

**[Report 1868] / Medical Officer of Health, Liverpool City.**

**Contributors**

Liverpool (England). City Council.

**Publication/Creation**

1868

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# REPORT

OF THE

# HEALTH OF LIVERPOOL

DURING THE YEAR 1868;

BY W. S. TRENCH, M.D.,


Medical Officer of Health for the Borough.



THE LIVERPOOL PRINTING AND STATIONERY COMPANY, LIMITED,  
38, CASTLE STREET.

—  
1869.

REPORT  
REPORT, 1868



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# REPORT, 1868.

DURING the fifty-two weeks of the year 1868, the Returns of the Local Registrars record 19,341 births and 14,583 deaths within the Borough of Liverpool.

Of the births, 9,863 were males and 9,478 females; making the total Birth-rate of the Borough equal to 38·6 per 1000 of the population.

The distribution of the births in the different wards and districts of the Borough is shown in the following Table :—

## BIRTHS.

DISTRICTS AND WARDS.		1ST QUARTER.		2ND QUARTER.		3RD QUARTER.		4TH QUARTER.		ANNUAL
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Births.
Parish.	Scotland .....	478	435	435	424	398	373	405	388	3336
	Vauxhall .....	91	83	98	94	76	73	89	72	676
	St. Paul's and Exchange ...	114	101	112	101	120	136	97	108	889
	St. Anne's and Lime Street..	190	170	173	182	162	168	176	177	1398
	Castle Street and St. Peter's	36	41	36	35	30	38	22	25	263
	Pitt Street and Gt. George.	102	102	107	90	105	93	91	87	777
	Rodney St. & Abereromby..	270	248	266	241	247	246	241	239	1998
Out Townships.	Everton and Kirkdale .....	591	642	613	605	608	560	597	527	4743
	West Derby.....	267	257	255	233	219	229	254	232	1946
	The Toxteths .....	448	434	426	414	395	380	423	395	3315
Parish .....		1281	1180	1227	1167	1138	1127	1121	1096	9337
Out Townships .....		1306	1333	1294	1252	1222	1169	1274	1154	10004
Borough .....		2587	2513	2521	2419	2360	2296	2395	2250	19341

Of the 14,583 deaths, 7,504 were of males and 7,079 of females; 8,670 occurred in the Parish and 5,913 in the Out-townships.

The Death-rate of the Borough was equal to 29·1; that of the Parish to 31·3, and that of the Out-townships to 27·0 per 1000 of the estimated population.

If the relative number of males and females are still pretty near what they were between the two census periods of 1851 and 1861, then the Birth and Death-rates of females in 1868 were respectively 36·6 and 27·1, and those of males 41·0 and 31·1 per 1000 of the estimated population of the same sex.

The deaths occurred in the following districts:—

### DEATHS.

DISTRICTS.	1ST QUARTER.		2ND QUARTER.		3RD QUARTER.		4TH QUARTER.		ANNUAL.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Deaths.	
Parish.	Scotland .....	334	269	266	225	355	329	278	300	2356
	Vauxhall .....	76	62	60	72	77	87	64	69	567
	St. Paul's and Exchange .....	88	96	90	62	110	109	78	98	731
	St. Anne's & Lime Street.....	146	150	106	113	170	156	141	138	1120
	Castle Street & St. Peter's .....	31	27	24	21	25	28	22	33	211
	Pitt Street & Great George .....	78	95	66	72	94	90	83	67	645
	Rodney Street and Abercromby .....	119	144	99	96	111	120	110	97	896
	Parish Workhouse and Hospitals ...	347	252	334	196	273	199	315	228	2144
	Out Townships.	Everton and Kirkdale.....	322	317	299	323	426	418	347	356
West Derby .....		150	151	136	102	154	165	123	140	1121
The Toxteths .....		232	250	212	231	248	269	262	246	1950
Out Township Hospitals .....		2	2	4	3	5	3	12	3	34
Parish .....	1219	1095	1045	857	1215	1118	1091	1030	8670	
Out Townships.....	706	720	651	659	833	855	744	745	5913	
Borough.....	1925	1815	1696	1516	2048	1973	1835	1775	14583	

We are able from the Returns made by the Registrars as to the residences of persons dying in the Workhouses and Hospitals of the town to classify 1,235 of the deaths in these establishments under the wards and districts of the parish from whence the patients were removed, viz.:—369 under Scotland ward, 174 under Vauxhall ward, 191 under St. Paul's and Exchange wards (Dale Street district), 190 under St. Anne Street and Lime Street wards (Islington district), 45 under Castle Street and St. Peter's wards (St. George's district), 149 under Pitt Street and Great George's wards (St. Thomas' district), 117 under Rodney Street and Abercromby wards (Mount Pleasant district). This will, however, still leave unclassified 909 deaths of persons whose previous residences were either unknown or are not specified. An

arrangement exists between the Parish Vestry and the Guardians of the West Derby Union by which the paupers sick of fever or other infectious diseases in the wards of Everton, Kirkdale, and West Derby, and in the rural district of West Derby, are received into the Brownlow Hill Workhouse Hospital. Ninety-nine of the 909 unclassified deaths are traceable to these Out-township districts, and it is probable that of the remaining 810 many ought also to be credited to them.

The results of the alterations occasioned by a re-arrangement of the deaths under the wards and districts from whence the patients were removed will be shown in the following Table, from which a calculated rate of mortality per 1000 of the estimated inhabitants has also been made. These rates in the eighth year since the census must necessarily be regarded as only approximately correct.

DISTRICTS AND WARDS.	Annual.	
	Deaths.	Rate per 1000.
Scotland.....	2725	28·2
Vauxhall .....	741	33·2
St. Paul's and Exchange .....	922	34·5
St. Anne's and Lime Street .....	1310	31·6
Castle Street and St. Peter's.....	256	17·7
Pitt Street and Great George .....	794	31·3
Rodney Street and Abercromby .....	1013	20·0
Parish Workhouses and Hospitals, residences unknown .....	909	0·3
Everton and Kirkdale.....	2808	26·7
West Derby .....	1121	23·2
The Toxteths .....	1950	27·7
Out Township Workhouse & Hospitals, residences unknown	34	0·8
Parish.....	8670	31·3
Out Townships .....	5913	27·0
Borough.....	14583	29·1

The average Death-rate of the Borough during the previous ten years (1858 to 1867) was 32·2 per 1000, or 3·1 per 1000 more than in 1868. This is equivalent to a decrease of 1,552 in the number of deaths relatively to population, or, in other words, it may be regarded as a saving of 1,552 human lives when compared with the mortality of the previous decennial period. The deaths during 1867 were 14,513, or by 70 numerically less than in 1868; but if allowance be made for increase of population, at the rate of 1·68 per cent., then the returns of this year are more favourable than in 1867 by at least 172 deaths, or by a rate equal to 0·3 per 1000 of the population. This decrease, though slight, is satisfactory, because the excessive heat and dryness of the seasons occasioned an unusual amount of infantile sickness throughout the country during the summer and autumnal months of 1868.

The Registrar-General's weekly reports enable us to compare the mortality of Liverpool with thirteen of the large towns of Great Britain; but though such comparisons are desirable as incentives to sanitary improvements, they

will lead to very fallacious conclusions if, at the same time, due weight be not given to the moral, physical, and economical conditions of the inhabitants. The amount of pauperism, of Irish immigration, and of unskilled labour in Liverpool is far greater than in any other town of the kingdom, and no zeal in sanitary legislation can succeed in placing an indigent population on the favourable conditions of health attainable by towns whose labourers have constant work and are in the receipt of remunerative wages. The density of population on area is also a physical condition which ought to be duly considered in every comparison of the results of sanitary work, and as this can be shown directly, it has been included in two of the columns of the following Table:—

	Estimated Population in the middle of the year 1868.	Births in 52 Weeks, ending 26th Dec., 1868.	Deaths in 52 Weeks, ending 26th Dec., 1868.	Annual Rate to 1,000 of Population.		Area in Acres.	Population on Acre.
				Births.	Deaths.		
London .....	3126635	113239	73279	36.2	23.4	77997	40.0
Bristol .....	167487	6057	3800	36.1	22.7	4674	35.8
Birmingham .....	352296	12689	8394	36.0	23.8	7831	45.0
Manchester .....	336835	13793	11742	37.6	32.0	4069	90.1
Salford .....	117162	4629	3592	39.5	30.7	5009	23.4
Sheffield .....	232362	9103	6188	39.1	26.6	22830	10.2
*Bradford .....	134000	4931	3537	36.7	26.4	6590	20.3
*Leeds .....	246851	10190	6725	41.2	27.3	19221	12.8
Newcastle-on-Tyne..	127701	4860	3232	38.0	25.3	5336	23.9
*Hull .....	122628	4243	2984	34.6	24.3	3621	33.8
Edinburgh .....	177039	6601	4736	37.3	26.7	4191	42.2
Glasgow .....	449868	18439	13680	40.9	30.4	5791	77.7
Liverpool.....	500676	19341	14583	38.6	29.1	5210	96.1

The average age at death of the inhabitants in the Borough during the 12 months was 22 years, in the Parish 23 years, and in the Out-townships 20 years; but the following Table will show that during the third quarter, or during the months of July, August, and September, when the diseases of childhood are most rife, the average ages at death were in some districts as low as 15, 13, and 12 years.

\*In giving the population of the large towns, I have used the Registrar General's estimate in his Report for the third quarter of the year 1868; but if the mode of calculation which has been applied to Liverpool had been applied to Bradford, Leeds, and Hull, then the population of those three towns would have been respectively, 108,019; 236,746; 108,269; and then their death rates would have been by calculation—Bradford 32.7, Leeds 28.4, and Hull 27.5 per 1000.

