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Birkenhead (England). County Borough Council.

Publication/Creation

1894

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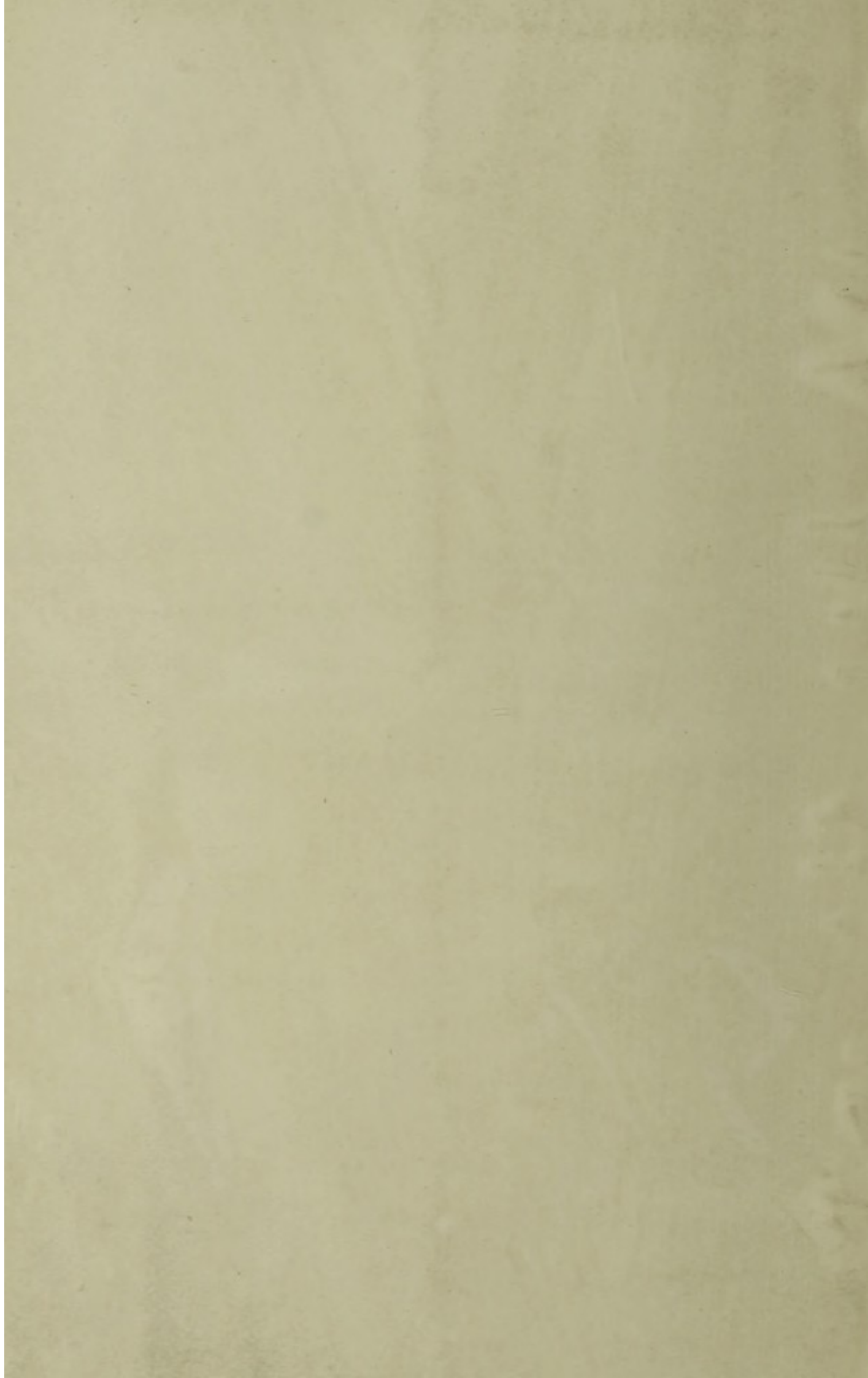


REPORT
ON THE
SANITARY CONDITION
OF THE
County Borough
OF
Birkenhead,
FOR THE YEAR 1894.

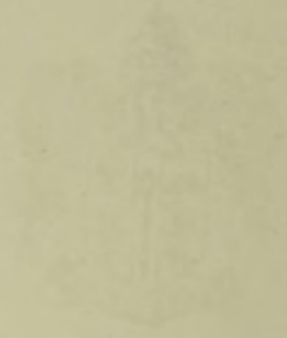
BY
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MEDICAL OFFICER OF HEALTH,
PHYSICIAN SUPERINTENDENT OF THE FEVER HOSPITAL,
AND
MEDICAL OFFICER TO THE SCHOOL BOARD.

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

1895.







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1895.

HEALTH COMMITTEE
OF THE
BIRKENHEAD TOWN COUNCIL,
1894-95.

*MR. ALDERMAN WILLIAM GETLEY, CHAIRMAN.

*MR. COUNCILLOR BENEDICT JONES, J.P., DEPUTY-CHAIRMAN.

*MR. ALDERMAN JOSEPH PERRIN.

*MR. ALDERMAN JAMES WOODCOCK.

*MR. ALDERMAN THOMAS CHARLES CLARKE.

MR. COUNCILLOR EDWARD DENMAN.

*MR. COUNCILLOR WILLIAM DOBIE.

*MR. COUNCILLOR JOHN EDWARDS.

*MR. COUNCILLOR CHARLES THOMAS GOSTENHOFER, J.P.

*MR. COUNCILLOR CECIL HOLDEN.

MR. COUNCILLOR EDWARD GEORGE MASON.

*MR. COUNCILLOR HESLOP LAIRD PEARSON.

MR. COUNCILLOR EDWARD PAYSON SMITH.

MR. COUNCILLOR GODFREY ALLAN SOLLY.

AND

HIS WORSHIP THE MAYOR.

(Mr. Alderman Thomas Shaw, J.P.)

Day of Meeting, Tuesday, at 4-30 p.m.

*Members of the Health Sub-Committee are marked thus.

OFFICIALS
OF THE
PUBLIC HEALTH DEPARTMENT,
1894.

.....

**Medical Officer of Health and Physician Superintendent
of the Fever Hospital.**

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.

Borough Analyst.

J. CARTER BELL, ASSOC. ROY. SCH. MINES., F. INST. CHEM.,
F.C.S., &C.

Chief Inspector and Inspector under the Food and Drugs Act.

*WILLIAM DAWSON, ASSOC. SAN. INST.

Matron of the Fever Hospital.

MISS EMILY YEOMANS.

Chief Clerk.

EDWARD H. CARTER.

Junior Clerks.

WILLIAM RILEY.

JOSEPH BENNETT.

Inspector of Meat, Fish and Slaughter Houses.

ROBERT WAGSTAFFE.

District Sanitary Inspectors.

*WILLIAM FITZGERALD.

*JOHN LEE.

*H. T. TAYLOR.

Inspector of Workshops and Bakehouses.

HENRY MOUNTFIELD.

Inspector of Back Passages and Ashpits.

ALBERT YOUNG.

**Inspector of Common Lodging Houses and
Houses let in Lodgings.**

WILLIAM SCOTT.

Disinfecting Inspector.

ISAAC TAYLOR.

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

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THE SANITARY CONDITION
OF THE
COUNTY BOROUGH OF BIRKENHEAD
DURING 1894.

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

Area.—The Borough has an Area of 3849½ acres, or a little more than six square miles.

Population.—The population at midsummer, 1894, as estimated by the Registrar-General, was 105,627—an addition of 1810 persons to the estimated population at midsummer 1893.

This estimate, however, I consider to be about 500 too much on the following grounds. At the time of the Census in 1891 there were 17,495 inhabited houses, and a population of 99,857, giving an average population per house of 5·7 individuals. Since the Census was taken however, there had been 80 houses demolished and 361 houses built, up to midsummer, 1894, or taking the one from the other an addition of 281 houses to the total number in the Borough. After deducting the number of uninhabited houses at June, 1894, from the total number of houses in the Borough, we arrive at the total number of inhabited houses at midsummer, 1894, viz., 18,442 as compared with 17,495 at the time of the Census. Now if we allow the same number of persons per house as was found to exist at the time of the Census return, viz., 5·7, and multiply 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 $5.7 \times 18,442 = 105,119$ which I consider was the true population of Birkenhead at midsummer, 1894. In calculating the rates, &c. contained in the following tables, I have adhered to the usual custom of taking the Registrar-General's estimate, as otherwise the rates would not be comparable with former reports or with those of other towns, where his estimates are almost invariably taken.

The population of the several townships forming the Borough as given in the Census of 1891, and the estimated population at midsummer, 1894, are conveniently arranged in tabular form as follows:—

TOWNSHIPS	Popula- tion at Census 1891	Population at Midsummer 1894
Birkenhead	58287	61656
Claughton	3510	3713
Tranmere	30680	32453
Oxton	4429	4684
Higher Bebington (part of)	2951	3121
Birkenhead Borough	99,857	105,627

Area in acres.—Density of Population.—The next table shows the area in statute acres of the townships forming the Borough, and the proportion of persons per acre in each. It will be seen that there is a great difference in the density of population of Birkenhead and Tranmere, and yet a greater difference in this respect between either of these townships and the semi-rural townships of Claughton, Oxton and Bebington.

TOWNSHIPS	Area in Acres	Persons per Acre
Birkenhead	1279 $\frac{3}{4}$	48.16
Claughton	438 $\frac{3}{4}$	8.46
Tranmere	1071 $\frac{1}{4}$	30.30
Oxton	814	5.75
Higher Bebington (part of)	245 $\frac{3}{4}$	12.68
Birkenhead Borough	3849 $\frac{1}{2}$	27.44

Uninhabited Property in the Borough.—I am indebted to the Chief Constable for the particulars contained in the following table, showing the amount of uninhabited property in the Town from March 31st to September 30th, 1894.

Return of Uninhabited Property in the Borough, 1893-94.						
	District.	Private Houses	Shops	Cottages	Dock Cottages	Total
For the Half-year ending 31st March, 1893.	Birkenhead	49	75	341	..	465
	Claughton and Oxton..	30	6	21	102	160
	Tranmere & Bebington	99	12	102	..	213
	Total for Borough..	178	93	464	103	838
For the Half-year ending 30th September, 1893.	Birkenhead	47	81	370	..	498
	Claughton and Oxton..	29	3	22	98	152
	Tranmere & Bebington	96	19	115	..	230
	Total for Borough..	172	103	507	98	880
For the Half-year ending 31st March, 1894.	Birkenhead	57	90	493	..	640
	Claughton and Oxton..	28	3	29	102	162
	Tranmere & Bebington	125	24	124	..	273
	Total for Borough..	210	117	646	102	1075
For the Half-year ending 30th September, 1894.	Birkenhead	35	81	377	..	493
	Claughton and Oxton..	40	4	31	94	169
	Tranmere & Bebington	130	10	77	..	217
	Total for Borough..	205	95	485	94	879

It will be seen from the above that the number of uninhabited houses on the 30th September, 1894, was one less than that for the half-year ending 30th September, 1893, and that in spite of the fact that a number of new houses were built during the year, (the exact number I have been unable to obtain), and that in 1892-93, the number of new houses built was 210.

Births and Deaths in Birkenhead.—During the year 1894, the returns of the local registrars recorded 3,246 births and 1,915 deaths in the Borough of Birkenhead. The natural increase in the population in 1894 was therefore 1,331. Of the births 1,675 were males, and 1,571 were females; of the deaths 984 were males, and 931 were females.

The excess of births over deaths during the last five years is shown in the following table :—

	1890	1891	1892	1893	1894
Births	3302	3286	3341	3431	3246
Deaths	2084	2100	1967	2132	1915
Excess of Births over Deaths ..	1218	1186	1374	1299	1331

Further particulars as to the births and deaths in the Borough in 1894, that is to say, the number registered in each quarter of the year, and the number referred to each township, are given in the tables subjoined. The births and deaths in the premises belonging to the Union are entered separately.

BIRTHS	1st Qr.		2nd Qr.		3rd Qr.		4th Qr.		1894		Total
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Birkenhead	300	276	273	234	263	260	234	230	1070	1000	2070
Claughton	6	7	10	14	5	8	9	11	30	40	70
Tranmere	132	111	130	108	132	144	109	101	503	464	967
Oxton	5	7	12	14	11	9	10	9	38	39	77
Bebington	6	..	4	4	4	3	3	2	17	9	26
Union Hospital	9	5	3	7	2	5	3	2	17	19	36
Birkenhead Borough ..	458	406	432	381	417	429	368	355	1675	1571	3246

DEATHS	1st Qr.		2nd Qr.		3rd Qr.		4th Qr.		1894		Total
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Birkenhead	181	163	151	143	154	142	116	123	602	571	1173
Claughton	6	3	4	4	4	6	1	2	15	15	30
Tranmere	71	80	61	67	55	42	64	63	251	252	503
Oxton	9	4	1	5	3	4	1	6	14	19	33
Bebington	2	4	1	4	4	7	6	1	13	16	29
Union Hospital	32	19	24	15	19	8	14	16	89	58	147
Birkenhead Borough ..	301	273	242	238	239	209	202	211	984	931	1915

Birth-rates and Death-rates in Birkenhead.—The annual rates, per 1,000 living, of births and deaths, for the whole incorporated area and the townships within it, appear in the next table.

1894	Annual Rate per 1000 Living	
	Births	Deaths
Birkenhead	33.57	19.02
Claughton.....	18.85	8.07
Tranmere	29.79	15.49
Oxton	16.43	7.89
Bebington.....	8.33	9.22
Birkenhead Borough including) B. and D. in Union premises) ..	30.73	18.12

The birth-rate for 1894 is the lowest yet recorded. The death-rate is, with one exception, (1881), the lowest recorded since the incorporation of the Borough.

The death-rate of Birkenhead township being nearly 4 per 1,000 living higher than the death-rate in Tranmere, and nearly 11 per cent. 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.

Birth-rates and Death-rates in the 33 great towns in England.—In order that the birth-rates and death-rates of the Borough of Birkenhead in 1894 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, 1894. The table gives the estimated population of the 33 large towns and the estimated number of persons per acre in each at midsummer, 1894. The birth-rates and death-rates are for the 52 weeks ending 30th December, 1894.

