOSPITAL VISITING SUB-COMMITTEE.

MR. ALDERMAN WILLIAM GETLEY, J.P., Chairman.

- ,, ,, THOMAS SHAW.
- " Joseph Perrin.
- ,, ,, JAMES WOODCOCK.
- ,, Councillor H. L. Pearson, M.R.C.S.

MATRON:

MISS EMILY YEOMANS.

The Fever hospital consists of four isolation wards, containing twelve beds and two cots in each ward, and two observation wards containing four beds and two cots each. The total number of available beds is therefore fifty-six, and twelve cots in addition.

During a large part of the year, however, these prove quite unequal to the wants of the town, and patients have repeatedly to be refused admission. I consider that another ward ought to be provided, but this would entail considerable enlargement of the Administration Block, the accommodation of which is now insufficient to meet the requirements of the staff, either for nurses or servants.

The floor space allowed for each bed in the hospital is 156 superficial feet, and the air space per bed 2,028 cubic feet.

The Nursing Staff consists of five charge nurses and ten assistant nurses.

The total number of patients treated in the hospital during the year (January 1st to December 31st) was 204; of these, 183 were admitted during the year, and 21 remained in hospital from 1898. Out of those admitted 33 died, giving a death-rate of 18.0 per cent., a high percentage, but when the serious nature of the diseases is considered, and the exhausted condition in which many of the cases are received, it is readily understood why the fatality is so great, but the chief cause of this large rise in the death-rate for this year was the excessive malignancy of the epidemic of typhoid which appeared—many of the cases of typhoid being the worst I have seen in all my experience.

The following table gives a summary of the cases treated in the hospital during the year 1899, along with the results obtained.

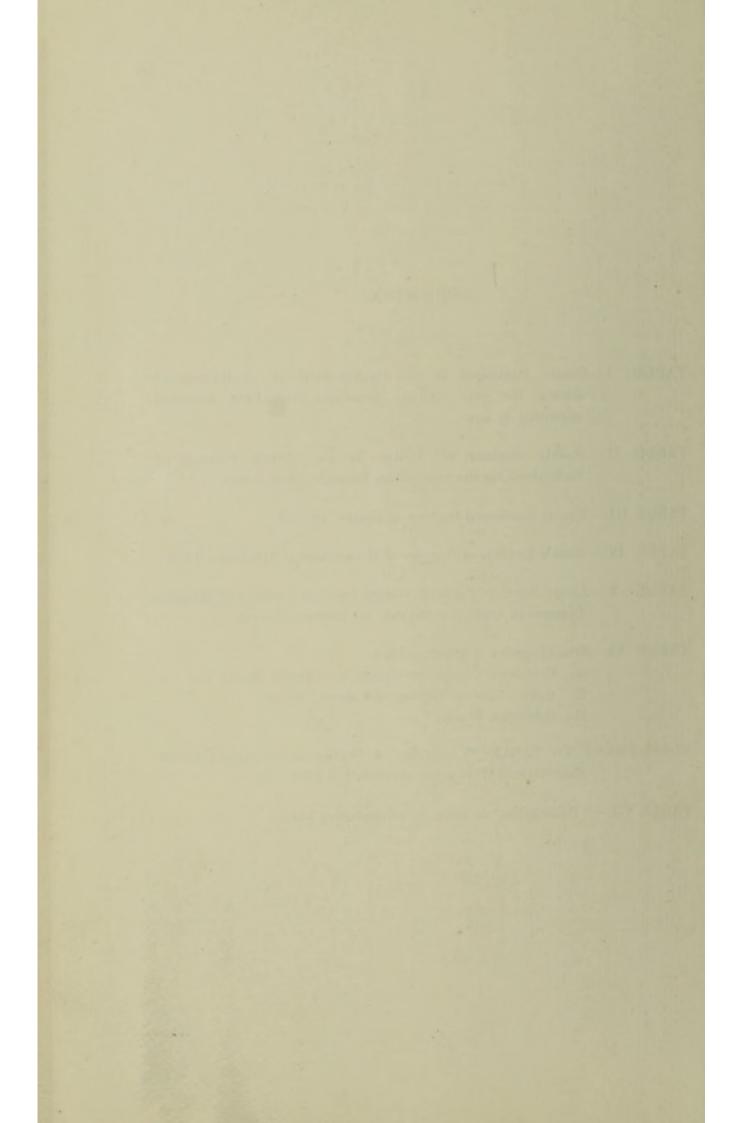
DISEAS	ES	м.	F.		e- ered	D	ied
				м.	F.	M.	F.
c \ (rem	aining	 6	3	6	3		
Scariatina adm	ritted	 27	22	25	21	2	1
Typhoid Fever   1	emaining	 8	4	8	4		
	dmitted	 71	52	53	40	16	12
Diphtheria	"	 1	2	1	2		
Measles	***	 	4		4		
Typhus	35	 1				1	
German Measles	33	 	1		1		
Cold	**	 1		1			**
Marasmus	**	 	1				1
Total		 115	89	94	75	19	14

The case of cold was sent in as typhoid.

The same that th

#### APPENDIX.

- TABLE I.—Deaths Registered in the County Borough of Birkenhead during the year ending December 31st, 1899, classified according to age.
- TABLE II.—Weekly Register of Deaths in the County Borough of Birkenhead for the year ending December 31st, 1899.
- TABLE III.—Weekly Condensed Register of Deaths for 1899.
- TABLE IV .- Weekly Condensed Register of Meteorological Results for 1899.
- TABLE V.—Lunar Monthly Table of Deaths from all causes and Zymotic Diseases in 1899, with the rate per 1000 per annum.
- TABLE VI. Street Register of Deaths-1899.
  - A. Cleveland, Claughton, Grange, and Argyle Wards.
  - B. Oxton, Egerton, Clifton, and Mersey Wards.
  - C. Bebington Ward.
- SUPPLEMENT TO TABLE VI.—Return of Deaths in Birkenhead Union Hospital and Workhouse, registered in 1899.
- TABLE VII.—" Description" of those who died during 1899.



		CLEVELAND, CLAUGETON, GRANGE AND ABOVLE WARDS.	OXTON EGRETON, CLIPTON AND MERS	EY	BERDWOON WARD.	UNION EMPITAL.	RESE
CLASS	CAUSES OF DEATE.	Acce at Dearen. Sex.   Sex.	Ann as Duals. Sex.	Tores.	Acces at Deate. Sec. 1	Acces as Dearen San	fex.
		Value 1 - 2 - 5 - 20 - 40 - 60 - 8 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2		50.00	1- 2- 3- 20- 40- 40- 40- M 2 2	*** ** ** ** ** ** ** *	M F F
	All Courses Special of Courses	\$80,300 pt 20,000 pt 00,11 pt 00,50,00 pt 00,00	Second Strip to Commonwell or recognision was as	CE L	0 42 10441111 0 0 0	11 1 1 1 SEPTEMBER 1 1 10 SE	EINCHON WITH
1000	Eyenfis Dismon Conflictional Dismon Lond Tomore Designation (Commental Promises Victor Deaths	30 00 100 100 100 0 10 0 10 0 10 0 10 0		100 1 100 2 200 2 201 1			249 240 250 256 250 554 507 500 1117 568 564 255 65 25 67
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III.	L. Districts D. Parkette D. Parkette D. Districts D. Districts D. Districts		\$1000 BESSET 1 B 5			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	S. Dienter of Norman broken B. Organ of Chrodelma B. Respiratory Organ B. Dignition Organ B. Dignition Organ B. Urman Organ B. Urman Organ F. Organ of Granustion F. Organ B. Beloguemonary System	1	CONTRACTOR CONTRACTOR	2012	10 1 1 1 1 1 1 1	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	THE REAL PROPERTY.
IV	A Addition		111111111111111111111111111111111111111				44 70 7
¥	Ancies or Negligenee     Remode     Negligenee     Neglige     Neglige     Neglige     Neglige     Neglige					2011/10/27	
1	Course L.—Marraneo.  2. Statebase Fra  3. Chicken Fra  5. Mender  6. Nacolitation (Saudel Press)  5. Digitalization (Saudel Press)  6. Opinior						17.7
	Z. Mendennina Cross	100	A particular included and representation of the contract of th	1 0			1 1
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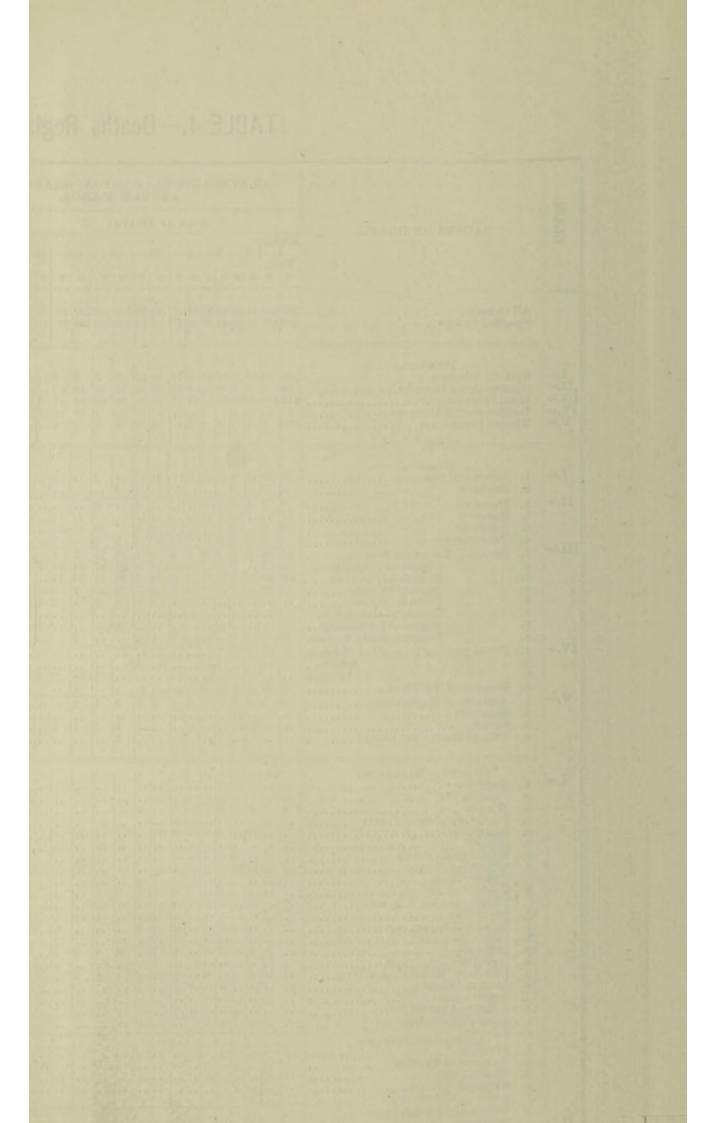
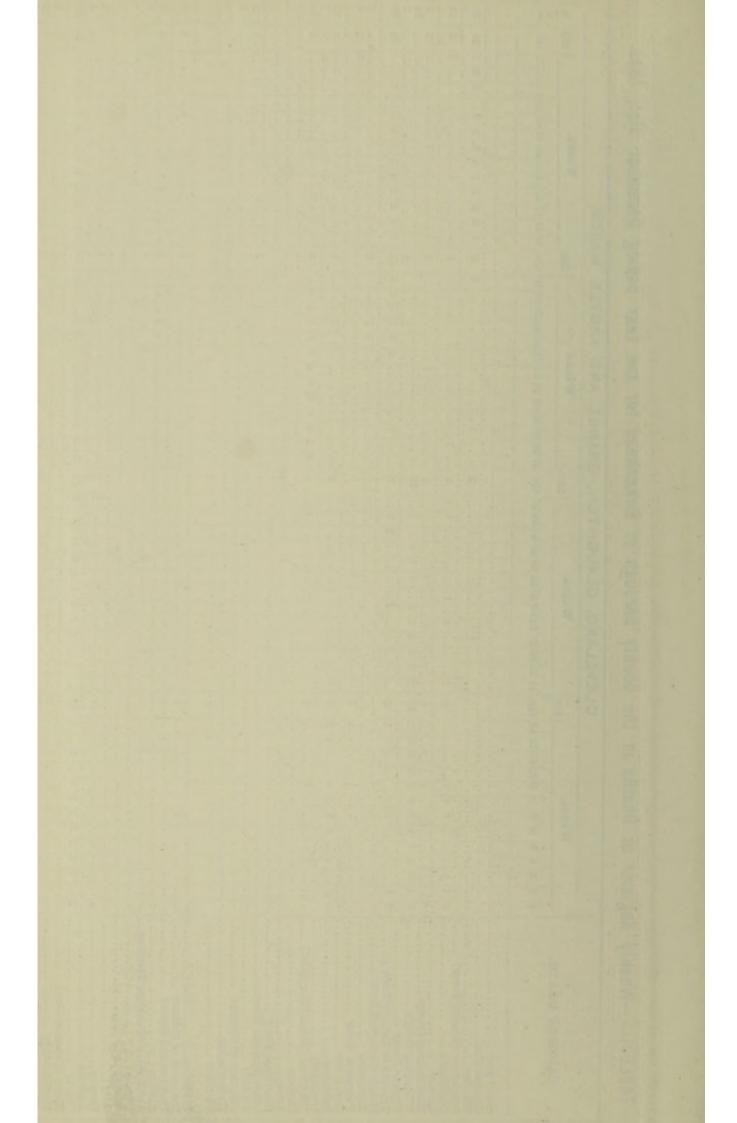