WARDS.	QUARTERS.				YEAR
	1st.	2nd.	3rd.	4th.	1868.
	Age in Years.	Age in Years.	Age in Years.	Age in Years.	Age in Years.
Scotland ..... average age at death	18	19	12	17	16
Vauxhall .....	20	21	12	18	18
St. Paul's.....	20	21	13	15	17
Exchange .....	22	26	18	22	22
St. Anne's .....	19	19	13	21	18
Lime Street .....	23	25	19	27	24
Castle Street .....	27	34	29	36	32
St. Peter's .....	24	21	22	23	23
Pitt Street .....	21	26	17	29	23
Great George .....	21	19	20	23	21
Rodney Street .....	30	26	24	34	29
Abercromby .....	29	28	19	28	26
Parish Workhouse and Hos- pitals .....	32	35	33	32	33
Everton and Kirkdale .....	22	20	15	22	20
West Derby .....	21	22	16	23	21
North Toxteth .....	21	24	19	22	22
South Toxteth .....	17	19	15	21	18
Out Township Workhouse and Hospitals .....	37	19	42	35	33
Parish .....	24	25	19	24	23
Out Townships .....	21	21	16	22	20
Borough .....	23	23	18	23	22

The deaths of Infants below the fifth year of their age amounted to 7,406, and thus comprised 50·8 per cent. of the total deaths. There were, at the last census, 60,760 children under 5 years of age within the Borough of Liverpool, and the number may now be estimated at 68,525; therefore, their mortality in 1868 was equal to 10·8 per cent. of the whole. 4,876 Infants, or every fourth child born within the Borough of Liverpool, died before attaining the age of twelve months. The first of the following Tables shows the districts where infant mortality was relatively and absolutely greatest. It will also demonstrate to those acquainted with the Borough the interesting fact that "poverty and want" will not serve to explain or justify its sad statistics. The second Table illustrates the influence of age on the Death-rate of the Borough.

The third Table places in one connected view the pathological history of the Death registry.

WARDS.	QUARTERS.				Annual.	Per Cent- age of Deaths under 5 Years to Total Deaths.	
	March.	June.	Sept.	Dec.			
Scotland.....	Total Deaths ...	603	491	684	578	2356	62.4
	Below 5 years...	351	284	496	339	1470	
Vauxhall .....	Total Deaths ...	138	132	164	133	567	60.1
	Below 5 years...	76	67	118	80	341	
St. Paul's .....	Total Deaths ...	93	88	122	73	376	55.1
	Below 5 years...	48	47	80	32	207	
Exchange .....	Total Deaths ...	91	64	97	103	355	52.1
	Below 5 years...	39	30	61	55	185	
St. Anne's .....	Total Deaths ...	200	161	230	208	799	61.0
	Below 5 years...	116	92	165	114	487	
Lime Street .....	Total Deaths ...	96	58	96	71	321	50.8
	Below 5 years...	47	26	60	30	163	
Castle Street .....	Total Deaths ...	19	16	14	13	62	32.3
	Below 5 years...	6	7	5	2	20	
St. Peter's .....	Total Deaths ...	39	29	39	42	149	46.3
	Below 5 years...	19	12	20	18	69	
Pitt Street.....	Total Deaths ...	63	44	63	43	213	49.3
	Below 5 years...	34	17	39	15	105	
Great George.....	Total Deaths ...	110	94	121	107	432	53.2
	Below 5 years...	62	51	72	45	230	
Rodney Street .....	Total Deaths ...	130	83	110	104	427	44.3
	Below 5 years...	55	40	58	36	189	
Abercromby .....	Total Deaths ...	133	112	121	103	469	44.3
	Below 5 years...	58	41	74	35	208	
Parish Workhouse and Hospitals .....	Total Deaths ...	599	530	472	543	2144	20.3
	Below 5 years...	143	111	71	110	435	
Everton and Kirkdale ...	Total Deaths ...	639	622	844	703	2808	54.8
	Below 5 years...	327	335	548	330	1540	
West Derby .....	Total Deaths ...	301	238	319	263	1121	64.9
	Below 5 years...	163	119	208	137	727	
North Toxteth .....	Total Deaths ...	222	205	231	243	901	54.1
	Below 5 years...	122	95	140	130	487	
South Toxteth .....	Total Deaths ...	260	238	286	265	1049	61.0
	Below 5 years...	165	133	196	146	640	
Union Workhouse and Everton Hospital .....	Total Deaths ...	4	7	8	15	34	8.8
	Below 5 years...	...	3	...	...	3	
Parish .....	Total Deaths ...	2314	1902	2333	2121	8670	47.4
	Below 5 years...	1054	825	1319	911	4109	
Out Townships .....	Total Deaths ...	1426	1310	1688	1489	5913	55.8
	Below 5 years...	777	685	1092	743	3297	
Borough .....	Total Deaths ...	3740	3212	4021	3610	14583	50.8
	Below 5 years...	1831	1510	2411	1654	7406	

AGES.	QUARTERS.				ANNUAL.	
	March.	June.	Sept.	Dec.	Deaths.	Rate per 1,000 of the Popu- lation.
Deaths at 1 year and under .....	1138	959	1737	1042	4876	9.7
"  between 1 year and 5 .....	693	551	674	612	2530	5.1
"  "  5  "  20 .....	254	238	214	302	1008	2.0
"  "  20  "  60 .....	1251	1117	1015	1285	4668	9.3
"  above 60 years .....	394	341	359	362	1456	2.9
"  at ages unknown .....	10	6	22	7	45	0.08
"  at all ages.....	3740	3212	4021	3610	14583	29.1

CLASSES.	QUARTERS.				YEAR 1868.
	March.	June	Sept.	Dec.	
1. Zymotic Diseases.....	888	678	1472	906	3944
2. Diseases of Uncertain Seat.....	114	95	87	114	410
3. Tubercular Diseases.....	592	576	534	473	2175
4. Diseases of Brain, &c.....	354	299	345	312	1310
5. „ of Heart, &c.....	139	111	98	116	464
6. „ of Lungs, &c.....	771	537	397	755	2460
7. „ of Stomach, &c.....	133	128	165	149	575
8. „ of Kidneys, &c.....	31	50	39	38	158
9. Childbirth, Diseases of the Uterus, &c.....	20	26	20	32	98
10. Rheumatism, „ of the Joints, &c.....	13	17	16	22	68
11. Diseases of the Skin, Cellular Tissue, &c. ....	25	11	25	20	81
12. Malformations. ....	3	5	10	6	24
13. Premature Birth .....	41	49	64	42	196
14. Atrophy and Debility .....	275	278	410	283	1246
15. Old Age .....	105	112	92	98	407
16. Privation, Colds, &c.....	6	4	9	8	27
17. Inquests, &c .....	200	195	204	193	792
Causes not specified.....	30	41	34	43	148
All Causes.....	3740	3212	4021	3610	14583
Total Zymotics .....	888	678	1472	906	3944
Small Pox .....	7	2	1	8	18
Measles .....	218	135	79	56	488
Scarlatina .....	109	98	98	151	456
Hooping Cough.....	216	126	88	87	517
Diarrhœa.....	48	99	859	102	1108
Typhus and Infantile Fever .....	158	123	190	370	841

### ZYMOTICS.

The group of diseases which in the above Table is classified under the term Zymotics includes simple or continued fevers, eruptive fevers, hooping cough, diarrhœa, cholera, influenza, and other disorders which are apt to spread and become epidemic among the people. It is to this characteristic of wide diffusion by infection, contagion, or malaria, that their important bearing on the public health is chiefly due; but they have also a special and peculiar interest in the admitted fact that their epidemic prevalence is occasioned by removable evils, and can be prevented or greatly controlled by sanitary measures. They occasioned during 1868, 3944 deaths, and thus accounted for 27 per cent. of the total mortality from all causes. This rate is 3 per cent. more than what in ordinary years is found to be the proportional rate of zymotic deaths throughout the country; but it is 1·8 per cent. less than the proportional rate within the Borough of Liverpool during the preceding decennial period. The following Table shows the localities and periods of their fatal prevalence, and also their per-centage rate of death.

WARDS, &c.	Deaths from all Causes.	ZYMOTICS.					
		QUARTERS.				Annual.	Per Centage of Zymotic deaths to deaths from all Causes.
		March.	June.	Sept.	Dec.		
Scotland.....	2356	124	121	300	157	702	29·8
Vauxhall .....	567	28	23	67	29	147	25·9
St. Paul's .....	376	18	17	43	15	93	24·7
Exchange .....	355	12	10	32	23	77	21·7
St. Anne's .....	799	48	40	108	53	249	31·1
Lime Street .....	321	21	12	31	13	77	24·0
Castle Street.....	62	...	3	4	3	10	16·1
St. Peter's .....	149	11	5	14	9	39	26·2
Pitt Street.....	213	21	5	22	11	59	27·7
Gt. George.....	432	28	26	39	20	113	26·1
Rodney Street .....	427	24	11	34	16	85	19·9
Abercromby .....	469	19	18	33	20	90	19·2
Liverpool Workhouse Hospital.....	1712	125	80	76	141	422	24·6
North Hospital.....	145	2	3	1	...	6	4·1
South Hospital .....	87	...	1	...	1	2	2·3
Royal Infirmary .....	190	5	1	2	3	11	5·8
Lying-in Hospital .....	10	...	...	...	...	...	...
Everton and Kirkdale.....	2808	185	175	355	201	916	32·6
West Derby .....	1121	67	49	132	56	304	27·1
North Toxteth .....	901	63	26	88	55	232	25·7
South Toxteth .....	1049	84	48	86	68	286	27·2
West Derby Union .....	7	...	...	...	...	...	...
Everton Hospital.....	27	3	4	5	12	24	8·9
Parish .....	8670	486	376	806	514	2182	25·1
Out Townships .....	5913	402	302	666	392	1762	29·8
Borough .....	14583	888	678	1472	906	3944	27·0

### TYPHUS AND INFANTILE REMITTENT FEVER.

The registered deaths from these diseases are recorded separately and apart in the nosological chart at the end of the Report; but, because of a similarity in their etiology, and in much of their natural history, it will be convenient to speak of the extent, localities and results of their fatal prevalence under one and the same heading.