33 Great Towns—Population, Persons to Acre, Births, Deaths, &c., for the Year 1894.

CITIES AND BOROUGH.	Estimated Population at Midsummer 1894	Persons to an Acre 1894	Births.	Deaths.	Annual Rate per 1000 Living			Deaths from							Deaths of Children under one year of	Rate per cent. of Uncertified Deaths.	
					Births.	Deaths.	Principal Zymotic Diseases.	Small-Pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-Cough.	Fever.	Diarrhoea.			
33 Towns	10458442	34.9	320497	188995	30.7	18.1	2.4	25412	450	6553	2177	3379	5033	1997	5223	152	1.7
32 Provincial Towns..	6109276	....	189944	111956	31.2	18.4	2.3	13868	361	3280	1215	1309	2936	1344	3443	159	2.3
London ..	4349166	58.2	130553	77039	30.1	17.8	2.7	11544	89	3293	962	2670	2097	653	1780	143	0.8
West Ham	238184	50.6	8067	3841	34.0	16.2	3.2	758	49	229	36	190	101	45	108	138	4.2
Croydon	111921	12.4	2793	1472	25.0	13.2	1.5	172	..	40	8	26	62	7	23	121	..
Brighton	118715	46.9	3055	1943	25.8	16.4	1.2	143	..	36	4	33	14	11	52	138	1.4
Plymouth	170973	36.6	4709	2584	27.6	15.2	2.0	332	4	138	15	33	41	27	74	131	0.8
Plymouth	87931	59.1	2528	1605	28.8	18.3	1.6	139	5	3	8	5	78	11	29	160	1.2
Bristol	296578	50.8	6373	3900	38.2	17.3	2.0	461	16	114	16	48	176	22	69	150	1.3
Cardiff ..	148890	24.6	5103	2408	34.4	16.2	1.9	288	1	11	8	69	123	8	68	141	1.2
Swansea	95399	18.8	3069	1621	32.3	17.0	1.8	168	..	26	23	10	77	12	20	163	1.1
Wolverhampton..	85036	24.1	2889	1755	34.1	20.7	3.2	274	5	72	53	35	28	17	64	166	0.7
Birmingham	492301	38.7	15562	9125	31.7	18.6	2.5	1225	170	327	76	75	214	106	257	163	5.1
Norwich	105645	14.0	3137	1974	29.8	18.7	1.5	159	..	22	15	18	38	23	43	164	1.7
Leicester	189136	22.0	5934	2764	31.5	14.7	1.9	365	..	106	30	13	12	28	176	162	3.1
Nottingham	223584	20.4	6381	3844	28.6	17.2	2.3	520	3	134	51	18	118	62	131	174	1.3
Derby	98796	28.6	2890	1479	29.3	15.0	1.6	160	..	64	15	5	16	26	34	123	0.7
BIRKENHEAD	105627	30.3	3246	1915	30.7	18.1	2.6	278	1	92	12	41	67	17	48	143	0.5
Liverpool	507230	97.3	17893	12062	35.4	23.8	3.4	1726	20	299	229	97	276	297	508	179	3.5
Bolton	118303	50.2	3721	2217	31.5	18.8	1.8	215	..	21	9	10	59	26	90	162	0.9
Manchester	520211	40.3	16606	10392	32.0	20.4	2.4	1235	23	224	113	146	287	96	346	160	1.3
Salford	295828	39.8	7041	4310	34.3	21.0	3.3	667	2	146	112	63	140	63	141	174	2.8
Oldham	138755	29.3	3762	2575	27.2	18.6	1.8	255	23	56	21	39	57	15	44	161	0.8
Burnley	96478	24.6	3069	1799	32.2	18.7	2.5	237	..	36	51	29	17	27	77	170	1.8
Blackburn	125797	18.0	3617	2244	28.8	17.9	1.6	201	..	13	9	18	42	33	86	169	3.6
Preston	111425	27.4	3566	2312	32.1	20.8	2.6	290	1	37	12	8	46	29	157	217	4.8
Huddersfield	98511	8.3	1988	1552	20.2	15.8	1.4	142	..	13	23	22	54	12	18	160	3.4
Halifax	92831	10.9	2142	1526	23.1	16.5	0.9	81	4	33	3	12	19	6	4	135	4.9
Bradford	223985	20.8	5961	3797	26.7	17.0	1.8	394	27	115	72	17	68	30	65	145	0.9
Leeds ..	388761	18.0	12502	6927	32.2	17.9	2.0	776	3	290	52	73	131	52	175	155	1.0
Sheffield	338316	17.2	11267	5994	33.4	17.8	2.3	765	..	165	40	66	239	64	191	157	3.6
Hull ..	212679	26.0	6868	3683	32.4	17.4	1.8	373	3	93	39	29	91	40	88	142	4.2
Sunderland	136101	47.5	4768	2821	35.1	20.8	3.1	415	..	116	25	9	70	82	113	167	1.0
Gateshead	93372	29.7	3180	1644	34.2	17.7	2.4	219	1	93	6	21	31	23	44	152	0.9
Newcastle-on-Tyne	201947	37.6	6250	3684	31.0	18.3	2.2	435	..	96	29	32	154	27	97	157	1.0

Out of the whole number of cities and boroughs, fourteen had lower birth-rates and nineteen lower death-rates than Birkenhead. The birth-rate of the gross population of the great cities and boroughs was 0·5 per 1000 living higher, and the death-rate 0·3 per 1000 living higher, than the corresponding rates in Birkenhead. The population of Birkenhead it will be noted is greater than eight on the list of great towns, and the density of population (persons per acre) is greater than in nineteen towns in the list.

The birth-rate of the 33 towns in 1894, (30·7) is exceptionally low, being even less than last year, (32·9), the average rate in the preceding nine years having been 33·9. The death-rate of the 33 towns in 1894 (18·1) is much lower than last year (21·6), the average rate in the preceding nine years having been 21·5.

In my last year's report I had a table, shewing the population of Birkenhead as corrected from the complete census returns, and the number of births and deaths in past years since the incorporation of the Borough, and also the birth and death-rates deducible from these figures; this is repeated, together with the figures for this year.

Year	Estimated Population at Midsummer	BIRTHS.		DEATHS.	
		Number of Births	Birth rate per 1000 per annum	Number of Deaths	Death rate per 1000 per annum
1878	77260	2932	37·94	1656	21·43
1879	79642	3112	39·07	1631	20·47
1880	82023	3048	37·16	1624	19·79
1881	84404	3059	36·24	1462	17·32
1882	85993	3156	36·70	1742	20·25
1883	87582	3145	35·90	1770	20·20
1884	89171	3459	38·79	1769	19·83
1885	90760	3224	35·52	1816	20·00
1886	92349	3218	34·84	1808	19·57
1887	93938	3161	33·64	2053	21·85
1888	95527	3082	32·26	1788	18·71
1889	97116	3207	33·02	1830	18·84
1890	98705	3302	33·45	2084	21·11
1891	100294	3286	32·76	2100	20·93
1892	102038	3341	32·74	1967	19·27
1893	103817	3431	33·04	2132	20·53
1894	105627	3246	30·73	1915	18·12

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 meteorological 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 1894, arranged with reference to the age at which death occurred in each case. They are disposed in four sub-tables—the 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 1894, the deaths of infants under one year of age accounted for 461, those over one year but under five years of age for 339, children and young persons for 121, adults 577, old people over sixty years of age 417. In the Townships of Birkenhead and Claughton, 306 deaths occurred among infants, 239 in children under five, 83 among children and young persons, 360 among adults, and 215 among old persons. In Tranmere and Oxton the number of deaths of infants under one year was 144, of those under five and over one year was 96, of children and young persons 31, of adults 141, and of old people 124.

In Bebington Ward there were 3 deaths of infants under one year, 2 over one and under five years, 6 of children and young persons, 7 of adults and 11 of old people.

The relative proportion of deaths, in 1894, 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 AGES TO TOTAL DEATHS	Age below				60 and Upwards
	1	2-5	20	60	
Birkenhead and Claughton.....	25.4	19.8	6.8	29.9	17.8
Tranmere and Oxtou	26.8	17.9	5.7	26.3	23.1
Bebington	10.3	2.8	20.6	24.1	37.9
Union Hospital and Workhouse	5.4	1.3	0.6	46.9	45.5
Birkenhead Borough	24.07	17.7	6.3	30.1	21.7

In this respect the local mortality compares favourably with the mortality in most great cities and boroughs. The local mortality for 1894 also compares favourably with the local mortality during the decade 1881-93. The percentages taken out for Bebington have little significance, the number of deaths being so small.

The proportion of deaths of infants under one year to the births registered.—The proportion in Birkenhead Borough in 1894 was equal to 142 per 1,000, which is a lower ratio than any yet recorded. In 1893 the proportion was unprecedentedly high, viz.:—197 per 1000. In 1892 it was equal to 168 per 1,000, in 1891 the proportion was 148 per 1,000, in 1890, 166, and in 1889 the proportion was 169. In the 33 great cities and boroughs in England and Wales, amongst which Birkenhead is classed, the proportion of deaths under one year to births registered, in 1894 was 152. It varied greatly in the different towns, ranging from 121 in Croydon to 217 in Preston.

Table II. is the weekly register of deaths in the Borough of Birkenhead for 1894. The deaths are entered as in Table I. into four sub-tables, representing Birkenhead and Claughton, Tranmere and Oxtou, 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.

Illegitimacy.—It seemed desirable last year to introduce into the report the statistics relating to illegitimacy, 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 to continue these statistics in this report as the subject is one of some importance.

The following table gives the total number of legitimate and illegitimate births, with the rates per 1,000 of births and per 1,000 living, and statistics relative to the deaths of such children under one year of age.

Illegitimate Birth and Death Rates, 1894.

Registrar's Sub-District	Estimated Population 1894	BIRTHS		ILLEGITIMATE BIRTHS		Total deaths of children under one year of age	Deaths of illegitimate children under one year of age	Proportion of illegitimate deaths to total deaths under one year of age.
		Legitimate	Illegitimate	to 1000 living	to 1000 births			
Birkenhead ..	61656	2008	62	1·00	30·87	302	33	13·7
Tranmere, Oxtou and Claughton ..	40850	1064	50	1·22	46·99	148	8	56·5
Bebington ..	3121	26	..	..	..	3	..	..
Total	105627	3098	112	1·06	36·15	453	41	11·0

It will be seen from the above that for every 1,000 *legitimate* births registered during the year, 136·2 deaths of *legitimate* children under one year of age took place, whilst for every 1,000 *illegitimate* births registered during the same period no less than 366·0 deaths of *illegitimate* children under one year of age took place. In other

words more than 36 per cent. of the illegitimate children born, die within the first year of life. These numbers are certainly better 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, 1893, to 30th June, 1894.

Births	Successfully Vaccinated	Insus-ceptable	Had Small-pox	Died Unvaccinated	Postponed by Medical Certificate	Removed to Districts the Vaccination Officers of which were duly notified	Removed to places unknown or which cannot be reached	In Abeyance
3317	2860	13	..	332	48	15	49	..

The percentage of children successfully vaccinated out of the total number of births was therefore 86·22, as compared with 83·89 last year.

The number of deaths of unvaccinated children, viz., 332, gives a percentage of 10·00, as compared with 11·57 last year.

Pauperism.—The latest information obtainable is for the year Michaelmas, 1893, to Michaelmas, 1894, the cost of relief during this period was as follows, viz:—

	£	s.	d.
In maintenance in year ended Michaelmas, 1894, was	6876	6	8
Out-door relief (including non-resident and boarded-out paupers)	8086	10	3
Total.....	£14962	16	11

The lowest number of In-door poor in any week during 1894 was 728, and the highest number 839.

The lowest number of Out-door poor in any week during 1894 was 1,649, and the highest number 7,742.

Marriages.—The number of marriages in the Borough during the year 1894 was 828, giving an annual rate per 1,000 living of 7·83, as compared with 5·72 for 1893, a very low rate.

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 1894. It has kindly been prepared by W. E. Plummer, Esq. M.A. F.R.A.S., Director of the Liverpool Observatory, Bidston Hill, who also furnishes particulars weekly of the daily observations taken under his directions, from which Table IV. in the appendix is compiled.

1894				Mean Tempera- ture	Mean Barometer	Rainfall on ground
				°	Inches	Inches
January	..	..	..	39·1	29·768	1·694
February	..	..	..	42·5	29·924	3·177
March	..	..	..	45·5	29·911	1·558
April	..	..	..	50·5	29·845	1·596
May	..	..	..	49·1	29·955	2·475
June	..	..	..	57·7	29·990	1·958
July	..	..	..	60·9	29·862	3·284
August	..	..	..	58·0	29·892	3·062
September	..	..	..	54·1	30·188	0·916
October	..	..	..	49·7	29·906	3·988
November	..	..	..	47·3	29·891	1·989
December	..	..	..	43·0	29·965	2·215

The meteorological results show as follows:—

Barometer.—The mean barometer of 1894 (29·925 inches) was lower than in recent years. The monthly mean was high in September, June, May and December. It was low in January. The highest reading during the year was on December 27th, when 30·671 was reached, on the 3rd January 30·639 was reached. The lowest barometer touched was 28·903 on October 25th.

Temperature.—The mean temperature in 1894 was 50·1 degrees F., or somewhat lower than the means of recent years, and 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, four days in February, and four days in December. The lowest temperature reached at any time during 1894 was 12·6 degrees F. on January 5th. The highest temperature reached was 81·0 degrees F. on July 1st.

Rainfall.—The Rainfall in 1894 (27·912 inches) was considerably greater than last year and slightly above the average. The rainfall in 1892 (32·856-inches) was in excess of the average fall in the locality, and greater than the rainfall of the previous year. A rainfall of 27 inches was recorded in 1889 and 1890; in 1888 but 24 inches of rain fell, and in 1887 under 21 inches—a smaller rainfall than any recorded since there has been an Observatory at Bidston. The number of hours at which rain fell during the year was 648·6, it was 538·1 last year, and 733 in 1892, which was higher than the yearly average. The heaviest fall on any single day was on October 20th (1·046 inches.)

Wind.—The wind force in 1894 was at the rate of 17·2 miles an hour, which is about that of the local average. The most rapid motion of air during any single hour of the year was on December 29th—on this day the rate of wind per hour was from 40 miles to 75 miles. The rate for the whole twenty-four hours of the day was 1,378 miles, giving a mean hourly motion of air of 57·4 miles. There were only two hours in the year in which there was no wind—these calm hours occurred on July 9th and August 31st, one hour on each day—there were eight calm hours in 1892. In 1894 55·37 per cent. of the winds were westerly, including due south, a percentage somewhat below the average.

Humidity of the air.—The mean difference between the wet and dry bulb of the thermometer in 1894 was less than in the last year, and the average.

Cloud.—The proportion of cloud to clear sky is estimated twice daily. In 1894, the proportion was 66·8 per cent. This is a lower per centage than the mean proportion.

This year's meteorology naturally introduces the next subject to be considered, 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 353 were entered to the first quarter, 302 to the second, 306 to the third, and 242 to the fourth; of the sum of the deaths in Tranmere and Oxtun, 164 appear in the first quarter, 134 in the second, 104 in the third, and 134 in the fourth. In Bebington the numbers of deaths registered in the four quarters were respectively 6, 5, 11, 7; and in the Union Hospital and Workhouse the numbers were 51, 39, 27 and 30. Expressed in death rates per 1,000 living, the mortality of the whole Borough, in 1894, was 21.7 in the first quarter, 18.1 in the second quarter, 16.9 in the third quarter and 15.6 in the fourth quarter. The mortality of the first quarter is thus shown to be high. The death-rate for the remainder of the year is a little below the mean.

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 called 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 nutritive processes. Class V. groups together all deaths which are the evident and direct result of physical or chemical forces.

Of the 1,915 deaths registered in the Borough during 1894, 1,885 were ascribed to specified causes; that is to say 340 to zymotic diseases, 303 to constitutional diseases, 888 to local diseases, 301 to developmental diseases, and 53 to violence. The proportion of deaths from zymotic diseases to the whole number of deaths was thus 17·7 per cent. The proportion 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 1,000 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 1894 are the corresponding corrected death-rates for 1893, 1892, 1891, 1890, and the mean of the corresponding corrected death-rates in the ten years 1881-90.

CLASSES	Annual Death-rate per 1000 Living					
	1881-90 Average	1890	1891	1892	1893	1894
Zymotic Diseases	3.11	3.35	2.63	3.05	3.73	3.21
Constitutional Diseases	2.75	3.42	3.07	2.25	2.38	2.86
Local Diseases	9.63	10.20	11.04	9.53	10.01	8.40
Developmental Diseases	3.16	3.38	3.17	3.40	3.50	2.84
Violent Deaths.....	0.82	0.58	0.98	0.07	0.63	0.50

This table shows that the death-rate as regards constitutional diseases in 1894 were slightly higher than the corrected mean rates. The zymotic death-rate was slightly above the mean. The death-rate as regards developmental diseases was much lower than the mean rate. The proportion of deaths due to violence was below the mean.