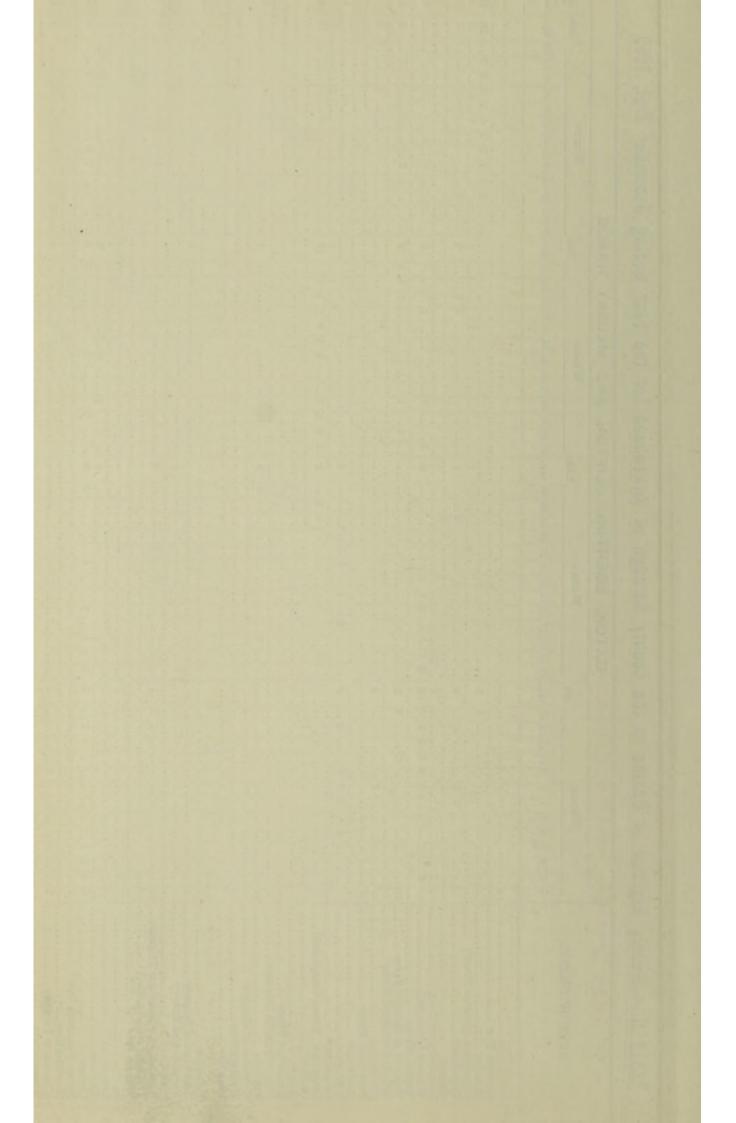
TABLE II.—Weekly Register of Deaths in the County Borough of Birkenhead for the Year ending December 31st, 1899.

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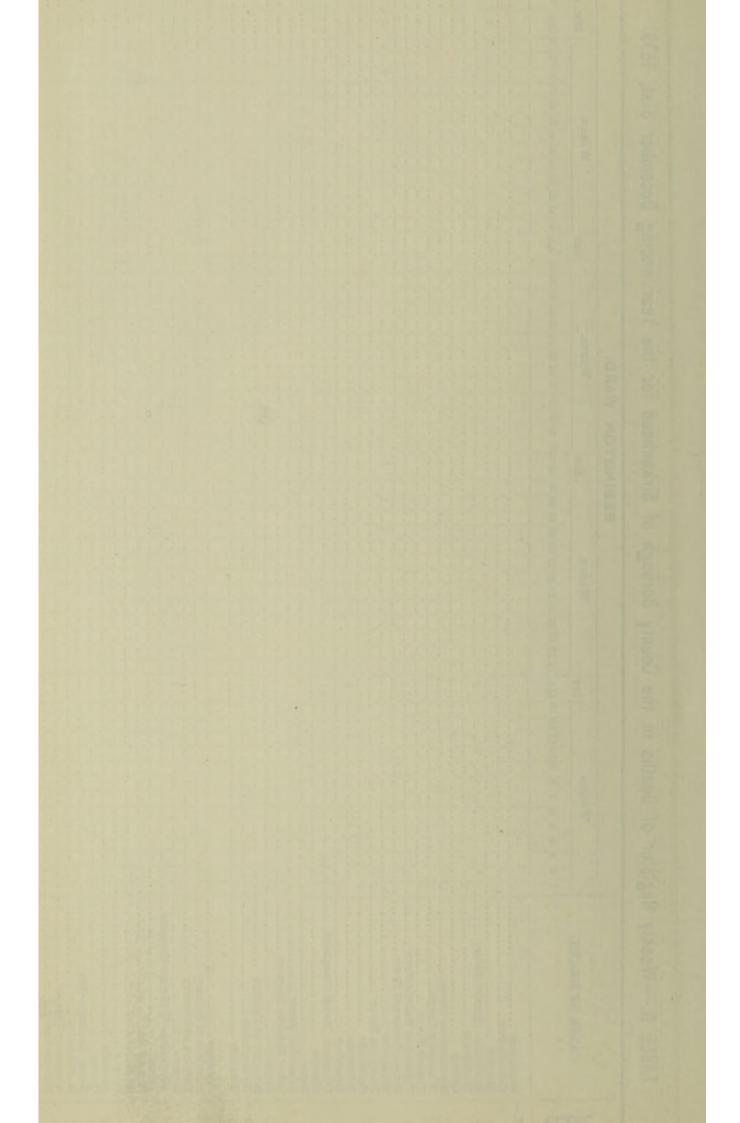


TABLE II.-Weekly Register of Deaths in the County Borough of Birkenhead for the Year ending December 31st, 1899.

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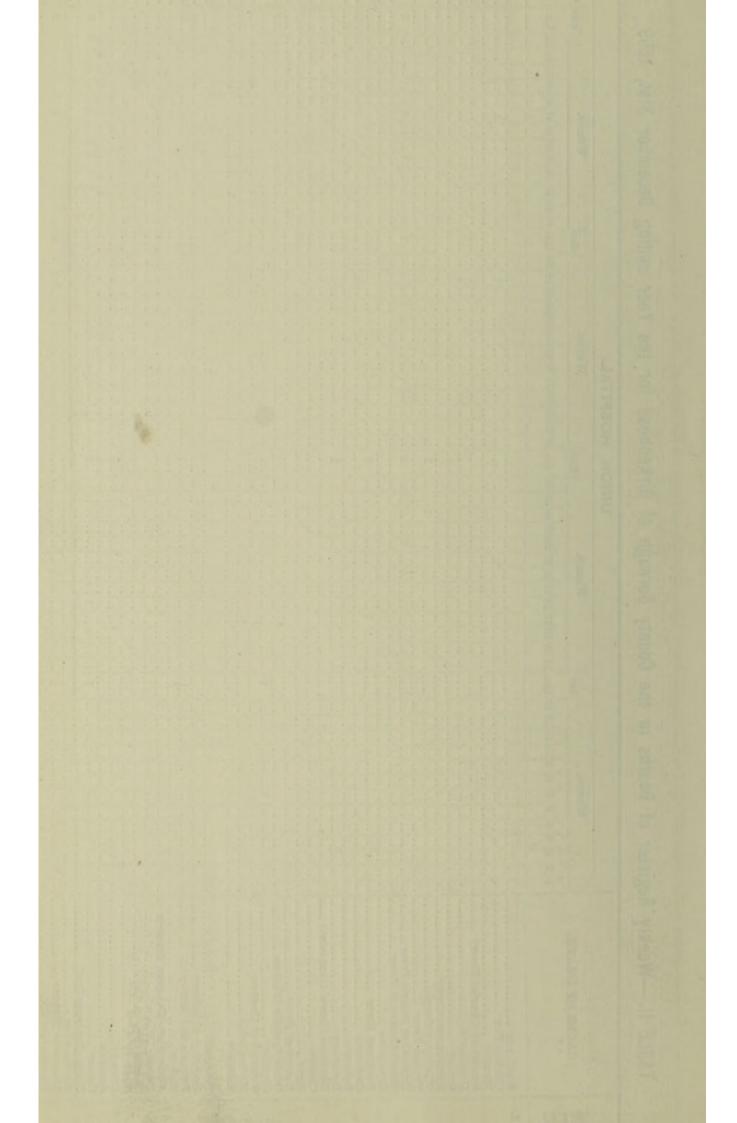


TABLE III. -- Weekly Condensed Register of Deaths for 1899.