They accounted within the Borough of Liverpool for 841 deaths; or for 532 in the Parish and 309 in the Out-townships. The rate of their mortality was equal to 1·7 per 1000 per annum of the estimated population; their percentage rate relatively to deaths from all causes was 4·2 during the first, 3·8 during the second, 4·7 during the third, and 10·2 during the fourth quarter of the year. Their deaths included 432 males and 409 females; 239 persons below the age of 15; 231 between the ages of 15 and 30; and 371 above the age of 30.

These statistics demonstrate the existence of many causes of epidemic sickness, and therefore also of many physical evils within or around the residences

of the poor; but if a comparison be drawn between the average number of fever deaths in the different wards of the town during the last ten years (1858 to 1867) and those of the same districts during 1868, there will appear real and satisfactory evidence of improvement in the health condition of those parts of the Borough where the greatest alterations have been effected under the Presentments of the Grand Jury and by the orders of the Town Council.

WARDS.	Exact Average of Fever Deaths for Preceding Ten Years.	Deaths from Fever during the Year 1868.
Scotland .....	137	124
Vauxhall .....	48	24
St. Paul's .....	25	10
Exchange .....	24	15
St. Anne's .....	43	20
Lime Street .....	19	6
Castle Street .....	6	1
St. Peter's .....	7	9
Pitt Street .....	13	11
Great George .....	32	9
Rodney Street .....	19	18
Abercromby .....	23	14
Everton and Kirkdale.....	93	178
West Derby .....	35	40
North Toxteth .....	55	31
South Toxteth .....	79	39
Hospital Deaths .....	374	292
Total.....	1032	841

In the above Table the averages have been calculated without making allowance for increase of population.

The mortality of 1868 therefore appears greater than it really is proportionally to that of the previous ten years. This is more particularly the case in Scotland ward, where the rate of increase of population between the census of 1851 and 1861 was 31.5 per cent., or at a rate equal to nearly 3 per cent. per annum; and in Everton, where the population increased from 25,883 in the year 1851, to 54,848 in 1861, or in a ratio of 112 per cent., and where the population is still estimated to be progressing at the same rate or at nearly 8 per cent. per annum; and in Kirkdale, where the population is still probably increasing at the rate of 5 per cent. per annum. But making every allowance for increase of population, the table shows this instructive and peculiar fact, that during the year 1868 fever was more rife in some of the Out-townships than in the wards and districts of the Parish which have hitherto been regarded as the *endemic habitats* of typhus.

Every form of continued fever is included under the generic term of Typhus; but the Registers of Deaths attribute 41 fatal cases to gastric fever, 12 to enteric fever, 146 to typhoid fever, 1 to bilious fever, 1 to relapsing fever, 8

to brain fever, 475 to typhus fever, 12 to febricula, and 119 to febris or fever. These distinctions of type are important both in tracing the history of causation and in applying the preventive measures suggested by sanitary science. The fevers in which abdominal derangements are predominant (gastric, enteric, typhoid, bilious, relapsing) do as a rule prevail during the summer months, when the emanations from decomposing animal and vegetable refuse are most abundant and concentrated; while typhus, the disease of debility, of want, of indigence, and overcrowding, is most common during the wet and cold months of the year. This was made tolerably evident in the certificates of the fever deaths in 1868; for, while during the first half of the year only 11·2 per cent. were included under the terms gastric, enteric or typhoid, the number increased to 25·7 per cent. during the hot months of July, August, and September.

Not only does this distinction of type point to causation and its remedy, but it also gives the best data by which to judge of the hopefulness and efficiency of sanitary measures. In theory it is usual to say that all the causes of fever are removable, but practically it is found that even the abatement of certain causes baffles the exertions of the Physician, the Philanthropist, or the Statesman. If poverty and want, or intoxication, or overcrowding, or insalubrious home arrangements, be the proximate causes of fever, then mere sanitary legislation cannot hope to reach and to eradicate the evils; but it is different when external filth, insufficient drainage, untrapped and unventilated sewers, close and confined courts, cellar habitations, inadequate water supply, or any other removable physical conditions which are under the surveillance and within the control of the local authorities, be the causes of fever. In other words, typhus may exist without blame to the governing body, and the removal of its cause be beyond the duties and responsibilities of property; but epidemic typhoid, or enteric fever, never.

During the months of August, September, and October, while summer and infantile diarrhoea were likewise extremely prevalent, there raged a widespread epidemic of the enteric type of continued fever. It first showed itself in the rural districts on the north and north-east of Liverpool, where beneath a sandy soil of very moderate depth, the substratum is boulder clay of great extent and thickness. Its attacks were not restricted to the weakly, the poor, the indigent, or the overcrowded; but, on the contrary, while it spared no class, its chief victims were the young and adolescent of families in comfortable circumstances. It was not on the whole a very fatal malady; its death rate being much less than that of ordinary typhus, and, according to the experience of six medical men in extensive practice in the localities of its fatal prevalence, not above 1 in 40 of the attacked of all ages. It is, however, right to mention, that one surgeon estimated its fatality as 1 in 5, while others attended many cases without a single death. There was observed, especially in the earlier cases, a tendency in the fever to remissions and exacerbations (remittent type) and a proneness to relapse after apparent convalescence (relapsing type). There does not appear, as far as my knowledge extends, to

have been conjoined with the abdominal symptoms any marked derangement of the Liver or any appearance of yellowness so common in the relapsing fever of 1843.

The progress of the fever, so far as can be judged from the answers kindly made to my questions by nineteen medical practitioners, seems to have been not in the direction of the wind but directly against it. The prevailing wind of July was WNW., and that of August W.; yet the disease was first observed as an epidemic in Walton and neighbourhood, then in Kirkdale, then in Bootle, and afterwards in Seaforth, Waterloo, Crosby, Litherland, and Sefton. After the epidemic had been raging in Bootle a couple of weeks or more, it spread into Scotland and Everton wards within the Borough. The general impression of my medical correspondents was that the origin of the malady was pythogenic, or due to the emanations of filth. Many attributed it to defective drainage, to unventilated sewers, to imperfect traps in sewers, to cesspools, to midden heaps, to the manure in fields, to the effluvia from open ditches and ponds, to the festering mud on the shore and at the outlet of the Bootle sewer; all attributed it to removable nuisances of some kind or other.

The drainage of houses throughout the whole of these rural districts is at present necessarily imperfect. The land is flat, the clay substratum impervious to fluids, the subsoil water line near to the surface. The drains, such as they are, either terminate in cesspools, or empty into stagnant ditches, or enter the muddy and sluggish tributary streams of the river Alt, or allow their contents to percolate through the porous soil around the houses. In Bootle the sewers are unventilated, and notwithstanding the lessons so sadly taught by the death registry of Liverpool, the houses in that rising district are constructed in many respects without due regard to the principles of hygiene.

It is necessary to refer to these physical causes of disease. If the mere general topography of the district was regarded, if the position of a locality over which the pure and invigorating sea-breeze blows throughout the year was alone taken into consideration, apart from the defects and evils which are directly due to neglect of health laws, it would be impossible to understand the existence of epidemic fever in a district which ought to be one of the most salubrious in the country.

The season was favourable to the injurious miasmata which result from vegetable decomposition aided by a high temperature. Rain had only fallen, and that without any force or duration, during seven days of the months of June and July, and then only to an extent of 0.38 of an inch during the whole period. The mean temperature of the month of July was 66, and of August, 63; but there were many days during both months in which the temperature exceeded 80, and even reached to 85, 87, and 89 degrees.

The following Table of mortality from fever in the rural districts, and in the wards at the north of the town, contiguous to these rural districts, during the months when the epidemic was raging, as compared with the return of fever deaths in the districts which were formerly called the fever districts of Liverpool, is exceedingly interesting:—

DISTRICTS.		DEATHS FROM FEVER DURING THE WEEKS ENDING														
		AUGUST.				SEPTEMBER.				OCTOBER.					TOTAL.	
		1	8	15	22	29	5	12	19	26	3	10	17	24		31
Rural Districts. Not in the Borough.	{ Walton-on-the-Hill, Bootle-cum- Linacre, Fazakerly, and Kirby... }	...	...	1	1	...	2	3	4	10	8	11	7	4	3	54
	{ Litherland, Lunt, Netherton, Or- rell, Ford, Sefton, and Aintree }	...	1	1	1	...	...	...	...	4	2	2	2	1	1	15
	{ West Derby..... }	...	...	1	...	...	1	...	1	2	2	2	3	...	...	12
	{ Great and Little Crosby, Ince, Blundell, and Thornton ..... }	...	...	...	1	...	1	1	1	1	1	1	1	1	...	...
In the Borough.	{ Everton and Kirkdale .....	...	1	2	1	4	3	6	11	15	13	19	9	10	9	103
	{ West Derby Ward..... }	1	...	...	...	...	1	2	1	3	3	5	...	1	2	19
	{ No. 1 Fever District .....	...	...	1	...	...	1	...	...	...	...	...	1	...	2	5
	{ No. 2 Fever District .....	1	1	...	2	1	...	...	1	...	...	2	...	...	1	9

The Table shows that during the warm summer months the open and suburban districts were suffering more from fever than those low-placed and confined localities which are the resort of the poor and the indigent. The type of the fever was markedly enteric; and when it is remembered that it was greatly restricted to a particular country and neighbourhood, it will be instructive to inquire whether there existed any manifest conditions favourable to its epidemic prevalence. My own opinion fully coincides with that of my medical correspondents, that the fever was due to the emanations from filth, or of decomposing organic matter, and that the chief origin of these emanations in the rural districts was bad or insufficient drainage.