Zymotic Diseases.—The deaths from zymotic diseases include 284 by what have been termed the chief zymotics (certain diseases belonging to the miasmatic order), viz: smallpox 1, measles 94, scarlatina 10, diphtheria 38, whooping cough 66, fevers 18, and diarrhoea 57. The remaining 56 were entered to what have been called minor zymotics (diseases less prevalent, less fatal, or less obviously zymotic in character), viz: influenza 6, croup 8, quinsy 1, syphilis 14, erysipelas 6, rickets 1, alcoholism 4, puerperal fever 7, dysentery 3, hydrophobia 1, thrush 1, privation 1, and others 3. The mortality from the chief zymotics in 1894 was equal to a death-rate of 2.68 per 1,000 living.

The death-rates in respect of the principal and other zymotics during 1894 are given in the next table. Corresponding corrected rates for 1890, 1891, 1892, 1893, and the average of corrected rates for the ten years 1881-90, having been taken out for comparison.

ZYMOTIC DISEASES.	Annual Death-rate per 1000 Living.					
	1881-90 Average	1890	1891	1892	1893	1894
Chicken Pox	0.00	0.00	0.00	0.009	0.009	0.000
Smallpox	0.016	0.00	0.00	0.009	0.009	0.009
Measles.....	0.55	0.90	0.34	0.620	0.144	0.880
Scarlatina	0.32	0.15	0.05	0.079	0.115	0.094
Diphtheria	0.09	0.11	0.11	0.059	0.154	0.359
Whooping Cough	0.48	0.38	0.30	0.058	0.655	0.624
Fevers	0.31	0.44	0.46	0.023	0.260	0.170
Diarrhoea.....	0.63	0.71	0.35	0.056	1.647	0.539
Other Zymotics	0.72	0.63	1.01	0.091	0.539	0.530

This table shows that in 1894, the mortality of all the principal zymotic diseases was below the average, except diphtheria, measles, and whooping cough. The fatality from scarlatina and diarrhœa is low. On the other hand the mortality from measles is very high, and from fevers much below the mean rate. The mortality from the diseases grouped together as "other zymotics" is also low.

Prevalence of Sickness during 1894.

Small-pox.—Twelve cases of small-pox occurred in the Borough during 1894. Of these, one case occurred in March, one in April, two in June, one in July, one in August, one in October, four in November, and one case in December. In every case, but one, the patients were removed to the Infectious Diseases Hospital and isolated within a few hours of their notification, and thus what might have proved a dangerous epidemic was effectually stopped at its commencement. Only one death occurred from this disease.

Chicken-pox.—There was no death registered from this disease during the year.

Measles.—There were 1,818 cases of measles reported during the year 1894, which is a larger number than has occurred in any year since notification has been in force. The epidemic commenced in 1893, and in January there was 320 new cases; in February 448 cases; in March 512 cases; and then the disease gradually died out by the end of July.

There were 94 deaths certified directly as due to this disease, and no doubt others occurred which were not primarily attributed to measles; yet as I have remarked each year, there are persons who go about openly advocating the exposure of children to the chance of infection, on the ground that all children must have it and the sooner they get it the better.

German Measles.—There were sixteen cases of German measles reported during the year, but no deaths from this disease.

Scarlatina--was prevalent during the whole year, 379 cases being notified during the twelve months, or some 42 fewer cases than occurred in 1893. The greatest number reported during any one month was in November, when 48 cases occurred. The disease was not confined to any one quarter of the town, but pretty evenly distributed over the whole Borough. The number of deaths—10, was very low in proportion to the number of cases reported.

Diphtheria.—One hundred and thirty-three cases of diphtheria were reported during the year, a larger number than in any year since compulsory notification came into force. Of these no less than 38 died, a mortality of 28·5 per cent, or nearly 8 per cent higher than last year, and of these thirty-eight who died, thirty-five were under five years of age at the time of death.

Croup.—There were also eight deaths attributed to croup. All of these being in children under five years of age.

Fevers.—The number of cases of fever notified in 1894 was considerably less than that of the previous year, viz:—25 as compared with 35 in 1893—of these 18 were ascribed to typhoid fever, and 7 to Puerperal Septicæmia.

Typhus Fever.—Of the seven cases notified to the Sanitary Authority, all were immediately removed to the Infectious Diseases Hospital and isolated, every care being taken to stop the spread of the disease. Fortunately none of them succumbed to the disease.

Typhoid Fever.—As previously stated there were 194 cases of Typhoid Fever notified during 1894, this disease being practically never absent from the town. The number of cases this year being much less than the number recorded in 1893, viz:—221. The number of deaths, 18, was proportionately very low, and less than the number recorded in any year during the past seven years.

Diarrhœa.—The year has been marked by a considerable decrease in the number of deaths from Summer Diarrhœa, only 57 deaths

being attributed to this cause, as compared with 171 last year. Of the deaths 45 were of children under two years of age.

Influenza.—This is not one of the diseases notifiable under the Local Act, and consequently we have no direct means of knowing to what extent it prevailed in the district. There were, however, 6 deaths directly attributed to this cause, being fifteen less than those of last year, but a much smaller number than occurred in 1891, when 48 deaths were recorded. Of the deaths occurring in 1894, three were males and three were females.

Whooping Cough.—This also is not one of the notifiable diseases, and consequently we have here also no record of the number of cases occurring. There were, however, no less than 66 deaths registered under this head, being 2 less than last year.

Cholera.—No case of Cholera was known to the Sanitary Authority as having occurred in the district during 1894.

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 smallpox, measles, German measles, scarlatina, diphtheria, membranous croup, fevers, (typhus, typhoid, continued, relapsing, and puerperal septicæmia), and cholera. The cases notified appear in the following return. Of the whole number 2,584 were notified by duly qualified medical practitioners; 20 were notified by school attendance officers, such notifications being subsequently verified by the occupiers; 19 cases were notified by the occupier only; and two cases were notified by the registrar—of course after death. This may be assumed to represent proximately the extent of the failure of compulsory

notification. In 1892 and 1893 there were two cases each year, and in 1891 there were four cases not notified till after death. In 1890 there were five cases, and in 1889 only one case was not notified till after death.

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

1894	Smallpox	Measles	German Measles	Scarlatina	Diphtheria	Typhus Fever	Typhoid Fever	Fever	Cholera	TOTAL
January....	..	320	3	49	14	..	11	1	..	399
February ..	..	448	7	23	15	..	11	1	..	505
March	1	512	4	24	8	..	12	..	..	561
April	1	207	..	15	5	..	15	..	..	243
May .....	..	107	1	9	3	..	20	1	..	201
June	2	85	..	22	15	2	21	..	..	147
July	1	56	..	33	10	2	18	..	..	120
August	1	7	..	30	8	..	13	..	..	59
September..	..	4	1	45	23	2	12	..	..	87
October	1	5	..	39	15	1	10	..	..	70
November..	4	6	..	48	6	..	26	1	..	91
December ..	1	1	..	42	11	..	25	2	..	81
	12	1818	16	379	133	7	194	6	..	2565

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 Fever	Typhoid Fever	Fever	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	..	1643
1886	6	595	10	617	24	18	58	4	..	1332
1887	..	1334	12	914	21	8	142	4	..	2435
1888	..	819	4	438	36	13	234	2	..	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	..	1966
1893	15	540	11	421	77	4	221	9	..	1298
1894	12	1818	16	379	133	7	194	6	..	2565
	203	12954	126	4830	471	321	1843	86	2	20836

Constitutional, Local, and Developmental Diseases.—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 columns containing the rates of 1894, are the corresponding death-rates for 1893, 1892 and 1891, the corrected death-rate for 1890, and the mean of the corresponding corrected death-rates in the ten years of 1881-90.

CONSTITUTIONAL, LOCAL, AND DEVELOPMENTAL DISEASES.	Annual Death-rate per 1000 Living					
	1881-90 Average	1890	1891	1892	1893	1894
Diathetic Diseases	0·63	0·85	0·58	0·58	0·59	0·86
Tubercular Diseases.. ..	2·11	2·56	2·49	1·66	1·79	2·57
Diseases of Nervous System ..	2·81	3·06	3·00	2·66	2·64	2·31
" Organs of Circulation ..	1·21	1·20	1·29	1·07	1·35	1·22
" Respiratory Organs ..	3·91	4·52	5·32	4·07	3·90	3·31
" Digestive Organs ..	1·08	0·97	1·00	1·13	1·44	0·98
" Urinary Organs ..	0·41	0·29	0·27	0·37	0·44	0·42
" Organs of Generation ..	0·01	0·00	0·01	0·15	0·10	0·00
" Organs of Locomotion ..	0·05	0·07	0·08	0·00	0·01	0·00
" Integumentary System ..	0·08	0·06	0·06	0·03	0·09	0·09
Developmental Diseases of Children	0·80	0·80	0·73	1·03	1·06	0·62
" " Adults	0·15	0·13	0·18	0·00	0·10	0·05
" " Old People	0·84	1·18	1·07	1·20	1·26	1·21
Diseases of Nutrition	1·36	1·26	1·18	1·16	1·06	0·95

The two orders under which constitutional diseases are arranged have little in common, except that in typical diseases in each order new morbid products are deposited. Diathetic diseases account for 91 deaths, of which 43 were due to cancer, 9 to rheumatism, 10 to anæmia, 6 to mortification, 5 to dropsy, and 18 were ascribed to tumour. All but 10 out of the 91 were deaths of adults. Tubercular diseases account for 212 deaths; of which 191 were due to phthisis pulmonalis, 2 to hydrocephalus, 17 to tabes mesenterica, 1 to scrofula, and 1 to hæmoptysis. One hundred and sixty-two of the deaths in this order were of children and young persons. The diathetic disease death-rate of 1894 is almost

the same as in 1890, and a little above the local mean rate; and the tubercular disease death-rate of 1894 is higher than that for the four preceding years, and one-fourth higher than 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 1894 were 245; the deaths from diseases of the heart and blood vessels were 129; the deaths from diseases of the respiratory organs were 353; and the deaths from diseases of the digestive organs were 104. The deaths entered to diseases under the remaining four orders were 57. Of the 888 deaths from local diseases, 320 were of infants under five years of age, and 46 were of children and young persons over five years and under twenty. It will be seen that the death-rate as regards diseases of respiratory organs in 1894 was less than during the last four years, and about that of the mean rate. The death-rates as regards diseases of the nervous system and diseases of the organs of circulation in 1894 were also about the mean rates. The death-rates in respect of diseases of the digestive and urinary organs in 1894 were also about the mean rates.

Of the deaths caused in Class IV., 66 were ascribed to so-called developmental diseases of children, *i.e.* premature birth, malformations, and teething; 128 to old age; and 101 to diseases of nutrition, that is, atrophy, debility and marasmus. The death-rates for 1894 in this class do not compare unfavourably with the corresponding local mean rates. The number of deaths ascribed to old age is considerably more than the average, and the number ascribed to the diseases of nutrition is slightly below the average. There is some reason to believe that the number of deaths due to childbirth is understated year by year; many deaths in childbed being certified to secondary causes, "peritonitis," "convulsions," &c.

Inquests.—The number of inquests held during 1894 was 146, thus 7 per cent. of the sum of the deaths in the Borough formed

the subjects of official enquiries. Of these inquests 119 were in the township of Birkenhead, 20 were in Tranmere, 4 in Claughton, 1 in Oxtan, 1 in Rebington, and 1 was held in the Workhouse; 90 were on the bodies of males, and 56 were on the bodies of females. In 1893 the number of inquests was 171, in 1892—188, in 1891—156, in 1890—120, and in 1889 the number was 134. Out of the 146 inquests held, in 35 cases, or no less than 24·6 per cent., it does not appear that the actual *cause* of death was ascertained at all. Thus it is stated as follows:—

Found dead in bed	...	...	...	...	10
Natural causes	...	...	...	...	5
Found dead	...	...	...	...	2
By the visitation of God	...	...	...	...	2
Nature of disease unascertained	...	...	...	...	7
Accidental death	...	...	...	...	2
Found drowned (whether thrown into the water before or after death not being stated)	...	...	...	...	7

As I remarked last year, one fails to see what benefit is obtained from inquests which arrive at such indefinite conclusions.

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 1894, out of the 1,915 deaths registered, 10 (4 males and 6 females) were marked "not certified,"—that is 0·52 per cent. Eight of these uncertified deaths took place in the Township of Birkenhead, and two in Tranmere. With two exceptions all were of infants under one year of age. *It is a great defect of our present law that such deaths should be allowed to be registered without an official enquiry into*

their cause. It is a very significant fact that in eight cases they were deaths of infants. The causes of the 10 deaths were entered in accordance with the statements of persons giving information to the registrars as follows:—

3 to convulsions
 2 to debility
 1 to bronchitis
 1 to jaundice
 1 to premature birth
 1 to teething, and
 1 to old age

The proportion of uncertified deaths to the sum of the deaths was, as already stated, 0·52 per cent. as compared with 1·12 per cent. in 1893, 0·45 per cent. in 1892, under 0·09 per cent. in 1891, 1·1 per cent. in 1890, and 1·4 per cent in 1889; the mean proportion during the ten years 1879—88 was 2·6 per cent. The proportion of uncertified deaths is therefore decreasing, which is most satisfactory.

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 1894, 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 the 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.

1894				Deaths from All Causes		Deaths from Zymotic Diseases		Deaths from Causes Uncertified	
				M.	F.	M.	F.	M.	F.
Cleveland	Ward	..	..	211	174	34	37	1	2
Claughton	"	..	..	15	15	1	3	..	..
Grange	"	..	..	231	241	40	43	2	2
Argyle	"	..	..	160	156	30	39	1	..
Oxton	"	..	..	14	19	2	..	..	..
Egerton	"	..	..	78	71	14	25	..	..
Clifton	"	..	..	120	123	20	17	..	..
Mersey	"	..	..	54	57	12	14	..	2
Bebington	"	..	..	13	16	2	2	..	..

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 1894, as in past years, the sickness and mortality were most prevalent in the smaller streets and alleys inhabited by the very poor.

The following table shows the relative mortality of the wards during 1894.

1894					Estimated Population at Midsummer	General Death-rate per 1000 Living	Zymotic Death-rate per 1000 Living
Cleveland	Ward	..	..	..	18349	20·98	3·86
Claughton	"	..	..	..	3713	8·07	1·07
Grange	"	..	..	..	26821	17·59	3·09
Argyle	"	..	..	..	16486	19·16	4·18
Oxton	"	..	..	..	4684	7·04	0·42
Egerton	"	..	..	..	10565	14·10	3·69
Clifton	"	..	..	..	15963	15·22	2·31
Mersey	"	..	..	..	5925	18·73	4·38
Bebington	"	..	..	..	3121	9·27	1·28
Birkenhead Borough including deaths in Union premises ..					105627	18·12	3·21

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 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 1894, was Mersey Ward. The highest death-rate was in Cleveland 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.

Relative Fatality of Chief Zymotic Diseases.