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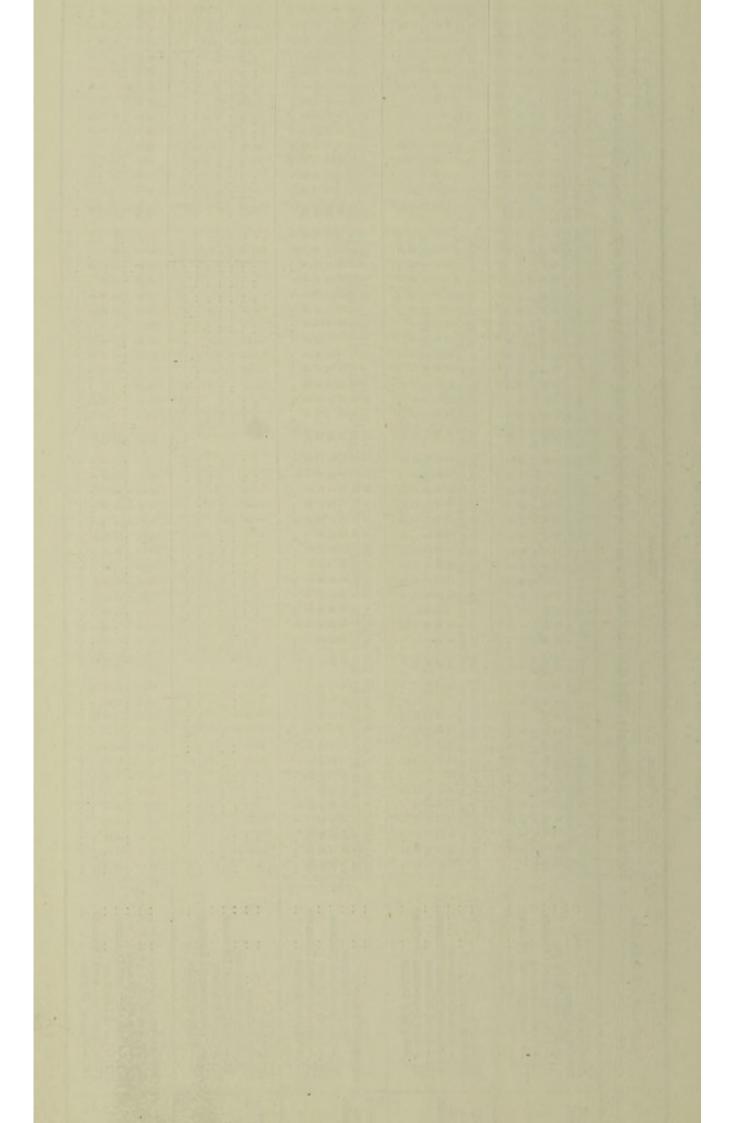


TABLE IV.—Weekly Condensed Register of Meteorological Results for 1899.

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	30 31	24.04	\$6-II	45.82	211.0	9.8	08.19	21.09	\$61.08
	29	88-68	26-81	12.99	980-0	7-8	27-08	22.75	80-129
	28	10.11	22.6	12.92	962-0	1.9I	T#-89	18-69	890-08
	27	72-02	\$6.0I	21.18 00.70	0.800	8-61	88-19	19.89	896-6Z
2ND	QB.	90-09	26.9I 87.8I	98-89	98-1	1.861	20-29	29.87	980-08
	26								-
	25 2	19.69	SF-91	27-IS	E28-I	8-97 0.97	81-69	06-90	996-67
	24.2	12.09	\$6.2I	29.88	1-258	0.0	90-09	90.99	30-155
	23	21-12 21-12	19.4	19.86	000-0	0.0	08-69	19.99	
1	52	98.08	80.6	30.00	000-0	0.0	88-99	28-33	30-343
8	212	58-88	10.01	31.18	684-0	D-0	20-81	09.97	30-00E
WEEKS.	202	12.00	10.01	\$1.11	881.0	0.07	26-19	99.81	809-67
! #	192	\$1.28	90-6	¥1.29	998-0	0.12	27.09	22-27	110-08
1	181	96-08	13.00	82-11	0.128	6.1	80.91	11.21	102-08
	17	87.19	79.PI	82.17	989.0	23.2	Z8-61	98-91	127-92
	16	19.74	12:08	98-79	PII-0	4-9	43-88	18-01	300.00
	-	87-73	27-6I	81.42	0F0-I	2-28	\$2-8\$	\$6-0¥	29.473
	14	99-16	52.52	00-08	611-0	18.4	₹8.05	00.97	888-67
1st	9 10 11 12 13 QR. 14 15	81-19	66-91	67-89	981-9	6-69T	64-11	19.68	128-62
	13	08-98	52.42	00-08	£9£+C	8-9T	27-64	47-31	876-68
	12	29.69	26.11	14-91	218-C	13-2	12-28	89-88	\$86.68
	=	19.89	92.8	90.00	0.000	0-0	42.02	42-15	30.432
	10	19.81	12.18	73-84	198.0	8-11	45.84	16-62	PP 2.62
		87.19	19.91	41.42	₹20.0	3.4	40-28	08.78	80.379
N. S.	00	99.91	16.35	28-29	0.020	6-0	99-68	28-98	30.577
WEEKS.	-1	14-09	14.84	₱T-29	011-0	9-21	19.11	45.45	₹29.62
1 5	9	10.11	21.30	81-42	917.0	22-3	08-11	82-21	188-63
1	10	01.17	96-2	FI-29	188-0	9.01	32-13	33.37	\$28.6Z
	4	52-23	ZF-01	20.00	\$II-0	P-8	26-88	31.87	30.323
	01	20-16	10.97	81.42	1-135	Z-28	29.97	44.52	781-62
	-	62.20	72-27 75-75	71.42	291-0	9.81	43.45	89.11	59-429
		61.92	21-12	12.98	689-0	F-03	89-11	₱T-0₱	889-67
		Percentage of time Wind blew from S., S.W., W., and N.W.	Mean Hourly Horizontal Motion of the Air in Miles	Average Percentage of Cloud to Clear Sky		1		-	Barometer Means, reduced to Sea Level and to 32º Fahrenheit
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1/2		ercentage of time Wind blev from S., S.W., W., and N.W	lean Hourly Horizon of the Air in Miles	verage Per Clear Sky	Rainfall in Inches	Rainfall as to Hours	Thermometer Means	Mean of Evaporation	arometer Means, reduced to See Level and to 32º Fahrenheit
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		Meteorological Results.							
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The Meteorological Results are for the 52 weeks ending December 30th, 1899.

Mean reading of the Barometer for 25 years reduced to the Sea level, and to 32° Fahrenheit=29.919 inches.

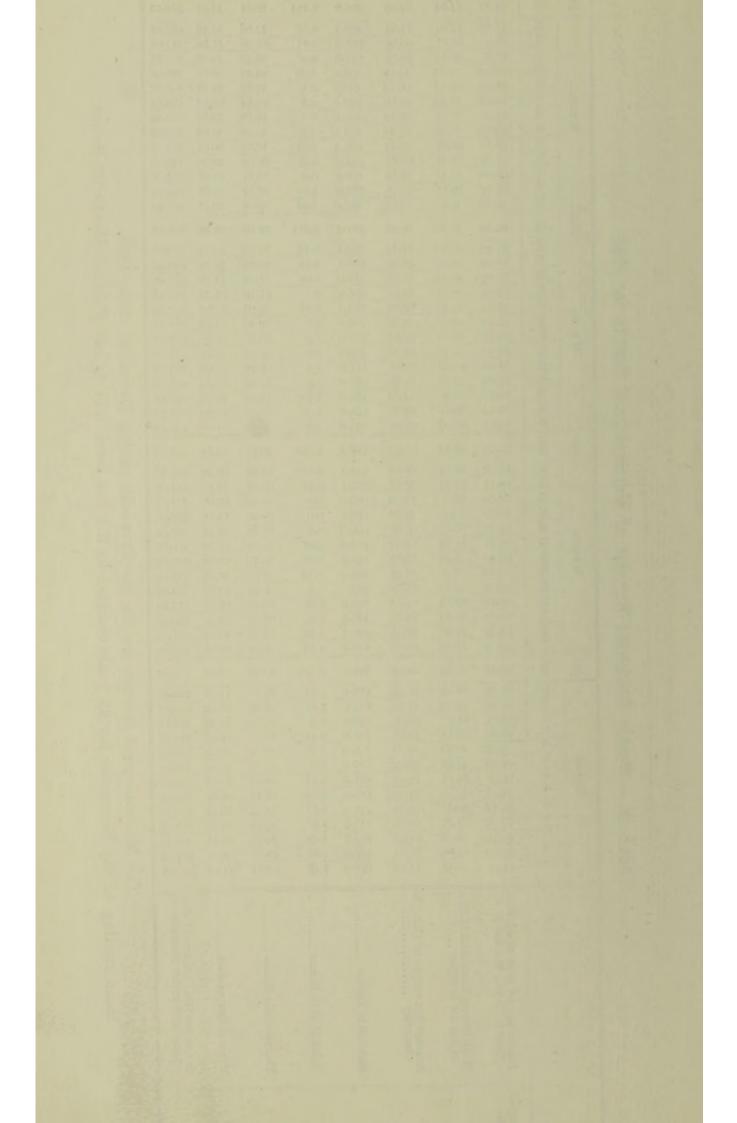


TABLE V.

LUNAR MONTHLY TABLE OF DEATHS from all Causes and Zymotic

Diseases, with the Rates per 1,000 inhabitants per annum.