But it may be asked, how could such causes apply in Everton, Kirkdale, and Scotland wards, which, being within the Borough, have a complete system of ventilated sewers? It is, indeed, probable that many sufferers from the fever in these northern wards of the town were subjected to the miasm from the undrained districts in their neighbourhood; but it must be also remembered, that although the houses in many of the streets in these wards were built since the passing of the Sanitary Act of 1847, yet they are replete with the evils of overcrowding on area, of privies in near proximity to inhabited rooms, and of cellars as residences and sleeping apartments, dark, damp, cold, and unventilated to a degree which it is difficult for those not familiar with the houses of the poor, to conceive. There occurred in Kirkdale, Everton, and

NOTE:—No. 1 Fever district represents the cluster of streets lying between Great Crosshall Street, Standish Street, and Marybone. The population of this block, in the census of 1861, was 9,632 persons, of 1,993 families, in 1,051 houses, on an area of 63,609 superficial yards. 1·2 per cent. of the whole population died from fever in 1865.—No. 2 Fever district is bounded by Mill Street, Grafton Street, Stanhope Street, and Northumberland Street. It contained in the census of 1861, 2,746 houses, 4,056 families, 18,263 persons, on a superficies of 195,000 yards. 1·5 per cent. of the whole population died from fever in 1865.

Scotland wards, and in the part of West Derby within the borough 186 deaths from fever during the three months of August, September, and October. These were so scattered that the number of streets in which they happened amounted to 142. It is not possible therefore to speak definitely of or to form any possible conclusion from the existence of particular evils except in those more restricted instances in which there were three or more deaths in one street. Such streets were Sherwood Street, Hornby Street, Burlington Street, Gordon Street, Robsart Street, and China Street, where the cellar habitations are of the very worst description.

The epidemic did not cease in October either in the country or in the town, but its progress within the Borough during the months of November and December is not easily separated from that of the ordinary typhus which always prevails in Liverpool during the winter.

There has not, as far as I am aware, been a fever of the enteric type epidemic in Liverpool or its neighbourhood since the year 1844. In the summer of that year a fever attacking chiefly the young members of families in easy circumstances, prevailed very fatally in Everton, and in the rural districts to the north and north-east of the Borough.

It showed itself firstly in Old Swan, and then spread along the ridge of Everton and Edge Hill to Kirkdale and Bootle. At that time neither Kirkdale nor Everton, though within the Borough, were sewered; the house drains led into cesspools, or their contents percolated through the loamy soil above the clay, or, as was the case with the drain from the West Derby Workhouse, pursued an open course for a considerable distance. As in the late epidemic, the destitute were neither the originators, nor the promoters, nor the chief sufferers from the malady, and its ravages were restricted to the districts at the north of the town. In 1844, the months of great drought were April and May; the mean reading of the thermometer in July was 61, in August 58, and in September 58, but during these months the maximum heat reached to 80.

In addition to the following Table which classifies the deaths from typhus during the year under the three heads of age, sex, and locality, there are also added a list of the streets in which the disease most fatally prevailed, and also an analysis of the occupations of persons who died from it.

## TYPHUS AND INFANTILE FEVER.

WARDS.	QUARTERS.								YEAR.			
	MARCH.		JUNE.		SEPT.		DEC.		M.	F.	TOTAL.	
	M.	F.	M.	F.	M.	F.	M.	F.				
Scotland .....	{ Below 5 years ...	5	3	4	1	4	5	7	9	20	18	38
	{ Above 5 years ...	7	8	4	9	10	9	17	22	38	48	86
Vauxhall .....	{ Below 5 years ...	1	1	...	1	3	3	...	...	4	5	9
	{ Above 5 years ...	1	...	2	3	2	2	3	2	8	7	15
St. Paul's .....	{ Below 5 years ...	1	...	1	...	...	...	...	1	2	1	3
	{ Above 5 years ...	...	1	...	...	1	...	2	3	3	4	7
Exchange.....	{ Below 5 years ...	...	...	...	2	...	...	...	1	...	3	3
	{ Above 5 years ...	2	2	...	1	...	2	3	2	5	7	12
St. Anne's .....	{ Below 5 years ...	...	1	...	...	1	...	...	1	1	2	3
	{ Above 5 years ...	1	...	1	2	2	5	5	1	9	8	17
Lime Street.....	{ Below 5 years ...	...	...	...	...	1	...	...	...	1	...	1
	{ Above 5 years ...	...	2	...	...	...	...	1	2	1	4	5
Castle Street .....	{ Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	{ Above 5 years ...	...	...	...	...	...	1	...	...	...	1	1
St. Peter's .....	{ Below 5 years ...	...	...	...	...	...	...	...	1	...	1	1
	{ Above 5 years ...	...	2	1	...	3	1	...	1	4	4	8
Pitt Street .....	{ Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	{ Above 5 years ...	2	...	1	...	2	2	1	3	6	5	11
Gt. George .....	{ Below 5 years ...	...	...	...	...	1	...	...	...	1	...	1
	{ Above 5 years ...	...	1	2	2	...	...	2	1	4	4	8
Rodney Street.....	{ Below 5 years ...	1	...	...	1	...	2	...	1	1	4	5
	{ Above 5 years ...	2	...	1	1	2	...	3	4	8	5	13
Abercromby .....	{ Below 5 years ...	...	...	1	1	...	...	...	...	1	1	2
	{ Above 5 years ...	...	1	1	1	1	...	4	4	6	6	12
Parish Workhouse and Hospitals .....	{ Below 5 years ...	4	4	1	1	...	...	1	1	6	6	12
	{ Above 5 years ...	32	29	28	10	30	20	61	49	151	108	259
Out Townships Work- house and Hospitals	{ Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	{ Above 5 years ...	2	1	2	1	4	1	7	3	15	6	21
Everton and Kirkdale	{ Below 5 years ...	1	1	1	3	3	6	9	6	14	16	30
	{ Above 5 years ...	14	9	8	8	15	16	37	41	74	74	148
West Derby.....	{ Below 5 years ...	...	2	1	1	1	1	...	...	2	4	6
	{ Above 5 years ...	4	2	1	1	1	7	11	7	17	17	34
North Toxteth .....	{ Below 5 years ...	...	...	...	1	1	1	...	2	1	4	5
	{ Above 5 years ...	1	4	3	3	3	4	3	5	10	16	26
South Toxteth .....	{ Below 5 years ...	1	...	...	1	1	1	1	1	3	3	6
	{ Above 5 years ...	2	...	2	2	4	5	8	10	16	17	33
Parish .....	{ Below 5 years ...	12	9	7	7	10	10	8	15	37	41	78
	{ Above 5 years ...	47	46	41	29	53	42	102	94	243	211	454
Out Townships .....	{ Below 5 years ...	2	3	2	6	6	9	10	9	20	27	47
	{ Above 5 years ...	23	16	16	15	27	33	66	66	132	130	262
Borough .....	{ Below 5 years ...	14	12	9	13	16	19	18	24	57	68	125
	{ Above 5 years ...	70	62	57	44	80	75	168	160	375	341	716

LIST OF STREETS IN THE BOROUGH WHEREIN 3 OR MORE  
DEATHS FROM TYPHUS AND INFANTILE FEVER OCCURRED IN 1868.

STREETS IN THE PARISH.	HOUSES.		Total.	STREETS IN THE PARISH.	HOUSES.		Total.
	Front.	Court.			Front.	Court.	
Athol .....	6	1	7	Taylor.....	3	...	3
Burlington.....	4	7	11	Titchfield .....	4	1	5
Blenheim .....	1	2	3	Tatlock .....	4	1	5
Bond .....	3	2	5	Upper Frederick .....	3	1	4
Boundary .....	3	2	5	Vauxhall Road .....	4	...	4
Banaster.....	1	2	3				
Bent .....	3	...	3	STREETS IN THE OUT			
Bridgewater .....	5	...	5	TOWNSHIPS.			
Collingwood .....	2	3	5	Anderson .....	3	...	3
Cranmer .....	3	...	3	Beresford .....	3	...	3
Carlton .....	1	2	3	Conway .....	5	...	5
Comus.....	1	3	4	China .....	3	...	3
Doncaster .....	3	...	3	Combermere .....	4	3	7
Denison .....	2	1	3	Clive .....	4	1	5
Duckinfield.....	1	3	4	Cotter.....	1	2	3
Eldon .....	5	8	13	Edinburgh .....	3	...	3
Eaton .....	2	1	3	Elias .....	3	...	3
Falkner .....	3	...	3	Gordon .....	8	...	8
Great Crosshall.....	4	...	4	Great Homer.....	3	...	3
Hedley .....	2	1	3	Gore .....	2	2	4
Hornby .....	5	2	7	Hill .....	1	2	3
Kew.....	1	2	3	Haddock.....	3	...	3
Kent .....	2	1	3	Jubilee .....	3	...	3
Limekiln Lane .....	3	1	4	Kirkdale Road .....	4	...	4
Lace .....	3	4	7	Luton .....	4	...	4
Lower Myrtle .....	3	...	3	Mason.....	...	4	4
Mile End .....	2	2	4	Mann .....	4	2	6
Maguire .....	...	3	3	Mill .....	3	...	3
Myrtle.....	3	...	3	Northumberland .....	3	...	3
Newsham .....	1	2	3	Prince Edwin.....	4	2	6
Porter.....	1	3	4	Prince William.....	3	9	12
Portland.....	1	2	3	Robsart .....	7	2	9
Paul .....	...	3	3	Rose Vale .....	4	...	4
Farr .....	2	3	5	Saint Domingo Road ...	1	2	3
Pitt .....	3	...	3	Stanhope .....	2	1	3
Rose Place.....	1	3	4	Tetlow.....	3	...	3
Regent .....	3	...	3	Upper Harrington.....	5	...	5
Ray .....	1	2	3	Victoria .....	4	...	4
Scotland Road .....	3	...	3	Wolfe .....	7	1	8
Sherwood .....	6	1	7				
Sawney-Pope .....	4	2	6				