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

Year	Deaths from Zymotic Diseases.								Death rate per 1000 living.							
	Smallpox	Measles	Scarlatina	Diphtheria	Whooping Cough	Typhus Fever	Typhoid Fever	Diarrhoea	Smallpox	Measles	Scarlatina	Diphtheria	Whooping Cough	Typhus Fever	Typhoid Fever	Diarrhoea
1878	..	72	28	14	90	18	20	74	0.00	0.93	0.36	0.18	1.16	0.23	0.25	0.95
1879	..	23	125	19	14	15	10	33	0.00	0.28	1.56	0.23	0.17	0.18	0.12	0.41
1880	..	15	74	11	69	13	8	77	0.00	0.18	0.90	0.13	0.84	0.15	0.09	0.93
1881	..	49	20	5	45	12	11	37	0.00	0.58	0.23	0.05	0.53	0.14	0.13	0.43
1882	..	34	17	3	89	27	16	63	0.00	0.39	0.19	0.03	1.03	0.31	0.18	0.73
1883	..	40	23	2	31	10	13	45	0.00	0.45	0.26	0.02	0.35	0.11	0.14	0.51
1884	11	40	27	8	9	4	17	82	0.12	0.44	0.30	0.08	0.10	0.04	0.19	0.91
1885	2	78	29	14	66	1	12	28	0.02	0.85	0.31	0.15	0.72	0.01	0.13	0.30
1886	2	22	40	15	18	4	11	91	0.02	0.23	0.43	0.16	0.19	0.04	0.11	0.98
1887	..	81	89	10	31	3	21	74	0.00	0.86	0.94	0.10	0.33	0.03	0.22	0.78
1888	..	15	34	7	23	6	31	37	0.00	0.15	0.35	0.07	0.24	0.06	0.32	0.38
1889	..	61	13	8	93	..	34	56	0.00	0.62	0.13	0.08	0.95	0.00	0.35	0.57
1890	..	89	15	11	38	13	30	70	0.00	0.90	0.15	0.11	0.38	0.13	0.30	0.70
1891	..	34	5	11	30	15	31	35	0.00	0.33	0.04	0.10	0.29	0.14	0.30	0.34
1892	1	63	8	6	59	2	22	57	0.009	0.61	0.07	0.05	0.57	0.01	0.21	0.55
1893	1	15	12	16	68	1	26	171	0.009	0.14	0.11	0.15	0.65	0.009	0.25	1.64
1894	1	94	10	38	66	..	18	57	0.009	0.88	0.09	0.35	0.62	0.00	0.17	0.53

Deaths in the Union Hospital and Workhouse.—As a supplement to the Street Register, it is deemed advisable to add a return of the deaths in the Union Hospital and Workhouse, giving in each case the address of the deceased when admitted into the Union, and date of admission. The sex, age, occupation, date and cause of death are extracted from the register, and the information in the last column has been supplied by the Master of

the Workhouse. The return is an important one in many respects. From it is prepared the summary here submitted of the localities from which patients dying in the Union were received.

LOCALITIES FROM WHICH PATIENTS DYING IN UNION WERE RECEIVED.	Year when Admitted to Union.												TOTAL.
	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	
Birkenhead-Ward not specified	1	1	1	1	..	..	1	2	1	..	..	..	8
Cleveland Ward..	2	2	2	18	24
Grange	1	1	..	..	..	..	..	..	1	9	23	35
Argyle	1	1	..	1	..	2	1	4	13	23	46
Tranmere-Ward not specified	1	1	..	1	..	..	1	5	9
Egerton	1	..	..	2	3	2	8
Clifton	1	..	..	1	1	5	8
Mersey	1	2	3
Workhouse Official	1
Born in Workhouse	4	4
Liverpool	1	..	1
Total	1	2	3	2	1	2	3	5	4	10	31	82	147

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 July 15th (27·80), and lowest in the month ending May 20th (16·28). The zymotic death-rate ranged from 9·51 in July to 1·62 in February.

Description of those who died during 1894.—The last of the tables appended, Table VII., gives the “description” of all those whose deaths have been registered during the year. 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 local community; *i.e.*, the 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 recognized form of skilled or unskilled labour may here see the number of deaths, in 1894, in the ranks of fellow-workers in the Borough. The number of bread-winners removed by death from the local community, in 1894, 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, gentlemen, 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 family-supporting, 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.

Sketch Map of the Borough.—The sketch map of the Borough, which has been added, shows the boundaries of the wards and the positions of the houses in which deaths from zymotic diseases have occurred. The fatal cases of zymotic diseases received into the Borough Hospital, Children's Hospital, and Workhouse Hospital have, as far as possible, been referred to the localities from which they were drawn.

Inspection of Common Lodging Houses and Houses let in Lodgings.

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

REGISTERED COMMON LODGING HOUSES.

Day Inspections ...	...	...	...	916
Night Inspections	...	...	...	85

Two new houses were put on the register, after being carefully inspected and certified by the Medical Officer of Health as suitable for the purpose.

The total number of registered lodging houses so certified is ten. There were also five night visits paid to unregistered houses suspected of taking in nightly lodgers.

REGISTERED HOUSES LET IN LODGINGS :

Day Inspections	...	...	...	5059
Night Inspections	...	...	...	44

Eighty-three 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 1894 was 364.

During the year, two prosecutions were taken for various offences, and convictions obtained in each case as under—

July 28	16 Leicester St.	Boundover in £5 to come up for judgment when called upon.	For occupying a cellar as a sleeping apartment.
Nov. 16	17 Waterloo Place	10/- and costs.	For allowing a room in a common lodging house to be used by two or more married couples, such room not being properly fitted for the purpose.

Ordinary Sanitary Operations.—The ordinary sanitary operations of this department have received 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.

Overcrowding and Cellar-occupation.—Though the repression of overcrowding and cellar-occupation presents exceptional difficulties, much has been accomplished in the past year.

Six cellar dwellings were reported by the Inspector, and in every case suppressed.

Summary of Nuisances &c.—The summary of nuisances investigated and dealt with during 1894, is as follows:—

	1894
Number of nuisances reported	6248
Number abated without formal notice	440
Number of formal notices given	5808
Number abated after formal notice and without proceedings	5807
Number of cases in which proceedings were taken for ordinary nuisances	1
Number abated after proceedings	1
Number of cases in which summonses were issued for non-payment of disinfecting expenses. Amounts and costs received in each case	7
Number of cases in which proceedings were taken for keeping a Common Lodging House in an improper manner, in accordance with Bye-Law 4	1
Disinfecting notices	1443
Under Infectious Diseases (Prevention) Act ...	792
Houses Let in Lodgings	95
Common Lodging Houses	8
Cleansing of filthy houses	1

A brief statement of the other measures taken in 1894, for correcting or getting rid of whatever appeared to be prejudicial to health is subjoined.

	1894
Sanitary defects reported by the Inspectors and referred for the action of the Borough Surveyor.....	290
Houses or parts of houses specially disinfected by sulphu- rous acid or other disinfectants.....	1792
Notices to whitewash and efficiently cleanse milkhouses, cowsheds, and dairies, given and complied with.....	330

Offensive privies ordered for conversion into water-closets	534
Parcels of infected bedding and clothes disinfected at the Disinfecting House.....	420
Parcels of infected or discarded bedding and clothes destroyed	232
Carcases of dogs and cats removed from pools or waste land and buried.....	167
Deposits of putrid fish and other objectionable refuse removed.....	5
Total.....	<hr/> 3770 <hr/>

It will be seen from the above that the work of the Department has been very largely increased during the year, in part due to the new Acts of Parliament which have come into force since 1st January, 1892.

Cholera Order of 6th September, 1892.—In carrying out the provisions of this Order, 22 visits were made during the year by the Disinfecting Inspector to addresses sent by Port Sanitary Authorities, of persons arriving in Birkenhead who were on board ships coming from cholera-infected ports, and who were permitted to land pursuant to Article 2 of the above Order, on giving the Port Medical Officer their names and places of destination. Such persons were kept under supervision until all possibility of their being affected with the disease had ceased.

District Inspection.—The following is a statement of the work done by the District Inspectors of Nuisances and the Disinfecting Inspector during 1894.

			Number of visits and revisits made to insanitary property.
District A—Inspector Fitzgerald ...	...	5588	
„ B „ Lee... ..	...	4000	
„ C „ H. T. Taylor ...	...	4582	
Disinfecting Inspector Isaac Taylor ...	...	8985	
Total	...	<hr/> 23155 <hr/>	

The Disinfecting Inspector also paid twenty-two visits in connection with reports from the Port Sanitary Authority, and seventeen visits for the purpose of examining railway trucks at the terminus in Shore Road.

412 excavations were made for the purpose of testing the conditions of house drains.

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 Inspectors during the year, viz.—

- 800 visits have been made to workshops.
- 96 workshops have been placed on the Register during the year, making a total of 400 up to the end of 1894.
- 42 workshops have been closed.
- 26 workshops have been transferred to more suitable premises.
- 347 nuisances in connection with workshops have been reported and abated.
- 80 notices have been served for the abatement of nuisances arising out of defective drainage, and ten for inefficient ventilation.
- 50 notices to cleanse and limewash the workshops have been served and complied with.
- In addition to the above, the occupiers of 45 workshops have limewashed their premises under inspection, but without waiting for the formal notice.
- 12 cases of overcrowding have been reported and stopped.
- 70 cases have been notified to H.M. Inspector of Factories as referred to in section 3, sub-section 3 of the Act.

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 upon forty-five employers.

Twenty-six additional outworkers had been placed on the Register up to the end of the year.

"Shop Hours Act, 1892."

In carrying out the provisions of this Act, the Inspector has paid 800 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. Printed notices in the following form have been served in every case.

THE SHOP HOURS ACT, 1892.

Notice is hereby given, pursuant to section 4 of the above-mentioned Act, that no young person, (that is, a person under the age of 18 years), may lawfully be employed in this shop for a longer period than 74 hours, including meal times in any one week.

Ashpits &c.—In connection with this subject I can only repeat what I said in my last year's report, I there called attention to the large number of houses in Birkenhead that have compound privy-middens for the reception of excremental matter as well as ashes and other refuse, frequently of a most objectionable character.

These receptacles are in many cases actually abutting upon the house walls, and in others they are only a few feet removed from bedroom or other windows that open directly upon them.

They form a constant source of danger to the people dwelling near, and are liable at any moment to have infective excreta thrown into them, there to find a nidus for the growth of the infective germs and to form centres for the spread of disease in the locality.

The question as to the number of these privies and compound middens in the Borough has been carefully gone into, and it was estimated that at midsummer, 1893, the approximate number still in existence within the Borough was about 2721.

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

The following table shows the number converted in each year since 1890, from which it will be seen that a great step has been made during this year towards the abolition of these objectionable nurseries of disease

	1890	1891	1892	1893	1894
Number converted ..	240	195	282	790	542

Since the above number of 2721 compound middens was estimated, there have been 950 conversions ordered; thus leaving a balance of 1771 remaining to be dealt with at the end of the year.

Seizure and Destruction of Unwholesome Meat, Fish, and Vegetables.—The Meat and Food Inspector, Mr. Robert Wagstaffe, has furnished the following particulars of Meat &c., unfit for human food, seized and destroyed during 1894.

The total number of seizures made was 965, being 430 more than the number of seizures last year, and the weight of the meat seized amounted to 276,225½ lbs., this amount was made up as follows:—

	lbs.
68 carcasses of beef.....weighing	53,719
Portions of beef.....	7,169¾
206 calves	7,335
Portions of veal	—
497 sheep and lambs.....	28,534
Portions of sheep and lambs	276½
26 pigs.....	2,995
Portions of pigs... ..	218
Ham and bacon.....	25½
Sausages.....	6
Offal (<i>i.e.</i> liver, lungs, tongues, spleens or melts &c.) ..	175,946½
Total of meat seized in 1894.....	276,225½

In addition to the above, there were also seized 1 cwt. 3 qrs. of bad fish, 4 rabbits, 5 pheasants and 64 lbs. of tomatoes.

As in all recent years, a considerable proportion of the meat seized was on premises in connection with the Foreign Animals' Wharf, Woodside.

The amount of meat seized and destroyed this year was not so large as the previous year, but much greater than the mean annual seizure. The mean annual seizure during the ten years 1881-90 amounted to 43,822 lbs., in 1891 it was 64,896 lbs., and in 1892 it was 116,284 lbs.

The large amount of offal seized this year, is due entirely to the wet weather experienced during the summer. The meat went bad in the slaughter-houses at Woodside before it could be disposed of, and became totally unfit for food.

The whole of the bad meat seized is dealt with at the Old Potteries, Seacombe, without creating noticeable effluvia; in accordance with an arrangement entered into in February, 1887.

Twelve applications were made to a Justice for an order to destroy diseased or unsound food (under the Public Health Act, 1875, clause 117) and granted in every case. Five persons were summoned before the Magistrate for exposing for sale food unfit for human consumption, and convictions obtained in every case.

Tuberculosis.—During the year 7 carcasses of beasts, 17 carcasses of pigs, 1 sheep's carcass and 1 calf's carcass, together with $37\frac{1}{2}$ lbs. of pork in pieces, and 1442 lbs. of offal and two rabbits, were seized and destroyed through being affected with tuberculosis; the total amount weighing $6,522\frac{1}{2}$ lbs.

"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 1894, viz.—

The total number of samples taken during the year was 104 ; viz., Butter 31, Cheese 3, Coffee 12, Lard 6, Milk 40, Ground Ginger 4, Tea 2, Brandy 2, Rum 2, Gin 2. Out of the above, 4 samples of butter and 2 of milk were reported adulterated, by the Public Analyst, and proceedings were taken in respect of four of these, the results of which are as follows, viz.—

Quarter Ending.	No.	Article.	Amount of Adulteration.	Penalty Imposed in addition to Costs.
March 31	3	Butter	Margarine	£ s. d. 5 0 0
September 30	35	Milk	8 per cent. of water	0 5 0
December 31	58	Butter	Margarine	3 0 0
December 31	59	Butter	Margarine	15 0 0

In the first of the above cases, the prosecution was taken under somewhat remarkable circumstances. The defendant kept a so-called “ farmer’s stall ” in the market, and the Inspector purchased from her a pound of butter made up into a “pat,” paying 1s. 4d. for it. On analysis it was found to be simply margarine. The magistrates said they considered it a distinct and serious fraud upon the public, and inflicted a penalty of £5 and costs (or some £6 12s. 0d. in all), or two months’ imprisonment in default.

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, who also looks after the workshops in the Borough.

Very special attention has been paid during the year 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 the systematical inspection carried out during the year.

The Milkhouses.—The regulation of dairies, cowsheds, and milk-shops, and the supervision of milk-sellers, has had systematic attention throughout the year. Special care is taken that the ventilation, lighting, cleansing, draining, and water supply of premises used for the 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, milkshop keepers, &c. The register of milk-sellers is revised week by week. The total number of milkshops is 134, in addition there are 27 cowsheds, and 44 farmers resident outside the Borough, registered to purvey milk inside the Borough.

Open Sewer-Ventilators in the Roads.

During the year 1894 there have been a considerable number of complaints received regarding nuisances arising from the effluvia from the sewer ventilators.

In some few instances no doubt these complaints may have been well founded, and possibly a few cases of diarrhœa or other disease might be traced to this cause, still it by no means follows that a bad and objectionable smell is necessarily dangerous to health. And I am of the opinion that a great deal more fuss is made about the smells from the sewers than is called for or justified. However, recognising the feeling that exists on the subject, the Borough Surveyor has taken, during the year, very exceptional and thorough means to have the sewers and gullies periodically flushed with disinfectants, so as to reduce any danger arising therefrom to a minimum, 2,245,820 gallons of water were used for sewer flushing.

Open Spaces and Recreation Grounds.—I would again specially call the attention of the Health Committee to the desirability of securing a few open spaces in the centre of the more populous parts of the town, to be laid out as gymnasia and

recreation grounds, for the benefit of the children who have to live in the narrow, ill-ventilated and often sunless courts and alleys which exist in the lower parts of the Borough. The benefits in the shape of improved physical stamina which would accrue to these children cannot be over-estimated, and must help to enable them to bear better the future struggle for life and reduce the pauper rate accordingly. The value of such open places of recreation is now fully acknowledged and requires no further demonstration here, but I would remind the Committee that the open spaces are being rapidly absorbed for building purposes, and will very soon have disappeared, never to be regained. I would most strongly urge, therefore, in the interest of the health of the poor, that an effort be made to secure at least one or two open spaces for this purpose.