		1899		No. of Deaths from All Causes.	Annual Rate per 1,000 Living.	No. of Deaths from Zymotic Diseases.	Annual Rate per 1,000 Living.
1st Mo 2nd , 3rd , 4th , 5th , 6th , 7th , 8th , 9th , 10th , 11th , 12th , 13th ,	, , , , , , , , , , , , , , , , , , ,	ng January 28th February 25th March 25th April 22nd May 20th June 17th July 15th August 12th September 9th October 7th November 4th December 2nd days extra) ending	    g Dec. 31st	 151 194 211 172 164 137 120 182 202 176 156 163 186	17·1 22·05 23·9 19·5 18·6 15·5 13.6 20·6 22·9 20·0 17·7 18·5 20·5	19 27 34 28 20 16 15 31 40 24 28 24 22	2·15 3·06 3·86 3·18 2·27 1·81 1·70 3·52 4·54 2·73 3·18 2·73 2·41
		Total		 2214	19.3	328	2.86



55 TABLE VI. STREET REGISTER OF DEATHS.

A. -CLEVELAND, CLAUGHTON, GRANGE AND ARGYLE WARDS.

Chavidand,			TON,	GRANGE AND ARG			
Streets.		Total from all Causes.	From Zymotic Diseases only.	STREETS.		Total from all Causes.	From Zymotic Diseases only.
Abbey street		3	0	Brimstage street		1	0
Abbey terrace		1	0	Brook place		4	1
Abbot street		5	0	Brook street		44	5
Ackworth place		1	0	Broom Hill		1	0
Adelphi street		4	0	Brunswick avenue		3	0
Albert terrace		2	1	Cambridge place		8	1
Albion street		3	0	Camden street		9	1
Albion terrace		5	2	Campbell terrace		2	0
Alexandra road		1	0	Camperdown street		1	0
Alfred road		1	0	Canning street		1	0
Alma street		1	0	Cannon hill		1	0
Alvanley place		1	0	Cardigan street		1	1
Anglesey terrace		1	0	Carlisle street		3	0
Argyle street		4	1	Carnforth street		5	1
Arrow place		2	0	Carnforth terrace		1	0
Arthur street		4	0	Carpenter's row		5	1
Ashville road		1	0	Castle buildings		3	0
Athol street		1	1	Cathcart street		15	3
Austin street		3	0	Catherine street		1	0
Back Camden street		1	1	Cavendish street		1	0
Back Myrtle street		4	0	Challis street		1	0
Back Oliver street		2 3	1 0	Chapel street		6	1 0
Back Price street Back St. Anne street		10	4	Chester place		5	1
Balls road east	1000	5	1	Christchurch road		3	1
Banning street		3	1	Church street		7	0
Barnard road		1	0	Clarendon street		6	1
Barnston street	::	3	1	Claughton firs	::	1	0
Beaufort road		1	0	Claughton place		1	0
Beckwith street		42	6	Claughton road		17	3
Belmont		1	0	Clayton street			0
Bentinck place		2	0	Cleveland avenue		7	1
Bentinck street		100000000000000000000000000000000000000	1	Cleveland street		25	5
Berner street		1	0	Clifton crescent		2	0
Berry street		1	1	Clwyd street		1	0
Bertha street		4	0	Coburg street		2	0
Bessborough road		1	0	Collingwood street		3	0
Birkenhead & Wirral		700		Conway place		1	0
Children's Hospital		4	1	Conway street		13	1
Blackpool street		1	0	Corfu street		1	0
Borough Hospital		8	2	Corporation road		3	1
Brassey street		5	1	Cottage street		6	1
Brattan road		2	0	Craven place		1	0
Bray street		2	0	Craven street		6	1
Briardale road		7	1	Crown street		4	0
Bridge street		9	0	Cumberland place		1	1
Bright street		6	1	Cyprus street		2	1
	-	1	1)				

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TABLE VI.—Continued.

Streets.	Total from all Causes.	From Zymotic Diseases only	Streets.		Total from all Causes.	From Zymotic Diseases only.
Dacre street	9	2	Hamilton lane		1	0
Davies street	3	2	Hamilton square		5	1
Derby street	7	2	Hampton street		4	1
Devonshire place	i	0	Harriet street		2	0
Devonshire road	5	0	Henry street		2	0
Dover street	2	1	Henthorne street		1	0
Duke street	4	1	Herbert place		3	0
Duncan street	3	0	Hilton street		4	0
Eagle court	1	0	Hind street		1	0
Eastbourne road	3	0	Hinson street		1	0
Eastham street	2	0	Hope street		4	0
Edgar street	4	1	Horatio street		1	0
Egerton street	1	1	Howard street		2	0
Eldon place	9	1	Howe street		2	0
Eldon street	3	0	Hughes' buildings		2	0
Elgin street	3	0	Huskisson street		5	2
Elizabeth place	2	1	Infectious Diseases			
Elizabeth street	2	1	Hospital		1	1
Elm street	1	0	Ivy bank		1	0
Erskine street	1	0	Ivy court		2	2
Euston grove	2	0	Ivy street		6	0
Evan's court	1	0	Jackson street		4	0
Evan's place	2	0	Keightley street		2 4	0
Exmouth street	7	2	Kent place		3	0
Field street	2	0	King's mount		2	0
Flamank street	10	0	Kinmel street Knowles street		1	1
200	6 2	1	Laird street		10	1
373	-	1	Lansdowne road		4	2
373	-	0	Laxey terrace		0	0
77	9	2	Lea street		ĩ	0
Frederick street		2	Leicester street		8	0
Garfield place	-	0	Leinster street		1	1
Garnet street	0	0	Leta street		3	0
George street	0	1	Lingdale road		3	2
German terrace	1	0	Lingdale road north		1	0
Gladstone street	-	1	Livingstone street		10	2
Glover street	-	î	Lord street		-	0
Gomer street		0	Lorn street		-	1
Gore street		0	Lower Ivy street		4	0
Grace street		0	Lowther street		7	3
Grafton street		0	Maddock street		2	0
Grange mount	0	0	Malta street		2	0
Grange place	4	0	Marion grove		2	1
Grange road	9	2	Marion street		4	2
Grange road west	2	0	Market place south		1	0
Grange street	2	0	Market street		12	2
Greenfield street	1	1	Market street (court)		1	0
Haleyon road		0	Marlborough grove		2	0
Halkin street	1	1	Marshall place		2	1
Charles and the same of the sa		1		Service Service		

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TABLE VI.—Continued.

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STREETS.	Total from all Causes.	From Zymotic Diseases only.	Streets.	Total from all Causes.	From Zymotic Diseases only
Mather road	3	0	Pinces ter., Grange rd.	2	0
35 3 4 1	5	1	D	4	0
31	4	0	TO 1	4	0
	1	0		5	0
Mersey place	100000	1	Pym street	4	3
Mersey street	1		Quarry bank place	17	2
Merton place	1	0	Queen's buildings	6	1
Midland street	5	0	Queensbury street	77.	0
Miller's place	2	2	Ravenscroft road	1 5	1750
Milton street	5	3	Robert street		0
Mona street	2	1	Roe street	1	0
Monk street	1	0	Romilly street	1	0
Moon street	8	1	Rose street	4	0
Mornington street	5	0	Rowland street	3	0
Morpeth buildings	8	4	Rushton's court	4	1
Morpeth Dock	1	0	Russell place	3	0
Mortimer street	1	0	St. Anne street	26	4
Mount grove	3	1	St. Anne's terrace	2	1
Munster street	4	0	St. Mary's avenue	2	0
Myrtle place	1	1	St. Mary's gate	5	1
Myrtle street	1	0	St. Mary's street	1	0
Napier street	3	1	Salisbury street	10	2
Nelson street	4	3	Saxon street	2	0
Neptune street	2	0	School place	3	1
Neston street	4	0	Shaw's terrace	2	1
Newton street	2	0	Sidney street	1	0
Oal-6-11 -1	4	1	Simpson street	1	0
0-1	12	1	Slatey road	1	0
Old Dideter 1	11	2	Somerville street	6	0
Oliver whee	2	0	CL 1	í	0
(VIII to t	24	5	Charlessand	1	0
Oudenly susuas	2	0	Character to the second	1	0
Ondonly place	3	2	01.1.1.1	3	1
Outon wood	6	i	C	6	î
Dank Gald aganna	26	0	C	4	1
D1-C-11-1		1		4	1
Dank and and	9	1	Taylor's buildings	2	0
Daule wood north	7		Taylor street	9	1
		0	771	1	0
Park road south Park road west	2	0	Tunnel road	1	0
Doule street	1	0	Turner street	2	0
Park street		1	Unknown	2	0
Paterson street	12	0	Upper Beckwith street	2	0
Patten street	1	0	Upton road	1	0
Payson street	14	2	Vernon place	2	0
Payson terrace		0	Vicar's court	1	0
Penrith street	0	0	Vincent street		2
Pensby street	0	2	Vine street	10	0
Pilgrim street		0	Vittoria street	3	0
Pleasant street		2	Vittoria Wharf	2	
Price street	1 - 1 - 1 - 1 - 1 - 1	5	Vulcan street	5	1
Princes ter., Balls rd	1	0	Wallasey Dock	3	0

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# TABLE VI .- Continued.

STREETS.	Total from all Causes.	From Zymotic Diseases onl	Streets.	Total from all Causes.	From Zymotic
Walton street	 3	2	Wilbraham terrace	 2	0
Warwick street	 4	1	Wilkinson street	 9	1
Waterloo place	 4	0	Willaston place	 3	0
Watson street	 10	0	William street	 6	2
Wellesley street	 1	0	Wilson street	 8	1
Westbourne road	 11	0	Windsor street		0
West Float	 1	0	Wirral street	 2	0
Westminster road	 1	1	Woodchurch road	 2	0
Whetstone view	 2	0	Wood street	 17	3
White street	 7	4	Woodville road	 7	3

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# TABLE VI.—Continued.