OCCUPATIONS OF PERSONS WHO (EITHER THEMSELVES OR MEMBERS OF THEIR FAMILY) HAVE DIED FROM TYPHUS AND INFANTILE FEVER IN THE WORKHOUSES OR HOSPITALS OF THE BOROUGH, TABULATED INTO WARDS FROM WHENCE THEY CAME DURING THE YEAR 1868.

## LIVERPOOL WORKHOUSE.

OCCUPATIONS.	WARDS.													TOTAL.			
	Scotland.	Vauxhall	St. Paul's.	Exchange.	St. Anne's.	Lime Street	Castle Street	St. Peter's.	Pitt Street.	Great George.	Rodney Street.	Abercromby.	Everton and Kirkdale.		West Derby	North Toxteth.	Unknown.
Labourers .....	39	11	4	8	10	...	1	2	2	4	4	1	15	5	1	24	131
Tradesmen .....	17	1	3	5	11	4	...	1	3	2	3	3	15	7	...	8	83
Servants .....	5	...	1	...	2	2	...	...	1	...	1	2	4	4	...	7	29
Seamen .....	6	1	1	...	...	...	...	...	...	...	...	...	4	...	...	3	15
Unknown .....	1	1	2	1	...	...	...	...	...	...	...	...	2	...	...	3	10
Males .....	35	8	6	10	13	3	1	3	4	4	5	2	24	12	...	27	157
Females .....	33	6	5	4	10	3	...	...	2	2	3	4	16	4	1	18	111
Total .....	68	14	11	14	23	6	1	3	6	6	8	6	40	16	1	45	268

## EVERTON HOSPITAL.

OCCUPATIONS.	WARDS.				TOTAL.
	Abercromby.	St. Peter's.	Rodney Street.	Unknown.	
Labourers .....	...	...	...	2	2
Tradesmen .....	...	1	...	13	14
Servants .....	1	...	...	1	2
Professions .....	...	...	1	1	2
Unknown .....	...	...	...	1	1
Males .....	...	1	1	14	16
Females .....	1	...	...	4	5
Total .....	1	1	1	18	21

## NORTH HOSPITAL.

OCCUPATIONS.	WARDS.		TOTAL.
	Scotland.	Unknown.	
Seaman .....	1	1	2
Male .....	1	1	2
Female .....	...	...	...
Total .....	1	1	2

## ROYAL INFIRMARY.

One Male, a Seaman, unknown.

OCCUPATIONS OF PERSONS WHO (EITHER THEMSELVES OR MEMBERS OF THEIR FAMILY) HAVE DIED FROM TYPHUS AND INFANTILE FEVER IN THE DIFFERENT WARDS OF THE BOROUGH DURING THE YEAR 1868. (NOT INCLUDED IN THE FOREGOING TABLES OF DEATHS IN WORKHOUSES AND HOSPITALS.)

OCCUPATIONS.	WARDS.													TOTAL.			
	Scotland.	Vauxhall.	St. Pauls.	Exchange.	St. Anne's.	Lime Street.	Castle Street.	St. Peter's.	Pitt Street.	Great George.	Rodney Street.	Abercromby.	Ever-on and Kirkdale.		West Derby.	North Toxteth.	South Toxteth.
Labourers .....	70	14	2	6	6	...	...	3	3	1	3	2	49	8	10	20	197
Tradesmen .....	42	9	6	9	14	5	1	6	6	7	11	11	102	26	18	14	287
Servants .....	...	1	...	...	...	1	...	...	...	...	...	...	4	1	2	...	9
Seamen .....	12	...	1	...	...	...	...	...	2	1	2	1	18	1	1	4	43
Soldiers .....	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Professions and Mercantile .....	...	...	1	...	...	...	...	...	...	...	2	...	4	4	...	1	12
Males.....	55	13	7	5	9	2	...	4	6	3	9	8	88	18	11	18	256
Females.....	69	11	3	10	11	4	1	5	5	6	9	6	90	22	20	21	293
Total .....	124	24	10	15	20	6	1	9	11	9	18	14	178	40	31	39	549

Amongst the victims of the disease were two Surgeons, one Roman Catholic Priest, two Scripture Readers, two Nurses, and one Relieving Officer.

#### TOXTETH WORKHOUSE.

Not included in the Mortality of the Borough, being beyond the Municipal Boundaries.

OCCUPATIONS.	WARDS.			TOTAL.
	North Toxteth.	South Toxteth.	Unknown.	
Labourers .....	3	13	...	16
Tradesmen .....	4	8	3	15
Servants .....	1	2	...	3
Seamen .....	2	...	1	3
Unknown .....	...	1	...	1
Male .....	3	14	2	19
Female .....	7	10	2	19
Total .....	10	24	4	38

## DIARRHŒA.

Diarrhœa accounted for 1,108 deaths, or for 312 in excess of the corrected averages of the previous ten years. Its per-centage Death-rate relatively to that from all diseases was 7.6, and relatively to total Zymotics, 28. It was, as will be seen by the following Table, most prevalent in the third quarter of the year, and most fatal to children in earliest infancy.

WARDS.	QUARTERS.								YEAR.			
	March.		June.		Sept.		Dec.		M.	F.	TOTAL.	
	M.	F.	M.	F.	M.	F.	M.	F.				
Scotland .....	Below 5 years ...	1	2	18	9	106	87	10	12	135	110	245
	Above 5 years ...	...	1	...	...	8	7	...	1	8	9	17
Vauxhall .....	Below 5 years ...	1	3	4	4	18	23	5	1	28	31	59
	Above 5 years ...	...	...	1	...	2	...	1	...	4	...	4
St. Paul's .....	Below 5 years ...	...	1	2	1	7	15	...	1	9	18	27
	Above 5 years ...	...	...	...	...	2	1	...	1	2	2	4
Exchange.....	Below 5 years ...	...	...	1	...	6	10	1	2	8	12	20
	Above 5 years ...	...	...	...	...	1	1	...	...	1	1	2
St. Anne's .....	Below 5 years ...	...	1	3	8	30	31	2	4	35	44	79
	Above 5 years ...	...	...	...	1	1	2	...	1	1	4	5
Lime Street.....	Below 5 years ...	...	1	1	...	12	4	...	...	13	5	18
	Above 5 years ...	...	...	...	1	1	2	...	1	1	4	5
Castle Street .....	Below 5 years ...	...	...	...	...	1	1	...	1	1	2	3
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
St. Peter's .....	Below 5 years ...	...	1	1	...	5	3	...	...	6	4	10
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Pitt Street .....	Below 5 years ...	...	...	...	...	7	6	...	...	7	6	13
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Gt. George .....	Below 5 years ...	...	2	2	1	11	12	4	1	17	16	33
	Above 5 years ...	...	...	...	...	2	1	...	1	2	2	4
Rodney Street.....	Below 5 years ...	...	2	1	1	12	8	...	2	13	13	26
	Above 5 years ...	...	1	...	...	1	3	...	...	1	4	5
Abercromby.....	Below 5 years ...	...	1	3	1	4	12	1	...	8	14	22
	Above 5 years ...	1	...	...	1	1	1	...	...	2	2	4
Parish Workhouses and Hospitals .....	Below 5 years ...	1	5	1	...	2	6	6	3	10	14	24
	Above 5 years ...	...	1	2	...	6	...	5	2	13	3	16
Out Township Workhouses and Hospitals .....	Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Everton and Kirkdale .....	Below 5 years ...	5	3	9	7	91	81	7	4	112	95	207
	Above 5 years ...	1	1	2	2	3	7	1	1	7	11	18
West Derby.....	Below 5 years ...	1	...	5	...	37	42	4	4	47	46	93
	Above 5 years ...	...	1	...	...	2	3	...	...	2	4	6
North Toxteth .....	Below 5 years ...	2	2	1	1	28	24	1	3	32	30	62
	Above 5 years ...	...	1	...	...	...	4	...	...	...	5	5
South Toxteth .....	Below 5 years ...	3	2	...	3	25	23	4	2	32	30	62
	Above 5 years ...	...	...	...	1	2	5	...	2	2	8	10
Parish .....	Below 5 years ...	3	19	37	25	221	218	29	27	290	289	579
	Above 5 years ...	1	3	3	3	25	18	6	7	35	31	66
Out Townships .....	Below 5 years ...	11	7	15	11	181	170	16	13	223	201	424
	Above 5 years ...	1	3	2	3	7	19	1	3	11	28	39
Borough .....	Below 5 years ...	14	26	52	36	402	388	45	40	513	490	1003
	Above 5 years ...	2	6	5	6	32	37	7	10	46	59	105

The exceptionally high rate of its mortality, while it was epidemic as Summer Infantile Diarrhœa, was chiefly due to atmospherical conditions. In June and July there was excessive heat and almost complete drought; a rain-fall of only 0·38 of an inch, a mean temperature of 63, and a maximum range from 80 to 89 degrees. During August the mean temperature was still 63, but the rain-fall was two-and-a-half inches. There were in August some showers of considerable force, but as the continuance of the rain was for 59 hours during 16 days, and the result so comparatively small, it is evident that its amount at one time was seldom more than what would conduce to the fermentation of vegetable matter. The drought returned in September, when the rain-fall during the whole month was only 1·34 inch; the mean temperature being as high as 59 degrees.