Public Wash-houses.—I must also repeat what I said last year as to the great benefits which public wash-houses give to the poor, especially to those who have to earn their living, and often support a family of young children, by means of taking in washing, is now getting to be generally recognized in most of our large towns, and in my opinion ought to be adopted here at as early a date as possible.

When we consider the total unfitness, from a sanitary point of view, of a small cottage, for the carrying on of a laundry business, and the amount of dampness to the house, and general discomfort which it must cause to the children and other occupants of small kitchens in which the processes are carried on, it will be seen at once what an enormous boon a public wash-house offers to the smaller householders.

The amount charged for the use of a small separate compartment, with the necessary hot water, steam boiler, and other washing apparatus as provided in the modern public wash-house, must be much less than the cost of washing at home, besides being infinitely more clean and healthy, and thus enables a very deserving class of women to make ends meet more easily,

whilst the children get better food, and a home free from the necessary steam and wet attendant on the house washing, and thus infinitely more comfortable. I would once more strongly urge upon the consideration of the Corporation, the desirability of providing these very useful and sanitary accommodations.

The Fever Hospital.—The old Fever Hospital in Livingstone Street, with its 23 beds, although totally inadequate to the wants of the Borough, had again to serve for another year as our only means of isolating cases of infectious diseases. For several months it was closed to everything but smallpox, there being cases of that disease under treatment in the wards, and no other disease could be taken at the same time, owing to insufficiency of the air zone and inadequacy of accommodation for administration purposes.

The number of patients treated in 1894 was exactly 100, a larger number than is recorded for any year with the exception of the years 1877 and 1884.

Out of these 100 patients, 3 died, giving a death rate of 3 per cent., the lowest yet recorded; and when the difficulties are considered under which provision has had to be made for so large a number, it is very satisfactory to find how low the death rate has been, and what a very large percentage of recoveries has been made.

The ordinary nursing staff consisted of a Lady Matron (Miss Yeomans) and four permanent nurses. And great credit is due to them for the way in which they have carried out their duties, sometimes under very trying circumstances. The greatest number of patients under treatment at any one time was 20, viz., in the month of June, when we had three separate diseases in the hospital.

The following table shows the number of patients admitted, the number of deaths, and the percentage of deaths for each year since the opening of the Hospital in 1876.

Year	Number treated	Number of deaths	Mortality per cent.
1876	24	4	16.6
1877	194	27	13.9
1878	45	5	11.0
1879	30	1	3.3
1880	45	3	6.6
1881	36	9	25.0
1882	86	16	18.6
1883	70	9	12.8
1884	121	15	12.4
1885	55	3	5.4
1886	45	5	11.0
1887	56	11	19.0
1888	65	3	4.6
1889	18	..	..
1890	94	14	15.0
1891	47	15	32.0
1892	81	11	13.5
1893	93	4	4.3
1894	100	3	3.0
Total since opening	1305	158	12.1

Particulars as to the localities from which the patients were derived in 1894, and the diseases of patients received from each locality, are given in the following table.

1894.

LOCALITIES				Smallpox	Measles (german)	Scarlatina	Typhus Fever	Typhoid Fever	Continued Fever	For Observation	TOTAL.
Cleveland Ward	..	..	..	2	..	7	2	21	..	..	32
Grange	..	..	..	..	..	10	1	15	..	1	27
Argyle	..	..	..	1	1	8	..	6	..	..	16
Egerton	..	..	..	1	..	4	1	1	..	..	7
Clifton	..	..	..	3	..	4	..	..	..	..	7
Mersey	..	..	..	1	..	1	2	..	..	..	4
Bebington	..	..	..	1	..	..	1	..	..	..	2
Claughton	..	..	..	..	..	3	..	..	..	..	3
Oxton	..	..	..	..	..	..	..	1	1	..	2
Noctorum	..	..	..	..	..	..	..	1	..	..	1
Total				9	1	37	7	44	1	1	100

It will thus be seen that of the patients treated in 1894, 32 per cent. were from Cleveland Ward, in which the Hospital is situated.

Particulars as to results are given in the next table :—

DISEASES	M.	F.	Re-covered		Died		Re-moved	
			M.	F.	M.	F.	M.	F.
Small-pox—admitted ..	3	6	3	6	..	..	..	..
German Measles „ ..	..	1	..	1	..	..	..	..
Scarlatina „ ..	19	18	19	18	..	..	..	..
Typhus Fever „ ..	3	4	3	4	..	..	..	..
Typhoid Fever { remaining ..	2	2	1	2	1	..	..	..
admitted ..	17	23	17	21	..	2	..	..
Continued fever „ ..	..	1	..	1	..	..	..	..
Sent in for Pneumonia	1	..	1	..	..	..	..	..
Typhoid Fever ..								
Total ..	45	55	44	53	1	2	..	..

Thus out of 100 patients, 3 died—a mortality of 3 per cent. These deaths were due in every case to typhoid fever.

The New Hospital.

The corner stone of the Administrative Block was laid on the 24th of February of this year by the Mayor, (Benedict Jones, Esq., M.A., Cantab, Barrister-at-law), and it was anticipated that the buildings would be ready for the reception of patients by the beginning of November; but this proved not to be the case, and the year closed without the Hospital being completed. We may expect, however, that by the end of another year proper hospital accommodation will have been provided.

The Disinfecting House.—Good service continues to be rendered by the Disinfecting House. Mattresses, palliasses, beds, pillows, bolsters, woollen clothing, and fabrics from infected rooms are brought here and disinfected by heat. 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 apparatus, which is one of Messrs. Goddard, Massey & Warner's "Nottingham Patent Steam Disinfecting Apparatus,"

was erected in 1891, and a full description of it was given in the report for that year. It does not therefore call for any special notice here, and it is only necessary to say that it has been found in practice to be thoroughly efficient in its working.

Refuse Destructor.

It was expected that the South-end Refuse Destructor would be ready for use by about the end of September, but up to the close of the year it was still in process of construction.

The Housing of the Labouring Classes—No progress was made in 1894 in getting rid of the insanitary property referred to in Special Report on the Dwellings of the Labouring Classes, which was presented on February 4th, 1890. A list of back-to-back houses, numbering in all 475, and a list of obstructive houses, numbering in all 354, was appended to that report, and it was recommended that their demolition should be obtained. A few houses were pulled down during 1890, 1891, and 1892 by order of the Sanitary Authority, as detailed in the reports for those years.

But during 1893 and 1894 nothing further has been done as regards actual demolition. The Medical Officer of Health reported very fully on several blocks of insanitary property in 1893, and the result was that in two cases re-drainage and extensive alterations were made, rendering the houses more sanitary and fit for habitation.

In case of one row of back-to-back dwellings reported on, numbering fourteen, the houses were closed up rather than put them into proper repair, and in this way went out of occupation.

In many cases the entire cleansing and limewashing of the premises was ordered and effectively carried out.

R. SYDNEY MARSDEN.

MEDICAL OFFICER OF HEALTH'S DEPARTMENT,
TOWN HALL, MARCH 20TH, 1895.

APPENDIX.

TABLE I.—Deaths Registered in the County Borough of Birkenhead during the year ending December 31st, 1894, classified according to age.

TABLE II.—Weekly Register of Deaths in the County Borough of Birkenhead for the year ending December 31st, 1894.

TABLE III.—Weekly Condensed Register of Deaths for 1894.

TABLE IV.—Weekly Condensed Register of Meteorological Results for 1894.

TABLE V.—Lunar Monthly Totals of Deaths from all causes and Zymotic Diseases in 1894, with the rate per 1000 per annum.

TABLE VI.—Street Register of Deaths—1894.

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 1894.

TABLE VII.—“Description” of those who died during 1894.

SKETCH MAP of the Borough of Birkenhead, showing the Boundaries of the Wards, and the position of houses in which Deaths from Zymotic Diseases took place in 1894.

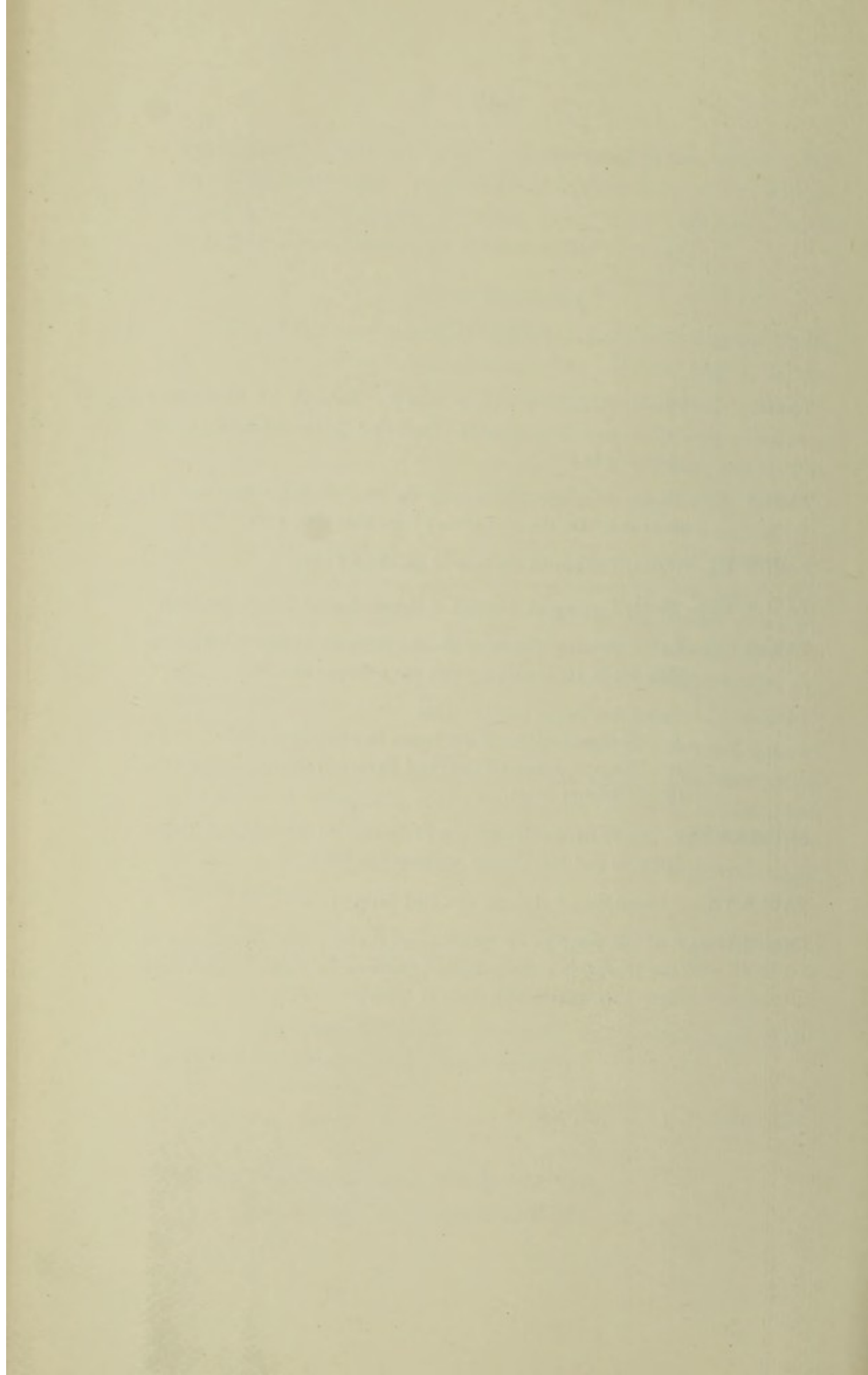


TABLE 1.—Deaths Registered in the Borough of Birkenhead during the Year ending December 31st, 1894.

1891

1892

1893

1894

1895

1896

1897

1898

1899

1900

1901

1902

1903

1904

1905

1906

1907

1908

1909

1910

Weekly Register of Deaths in the County Borough of Birkenhead for the Year ending December 31st, 1894.

[illegible]

NOTE.—The weeks end January 7th, 14th, 21st, &c., the last week in the year including one day extra.

1891

THE NEW YORK PUBLIC LIBRARY

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500 N. 5TH ST.

NEW YORK

1891

Wm. L. D. Director of Deaths in the County Borough of Birkenhead for the Year ending December 31st, 1894.



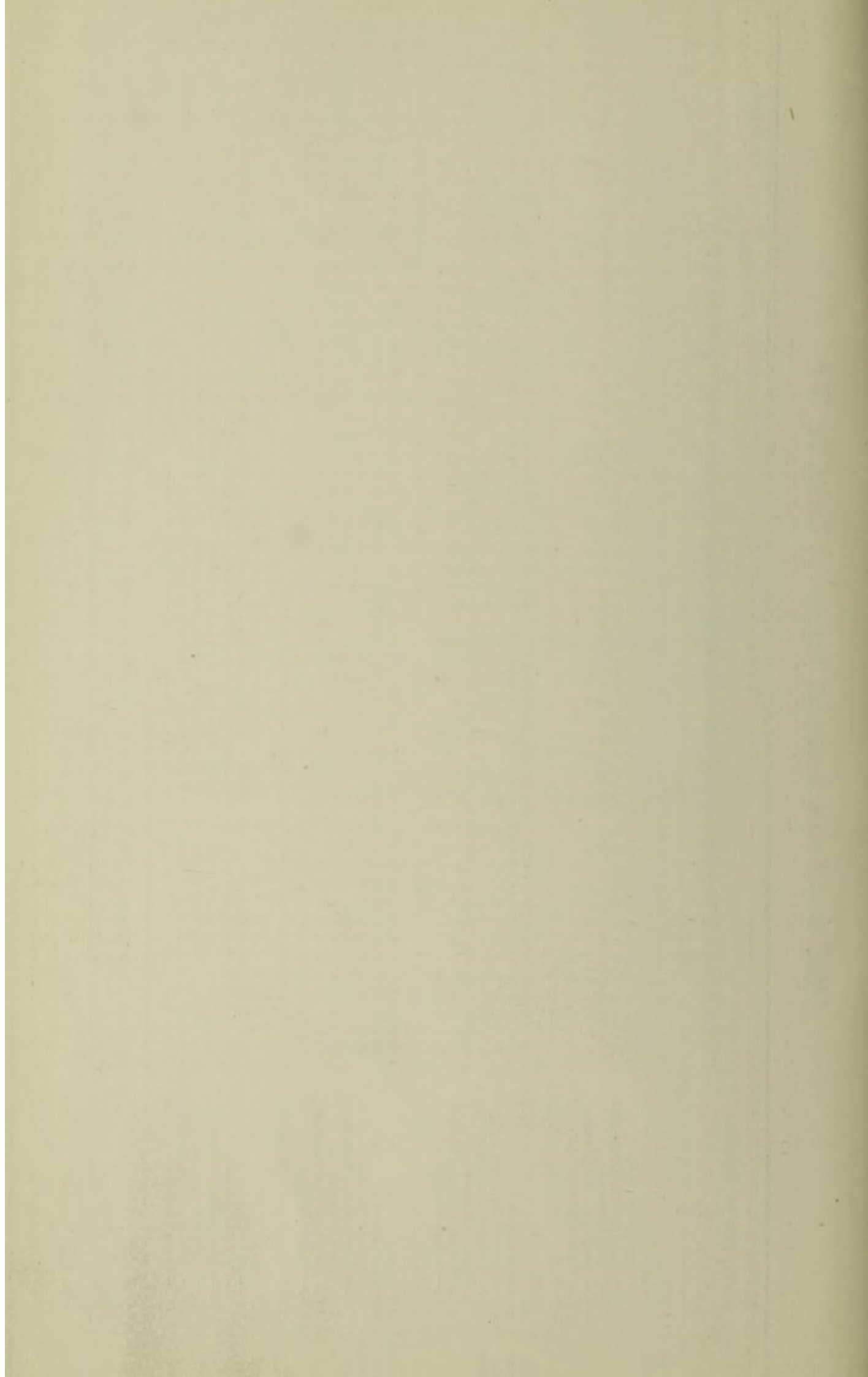
TABLE II. Weekly Register of Deaths in the County Borough of Birkenhead for the Year ending December 31st, 1894.