# B .- Oxton, Egerton, Clifton and Mersey Wards.

STREETS.	Total from all Causes.	From Zymotic Diseases only.	Streets.	Total from all Causes.	From Zymotic Diseases only.
Adelaide road	 1	0	Dial road	 1	1
Albert place	 3	0	Earl street	 5	1
Alison street	 3	1	Ebenezer street	 6	0
Allerton grove	 1	0	Eldon road	 2	0
Alton road	 1	0	Elm grove	 3	0
Argyle street south	 6	2	Elmswood road	 2	0
Arno road	 1	0	Fairfax road	 2	0
Arnside road		0	Fairfield road	 2	0
Ashley street	 2-	2	Fairview road	 1	0
Back Pitt street	 1	1	Farm road	 5	1
Back Portland street	 3	1	Fearnley road	 1	0
Beaconsfield road	 3	0	Fountain street	 3	1
Bebington road	 3	0	Gerald road	 1	0
Bedford place	4	2	Gladstone road	 4	0
Bedford road	 5	0	Glasgow street	 1	1
Beech road	 1	0	Greenbank road	 1	0
Beech view	 1	0	Green lane	 5	2
Beresford road	 2	0	Greenway road	 3	0
Bidston road	 2	0	Grenville road	 3	1
Birch road	 1	1	Grosvenor street	 6	0
Blucher street	 3	0	Grove mount	 1	0
Bold street	 5	2	Grove road	 7	1
Booth street	 4	0	Haddon road	 1	0
Borough road	 29	5	Hall's yard	 1	0
Brougham street	 9	1	Hampden grove	 1	1
Brunswick street	 4	0	Hampden street	 1	0
Bulwer street	 1	0	Harland road	 1	0
Buxton road	 1	0	Hawthorne cottages	 3	1
Caerwys grove	 2	0	Hawthorne road	 1	0
Carlton mount	 1	0	Heath bank road	 1	1
Cearns road	 2	0	Heathfield road	 1	0
Cedar street	 3	0	Helmingham road	 2	0
Chamberlain street	 1	0	Hinderton road	 8	3
Chapel place	 1	0	Holborn hill	 5	2
Chapel square	 2	1	Holly bank road	3	1
Charlecombe street	 1	0	Holme lane	 2	0
Chatham road	 3	0	Holt hill	 6	0
Church road	 11	1	Holt hill terrace	 1	0
Church terrace	 1	0	Holt road	 11	3
Clare street	 1	0	Holt terrace	 1	0
Clifton road	 2	0	Hope terrace	 1	1
Cobden place	 2	0	Houlden's place	 1	0
Cobden street	 9	0	Howson street	 6	1
Combermere terrace	 4	2	Hughes' cottages	 3	1
Comet street	 1	0	Kellett's place	 1	0
Dee street	 2	1	Kingsdown street	 2	0
Derby road	 3	0	Kingsland road	 2	0

TABLE VI.—Continued.

Streets.	Total from all Causes.	From Zymotic Diseases only.	Streets.		Total from all Causes.	From Zymotic Diseases only.
Kingsmead road south	1	0	Randle street		2	1
Larch road	3	0	Rhoden's place		2	0
Laurel road	1	1	Rocky bank road		1	0
Leighton road	1	1	Rodney street		11	0
Lever terrace	1	0	Roseberry grove		1	0
Liversidge road	5	1	Rose mount		1	0
Livingstone road	7	1	Rose place		2	1
Lorne road	2	0	Roslyn street		5	2
Lowwood grove	1	0	Russell cottages		1	0
Lowwood road	1	0	Russell road		5	1
Lunar street	2	0	St. Paul's place		3	1
Maple street	1	0 -	St. Paul's road		5	1
Meadow lane	3	0	Sea bank cottages			0
Medway road	5	3	Seymour street		3	0
Mellor road	1	0	Shaw street		3	3
Mersey road	8	0	Shrewsbury road			0
Meteor street	1	0	Sidney buildings		2	1
Mill street	10	1	Sidney road		3	0
Milton road	3	0	Sidney terrace		2	0
Mollington street	1	0	South bank		1	0
Moss lane		1	Southwick road		1	0
Mount Pleasant	1	0	Standard place		1	0
Mount street	2	0	Stanley street		4	0
Mulberry road		0	Star street		3	1
Newburn's lane		1	Stewart's place		4	0
New Chester road		2	Storeton road		1	0
North road	3	0	Taylor's delph		2	0
Oak tree place		2	The Woodlands		7	0
Oak tree terrace		1	Thompson street		2	0
Old Chester road		3	Tower hill		1	0
Olive crescent		0	Tower road		1	0
Olive mount		U	Tudor road		5	1
Orchard road	1000	0	Union street			2
Oriel road	5	2	Unknown		4	0
Park grove		0	Victoria mount			0
Peel street		6	Victoria road			0
Percy place		0	Village road			0
Pitt street		2	Village terrace			1
Planet street		0	Walker place			1
Prenton road west		0	Walker street			1
Price's lane		1	Warrington street			0
Princes place		0	Waverley grove			0
Queen's buildings		0	Wellington road		1	0
Queen's place		1	Wellington terrace			0
Queen street		0	Well lane			0
Quigley street		0	West bank road		-	1
Raffles road		0	Westbury street			0
Railway road	1	0	West view		4	0
				-		

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# TABLE VI.—Continued.

Streets.	Total from all Causes	From Zymotic Diseases only	Streets.	Total from all Causes.	From Zymotic Diseases only
Whalley road	 1	0	Woburn place	 1	0
Whetstone lane	 5	2	Woodchurch lane	 5	1
Whitfield street	 6	1	Woodland avenue	 1	0
Whitford road	 6	0	Woodland terrace	 5	2
Willmer road	 7	1	Wycliffe street	 7	1
Willow bank road	 1	0	Wye street	 2	0
Willy street	 1	0			

#### TABLE VI.—Continued.

# C.—Bebington Ward.

Streets.	Total from all Causes.	From Zymotic Diseases only	Streets.	Total from all Causes.	From Zymotic Diseases only
Derby park	 1	0	Reform, ship "Akbar"	1	0
Highfield grove north	 1	0	,, ,, "Clarence"	2	1
Highfield north	 1	0	Rock lane west	100	1
Highfield south	 2	0	Rock park	7	0
King street	 1	0	Rock Slip	1	0
Mersey lane south	 2	0	School ship "Conway"	1	1
Nelson place	 1	0	Sefton road	1	0
Nelson road	 5	2	Woodlands grove	1	0
New Chester road	 1	1	Woodlands road	1	0
Old Chester road	 4	0			

# SUPPLEMENT TO TABLE VI.

# RETURN OF DEATHS in Birkenhead Union Hospital and Workhouse during 1899.

Date.	Sex.	Age	Occupation &c.	Cause of Death.		d Address of Deceased when admitted.
Jan. 1	M	79	Tailor	Senile decay	29-8-94	14 William street
5	M	6	Painter's son	Tub. meningitis		10 Apple grove
7	M	42	Cotton porter	Aneurism	00000	25 Clarendon street
9	M	62	Seaman	Apoplexy	14-4-97	20 Craven place
11	M	23	do	Empyema	13-12-98	S.S. Orcana
11	M	75	Furniture dealer	Intest. obstruct.	10-1-99	18 Rodney street
16	M	38	Labourer		14-1-99	32 Grange road
17	M	66	Metal planer		16-1-99	238 Beckwith street
17	F	28			27-12-98	3 Albion terrace
17	M	62	Labourer	Morbus cordis	20-3-91	15 Brook place
18	F	43	Shoeingsmiths wif	Heart disease	6-1-99	196 Oliver street
18	F	39	Superannuated Postal clerk's wife	Cardina aathma	18-1-99	26 Douby wood
19	F	71	Labourer's widow	**	26-4-94	36 Derby road Transf from M'hester
20	M	67	r	~	12-10-89	Egerton street
23	F	35	Labourer s wife	Phthisis	8-11-98	41 Flamank street
24	M	35	Joiner		30-12-98	5 Alma street
28	F	66	Charwoman	Pneumonia	31-10-98	42 Payson street
29	M	68	Master mariner	Asthma	0.7.00	17 Harland road
30	M	42	Theatrical agent	Phthisis	30 4 00	86 Oliver street
30	M	64	Blacksmith	Enteritis	26-1-99	14 St. Mary's gate
31	M	40	Lighterman	Phthisis	24-12-98	11 Laxey terrace
Feb. 1	F	74	Plasterer's widow	Brouchitis		2 Wilton street
7	M	43	Labourer	Phthisis	19-1-99	12 Waterloo place
8	M	67	do	Heart disease	29-5-97	12 Waterloo place
10	M	53	Iron driller	Nephritis	8-2-99	160 New chester road
11	F	33	Q'rterm'st'r's da.	Phthisis	17-8-98	11 Thompson street
. 11	F	41	Labourer's daugh.	Bronchitis	9-2-99	18 Hope street
12 13	M	40	Clerk	Insanity	10 4 00	20 Haleyon road
14	F	28 63	Labourer's widow	do	200 00 00 00	20 St. Mary's gate 285 Brook street
16	M	66	do	Syphilis Heart disease	00 × 0×	210 Chester street
18	M	35		Phthisis	12-10-98	3 Meteor street
20	M	63	do do	Bronchitis	7-10-98	12 Waterloo place
24	M	52	Ship plater	Insanity	96 1 00	1 Sycamore road
25	M	62	Clerk	Heart disease	20-8-94	43 Ivy street
26	M	76	Labourer		12-10-92	7 Albert terrace
26	M	63	do	Dementia	0 10 00	27 G Queen's bldgs.
27	M	58	Gas inspector	Bronchitis	00 0 00	19 Turner street
Mar. 2	M	38	Shoemaker	Pneumonia	17-2-99	Tranmere
3	M	54	Labourer	Phthisis	3-12-98	3 Sussex street
5	F.	56	Boilermaker's wife		13-1-98	171 Bridge street .
7	M	27	Pensioner	Phthisis	30-1-99	127 St. Anne street
11	M	80	Labourer	Pneumonia	4-3-99	78 Earl street
12	M	42	do	Pleurisy	24-2-99	49 Bentinck street
12	F	82	Labourer's widow	Senile decay	4-9-93	34 Pleasant street
13	M	69	Labourer	do	12-3-86	4 Abbot street

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SUPPLEMENT TO TABLE VI.—Continued.