The summer season throughout the country seems to have been very similar to that of Liverpool as far as regards heat and absence of rain. Hence it is not surprising to find that the mortality from Diarrhœa was in considerable excess. The following Table will show its absolute amount in eleven of the large towns during the weeks between the 28th of June to the 26th of September. It is the more interesting because the amount of Summer Diarrhœa is about the very best test of the sanitary condition of a town.

Towns.	Total Deaths in Third Quarter.	Diarrhœa Deaths in Third Quarter.	Population in 1868.	Per Cent. of Diarrhœa to Total Deaths.	Per 1000 per Annum of Total Deaths to Population
London .....	19149	3145	3126635	16·4	24·5
Manchester .....	3457	869	366835	25·1	37·7
Salford .....	1051	279	117162	26·5	35·8
Birmingham .....	2617	821	352296	31·3	29·7
Leeds .....	2059	566	246851	27·4	33·3
Bristol .....	909	157	167487	17·2	21·7
Sheffield .....	1882	407	232362	21·6	32·3
Newcastle-upon-Tyne.....	873	122	127701	13·9	27·3
Hull .....	916	226	122628	24·6	29·9
Bradford .....	1028	205	134000	19·9	30·6
Liverpool .....	4021	859	500676	21·3	32·1

The connection of Infantile Diarrhœa with physical defects and sanitary evils within or around the homes and residences of the poor, is so manifest that it is well to localise as far as possible the seats of its most fatal prevalence. The following list of streets shows where more than three deaths occurred from Diarrhœa during the months from June to October, and there are also added Tables of the daily deaths, with thermometrical and barometrical means, amounts of rain-fall, and direction and velocity of the wind during the same period.



## DIARRHŒA IN DATES OF DEATH, 1868.

DATE. June.	No. of Deaths.	Mean Reading of Barometer.	Mean Tempe- rature.	RAIN.			WIND.	
				Amount in inches.	Hours.	Days.	Mean Daily Velocity in Miles.	DIRECTION.
1	3	29.993	62.1	...	...	...	288	SE & NW
2	3	30.006	53.9	...	...	...	394	Var & WNW
3	...	30.055	58.4	0.05	1.5	1	343	W & SW
4	3	30.012	54.8	...	...	...	487	WNW
5	3	30.165	58.9	...	...	...	199	W & NW
6	3	30.144	58.7	...	...	...	473	S & W
7	2	30.228	54.2	...	...	...	710	WNW
8	...	30.244	55.1	...	...	...	639	WNW
9	1	30.190	55.3	...	...	...	506	WNW & W
10	...	30.179	56.8	...	...	...	367	W & WSW
11	...	30.221	58.0	...	...	...	307	WSW & WNW
12	2	30.284	60.2	...	...	...	312	W & WNW
13	2	30.233	61.5	...	...	...	278	SSE & W
14	3	30.187	62.7	...	...	...	247	Var & SW
15	1	30.197	59.2	...	...	...	343	WSW & W
16	3	30.248	64.4	...	...	...	298	Var & SW
17	...	30.210	58.7	...	...	...	396	SW & WNW
18	5	30.284	62.7	...	...	...	336	ESE & E
19	2	30.215	64.7	...	...	...	535	ESE & E
20	...	30.053	70.0	...	...	...	295	ESE & Var
21	3	29.859	66.1	0.05	1.4	1	382	SE & SSE
22	3	29.705	57.0	...	...	...	228	Var & W
23	1	29.756	59.8	0.02	0.8	1	290	SSE & Var
24	1	30.020	60.1	0.03	3.0	1	310	W & WNW
25	2	30.150	59.9	...	...	...	502	Var & W
26	3	30.359	60.4	...	...	...	226	WNW & NW
27	3	30.293	64.1	...	...	...	348	Var & W
28	2	30.328	60.3	...	...	...	350	NW & WNW
29	4	30.388	63.9	...	...	...	199	Var & NW
30	4	30.365	63.8	...	...	...	235	WNW & Var

## DIARRHŒA IN DATES OF DEATH, 1868.

DATE. July.	No. of Deaths.	Mean Reading of Barometer.	Mean Tempe- rature.	RAIN.			WIND.	
				Amount in inches.	Hours.	Days.	Mean Daily Velocity in Miles.	DIRECTION.
1	3	30.363	65.0	...	...	...	226	Var
2	3	30.250	67.0	...	...	...	269	NNE & NW
3	3	30.119	65.3	...	...	...	230	N & NW
4	3	30.083	62.0	...	...	...	221	NE & WNW
5	1	30.069	61.6	...	...	...	516	W & WNW
6	5	30.093	62.3	...	...	...	494	WNW & W
7	3	30.115	68.0	...	...	...	350	SW & W
8	7	30.120	65.4	0.02	1.5	1	218	Var & WNW
9	8	30.180	63.4	...	...	...	235	Var & NW
10	4	30.237	67.3	...	...	...	331	E & ESE
11	8	30.226	67.0	...	...	...	343	ESE & E
12	6	30.190	64.8	...	...	...	370	E & ENE
13	12	30.155	66.6	...	...	...	343	E & Var
14	7	30.108	73.2	...	...	...	274	ESE & Var
15	14	29.977	75.0	...	...	...	276	SE & WNW
16	11	29.968	65.5	0.14	3.8	1	214	SW & NNW
17	11	30.065	63.2	...	...	...	242	NW & NNW
18	13	29.997	61.4	0.03	2.5	1	319	SSE & WNW
19	10	30.046	65.0	...	...	...	492	WNW & W
20	16	30.028	70.1	...	...	...	514	SW & WSW
21	16	30.064	72.4	...	...	...	242	WSW & NNW
22	13	30.021	67.0	...	...	...	235	Var & NW
23	14	30.229	59.0	...	...	...	430	NW & NE
24	9	30.458	59.7	...	...	...	413	ENE
25	12	30.345	63.2	...	...	...	370	E & ESE
26	13	30.079	70.3	...	...	...	290	E & Var
27	17	29.933	69.4	...	...	...	187	WNW & NW
28	24	29.672	71.3	...	...	...	406	SSE & Var
29	16	29.693	64.3	...	...	...	406	SW & WNW
30	14	30.009	65.3	...	...	...	490	WNW & Var
31	16	30.178	63.3	...	...	...	619	W

## DIARRHŒA IN DATES OF DEATH, 1868.

DATE. August	No. of Deaths.	Mean Reading of Barometer.	Mean Tempe- rature.	RAIN.			WIND.	
				Amount in inches.	Hours.	Days.	Mean Daily Velocity in Miles.	DIRECTION.
1	9	30.293	68.9	...	...	...	163	Var & NW
2	16	30.150	76.2	...	...	...	278	Var & ESE
3	13	30.043	74.3	...	...	...	511	ESE & E
4	17	29.936	76.0	...	...	...	372	E & Var
5	16	29.865	70.5	0.12	5.0	1	218	Var
6	14	29.700	63.2	0.43	6.5	1	180	SSE & WNW
7	13	29.666	63.0	0.02	1.0	1	511	Var & SW
8	13	29.898	62.9	...	...	...	662	SW & W
9	22	30.102	61.6	...	...	...	278	SW & WSW
10	20	30.004	65.6	0.14	2.3	1	175	Var
11	15	29.613	61.2	0.23	3.0	1	451	ESE & WSW
12	20	29.644	62.2	0.04	1.4	1	343	WSW & Var
13	15	29.555	59.1	0.25	7.8	1	456	ESE & Var
14	11	29.689	63.1	...	...	...	420	SSE & SE
15	17	29.856	62.8	...	...	...	379	ESE
16	14	29.950	63.3	...	...	...	307	ESE & ENE
17	10	29.903	64.3	0.07	3.0	1	269	Var & NW
18	12	29.782	60.4	...	...	...	403	NNW & Var
19	17	29.955	58.9	...	...	...	346	NNE & NE
20	12	30.053	61.5	0.03	1.3	1	144	ENE & NW
21	15	29.969	60.2	0.29	5.8	1	254	W & Var
22	7	29.294	58.2	0.43	12.5	1	751	SSE & WNW
23	17	29.508	56.6	0.03	0.5	1	1219	WNW & N
24	7	29.767	54.4	0.23	3.7	1	859	W
25	16	30.009	56.2	...	...	...	734	W
26	14	29.985	59.1	0.25	4.3	1	490	S & SSW
27	11	29.981	56.8	...	...	...	926	Var & WSW
28	10	30.118	56.9	0.01	0.4	1	1003	W
29	13	30.255	62.1	...	...	...	384	W & WNW
30	11	30.144	62.8	0.02	0.4	1	391	WSW & Var
31	11	30.135	61.5	...	...	...	310	NW & Var