NOTE.—The weeks end January 7th, 14th, 21st, &c., the last week in the year including one day extra.

1881-1882

TABLE III.—Weekly Condensed Register of Deaths for 1894.

[illegible]



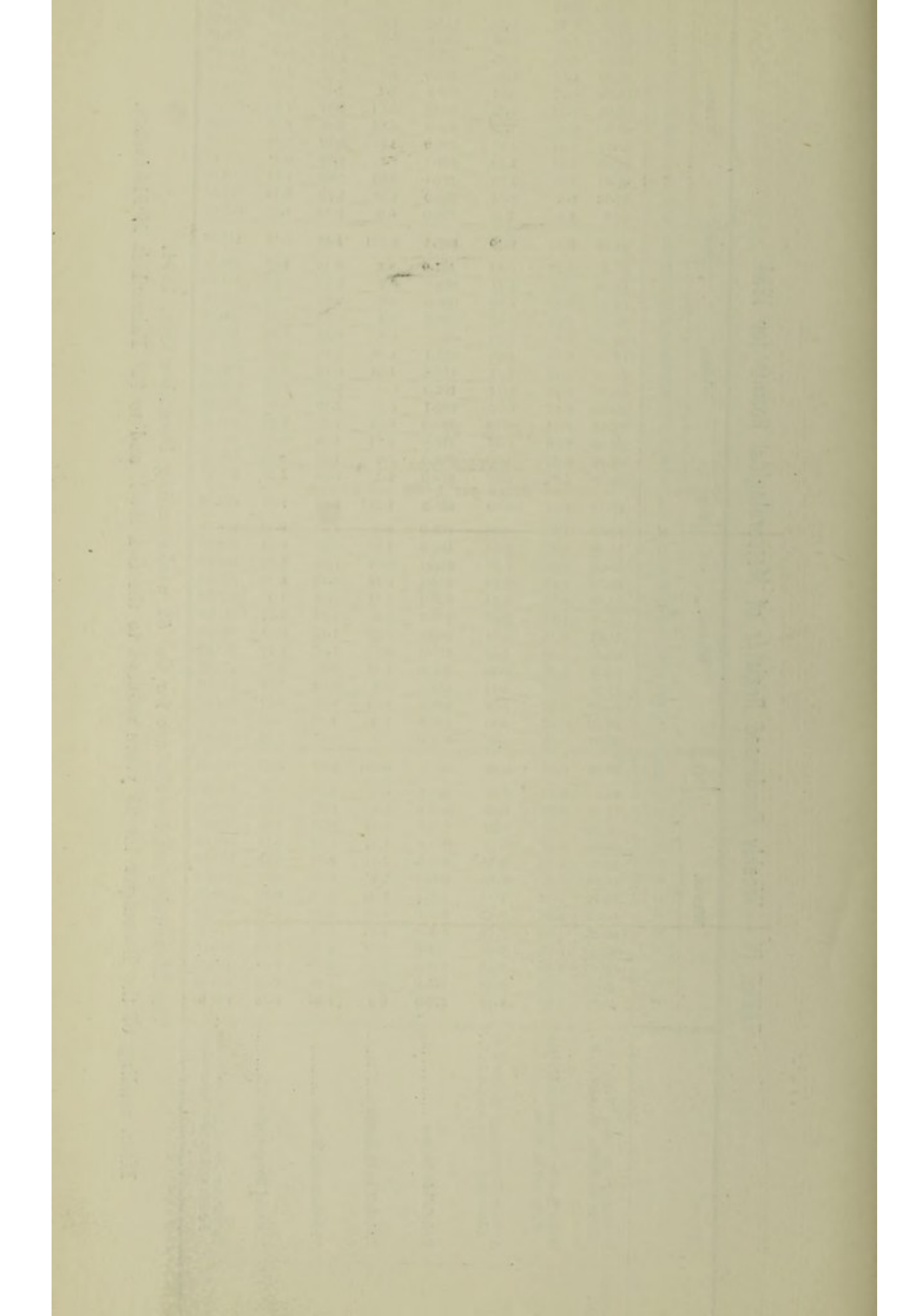


TABLE V.

LUNAR MONTHLY TABLE OF DEATHS from all Causes and Zymotic Diseases, with the Rates per 1,000 per annum.

1894					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 Month ending	January 28th	..	..	..	183	22.5	48	5.9
2nd "	February 25th	..	..	..	189	23.2	33	4.0
3rd "	March 25th	..	..	..	154	18.9	45	5.5
4th "	April 22nd	..	..	..	167	20.5	35	4.3
5th "	May 20th	..	..	..	169	20.8	27	3.3
6th "	June 17th	..	..	..	143	17.6	20	2.4
7th "	July 15th	..	..	..	129	15.8	15	1.8
8th "	August 12th	..	..	..	151	18.5	34	4.1
9th "	September 9th	..	..	..	130	16.0	29	3.5
10th "	October 7th	..	..	..	114	14.0	14	1.7
11th "	November 4th	..	..	..	114	14.0	11	1.3
12th "	December 2nd	..	..	..	114	14.0	15	1.8
13th "	(plus 1 day extra) ending Dec. 31st	..	..	..	158	18.7	14	1.6
Year					1915	18.1	340	3.2

TABLE VI.

STREET REGISTER OF DEATHS.

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

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Abbey street	2	0	Carlisle street	5	0
Abbot street	4	0	Castle buildings	4	1
Adelphi street	5	1	Cathcart street	12	1
Albion street	12	6	Catherine street	2	0
Alexandra road	2	1	Cavendish street	1	0
Argyle street	4	0	Chapel place	2	1
Arrow place	1	0	Chapel street	2	1
Arthur street	5	2	Charlesville	1	0
Aspinall street	7	0	Chester street	9	6
Atherton street	1	0	Christ church road	1	0
Athol street	1	0	Church street	2	0
Austin street	2	0	Clarendon street	6	1
Back Camden street	1	0	Claughton firs	1	0
Back Livingstone street	1	1	Claughton road	11	3
Back Price street	6	1	Clayton street	1	0
Back St. Anne street	8	0	Cleveland avenue	2	1
Balls road	3	0	Cleveland street	21	1
Balls road east	2	1	Clifton crescent	3	1
Barton street	4	3	Club row	2	1
Beckwith street	33	8	Clwyd street	1	1
Bedford street	1	0	Coburg street	4	0
Belmont	2	0	Collingwood street	4	1
Belmont grove	1	0	Conway place	1	0
Bentinck street	17	1	Conway street	16	3
Bentinck terrace	2	0	Cook street	1	0
Berry street	2	0	Cottage street	7	3
Bertha street	2	1	Coventry street	1	0
Blackpool street	2	0	Craven place	1	0
Borough Hospital	18	0	Craven street	6	0
Borough road	17	2	Crown street	2	0
Brassey street	2	1	Cumberland place	3	1
Brattan road	1	0	Cyprus street	1	0
Bray street	2	1	Dacre street	7	1
Bridge street	8	1	Davies street	4	0
Brimstage street	1	0	Derby street	4	0
Brook place	1	0	Douglas street	1	0
Brook square	2	0	Dover street	3	0
Brook street	43	12	Duke street	3	3
Brunswick avenue	5	0	Duncan street	1	0
Burton street	1	0	Eastham street	2	0
Byrom place	1	0	East float	2	0
Byrom street	1	1	Eaton road	1	1
Cambridge place	2	0	Edgar street	3	0
Camden street	12	4	Egerton street	3	2
Campbell terrace	1	0	Eldon place	4	1
Canning street	1	0	Eldon street	4	0
Cardigan street	1	0	Elgin street	2	0

TABLE VI—*Continued.*

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Elizabeth place..	1	0	Ivy bank..	1	0
Elizabeth street	3	1	Ivy street	7	1
Erskine street	3	0	Jackson street	3	0
Eton place	5	1	Keightley street	5	0
Euston grove	2	0	Kent place	3	1
Exmouth street	6	1	King's mount	3	0
Falcon road	1	0	Knowles street	2	2
Field street	4	0	Knox street	1	0
Flamank street	1	0	Laird street	3	3
Flint street	1	1	Lansdowne road	1	0
Florence street	1	0	Leicester street..	5	2
Fore street	3	1	Leinster street	2	0
Fox street	8	2	Leta street	3	0
Frederick street..	4	0	Livingstone street	7	2
Garnet street	3	0	Lord street	8	1
George street	8	2	Lorn street	2	1
Gilbrook..	1	0	Lowther street	9	0
Gladstone street	8	1	Lydia terrace	1	0
Glover street	3	0	Maddock street..	1	0
Godfrey's terrace	2	1	Malta street	1	0
Gomer street	3	1	Marion street	7	2
Gore street	1	0	Market place south	1	0
Grace street	3	0	Market street	15	4
Grange mount	5	0	Marshall place	3	1
Grange road	10	2	Marshall street	1	0
Grange road west	3	0	Meacock street	1	0
Great float	1	0	Meadow street	4	0
Greenfield street	3	0	Menai street	7	0
Grosvenor place	1	0	Mersey place	1	1
Grosvenor road	2	0	Mersey street	1	0
Halcyon road	2	0	Midland street	5	1
Halkin street	1	1	Miller's place	2	1
Hamilton lane	1	0	Milton street	1	0
Hamilton square	2	0	Mona street	1	0
Hamilton street	1	0	Monk street	1	0
Hampton street	5	3	Moon street	3	1
Harriet street	2	0	Moreton street	1	1
Harper's court	1	0	Mornington street	3	1
Havelock street..	2	1	Morpeth buildings	7	0
Hemingford terrace	1	0	Morpeth dock	2	0
Henry street	11	2	Mortimer street..	2	1
Herbert place	2	0	Mount grove	2	0
Hilton street	6	1	Munster street	1	0
Hind street	2	0	Myrtle court	4	0
Hinson street	2	0	Myrtle place	1	0
Hope street	7	1	Myrtle street	1	1
Horatio street	1	0	Napier street	1	0
Howard street	4	0	Nelson street	6	0
Howe street	1	1	Neptune street	3	1
Huskisson street	1	0	Neston street	4	2

TABLE VI.—Continued.

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Newton street ..	1	0	St. John's place..	1	0
Oakfield view ..	2	0	St. John's street ..	1	1
Oak street ..	10	1	St. Mary's gate..	4	1
Old Bidston road ..	14	4	St. Mary's street ..	2	1
Old Priory ..	2	2	Salisbury street..	2	2
Oliver place ..	8	2	Sandford street ..	2	0
Oliver street ..	15	7	Saxon street ..	3	0
Orderly place ..	1	0	Scott's place ..	1	0
Oxton road ..	11	1	Shaw's place ..	2	0
Palm grove ..	2	0	Shaw's terrace ..	1	1
Parkfield avenue ..	6	0	Simpson street ..	1	0
Parkfield place ..	2	0	Somerville street ..	7	1
Park road east ..	1	1	Stafford street ..	3	0
Park road south ..	1	0	Stanley road ..	1	0
Park street ..	5	2	Stoke street ..	7	4
Paterson street ..	16	3	Sun street ..	4	2
Patten street ..	1	0	Sussex street ..	2	0
Payson street ..	13	1	Taylor's buildings ..	6	1
Penrith street ..	3	1	Taylor street ..	3	0
Pensby street ..	3	0	Thomas street ..	13	5
Pilgrim street ..	2	0	Tranmere vale ..	8	2
Pleasant street ..	1	0	Tunnel road ..	2	0
Pool street ..	1	0	Turner street ..	2	0
Pover's court ..	1	0	Upper Beckwith street..	2	1
Price street ..	28	4	Upton road ..	1	1
Princes street ..	2	1	Vicars court ..	3	1
Princes terrace ..	3	0	Vine street ..	6	0
Priory court ..	2	0	Vittoria street ..	2	0
Priory street ..	3	1	Vulcan street ..	7	2
Prospect place ..	1	0	Walton street ..	1	0
Queen's buildings ..	22	4	Warwick street ..	3	0
Queensbury street ..	3	0	Waterloo place ..	2	0
Radnor place ..	2	0	Watson street ..	12	3
Ravenscroft road ..	1	0	Wellesley street ..	3	0
Rhyl street ..	3	1	Wesley street ..	1	1
Richmond cottages ..	3	1	Westbourne road ..	7	1
Richmond terrace ..	1	0	West float ..	2	0
Ridley street ..	4	0	Whetstone lane ..	1	1
River Mersey ..	1	0	Whetstone view..	1	0
Robert street ..	2	1	White street ..	6	2
Roe street ..	1	0	Wilkinson street ..	5	1
Romilly street ..	1	0	Willaston place..	2	0
Rose street ..	1	0	Williams' cottages ..	1	0
Ross terrace ..	3	0	William street ..	2	0
Rowland street ..	2	0	Willow street ..	1	0
Russell place ..	4	1	Wilson street ..	4	1
Russell street ..	3	2	Wilton street ..	3	0
St. Aidan's college ..	1	0	Windsor street ..	2	0
St. Anne's grove ..	1	0	Wirral children's h'spital	3	0
St. Anne street..	48	5	Woodchurch road ..	3	0
			Wood street ..	6	0

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.
Albert place	2	0	Ebenezer street	3	2
Alison street	2	0	Egerton park	2	0
Allerton road	2	0	Elm grove	2	0
Amery grove	1	0	Fairclough lane.. ..	1	0
Apple grove	2	0	Fairfield road	2	0
Argyle street south ..	7	3	Fairview road	1	0
Arno road	1	0	Farm road	4	1
Back Portland street ..	6	3	Fearnley road	2	0
Beaconsfield road	6	3	Fountain street.. ..	2	0
Bebington road.. ..	2	0	Frodsham street	6	1
Bedford place	3	0	Gladstone road	6	1
Bedford road	7	0	Gothic street	1	0
Beech road	1	0	Green lawn	1	1
Beresford road	5	0	Greenway road	5	1
Bidston road	2	1	Grosvenor street	10	2
Blucher street	2	0	Grove road	4	2
Bold street	1	0	Hampden grove	1	0
Booth street	2	0	Hampden street	2	0
Borough road	15	4	Harland road	5	1
Brookland road.. ..	2	0	Hatherley street	3	2
Brougham street	5	2	Hazel road	3	0
Brunswick street	6	1	Heath Bank road	1	0
Buxton road	1	0	Helmingham road	3	0
Caerwys grove	3	0	Holme lane	2	0
Cedar street	2	0	Holt hill.. ..	1	0
Chapel place	2	1	Holt hill convent	1	0
Chapel square	1	0	Holt road	1	0
Chatham road	8	2	Howson street	1	1
Chesnut grove	2	0	Hughes' cottages	1	0
Church road	9	0	Kingsdown street	1	0
Church terrace	2	0	Kingsland road.. ..	1	0
Clarence road	1	1	Kingsmead road north..	2	1
Circular road	1	0	Kingsmead road south..	3	0
Clare street	1	0	Larch road	3	0
Claughton firs	1	0	Laurel road	1	0
Clifton road	2	0	Lilly street	3	1
Clyde street	2	2	Liversidge road.. ..	1	0
Cobden place	2	0	Lowwood grove.. ..	1	0
Cobden street	12	4	Lowwood road	2	0
Combermere terrace ..	2	0	Lunar street	4	2
Comet street	1	0	Maple street	3	0
Croxtheth street	1	0	Meadow lane	2	1
Dee street	2	1	Medway road	4	1
Derby road	3	1	Mersey road	2	0
Dingle road	3	0	Meteor street	3	1
Downham road.. ..	2	0	Mill street	7	0
Earl street	11	5	Milton road	9	2