Date.	Sex.	Age	Occupation &c.	Caruse of Death.		d Address of Deceased when admitted.
Mar16	M	70	Hawker	Bronchitis	13-12-98	6 Waterloo place
16	F	65	Domestic servant	do	24-2-99	25 Barnston street
19	F	36	Fireman's wife	Phthisis	27-2-99	40 Mill street
19	F	81	Shipbuilder's wid	Heart disease	14-2-99	10 Moreton street
20	M	40	Labourer	Pneumonia	18-3-99	9 Walton street
22	M	41	do	Brain disease	14-3-99	9 Waterloo place
23	M	22	do	Tuberculosis	4-3-99	210 Chester street
26	M	68	Gardener	Heart disease	25-3-99	48 Brassey street
28	M	40	Engine driver	Phthisis	13-2-99	13 Cambridge place
28	F	22	Labourer's wife	do	6-3-99	2 Pym street
31	F	73	Labourer's widow	Heart disease	14-5-98	154 Beckwith street
April 4	F	75	Fisherman's wid	do	11-2-99	39 Thomas street
4	M	60	Shipwright	Nephritis	4-2-99	28 Pool street
4	F	73	Labourer's wife	Heart disease	4-4-99	2 Broom hill
$\frac{7}{12}$	F	73	Cabdriver's widow	* *	24-12-99 6-4-98	47 Clarendon street 81 Briardale road
12	F	65 41	Cotton porter	Cystitis	10-4-99	25 Back Portland st.
12	M	63	Labourer's wife Warehouseman	Toronitor	9-3-97	189 Borough road
14	M	60	Shoemaker	TT + 1'	5-4-99	105 Back Price street
15	F	63	Assur. agents wid	1.	23-7-98	40 Grosvenor street
20	F	71	Soldier's widow	Cancer	26-3-88	54 Egerton street
26	F	60	Butler's widow	Arthritis	27-1-99	97 Greenway road
26	M	39	Tool grinder	Pneumonia	24-4-99	210 Chester street
26	M	77	Tailor	Heart disease	26-7-97	8 Carlisle street
27	F	20	Domestic servant	Puerperal fever	3-4-99	16 Meadow lane
28	M	2	Labourer's son		26-11-98	82 Market street
28	F	54	do. widow	Cirrhosis of liver	Principle of the Control of the Cont	15 Back St. Anne st.
25	F	65	do. do.	Fracture of thigh	26-1-99	25 Up. Beckwith st.
26	F	67	do. do.	Uræmia	17-4-99	1 h. 2t. Payson st.
May 2	M	46	Carter		28-4-99	12 Waterloo place
2	F	44	Stone quar. widow		25-3-99	53 Livingstone road
3	F	63	Bootmaker's wid	Heart disease	27-4-99	21 Carnforth street
4	M	85	Labourer	Cancer	19-1-98	14 Oakfield view
10	F	38	Labourer's widow	Bronchitis	9-5-99	22 Hope street
11	M	80	Marie Control of the	Heart disease	7-4-99	9 H Queen's bldgs.
12	F	20	Town clerk's dau	do	17-4-99	16 Grenville road
14	F	35	Labourer's wife	Phthisis	8-5-99	2 Hamilton view
16	F M	40	Joiner's widow Gardener	do	24-4-99 9-3-99	19 Taylor's buildings 75 Market street
18 18	M	68 53	0	Pneumonia	8-4-99	325 Cleveland street
22	F	73	Labourer's widow	A	11-1-99	Mere Farm
23	M	77	Baker	Senile decay	2-6-96	24 Egerton street
23	M	58	Labourer	Heart disease	1-5-99	39 Brunswick street
24	F	63	Carpenter's widow		12-5-99	6 William street
24	F	49	Steward's widow	Phthisis	20-5-99	14 Flamank street
26	M	23	Organ grinder	do	21-4-99	4 Watson street
26	F	16	Domestic servant	Enteric fever	22-4-99	2 St. Paul's road
June 5	F	37	Elec. engin'rs wife		21-6-98	5 Prenton road east
6	M	61	Labourer		17-11-98	7 Cambridge place
7	M	56	do	Dysentery	26-5-99	3 Mason's court
10	F	48	Iron-dresser's wife		6-4-99	15 Vicar's court
10	F	3	Labourer's daugh.	Whooping cough	8-6-99	11 Howard street

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SUPPLEMENT TO TABLE VI.—Continued.

Date.	Sex.	Age	Occupation &c.	Cause of Death.		d Address of Deceased when admitted.
Jun 12	м	21	Labourer's son	Insanity	13-4-98	38 Derby street
13	F	52	Porter's wife	Cirrhosis of !ive		50 Oriel road
14	M	60	Labourer	Aneurism	17-9-97	13 Ivy street
14	F	32	Labourer's wife	Phthisis	12-6-99	15 Flamank street
19	M	28	Quartermaster	Meningitis		34 Elgin street
19	F	89	Labourer's widow	Senile decay		5 Wilson street
18	F	33	Shipsmith's wife	Phthisis		1 Exmouth street
22	F	33	Labourer's wife	Pneumonia		54 Flamank street
23	M	30	Labourer	Phthisis		46 Mill street
27	F	72	Labourer's widow	Heart disease		7 Howard street
July 1	F	39	Iron planer's wife			26 Vine street
5	F	46	Butcher's wife	Insanity	00 7 00	11 Clare street
7	M	69	Labourer	Heart disease	00 1 01	4 Hamilton view
6	M F	67 58	do	Nephritis	00 0 00	32 Grange road 14 Oak street
11	M	30	Labourer's wife Butcher	Senile decay	1 7 00	Watson street
13	M	64	-	Meningitis Heart disease .	1 7 00	108 Oliver street
14	F	5	Labourer's daugh.		10-10-98	20 Flamank street
18	M	35	D. C. A.	D	10 7 00	12 Burton street
22	M	28	T 1	TT 2:	10 7 00	8 Sun street
24	F	67	Shipwright's wife	Paralysis .	14-12-99	31 Henry street
24	F	41	widow	do	10 4 04	34 Argyle street
25	F	7	Labourer's daugh.		1 40 7 00	4 Ivy court
29	M	32	Baker	TOT (T. 1. 1.	01 5 00	43 Farm road
30	F	17	Labourer's daugh.		00 0 00	40 St. Anne street
Aug. 3	M	56	Labourer	Paralysis .	11 4 00	104 Cathcart street
6	M	52	Hawker	Phthisis .	71 7 00	126 Market street
9	F	39	Labourer's wife	Heart disease .	90 7 00	49 Ivy street
11	M	52	Labourer	Phthisis .	14 7 00	22 School place
12	M	58	Boilermaker	Paralysis .	. 10-8-99	363 Price street
15	M	30	Coalheaver	Pneumonia .	. 5-8-99	177 Peel street
21	M	42	Com. traveller	Phthisis .		6 Waterloo place
22	M	61	Carter	Senile decay .		383 Brook street
22	F	3 m.		Enteritis .		Workhouse
22	M	27	Plumber	Pneumonia .		61 Borough road
29	F	40	Labourer's wife		1-7-99	1 Back St. Anne st.
26	F	19	do. daugh.		. 19-12-98	Resc hom. Euston gr
28	F	70	Domestic servant			83 Bentinck street
29	F	50	Seaman's widow	Bronchitis .		103 Back Price street
30 Sept 1	M F	58 36	Labourer	** * ****		32 Grange road
Sept. 1	M	31	Painter's wife			17 Taylor's buildings
3	F	46	Boilermaker Labourer's wife		. 21-8-99	52 Eldon street 216 Beckwith street
4	M	5 m.		77 1 111	. 4-7-98 2-9-99	The state of the s
7	F	2 m.			20 0 00	41 Salisbury street Workhouse
9	M	6 m.	0	The state of the s	10000	Workhouse
11	F	67	widow	Dhahinin	6-9-99	20 K Queen's bldgs.
13	F	4 m.			9-9-99	Workhouse
14	M	34	Shopman	TT . 31	1-6-99	12 Crown street
14	F	69	Labourer's widow		. 23-1-96	36 Moon street
15	F	46	Engineer's widow		. 14-9-99	131 Peel street
	F	33		Phthisis .		69 Thomas street

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SUPPLEMENT TO TABLE VI.—Continued.

Date.	Sex.	Age	Occupation &c.	Cause of Death.		d Address of Deceased when admitted.
Sep. 16	M	65	Hawker	Abscess	11-7-99	32 Grange road
21	F	2 m.			4-8-99	Workhouse
22	M	48	Laborer	DL41.1.1.	6-6-99	91 Vittoria street
24	M	37	1.	Canasana	31-8-98	W'house TrampShe
Oct. 2	M	89	Magganger	C	25-10-98	Home, Parkfield
1	M	71	Painter	Nephritis	22-8-99	5 Orderly place
5	M	66	Labourer	Heart disease	13-7-97	13 Oak street
5	M	23	do	do	26-9-99	75 Market street
9	M	38	Bricklayer	Phthisis	7-10-99	7 Holt hill
16	M	59	Baker	Cancer	20-6-99	21 Clayton street
23	M	78	Shipwright	do	22-6-98	12 Waterloo place
23	F	67	Glass cutter's wid.	do	3-7-99	31 Greenway road
24	M	12	Labourer's son	Peritonitis	20-9-97	32 St. Anne street
26	F	71	Tobacco spin. wid		22-9-99	1 Roe street
28	F	42	Boatswain's wife	Enteric fever	25-10-99	91 Brook street
28	M	51	Marine engineer	Cer. hæmorrhage	4-4-99	103 Beckwith street
30	F	65	Labourer's widow		27-10-99	163 Brook street
Nov. 2	F	82	do. do.	Senility	1-5-96	24 Back Portland st
2	M	67	Labourer	Heart disease	1-7-99	3 Back Camden st.
4	F	79	Engineer's widow		12-10-99	Union Tramp Shed
6	M	50	Joiner	Cancer	5-10-99	13 Sussex street
6	M	55	Brass finisher		21-10-99	91 Brook street
7	F	15	Labourer's daugh.	Phthisis	13-9-99	91 Back Price street
9	M	43	Labourer	Brain disease	2-11-99	4 Orderly residence
8	M	58	do	Bronchitis	11-6-97	43 Gilbrook
10	M	60	Shipwright	Apoplexy	22-9-99	30 Sun street
14	F	32	Coalheaver's wife		27-10-99	45 Frederick street
14	M	81 78	Porter's widow	Senile decay	21-9-99	140 Chester street
16 16	M	40	Labourer Plasterer	do Aneurism	5-8-99	14 Queen's place
14	M	52	T 1		15-5-99 14-11-99	27 Queen's place 393 Brook street
17	F	60	Policeman's wife	TT 4 31	4-10-99	33 Wellesley street
17	M	38	D 1 1	/D	6-10-99	17 Haleyon road
20	M	21	Labourer	Phthisis	28-9-99	2 Albion street
20	M	44	do		31-10-99	142 Chester street
20	M	66	do	Apoplexy	30-8-99	12 Waterloo place
21	M	21	Trimmer		11-11-99	1 h. 2 t, Payson st.
24	M	49	Boiler cleaner	Tumour	2-10-99	152 Oliver street
25	M	77	Labourer	Senile decay	28-7-98	4 Windsor street
27	M	74	Bricklayer	do	1-2-95	3 Moon street
29	M	2	Labourer's son		23-10-99	29 K Queen's bldgs.
30	F	72	do. wife	Senile decay	15-4-99	8 Payson street
Dec. 5	M	77	Engineer	do	11-2-99	9 Ivy street
6	M	35	Fireman	Heart disease	10-11-99	99 Brook street
9	M	19	Assur. agent's son	Phthisis	10-10-93	50 Cobden street
12	M	38	Boilermaker	do	16-9-99	115 St. Anne street
14	F	71	Tram driver's wid		7-7-99	33 Clarendon street
18	M	36	Stone mason		13-11-99	41 Payson street
17	F	76	Plasterer's widow	Senile decay	30-8-99	16 Catherine street
19	F	80	Governess	, do	2-9-93	67 Peel street
21	F	72			12-8-99	45 Thomas street
24	F	60	Labourer's widow	Heart disease	25-3-99	Payson street

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SUPPLEMENT TO TABLE VI.—Continued.