## DIARRHŒA IN DATES OF DEATH, 1868.

DATE. Sept.	No. of Deaths.	Mean Reading of Barometer.	Mean Tempe- rature.	RAIN.			WIND.	
				Amount in inches.	Hours.	Days.	Mean Daily Velocity in Miles.	DIRECTION.
1	5	30.176	60.8	...	...	...	468	WSW & WNW
2	7	30.268	63.7	...	...	...	221	SW & Var
3	9	30.135	68.6	0.03	0.4	1	214	SE & WNW
4	8	30.134	61.5	...	...	...	144	Var
5	6	30.193	71.4	...	...	...	240	ESE & Var
6	4	30.158	73.3	...	...	...	343	SE & S
7	7	30.087	68.5	...	...	...	278	Var & WNW
8	4	30.281	52.6	...	...	...	384	NW & ENE
9	7	30.400	58.1	...	...	...	401	ENE & ESE
10	6	30.222	63.7	...	...	...	353	SE
11	2	30.065	63.5	...	...	...	252	Var
12	4	30.115	49.6	...	...	...	593	ENE
13	5	30.119	51.5	...	...	...	410	ENE
14	3	30.062	52.2	...	...	...	324	ENE
15	1	30.070	52.6	...	...	...	300	ENE
16	5	29.998	56.4	...	...	...	269	E & Var
17	3	29.808	55.6	...	...	...	502	E
18	3	29.658	55.4	0.16	2.0	1	547	E & ENE
19	2	29.578	59.3	...	...	...	444	E & ENE
20	4	29.613	59.7	...	...	...	408	ESE & E
21	2	29.796	60.0	...	...	...	334	ESE & ENE
22	4	29.842	56.1	0.03	0.8	1	194	ENE & N
23	2	29.755	56.5	...	...	...	331	NNE & WNW
24	3	29.701	53.3	...	...	...	338	W & WNW
25	3	29.526	55.0	0.58	5.0	1	588	Var & ENE
26	4	29.604	56.3	0.15	3.5	1	406	SE & ESE
27	3	29.347	56.2	0.31	5.1	1	461	ESE & Var
28	5	29.328	57.8	0.02	0.5	1	374	Var
29	5	29.149	54.8	0.06	0.7	1	485	SE & SSW
30	5	29.313	51.3	...	...	...	319	SE & Var

## DIARRHŒA IN DATES OF DEATH, 1868.

DATE. October.	No. of Deaths.	Mean Reading of Barometer.	Mean Tempe- rature.	RAIN.			WIND.	
				Amount in inches.	Hours.	Days.	Mean Daily Velocity in Miles.	DIRECTION.
1	5	29.914	46.5	...	...	...	408	NE
2	5	30.167	48.0	...	...	...	132	NE & NNW
3	4	29.954	47.9	0.40	8.3	1	192	ESE & ENE
4	2	29.793	46.4	0.07	0.5	1	283	WNW & WSW
5	3	30.039	51.7	0.03	0.3	1	250	Var & SSE
6	3	29.895	49.3	0.24	9.2	1	360	SE & Var
7	1	29.995	49.1	0.01	0.4	1	511	WSW
8	1	30.090	53.6	0.05	0.5	1	401	SW & S
9	2	29.909	53.3	0.04	0.9	1	360	SSE
10	1	30.070	51.8	...	...	...	264	SSE & Var
11	1	30.163	50.2	...	...	...	254	SE
12	...	30.073	51.3	0.09	3.0	1	283	SE & S
13	1	30.125	48.0	0.06	2.0	1	259	SSE & NW
14	1	30.196	49.8	...	...	...	149	NE & Var
15	1	29.805	51.2	0.04	1.2	1	650	Var & W
16	1	29.579	47.0	0.07	2.3	1	643	SW & WSW
17	2	29.588	44.2	0.06	1.8	1	446	WSW & SW
18	3	29.743	40.2	0.41	9.0	1	396	WSW & Var
19	1	29.814	38.7	0.18	3.0	1	290	SW & NNE
20	1	29.931	42.3	0.33	5.0	1	274	Var & SE
21	1	29.747	46.9	0.18	1.5	1	600	W & WNW
22	4	29.990	47.9	0.08	2.5	1	461	WNW & Var
23	...	29.791	44.3	0.35	8.3	1	684	Var & W
24	1	29.502	51.4	0.12	2.5	1	895	Var & W
25	1	29.711	49.1	0.14	2.7	1	566	W & WSW
26	1	29.856	46.8	0.10	3.8	1	792	W & WSW
27	1	30.130	46.6	0.02	0.3	1	797	WNW & W
28	...	30.195	48.4	0.44	6.2	1	478	WNW & SSW
29	...	29.777	46.1	0.13	2.2	1	1111	W
30	...	30.140	51.1	...	...	...	797	W & WSW
31	2	30.084	56.3	...	...	...	610	WSW & SW

## MEASLES.

Measles occasioned 488 deaths, or 64 in excess of the corrected averages of the last ten years. Its per-centage Death-rate, relatively to deaths from all causes, was 3.3, and relatively to deaths from total Zymotics, 12.3. The following Table shows the periods and localities of its fatal prevalence:—

WARDS.	QUATERS.								YEAR.			
	March.		June.		Sept.		Dec.		M.	F.	TOTAL.	
	M.	F.	M.	F.	M.	F.	M.	F.				
Scotland .....	{ Below 5 years ...	15	14	13	9	6	6	2	2	36	31	67
	{ Above 5 years ...	2	...	...	...	1	...	...	...	3	...	3
Vauxhall .....	{ Below 5 years ...	1	2	...	2	...	2	...	2	1	8	9
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
St. Paul's .....	{ Below 5 years ...	2	1	1	...	...	1	...	1	3	3	6
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Exchange.....	{ Below 5 years ...	2	1	...	2	...	1	1	2	3	6	9
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
St. Anne's .....	{ Below 5 years ...	10	10	2	...	3	6	3	4	18	20	38
	{ Above 5 years ...	2	...	...	...	...	...	...	...	2	...	2
Lime Street.....	{ Below 5 years ...	6	4	2	...	...	1	...	1	8	6	14
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Castle Street .....	{ Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
St. Peter's .....	{ Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Pitt Street .....	{ Below 5 years ...	6	1	...	3	...	...	...	...	6	4	10
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Great George .....	{ Below 5 years ...	3	4	2	2	...	1	...	...	5	7	12
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Rodney Street.....	{ Below 5 years ...	1	1	...	1	1	1	2	...	4	3	7
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Abercromby .....	{ Below 5 years ...	3	4	...	...	2	1	...	1	5	6	11
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Parish Workhouses and Hospitals .....	{ Below 5 years ...	18	17	10	11	2	6	5	3	35	37	72
	{ Above 5 years ...	...	...	1	...	...	...	...	...	1	...	1
Out Township Workhouses and Hospitals .....	{ Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Everton and Kirkdale .....	{ Below 5 years ...	18	14	19	26	14	10	4	5	55	55	110
	{ Above 5 years ...	1	...	1	...	1	1	...	...	3	1	4
West Derby.....	{ Below 5 years ...	5	3	6	5	2	1	1	1	14	10	24
	{ Above 5 years ...	2	...	...	...	...	...	...	...	2	...	2
North Toxteth .....	{ Below 5 years ...	10	9	1	3	1	1	3	5	15	18	33
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
South Toxteth .....	{ Below 5 years ...	10	15	3	9	4	3	4	3	21	30	51
	{ Above 5 years ...	...	1	...	1	...	...	...	1	...	3	3
Parish .....	{ Below 5 years ...	67	59	30	30	14	26	13	16	124	131	255
	{ Above 5 years ...	4	...	1	...	1	...	...	...	6	...	6
Out Townships .....	{ Below 5 years ...	43	41	29	43	21	15	12	14	105	113	218
	{ Above 5 years ...	3	1	1	1	1	1	...	1	5	4	9
Borough .....	{ Below 5 years ...	110	100	59	73	35	41	25	30	229	244	473
	{ Above 5 years ...	7	1	2	1	2	1	..	1	11	4	15

## SCARLATINA.

Scarlatina accounted during the year for 456 deaths, or for 234 less than the corrected averages of the previous ten years. Its per-centage Death-rate, relatively to that of deaths from all causes, was 3.1, and its Death-rate, relatively to that of total Zymotics, was 11.5. The following Table shows the distribution of deaths:—