TABLE VI.—*Continued.*

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Mollington street ..	2	1	St. Paul's villas..	1	0
Mount street ..	1	0	Sea Bank cottages ..	2	1
Mulberry road ..	4	2	Seymour street ..	1	0
New Chester road ..	10	1	Shrewsbury road ..	8	0
North road ..	2	0	Sidney buildings ..	4	2
Oak tree place ..	6	2	Sidney road ..	1	0
Oak tree terrace ..	1	0	South bank ..	1	0
Old Chester road ..	24	6	South road ..	2	0
Olive crescent ..	1	0	Southwick road..	1	0
Orchard road ..	3	1	Spring villas ..	1	0
Park grove ..	1	0	Stanley street ..	5	0
Park road ..	1	0	Star street ..	3	1
Peel street ..	15	2	Storeton road ..	2	0
Pitt street ..	4	0	Stuart road ..	2	0
Planet street ..	5	1	Temple road ..	1	0
Prenton road east ..	1	0	The Woodlands..	3	0
Prenton road west ..	1	1	Thompson street ..	2	0
Princes place ..	4	0	Tower hill ..	2	1
Queen's buildings ..	4	0	Tower road ..	1	1
Queen's place ..	2	1	Tudor road ..	3	0
Queen street ..	4	1	Union street ..	1	0
Quigley street ..	1	0	Victoria road ..	4	1
Railway road ..	3	1	Walker place ..	1	1
Railway terrace..	2	0	Walker street ..	2	0
Randle street ..	2	0	Waverley grove..	1	0
Redmond street..	1	0	Wellington road ..	2	0
Rhoden's place ..	1	0	Well lane ..	3	1
Ripon street ..	1	0	Westbank road..	1	0
Rockville street..	1	0	Whetstone lane..	7	1
Rocky bank road ..	1	0	Whitfield street..	2	0
Rodney street ..	16	3	Whitford road ..	6	1
Roseberry grove ..	1	0	Willmer road ..	1	0
Rose cottages ..	2	1	Willow Bank road ..	1	0
Rose mount ..	1	0	Willy street ..	2	1
Rose place ..	1	0	Woburn place ..	2	0
Roslin road ..	1	0	Woodchurch lane ..	2	0
Roslyn street ..	4	1	Woodchurch road ..	3	1
Russell road ..	8	1	Woodland avenue ..	1	0
St. Paul's place..	3	1	Wycliffe street ..	5	4
St. Paul's road ..	9	1	Wye street ..	1	0

TABLE VI.—*Continued.*

C.—BEBINGTON WARD.

STREETS.				STREETS.			
			Total from all Causes.	From Zymotic Diseases only.			
Acton road	..	..	1	0	Rock lane	..	0
Acton terrace	..	..	1	0	Rock lane east	..	1
Dacre hill	..	..	3	0	Rock park	..	0
Highfield	..	..	1	0	Training ship "Akbar"	3	0
King street	..	..	5	1	Training ship "Clarence"	1	0
Nelson place	..	..	1	0	Training ship "Indelati- gale"	1	0
Nelson road	..	..	4	2			
Rock ferry	..	..	1	0			

SUPPLEMENT TO TABLE VI.

RETURN of DEATHS in Birkenhead Union Hospital and Workhouse,
during 1894.

Date.	Sex.	Age.	Occupation, &c.	Cause of Death.	Date and Address of Deceased when admitted.	
Jan.						
2	F	58	Pilot's widow ..	Mortification ..	Dec. 8,'93	5 Walker st., Tra.
4	M	32	Labourer ..	Phthisis ..	Sep. 25,'93	2 Waterloo place
6	F	47	Carpenter's widow	Paralysis ..	Mar. 16,'90	Tranmere
6	F	64	Labourer's wife ..	Senility ..	Aug. 4,'91	19 Hope street
7	F	52	Porter's widow ..	Cancer ..	Sep. 15,'93	34 White street
9	M	49	Clerk ..	Heart disease ..	Nov. 18,'93	10 Wesley street
9	F	53	Labourer's widow	Paralysis ..	May 6,'84	W'tone la., B'head
9	M	83	Labourer ..	Paralysis ..	Dec. 1,'92	76 St. Anne street
10	F	32	Joiner's wife ..	Paralysis ..	April 2,'89	11 Mill st., Tra
11	M	45	Fireman ..	St'ture of uretha	Jan. 3,'94	2 Albert place, Tr.
12	M	75	Labourer ..	Senility ..	Oct. 3,'92	138 Beckwith st.
13	M	6d.	Dom. Serv. Son	Premature birth	Jan. 7,'94	Born in W'house
14	M	34	Labourer ..	Heart disease ..	Jan. 2,'94	85 Watson street
18	M	73	Storekeeper ..	Senility ..	May 2,'85	2 Back Oliver st.
18	M	69	Labourer ..	Senility ..	Oct. 28,'87	Tranmere
21	M	66	Labourer ..	Bronchitis ..	Oct. 3,'93	20 St. Mary's gate
23	M	58	Clerk ..	Pneumonia ..	July 28,'92	21 Sandford street
24	F	79	Wareh'man's wid.	Pneumonia ..	Oct. 29,'89	13 Queen st., Tra.
25	M	77	Labourer ..	Bronchitis ..	May 3,'83	Birkenhead
28	M	39	File cutter ..	Pneumonia ..	Jan. 24,'94	10 Queen's pl., Tr.
27	M	60	Carter ..	Paralysis ..	Dec. 20,'93	33 Brook place
29	M	73	Rag gatherer ..	Paralysis ..	Dec. 5,'92	21 Tunnel road
29	M	40	Labourer ..	Bronchitis ..	Jan. 26,'94	37 Hope street
Feb.						
1	M	43	Chimney sweeper	Pneumonia ..	Jan. 16,'94	25 Park street
2	F	28	Domestic servant	Heart disease ..	Nov. 7,'93	7 Windsor place
2	M	70	Labourer ..	Bronchitis ..	Mar. 18,'93	75 Market street
6	M	25	Labourer ..	Epilepsy ..	Sep. 28,'93	30 Mill street, Tra.
8	M	45	Waterman ..	Bronchitis ..	Sep. 12,'93	36 Russell street
9	F	91	Servant ..	Senility ..	Feb. 6,'93	10 Grange mount
12	F	77	Labourer's widow	Senility ..	Feb. 5,'94	91 St. Anne street
13	M	49	Organ blower ..	Heart disease ..	Feb. 12,'94	195 Market street
14	M	49	Carter ..	Bronchitis ..	Jan. 31,'94	6 Hope street
14	M	22	Basket maker ..	Phthisis ..	Sep. 11,'93	Tranmere
15	M	62	Carpenter ..	Bronchitis ..	Oct. 20,'93	Liverpool
21	F	83	Labourer's wid.	Senility ..	April 13,'88	Egerton street
21	M	64	Old clothes dealer	Pul'nary conges.	Feb. 19,'94	196 Chester street
22	F	27	Flatman's widow	Confinement ..	Jan. 20,'94	4 Myrtle court
23	F	70	Man serv'nt's wid.	Rup.'of blood ves.	Sep. 14,'93	St. Anne street
26	M	65	Blacksmith ..	Apoplexy ..	June 30,'91	24 Egerton street
28	M	28	Labourer ..	Phthisis ..	Jan. 9,'94	2 Ivy street
Mar.						
3	M	66	Labourer ..	Bronchitis ..	July 11,'93	3 Oakfield view
3	M	2m.	Labourer's son ..	Marasmus ..	Jan. 24,'94	1 Oak tree ter., Tr.
5	F	11m.	Waterman's dau.	Marasmus ..	Jan. 17,'94	25 Vine street
6	M	50	Labourer ..	Bronchitis ..	Feb. 17,'94	24 St. Anne street
6	F	61	Labourer's widow	Bronchitis ..	Sep. 20,'92	119 St. Anne street

SUPPLEMENT TO TABLE VI.—*Continued.*

Date.	Sex.	Age.	Occupation, &c.	Cause of Death.	Date and Address of Deceased when admitted.	
Mar.						
9	F	1m.	Flatman's dau. ..	Marasmus ..	Feb. 2,'94	Born in W'house
17	F	63	Painter's widow..	Bronchitis ..	Aug. 3,'93	26 G'venor st., Tr.
22	M	50	Labourer ..	Dropsy ..	Oct. 30,'93	4 Eldon place
24	F	70	Labourer's widow	Paralysis ..	Feb. 11,'86	2 Godfrey's court
27	F	66	Collier's widow ..	Pul'nary conges.	Feb. 7,'94	Tranmere
30	M	62	Joiner	Apoplexy ..	Aug. 2,'92	137 Peel st., Tran
April						
2	F	35	Labourer's wife ..	Phthisis ..	Mar. 7,'94	64 Back St. Anne st.
3	F	67	Chairmaker's wid.	Bronchitis ..	April 2,'94	Tranmere
4	M	43	Salt hawker ..	Pul'nary conges.	Feb. 8,'94	29 White street
6	F	24	Labourer's dau...	Phthisis ..	Feb. 24,'94	7 Euston grove
6	M	38	Coir maker ..	Phthisis ..	Oct. 7,'93	67 Old Bidston rd.
7	M	24	Labourer ..	Pneumonia ..	Jan. 2,'94	12 Oakfield view
8	M	50	Labourer ..	Paralysis ..	April 5,'94	14 William street
8	F	71	Gardener's wife..	Senility..	April 1,'93	11 Lowther street
13	F	60	Charwoman ..	Diarrhoea ..	April 3,'94	1 Halkin street
16	M	39	Butcher	Phthisis ..	Feb. 28,'94	139 Brook street
17	F	29	Waitress	Phthisis ..	Jan. 29,'94	107 Brook street
19	M	55	Cattle drover ..	Paralysis ..	Mar. 26,'94	21 St. Mary's gate
24	M	22	Labour master ..	Meningitis ..	An Official	from Oxford
26	M	2	Labourer's son ..	Dentition ..	Oct. 14,'93	123 Fox street
27	M	37	Labourer ..	Pul'nary conges.	April 17,'94	2 Orderly home
28	M	66	Butcher	Abscess ..	Mar. 13,'94	344 Price street
28	M	45	Clerk	Mortification ..	April 16,'94	50 Bentinck street
29	M	64	Joiner	Paralysis ..	April 28,'94	81 Wood street
May						
1	F	48	Officer's ser. wid.	Bronchitis ..	Aug. 3,'93	3 Wilson' street
1	M	70	Labourer ..	Mortification ..	July 7,'92	4 Walter s court
4	M	40	Labourer ..	Pneumonia ..	April 26,'94	75 Mark ^{et} street
9	M	57	Labourer ..	Paralysis ..	Mar. 18,'90	33 Henr ^y st ^{reet}
10	F	79	Labourer's widow	Senility..	May 12,'93	158 Pric ^e st ^{reet}
12	F	60	Joiner's widow ..	Apoplexy ..	Nov. 28,'91	Birkenhead ^r
20	F	57	General servant..	Bronchitis ..	July 15,'90	Birkenhead
22	F	68	Joiner's widow ..	Dropsy ..	May 15,'94	298 Price street
4	M	28	Printer	Phthisis ..	April 7,'94	1 Fore street
28	M	44	Labourer ..	Bronchitis ..	May 17,'94	20 B'k St. Anne st.
29	M	76	Labourer.. ..	Senility..	Oct. 24,'85	173 Brook street
30	F	1m.	Gen. serv. daugh.	Marasmus ..	April 1,'94	Born in W'house
31	M	72	Blacksmith ..	Senility..	Jan. 17,'94	163 Market street
June						
2	M	51	Auctioneer ..	Erysipelas ..	Oct. 20,'92	4 Milton rd., Tra.
5	F	44	Coppers'ith's wid.	Pneumonia ..	April 6,'94	Tranmere
6	M	70	Gardener ..	Dropsy ..	May 21,'94	149 Old C'h'r r., T.
7	F	39	Wareh'man's wife	Paralysis ..	June 29,'93	26 Clarendon st.
8	M	73	Labourer.. ..	Senility..	July 27,'93	Holt hill, Tran.
15	F	74	Labourer's widow	Bronchitis ..	May 10,'88	Tranmere
21	M	67	Labourer.. ..	Bronchitis ..	June 18,'94	5 Wilbraham ter.
27	M	49	Labourer ..	Apoplexy ..	May 9,'94	21 Albert pl., Tra.
July						
1	M	71	Stonemason ..	Senility..	May 24,'93	21 Barton street
2	M	73	Gardener ..	Apoplexy ..	Jan. 3,'94	75 Market street
6	F	10m.	Labourer's dau...	Marasmus ..	April 30,'94	35 Oak street

SUPPLEMENT TO TABLE VI.—*Continued.*

Date.	Sex.	Age.	Occupation, &c.	Cause of Death.	Date and Address of Deceased when admitted.	
July						
10	F	41		Phthisis ..	June 5,'94	12 St. John's place
18	F	31	Japanner ..	Phthisis ..	Mar. 9,'93	10 Chester place
18	M	79	Labourer.. ..	Senility.. ..	June 15,'92	12 Egerton street
20	M	60	Labourer ..	Hernia ..	July 10,'94	96 St. Anne street
20	M	68	Rag gatherer ..	Apoplexy ..	July 16,'94	2 Pover's court
28	M	75	Blacksmith ..	Senility.. ..	May 2,'93	27 Abbot street
Aug.						
6	F	76	Carpenter's widow	Apoplexy ..	Aug. 3,'94	188 Chester street
8	F	1M.	Labourer's daugh.	Marasmus ..	June 28,'94	2 Harper's court
12	M	64	Blacksmith ..	Senility.. ..	Aug. 2,'94	339 Cleveland st.
14	M	65	Engine driver ..	Senility.. ..	July 8,'84	Birkenhead
15	M	65	Pedlar ..	Cancer ..	Feb. 27,'94	6 Meacock street
16	M	43	Seaman ..	Phthisis ..	July 7,'93	35 John street
19	M	41	Butcher ..	Paralysis ..	Aug. 15,'93	60 Egerton street
22	M	55	Labourer ..	Diarrhœa ..	Aug. 6,'94	2 Gladstone street
29	M	33	Labourer ..	Phthisis ..	July 31,'94	46 Mill street, Tra.
31	M	61	Boilermaker ..	Pul'nary conges.	Aug. 29,'94	18 Flamank street
Sep.						
1	F	78	Tailor's widow ..	Senility.. ..	April 12,'90	Birkenhead
2	M	44	Nurse ..	Heart disease ..	Sep. 1,'94	10 Falcon road
8	M	49	Boilermaker ..	Paralysis ..	Sep. 3,'94	31 Hind street
17	M	34	Joiner ..	Paralysis ..	Sep. 6,'93	44 Thomas street
19	F	60	Car'ge smith's wi.	Paralysis ..	Sep. 7,'94	34 Lord street
23	F	63	Labourer's wife..	Paralysis ..	Sep. 14,'94	31 Warwick street
23	M	31	Labourer.. ..	Paralysis ..	Sep. 17,'94	45 Old Bidston rd.
27	M	35	Carter ..	Phthisis ..	May 22,'94	280 Brook street
Oct.						
3	F	52	Glove dr'er's wid.	Apoplexy ..	Sep. 27,'94	112 B'dford rd.R.F.
9	M	77	Hawker ..	Senility.. ..	May 28,'94	75 Market street
15	F	74	Tailor's wife ..	Senility.. ..	April 29,'90	10 Connor's court
16	F	25	Coal heaver's wife	Syphilis ..	Oct. 12,'94	42 Queen st., Tra.
19	M	32	Labourer ..	Phthisis ..	Oct. 3,'94	13 Gordon street
30	F	53	Fitter's wife ..	Cancer ..	July 26,'94	17 Tunnel road
Nov.						
2	M	37	Labourer ..	Phthisis ..	Nov. 20,'93	20 Tower rd., Tra.
10	M	29	Painter ..	Phthisis ..	Sep. 12,'94	209 Cleveland st.
13	M	58	Labourer.. ..	Heart disease ..	Sep. 24,'94	63 Old Bidston rd.
16	M	75	Wine merchant..	Senility.. ..	Jan. 18,'85	Birkenhead
18	M	50	Labourer ..	Paralysis ..	April 8,'86	Birkenhead
21	M	54	Labourer ..	Phthisis ..	Oct. 16,'94	71 Brunswick ave.
25	M	61	Labourer.. ..	Rheumatism ..	Mar. 31,'89	Birkenhead
30	M	55	Labourer ..	Dropsy ..	Sep. 7,'94	222 New C'h'r r., T.
Dec.						
4	F	75	Tinsmith's widow	Senility.. ..	Oct. 19,'94	87 Dacre street
5	F	41	Sailmaker's wid.	Gastritis ..	Nov. 29,'94	25 Price street
9	F	37	Fireman's widow	Phthisis ..	Dec. 8,'94	100 Beckwith st.
10	F	1M.	Collier's daughter	Marasmus ..	Nov. 16,'94	Born in W'house
13	M	67	Seaman ..	Apoplexy ..	May 24,'94	3 Hamilton street
13	F	61	C'ton b'ker's dau.	Senility.. ..	Dec. 5,'94	56 Hamilton squa.
15	F	66	Shoemaker's wife	Paralysis ..	Sep. 10,'92	14 Chapel pl., Tra.
17	F	63	Labourer's widow	Senility.. ..	July 4,'94	11 Salisbury street
18	M	60	Blacksmith ..	Cancer ..	Dec. 17,'94	12 Rodney st., Tr.