Date.	e. Sex. Age Occupation &c.		Cause of Death.	Date and Address of Deceased when admitted.		
Dec 25	F	60	Labourer's widow	The state of the s	20-12-99	35 Field street
25	F	66	Soldier's widow			29 Blucher street
26	M	72		Nephritis	The second secon	8 Eldon street
23	M	2 m.	Dom. servant's son		24-11-99	15 Howson street
3)	M	39	Fireman	Insanity	8-7-97	23 Greenfield street
30	F	79	Charwoman	Peritonitis	17-12-99	14 Wilkinson street
31	M	53	Boilermaker	Cancer	27-12-99	31 Leicester street
31	M	24	Labourer	Pneumonia	29-12-99	16 Eldon place
31	M	61	Fireman		17-11-99	10 h. 21 b. Fox st.

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TABLE VII.
Description of those who Died during 1899.

Accountant   1	1000		1099.	auring	10 Died	tose w	I LI	Description of	Descr
Actor   1	Widow.	Wife.	Daughter.	Son.	F.	м.		npation, &c.	Occupation, &
Actor   1		1	9			1		t	Accountant
Analytical chemist	1	-				200			A - 4
Annuitant		i							
Army pensioner         4          1           Asphalter          1            Assistant Overseer         1             Assurance agent         1             Assurance superintendent         1             Assurance superintendent         1             Auctioneer               Baker                Baker <td< td=""><td></td><td></td><td></td><td></td><td></td><td>6</td><td>7233</td><td></td><td></td></td<>						6	7233		
Army pensioner		i		1000			3333		
Assistant Overseer		-	2000			4	- 4		
Assistant Overseer		47.00 U.		0.00			1		
Assurance agent	1	1000		0.98		1	2000		
Assurance superintendent	1	3				1		agent	Assurance agent
Auctioneer			1			1			
Baker's manager							933334	r	Auctioneer
Barman   Billosting Co's manager     1   5       Billosting Co's manager     1       Billost and pump maker   1       Block and spar maker   1       Boatman     1       Boatswain       1       Boiler cleaner   1   1   1   5   1     Boiler maker     1       Boiler maker     1       Book maker     1       Book keeper     5   2   3   4     Boot and shoe maker     1       Boot & shoe maker's manager     1       Brass moulder     1       Brass moulder     1       Brewer     1       Brewer     1       Brewer     1       Brickburner     1       Brickburner     1       Brickmaker   1       Builder         Building Inspector     1       Butcher     7   18   6   6     Cab driver     5   4   3   1     Cabinet maker     1       Camera maker     1       Canal superintendent         Candle maker       1       Candle maker       1       Candle packer     1       Caretaker     1		3	7	4		1			
Billposting Co's manager				2				anager	Baker's manager
Blacksmith			5	1					
Block and pump maker									
Block and spar maker	7	3	3	2		277			
Boatman									
Boatswain   Comparison   Comp				101.79%				spar maker	
Boiler cleaner				1		1			The state of the s
Boiler maker						1000000			17.00
Bolt and nut maker	.:	10000		10000	••	200			
Bookbinder          5         2         3         4           Boot and shoe maker         10         4         4         3           Boot & shoe maker's manager         1             Brass moulder          1             Brewer           1             Brewer's cellarman         1 <td>4</td> <td></td> <td>3/3</td> <td></td> <td></td> <td></td> <td>- 50</td> <td></td> <td></td>	4		3/3				- 50		
Book keeper         .         .         2         3         4           Boot and shoe maker         .         .         .         4         4         3           Boot & shoe maker's manager         .						370			
Boot and shoe maker   10	2		1000		3333	724			
Boot & shoe maker's manager	2				2009				
Brass moulder        1           Brass turner              Brewer's cellarman       1		3	_		- 7				
Brass turner         1          Brewer's cellarman             Brickburner              Bricklayer        4       4       1       2         Brickmaker        1            Builder   .						3300	-		
Brewer <t< td=""><td></td><td></td><td>100000</td><td>7.00</td><td>70.00</td><td></td><td></td><td></td><td></td></t<>			100000	7.00	70.00				
Brewer's cellarman       1         Brickburner          Bricklayer       4         Brickmaker       1         Builder          Building Inspector          Butcher       7         Cab driver       5         Cabinet maker          Camera maker          Canal superintendent          Candle packer          Caretaker	1		-						D
Brickburner          1             Bricklayer          4              Brickmaker          1									
Bricklayer        4       1       2         Brickmaker        1           Builder              Building Inspector               Butcher				1			-0.55		D 1.11
Brickmaker       1         Builder          Building Inspector          Butcher          Cab driver          Cabinet maker          Camera maker          Canal superintendent          Candle maker          Candle packer          Caretaker	1	2	1						
Builder  <						1			
Building Inspector         1          Butcher         18       6       6         Cab driver         4       3       1         Cabinet maker         1          Camera maker         1          Canal superintendent          1          Candle maker          1          Candle packer          1          Caretaker	1								Builder
Butcher         7        18       6       6         Cab driver                Cabinet maker <td></td> <td></td> <td>1</td> <td>1000</td> <td></td> <td></td> <td></td> <td>nspector</td> <td>Building Inspecto</td>			1	1000				nspector	Building Inspecto
Cabinet maker         1         1          1  <	1	6	6	18					
Camera maker          1          Canal superintendent	1	1	3			5			
Canal superintendent				1					
Candle maker          1          Candle packer          1          Caretaker			1						
Candle packer            1            Caretaker            1	1								
Caretaker 1									
			1						
O	•:			1					
Carpenter 2	1	2			•:	100000000000000000000000000000000000000			
Car proprietor 1 1 1 2   23 19 8	*;			100000000000000000000000000000000000000	1				
Clarit commen	1					9			
Cart owner 1 1	.:	1							
Carver and gilder	1 2					10.000,000		a gracer	
Cashier 1 1 1	2		1	1		1			Cashlet

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TABLE VII.—Continued.

Cattle drover								
Cattle salesman   Cattle sal	Occupation, &c.		М.	F.	Son.	Daughter.	Wife.	Widow.
Cattle salesman   Cattle sal	Cattle duaven				1	2		
Cellarman   Charwoman   Charwoman   Charwoman   Charwoman   Chemist   Chemist   Chemist   Chemist   Chipper and caulker   Civil engineer   Civil Service tutor   Civil Service tutor   Civil Service tutor   Civil Service tutor   Clay pipe maker   Clerk						10000		
Charwoman  .	0.11			1000		1 1980 9	17/65	
Chemist            1         2           1         2	CO1	800		1333	1		336	133
Chipper and caulker Civil engineer Civil service tutor Clay pipe maker Clay pipe maker Clerk 12 Clerk 12 Clerk 12 Clothier 1 Coach works 1 Coach builder 1 Coach proprietor Coal merchant Coal rimmer Coal rimmer Coal trimmer Coal trimmer Comercial traveller Commercial traveller Commercial traveller Consulting accountant Contractor Conger Coppersmith Cook Coppersmith Corn merchant Corn merchant Corn merchant Corn merchant Cook Conger Coppersmith Conger Coppersmith Corn merchant Corn miller Corn miller Corn merchant Corn merchant Corn merchant Corn merchant Corn merchant Commercial traveller Commercial traveller Compositor Consulting accountant Contractor Consulting accountant Contractor Corn merchant Corn merchant Corn merchant Corn merchant Corn merchant Corn merchant Contractor Corn merchant Contractor Corn merchant Corn miller Corn merchant Corn miller Corn miller Corn miller Corn miller Corn miller Corn miller Corn merchant Corn miller Corn merchant Cor	Classicat						1000	
Civil agrineer					100.00		10000	- 8
Civil Service tutor		37.53			1336		10000000	1
Clay pipe maker				1999	7.50	1		0.00
Clerk						700		
Clerk of works								
Clothier		803		1000	1000		1333	
Coach builder          1         2         2         1           Coach builder           1         1          1           Coach proprietor	01-41-1				0.00			7.3
Coach builder          1         1          1           Coach proprietor	Casalaman				100000			
Coach proprietor           1		973		323				
Coal heaver         1         3         2            Coal merchant         6         1         3         1           Coal miner         2              Coal runner         1         1             Coal trimmer         1         1             Coffin maker         1         1             Coffin maker         1         1             Collector         1         1              Collector         1         1		000		307				
Coal merchant         6         1         3         1            Coal miner         2								
Coal miner         2			100000					
Coal runner          1  .	01	30.00		15 15				7.3
Coal trimmer.         1          1   .		100		1 1 1 1 1				
Coffin maker         1		-						
Coke dealer           1   .		0.00		0.00	-			1000
Collector          1          1           Colliery proprietor's manager         1              Commercial agent         1              Commercial traveller         1              Commission agent         3          1          1         1           Compositor				1980	i		333	
Colliery proprietor's manager         1   <	Callaston	6.3		333	100			
Commercial agent         1					1			
Commercial traveller         1          1          2            Commission agent         3          1          1         1          1          1  <		-	200		**	• • •		
Commission agent         3         1          1         1           Compositor           1         3         1            Confectioner				**				336
Compositor          1         3         1 <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td>			-					
Confectioner         1          1		7.00	-		1000			
Consulting accountant       1   <	0 6 11	33233	1000					7735
Contractor           1         2         1 <td></td> <td></td> <td></td> <td></td> <td>1000</td> <td></td> <td>**</td> <td>200</td>					1000		**	200
Cook          1         2         1           1           Cooper	Character of the same		-			i		
Cooper Copper refiner         2           1           Copper smith           2         2         2           Corn merchant         1         1         2              Corn miller </td <td>0-1-</td> <td>1000</td> <td>186.01</td> <td></td> <td></td> <td></td> <td>-</td> <td></td>	0-1-	1000	186.01				-	
Copper refiner           1            1					-			
Coppersmith			-					
Corn merchant         1         1         2	Connersmith				9		2	2000
Corn miller <td< td=""><td></td><td></td><td>i</td><td></td><td></td><td></td><td>-</td><td>1833</td></td<>			i				-	1833
Cotton broker         1 <td< td=""><td></td><td>333</td><td></td><td>***</td><td>-</td><td></td><td></td><td>1050 0</td></td<>		333		***	-			1050 0
Cotton salesman	Clatton buoken		i					
Customs officer           1         Cycle works manager          1           Damask weaver         1 <td></td> <td></td> <td>75</td> <td></td> <td></td> <td></td> <td></td> <td></td>			75					
Cycle works manager  <						1		
Damask weaver						1	33	100
Dentist  <				1				
Dock gateman		-		-		i		
Doctor of laws             1           Domestic servant           8         4         2             Donkey engine driver          1          1			1	200			2	1336
Domestic servant         8       4       2           Donkey engine driver        1        1			0.00					1
Donkey engine driver        1        1   .				8	4	2		
Draper             2         1           Draughtsman          1          1		72.3	1		-			
Draughtsman 1 1		000					2	
			1		1			
							2	
			-			1000	100	