SUPPLEMENT TO TABLE VI.—*Continued.*

Date.	Sex.	Age.	Occupation, &c.	Cause of Death.	Date and Address of Deceased when admitted.	
Dec.						
20	M	64	Baker	Dropsy	Nov. 23,'94	14 Rhyl street
21	F	72	Jute mill hand ..	Senility.. ..	Feb. 15,'94	4 Corfu street
24	F	72	Charwoman	Senility.. ..	Nov. 30,'94	25 B'k St. Anne St.
27	F	39	R'way g'ard's wid.	Phthisis	Oct. 22,'91	14 B'k Ha'lock St.
28	F	5	Engi'e dri'r's dau.	Phthisis	Mar. 2,'94	Tranmere
30	M	32	Shoemaker	Enteritis	Dec 26,'94	17 Waterloo place
31	F	68	Carpenter's wid.	Skin disease ..	Dec. 25,'94	16 Taylor street

TABLE VII.

Description of those who Died during 1894.

Occupation, &c.	M.	F.	Son.	Daughter.	Wife.	Widow.
Accountant	2	..	1	..	1	..
Agent .. ..	..	..	1	..	..	1
Annuitant	3	..	..	..	..	..
Apprentice	4	..	..	..	..	..
Architect	1	..	..	..	..	..
Articled clerk	1	..	..	..	..	..
Assurance agent .. ..	..	..	1	3	1	..
Auctioneer .. ..	..	..	..	1	..	1
Bailiff .. ..	..	..	..	..	1	..
Baker	3	..	7	4	2	1
Banker .. ..	..	..	..	1	..	..
Barman	1	..	..	2	..	..
Barrister .. ..	..	..	..	1	..	1
Basket maker .. ..	..	..	..	..	1	..
Bath attendant .. ..	..	..	1	..	..	..
Blacksmith	6	..	7	3	2	4
Blind maker	1	..	2	1	..	..
Block maker .. ..	..	..	..	..	..	1
Boiler cleaner .. ..	..	..	4	..	..	..
Boiler maker	22	..	10	11	7	3
Book keeper	4	..	2	3	1	3
Borer .. ..	..	..	1	..	..	..
Bottler .. ..	..	..	1	..	..	..
Bottle washer .. ..	..	1	..	..	..	..
Brass finisher .. ..	..	..	..	1	..	..
Brass moulder .. ..	..	..	1	..	..	..
Brewer	1	..	..	..	..	..
Bricklayer	1	..	2	3	4	2
Brick maker .. ..	..	..	1	2	..	1
Broker	2	..	1	5	3	1
Builder	1	..	3	5	2	1
Butcher	7	..	10	13	3	1
Cab driver	5	..	4	..	2	..
Cabin boy	1	..	..	..	..	..
Cabinet maker	3	..	1	..	..	1
Caretaker	2	..	..	1	1	..
Carpenter .. ..	..	..	1	..	1	..
Car proprietor	1	..	1	1	..	..
Carter	6	..	13	16	2	2
Cart owner	1	..	..	3	1	1
Cashier	2	..	1	2	1	..
Cattle drover .. ..	..	..	..	..	1	..
Caulker .. ..	..	..	..	4	..	..
Chandler .. ..	..	..	..	1	..	..
Charwoman .. ..	..	1	3	4	..	..
Chemist	1	..	2	2	..	2
Chimney sweeper .. ..	..	..	1	1	..	..
Cigarette maker .. ..	..	1	..	..	..	..
Civil engineer	4	..	2	..	2	..
Clerk	17	..	11	10	5	5

TABLE VII.—*Continued.*

Occupation, &c.	M.	F.	Son	Daughter.	Wife.	Widow.
Cloth cutter .. ..	..	..	1	..	..	..
Clothier	1	..	1	..	..	..
Coachman	4	..	6	2	1	1
Coal worker	1	..	1	1	2	..
Coal merchant .. ..	..	..	1	1	1	3
Coastguard .. ..	..	..	..	..	..	1
Consulting engineer..	1	..	..	..	..	..
Commercial traveller	3	..	1	1	..	1
Commission agent ..	..	..	1	1	2	..
Compositor	1	..	..	..	..	..
Confectioner .. ..	..	..	..	2	..	..
Contractor .. ..	..	..	..	1	..	1
Cook .. ..	..	4	..	..	1	..
Cooper .. ..	..	..	..	1	..	..
Corn merchant .. ..	..	..	..	1	..	..
Costermonger	1	..	..	..	..	..
Customs officer .. ..	..	..	..	2	..	3
Cycle manufacturer ..	..	..	1	1	..	..
Delegate .. ..	..	..	..	1	..	..
Dock gateman .. ..	..	..	2	..	..	..
Domestic servant .. ..	..	12	9	6	..	..
Draper	1	..	2	2	2	1
Draughtsman	1	..	1	..	..	..
Drayman	2	..	1	..	..	..
Dressmaker .. ..	..	1	..	..	..	..
Driller	2	..	4	6	..	1
Engine driver	3	..	8	1	5	..
Engineer	6	..	6	5	3	2
Engine greaser	1	..	..	..	..	..
Errand boy	2	..	..	..	..	..
Estate agent	3	..	..	..	..	..
Farmer	1	..	1	2	1	7
Fireman	4	..	7	14	4	2
Fisherman .. ..	..	..	3	2	..	..
Fishmonger .. ..	..	..	1	1	..	..
Fitter .. ..	..	..	3	3	2	1
Flatman	7	..	6	3	3	2
Foreman	1	..	..	..	..	..
French polisher	1	..	..	1	..	1
Furrier .. ..	..	1	..	..	..	..
Gardener	4	..	4	4	2	3
Gas fitter .. ..	..	..	1	1	..	..
Gas inspector .. ..	..	..	..	1	..	..
Gate keeper .. ..	..	..	..	..	..	1
General merchant	5	..	2	3	..	..
Glass stainer.. ..	..	..	1	..	..	..
Green grocer	1	..	1	1	..	..
Grocer	6	..	2	2	..	1
Hair dresser	1	..	3	2	..	1
Hat manufacturer .. ..	..	..	1	1	..	..

TABLE VII.—*Continued.*

Occupation, &c.	M.	F.	Son.	Daughter.	Wife.	Widow.
Hawker	1	..	2	3	2	1
Horse breaker .. ..	..	..	..	..	..	1
House maid .. ..	..	..	1	..	..	..
Hyde merchant .. ..	..	..	1	..	..	..
Iron dresser	1	..	2	..	..	..
Iron founder .. ..	..	..	1	1	..	..
Ironmonger	1	..	..	..	..	..
Iron moulder	4	..	2	1	..	..
Iron planer .. ..	..	..	..	1	..	..
Iron turner .. ..	..	..	1	2	..	..
Joiner	11	..	15	13	5	4
Journalist .. ..	..	..	..	..	..	1
Labourer	100	..	96	121	43	24
Lady's companion .. ..	..	1	..	..	..	..
Lamp lighter .. ..	..	..	..	..	1	..
Landed proprietor	2	..	..	1	..	1
Laundress .. ..	..	1	2	1	..	..
Laundry proprietor .. ..	..	..	..	..	1	..
Leather cutter .. ..	..	..	1	1	..	..
Leather merchant	1	..	..	..	..	..
Licensed victualler	5	..	5	6	1	2
Livery stable proprietor	1	..	..	..	..	..
Machinist .. ..	..	..	..	1	..	..
Manager	1	..	1	2	..	1
Manufacturer .. ..	..	..	1	..	..	..
Marble mason .. ..	..	..	1	1	..	..
Marine officer .. ..	..	..	..	1	1	..
Master mariner	1	..	..	2	1	5
Merchant	3	..	2	2	2	1
Messenger	1	..	..	..	..	..
Metal planer .. ..	..	..	1	..	..	..
Military officer	1	..	..	1	..	2
Milk purveyor	2	..	1	3	2	..
Miller	1	..	..	..	..	..
Milliner .. ..	..	1	..	..	..	..
Millwright	1	..	..	..	..	..
Miner	1	..	..	..	..	..
Mineral water manufacturer. .. ..	..	..	..	2	..	..
Minister .. ..	..	..	1	..	..	1
Missionary	1	..	..	1	..	..
Musician	1	..	2	1	2	..
Music seller	1	..	..	..	..	..
Newsagent .. ..	..	..	2	..	1	..
Nurse .. ..	..	2	..	1	..	..
Of independent means	4	5	..	..	1	2
Organ builder .. ..	..	..	..	..	..	1
Organist .. ..	..	..	1	..	..	..
Painter	6	..	14	7	6	4
Paper-hanger	1	..	..	..	..	..
Park superintendent .. ..	..	..	..	..	..	1

TABLE VII.—Continued.

Occupation, &c.	M.	F.	Son.	Daughter.	Wife	Widow.
Pattern maker .. ..	..	..	1	2	..	..
Pavior.. .. .	..	..	..	..	1	..
Pawnbroker .. ..	..	..	2	3	..	..
Pensioner	6	..	..	..	1	2
Photographer .. ..	..	1	..	..	..	..
Pianoforte tuner .. ..	..	..	..	1	..	..
Pilot .. .. .	..	..	..	..	..	2
Plasterer	3	..	1	3	1	2
Platelayer	1	..	1	1	..	1
Plumber	1	..	5	4	1	..
Police inspector .. ..	..	..	..	..	1	..
Policeman .. ..	..	..	4	5	2	..
Porter	4	..	3	3	2	2
Postman	2	..	2	2	1	..
Potato merchant	1	..	..	..	..	..
Printer	3	..	1	1	..	1
Provision dealer	1	..	..	1	..	..
Purser.. .. .	..	..	..	..	1	..
Quarryman	1	..	2	1	..	1
Railway servant	14	..	23	13	7	..
Registrar .. ..	..	..	..	..	..	1
Refreshment house keeper..	..	..	..	1	..	..
Retired broker	3	..	..	..	..	..
„ car proprietor	1	..	..	..	..	..
„ comedian	1	..	..	..	..	..
„ commercial traveller.	1	..	..	..	..	..
„ confectioner .. ..	..	1	..	..	..	..
„ copper refiner	1	..	..	..	..	..
„ customs officer	2	..	..	..	..	..
„ gamekeeper	1	..	..	..	..	..
„ licensed victualler ..	..	..	..	..	1	..
„ milk purveyor	1	..	..	..	..	..
„ officer	1	..	..	..	..	..
„ overseer	1	..	..	..	..	..
„ professor of music..	1	..	..	..	..	..
„ secretary	1	..	..	..	..	..
„ shoemaker	1	..	..	..	..	..
„ sailor .. .. .	..	..	..	..	..	1
Riding master .. ..	..	..	..	1	..	..
Rivet heater	1	..	..	..	..	..
Rivetter .. .. .	..	..	1	..	1	..
Saddler .. .. .	..	..	..	3	..	..
Sailmaker	1	..	1	..	1	2
Salesman .. .. .	..	..	..	1	..	1
Sawyer	1	..	2	2	..	2
School master	3	..	1	1	1	..
School director .. ..	..	..	..	..	1	..
Seaman	9	..	16	12	8	4
Secretary .. ..	..	..	1	1	..	..
Ship owner	1	..	..	..	..	1

TABLE VII.—*Continued.*

Occupation, &c.	M.	F.	Son.	Daughter.	Wife.	Widow.
Ship plater	1	..	1	2	..	..
Ship rigger	1	..	..	..	1	..
Shipsmith	1	..	..	1	..	..
Shipwright	4	..	4	5	2	6
Shoemaker	7	..	2	5	2	5
Shopman .. ..	..	..	..	..	..	1
Soap boxer .. ..	..	1	..	..	..	..
Soap manufacturer	1	..	..	..	..	..
Soldier	1	..	..	..	..	..
Solicitor .. ..	..	..	..	..	1	..
Stageman .. ..	..	..	1	..	..	..
Stationer .. ..	..	..	1	2	..	..
Stevedore	2	..	..	..	..	..
Steward	2	..	5	7	1	1
Stoker.. ..	2	..	4	2	..	..
Stonemason	4	..	2	1	4	6
Storekeeper	2	..	3	1	3	..
Surveyor	2	..	..	..	..	..
Tailor	6	..	8	7	..	3
Tailoress .. ..	..	..	..	1	..	..
Tallow chandler .. ..	..	..	..	..	..	1
Tanner	1	..	1	..	..	..
Tea merchant .. ..	..	..	1	..	..	..
Team owner .. ..	..	..	..	1	..	1
Tea planter .. ..	..	..	1	..	..	..
Timekeeper .. ..	..	..	1	3	2	..
Tin smith	2	..	..	1	..	..
Traffic manager .. ..	..	..	1	..	..	..
Training ship boy	1	..	..	..	..	..
Tramcar driver .. ..	..	..	1	1	..	..
Translator of languages .. ..	..	..	..	..	1	..
Undertaker	1	..	..	..	..	..
Unknown	8	4	2	1	..	..
Van driver	1	..	1	1	..	..
Waiter	1	..	..	..	..	..
Warehouseman	4	..	3	2	1	..
Warehouse owner .. ..	..	..	..	..	..	1
Watch maker.. ..	..	..	..	2	..	..
Watchman	3	..	1	..	2	..
Water inspector .. ..	..	..	..	..	1	..
Weaver .. ..	..	..	..	..	1	2
Weight taker.. ..	..	..	1	..	..	..
Wheelwright .. ..	..	..	..	1	2	1
White smith .. ..	..	..	..	2	..	..
Window cleaner .. ..	..	..	1	..	1	..
Wine merchant	1	..	..	..	..	..
Wood carver .. ..	..	..	1	..	..	..