**TABLE VII.**—Continued.

Dressmaker	The state of the s						-	and the same
Earthenware dealer	Occupation, &c.		М.	F.	Son.	Daughter.	Wife.	Widow.
Earthenware dealer	Duogamakan			9	1			
Engine delaner		1000		-	1			
Engine driver.			.;					
Engine fitter								
Engine fitter			0.000					
Engine greaser		36	750				1000	
Errand boy			100			9	4	1
Estate agent			-					
Excise officer								
Fancy ware dealer			1			**	3000	
Farmer							1	
Ferry stageman								1000000
Ferry toll collector				**			.:	
File cutter         1   .					15.4	1000	320	
Fireman         3          16         7         4         2           Firewood dealer's manager         1			100					1
Firewood dealer's manager         1			1000		1000000		100000	
Fish and poultry dealer         1					16	7	4	2
Fisherman          1         3           1         1           1         1								
Fishmonger         1          1         1          1         1          1		ler	1					
Flatman			**		1			
Flatowner's manager								
Foreign correspondent					6	3	1	2
Forwarding agent         1			100					
Fruit farmer           1			1					4.5
Furnace man <td< td=""><td>Forwarding agent .</td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td></td<>	Forwarding agent .		1					
Furniture broker	The state of the s					1		
Furniture remover         1								
Game keeper          1							2	
Gardener        7        4       4       1       6         Gas fitter <td< td=""><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td></td<>						1		
Gas fitter        3        1        1         Gas inspector						1		
Gas inspector       1			7		4	4	1	
General broker       1	Gas fitter		3			1		1
General dealer         2          1          1           General merchant         1          1         1         2           General merchant's manager         1  .	Gas inspector		1					
General merchant         1          1         1         2           General merchant's manager         1  <	General broker		1					
General merchant's manager       1 <td< td=""><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>						-		
Gentleman			-			1	1	2
Governess        1  <		manager	1					
Green grocer          4       1          Grocer        1        1       1           Groom   <	Gentleman			7		1		
Grocer.       1        1       1	Governess			1				
Grocer.       1        1       1	Green grocer					4	1	
Groom <td< td=""><td></td><td></td><td>1</td><td></td><td>1</td><td>1</td><td></td><td></td></td<>			1		1	1		
Hardware dealer	The state of the s							1
Hardware dealer	Hair dresser		2		2	3	2	
Hatter <t< td=""><td></td><td></td><td>1300</td><td></td><td></td><td></td><td></td><td></td></t<>			1300					
Hawker         1        2           Holder-up         4        1       1       2       1         Horse dealer         1             Horse keeper            1       1         Hotel manageress           1	Constitution (Constitution Constitution Cons		1					
Holder-up         4        1       1       2       1         Horse dealer         1 <t< td=""><td></td><td></td><td></td><td>1</td><td></td><td>2</td><td></td><td></td></t<>				1		2		
Horse dealer			4		7/2/2	-	2	1
Horse keeper								
Hotel manageress 1 1							1	1
						1		
		:					1	2

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TABLE VII.—Continued.

Occupation, &c.		М.	F.	Son.	Daughter.	Wife.	Widow.
House builder's merchant		2		200			
II b		_	4			**	**
House keeper Housemaid and waitress	::		*		i		
House owner		i				**	
Hydrauli c man		2					
Insurance broker		1					
Iron driller		1		7	9	4	
Ironmon ger					1		
Ironmonger's manager							1
Iron moulder		2		2	1		2
Iron planer		1					
Iron smith				1			
Iron turner		2		5			1
Jeweller		1					1
Joiner		14		8	12	5	6
Labourer		83		160	140	54	22
Lamp-lighter		1			1		
Land agent					1		0.57
Laundress			1	2			
Laundry ironer			1				
Laundry proprietor					1		
Leather merchant		44			1	.:	1000
Licensed victualler		11		8	6	1	4
Licensed vict. manager		2		1 ::			
Lithograph printer Machinist				1			i
Machinist Marble polisher		i		1			100000
Marine store dealer	::	1					
Marine superintendent		1	**				i
Market gardener				100		i	
Master butcher		1					
,, carter		2					
,, joiner					2	1	
,, mariner		2		1	1	2	4
,, plumber		1					
,, shipbuilder		1					
,, tailor		1					
,, watchmaker		1					
Meat inspector		1					
Meat salesman		2		1			
Medical practitioner					1		
Messenger		2					
Metal planer		1					
Milk purveyor		2	1	1	2	1	**
Milliner			1			.:	
Mineral water bottler					**	1	
Mineral water salesman Minister		1	**	2			
		1	**	2	1	**	**
Naval gun instructor					1	**	i
Travai gun instructor							-

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TABLE VII.—Continued.

Occupation, &c.	М.	F.	Son.	Daughter.	Wife.	Widow.
Naval pensioner	. 3				5	
37		i		i		
Manage		3				
NT.	3000			***		i
0 1	1	3	8	5		-
00: 1		2				
Ot						***
Packman		::		100		1
D ' /	0		7	7	5	1
D - 1 6 4			i			1
Did			2	3	2	
***			1		1	
D			1		1	1
Distance forms on the	1000		i	i		1
			1		i	**
Pilotage superintendent			4	i	1	
D1 / 1			1	1 1 1 1		
7.1	1		2	5	1	
Doline detective			i	1	1	
			1			
Police inspector			6			
				3	2	
				1		.:
	10			3	.:	1
			6	9	2	1
Postal telegraph supervisor.						
The state of the s				3	1	
			1		1	
			1	3	1	1
					1	1
	:					1
	. 1					
TO 3	:			1		
	. 1			*:		
	. ::			1		
	. 14		22	27	8	3
			1			
Refreshment house keeper .			2			
Refreshment house assistan						
	:		1			
	. 1					
Retired agr. imp. mak. m'ge						
	. 1					
					1	
The second control of	1					
,, brick & tile merchan	-		1			1
	. 1					
	. 1					
,, commercial travelle	1000					1
,, cotton broker .	. 2					
., customs officer						

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TABLE VII.— Continued.

Occupation, &c.	М.	F.	Son.	Daughter.	Wife.	Widow.
Retired customs surveyor	1					
., emigration agent					1	
,, enginesmith	i					
,, fancy ware dealer						1
,, farmer	1				1.	
,, flat owner	1			1		
" general broker	1					
,, general dealer					1	
,, general merchant	2					
,, greengrocer	1					
,, horsekeeper	1					
,, journalist						1
,, master baker			-			
,, master mariner					2	
,, mechanical engineer	1					
,, minister	1					1
,, oil mills manager	1					
,, printer	1			**		
,, provision merchant				1		
,, railway goods supt	1					
" seaman		**		1	**	
,, ship broker				1		
" ship owner					1	**
,, solicitor						1
,, storekeeper		•••		**	**	
Rivet heater	4					
Dinotkon	4	**	3	2		***
D 11	1		2	1000		
Coals monohous			1	**		
Saddler			1			1
0.21				***	i	1
Canitary inquastan	1000	1	i	2.50	1000	
Sawyer	The state of the s				1	i
Scaffolder	-	-		-		
School board visitor		1	-	1		
School master	1/450		1	3	1	2
Seaman	0		18	19	4	5
Seamstress		1				
Second-hand clothes dealer	1					
Servant			9	13		
Sewing machine canvasser.			1		1	
,, salesman .				1	1.	
Shandryman			1			
Shepherd						1
Ship builder						1
Ship owner						
Ship plater			3	2		
Ship rigger			2	1	5	1
Ship's cook	. 1		1		1	
	Alama		1		1	1

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TABLE VII.—Continued.

TABLE						
Occupation, &c.	M.	F.	Son.	Daughter.	Wife.	Widow.
Ship smith Ship steward Shipwright	2	::	6 5	1 1 3	1	2 3 4
Shop assistant	2	i	4	2		1
Shop boy Silk weaver	1		**		::	i
Slater	1					1 1
Soldier Solicitor	2	::	i			
Stationer			1	.;		
Steam crane driver Stevedore	i		1	1	::	
Stock and share broker	1					
Stoker	1		3	3	i	
Stone breaker Stone mason	2		2			3
Stone mason	2			1		1
Store keeper Striker	1		1 1	·:	1 1	1 1
Striker Super. assist. overseer					1	
Superannuated pol. constable Superannuated shore steward					i	1
Tailor	2		2	4	3	2
Team owner Tea salesman	1		1 1	2	::	**
Theatre biller and checker	1	::				
Timber buyer Timber merchant			i	i	::	1
Time keeper	1					
Tinsmith Tobacconist	3				1	
Tobacco spinner			1			
Tool dealer Tool grinder	1			::	1	::
Trades union secretary				1		
Tramcar driver Traveller		::	2	2 2	**	::
Tripe dresser	1					1
Tug boat captain Upholsterer			::	i	i	1
Van driver	1		1 1		·i	
Vet'inary surgeon's assistant						**
Violin teacher				i		1
Waiter				1		
Warehouse keeper Warehouseman	0		2	2 2	·:	1 2
Warehouse owner						1
	1			1		

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TABLE VII.—Continued.

Occupation, &c.	м.	F.	Son.	Daughter.	Wife.	Widow.
Watchmaker	1 8  2   1   1		1 2 2 1		 1 1  1  1 	· · · · · · · · · · · · · · · · · · ·