WARDS.	QUARTERS.								YEAR.			
	March.		June.		Sept.		Dec.		M.	F.	TOTAL.	
	M.	F.	M.	F.	M.	F.	M.	F.				
Scotland .....	Below 5 years ...	10	3	7	8	2	4	14	8	33	23	56
	Above 5 years ...	4	2	1	1	1	2	1	...	7	5	12
Vauxhall .....	Below 5 years ...	3	1	...	...	2	2	2	1	7	4	11
	Above 5 years ...	...	3	...	1	...	...	...	...	4	4	4
St. Paul's .....	Below 5 years ...	1	4	3	3	7	2	1	2	12	11	23
	Above 5 years ...	...	1	...	...	2	...	...	...	2	1	3
Exchange.....	Below 5 years ...	...	2	3	...	3	2	2	1	8	5	13
	Above 5 years ...	1	...	...	...	...	...	...	...	1	...	1
St. Anne's .....	Below 5 years ...	...	1	3	2	3	2	6	5	12	10	22
	Above 5 years ...	...	1	...	2	...	2	1	1	1	6	7
Lime Street.....	Below 5 years ...	1	...	1	1	...	1	3	2	5	4	9
	Above 5 years ...	...	...	...	...	...	1	...	...	...	1	1
Castle Street .....	Below 5 years ...	...	...	...	...	...	...	...	1	...	1	1
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
St. Peter's .....	Below 5 years ...	...	...	...	...	...	...	...	4	...	4	4
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Pitt Street .....	Below 5 years ...	1	...	...	...	1	...	2	1	4	1	5
	Above 5 years ...	...	...	...	...	...	...	1	...	1	...	1
Great George .....	Below 5 years ...	1	1	1	2	2	2	1	1	5	6	11
	Above 5 years ...	...	...	1	1	...	...	2	...	3	1	4
Rodney Street.....	Below 5 years ...	1	3	...	1	...	...	...	1	1	5	6
	Above 5 years ...	...	2	...	...	1	...	...	...	1	2	3
Abercromby .....	Below 5 years ...	1	...	...	...	1	1	...	5	2	6	8
	Above 5 years ...	...	1	...	...	...	...	...	1	...	2	2
Parish Workhouses and Hospitals .....	Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	Above 5 years ...	1	...	1	...	...	...	...	...	2	...	2
Out Township Work- houses and Hospitals	Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	Above 5 years ...	...	...	1	...	...	...	...	...	1	...	1
Everton and Kirkdale	Below 5 years ...	9	7	7	12	16	10	12	13	44	42	86
	Above 5 years ...	2	8	8	6	...	4	6	8	16	26	42
West Derby.....	Below 5 years ...	1	4	7	2	6	5	6	6	20	17	37
	Above 5 years ...	3	2	1	1	1	2	4	...	9	5	14
North Toxteth .....	Below 5 years ...	3	6	1	1	2	3	6	4	12	14	26
	Above 5 years ...	1	...	...	...	1	...	1	4	3	4	7
South Toxteth .....	Below 5 years ...	3	6	2	4	1	1	3	6	9	17	26
	Above 5 years ...	...	4	1	1	...	...	1	1	2	6	8
Parish .....	Below 5 years ...	19	15	18	17	21	16	31	32	89	80	169
	Above 5 years ...	6	10	3	5	4	5	5	2	18	22	40
Out Townships .....	Below 5 years ...	16	23	17	19	25	19	27	29	85	90	175
	Above 5 years ...	6	14	11	8	2	6	12	13	31	41	72
Borough .....	Below 5 years ...	35	38	35	36	46	35	58	61	174	170	344
	Above 5 years ...	12	24	14	13	6	11	17	15	49	63	112

## HOOPING COUGH.

The deaths from Hooping Cough during the year 1868 amounted to 517; being a decrease of 58 on the corrected averages of the previous ten years. It accounted for 3·5 per cent. of the deaths from all causes, and for 13·1 per cent. of those from the whole Zymotic class of diseases.

WARDS.	QUARTERS.								YEAR.		
	March.		June.		Sept.		Dec.		M.	F.	TOTAL.
	M.	F.	M.	F.	M.	F.	M.	F.			
Scotland .....	12	16	8	13	4	12	8	12	32	53	85
{ Below 5 years ...	12	16	8	13	4	12	8	12	32	53	85
{ Above 5 years ...	...	...	...	1	...	...	...	...	...	1	1
Vauxhall .....	1	4	1	1	...	2	1	5	3	12	15
{ Below 5 years ...	1	4	1	1	...	2	1	5	3	12	15
{ Above 5 years ...	...	1	...	...	...	...	...	...	...	1	1
St. Paul's .....	2	2	2	4	1	2	...	1	5	9	14
{ Below 5 years ...	2	2	2	4	1	2	...	1	5	9	14
{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Exchange.....	...	1	...	1	...	1	1	2	1	5	6
{ Below 5 years ...	...	1	...	1	...	1	1	2	1	5	6
{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
St. Anne's .....	7	5	3	5	8	5	3	5	21	20	41
{ Below 5 years ...	7	5	3	5	8	5	3	5	21	20	41
{ Above 5 years ...	...	1	1	...	...	1	...	2	1	3	3
Lime Street.....	1	4	1	...	3	3	...	3	5	10	15
{ Below 5 years ...	1	4	1	...	3	3	...	3	5	10	15
{ Above 5 years ...	1	...	...	...	...	...	...	1	...	1	1
Castle Street .....	...	...	1	1	...	...	...	1	1	2	2
{ Below 5 years ...	...	...	1	1	...	...	...	1	1	2	2
{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
St. Peter's .....	2	2	1	...	...	...	1	...	4	2	6
{ Below 5 years ...	2	2	1	...	...	...	1	...	4	2	6
{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Pitt Street .....	2	5	1	...	...	...	...	1	3	6	9
{ Below 5 years ...	2	5	1	...	...	...	...	1	3	6	9
{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Great George .....	4	6	4	3	...	3	...	2	8	14	22
{ Below 5 years ...	4	6	4	3	...	3	...	2	8	14	22
{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Rodney Street.....	3	4	1	2	1	...	...	2	5	8	13
{ Below 5 years ...	3	4	1	2	1	...	...	2	5	8	13
{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Abercromby .....	1	2	1	2	...	1	...	1	2	6	8
{ Below 5 years ...	1	2	1	2	...	1	...	1	2	6	8
{ Above 5 years ...	...	...	1	...	...	...	...	1	...	1	1
Parish Workhouses and Hospitals .....	5	1	2	5	1	...	...	...	8	6	14
{ Below 5 years ...	5	1	2	5	1	...	...	...	8	6	14
{ Above 5 years ...	...	...	...	1	...	...	...	...	1	1	1
Out Township Workhouses and Hospitals .....	...	...	...	...	...	...	...	...	...	...	...
{ Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Everton and Kirkdale .....	22	38	12	25	11	21	9	9	54	93	147
{ Below 5 years ...	22	38	12	25	11	21	9	9	54	93	147
{ Above 5 years ...	...	...	...	...	1	...	1	...	2	2	2
West Derby.....	12	14	4	1	...	1	1	2	17	18	35
{ Below 5 years ...	12	14	4	1	...	1	1	2	17	18	35
{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
North Toxteth .....	7	9	4	5	1	1	5	4	17	19	36
{ Below 5 years ...	7	9	4	5	1	1	5	4	17	19	36
{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
South Toxteth .....	7	12	6	2	3	2	4	3	20	19	39
{ Below 5 years ...	7	12	6	2	3	2	4	3	20	19	39
{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Parish .....	40	52	26	37	18	29	14	34	98	152	250
{ Below 5 years ...	40	52	26	37	18	29	14	34	98	152	250
{ Above 5 years ...	1	2	2	2	...	...	1	...	4	4	8
Out Townships .....	48	73	26	33	15	25	19	18	108	149	257
{ Below 5 years ...	48	73	26	33	15	25	19	18	108	149	257
{ Above 5 years ...	...	...	...	...	1	...	1	...	2	2	2
Borough .....	88	125	52	70	33	54	33	52	206	301	507
{ Below 5 years ...	88	125	52	70	33	54	33	52	206	301	507
{ Above 5 years ...	1	2	2	2	...	1	1	1	4	6	10

## SMALL POX.

WARDS.	QUARTERS.								YEAR.		
	March.		June.		Sept.		Dec.		M.	F.	TOTAL.
	M.	F.	M.	F.	M.	F.	M.	F.			
Scotland .....	Below 5 years ...	...	1	...	...	...	...	1	...	2	2
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...
Exchange.....	Below 5 years ...	...	...	...	...	...	...	1	...	1	1
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...
St. Anne's .....	Below 5 years ...	...	2	...	...	1	3	1	3	4	7
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...
Everton Hospital .....	Below 5 years ...	...	...	...	...	...	...	...	...	...	...
	Above 5 years ...	...	...	...	...	...	1	1	1	1	2
Everton and Kirkdale	Below 5 years ...	...	1	...	2	...	...	...	...	3	3
	Above 5 years ...	1	...	...	...	...	...	...	1	...	1
West Derby.....	Below 5 years ...	...	1	...	...	...	...	...	...	1	1
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...
South Toxteth .....	Below 5 years ...	1	...	...	...	...	...	...	1	...	1
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...
Parish .....	Below 5 years ...	..	3	...	...	1	3	3	3	7	10
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...
Out Townships .....	Below 5 years ...	1	2	...	2	...	...	...	1	4	5
	Above 5 years ...	1	...	...	...	...	1	1	2	1	3
Borough .....	Below 5 years ...	1	5	...	2	...	1	3	3	4	11
	Above 5 years ...	1	...	...	...	...	1	1	2	1	3

## CROUP.

WARDS.		QUARTERS.								YEAR.		
		March.		June.		Sept.		Dec.				TOTAL.
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Scotland .....	{ Below 5 years ...	3	1	2	4	1	2	3	9	9	16	25
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Vauxhall .....	{ Below 5 years ...	4	...	1	...	...	...	...	2	5	2	7
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
St. Paul's .....	{ Below 5 years ...	...	1	...	...	2	...	1	...	3	1	4
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Exchange.....	{ Below 5 years ...	...	...	...	...	1	...	...	...	1	1	1
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
St. Anne's .....	{ Below 5 years ...	...	...	...	1	2	...	1	2	2	2	4
	{ Above 5 years ...	1	...	1	...	...	...	...	1	1	1	2
Lime Street.....	{ Below 5 years ...	...	...	...	2	...	...	...	...	2	2	2
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Castle Street .....	{ Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
St. Peter's .....	{ Below 5 years ...	...	2	...	...	...	...	...	...	2	2	2
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Pitt Street .....	{ Below 5 years ...	...	...	...	1	1	...	...	1	1	1	2
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Great George .....	{ Below 5 years ...	1	1	...	1	...	...	...	2	1	1	3
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Rodney Street.....	{ Below 5 years ...	1	...	1	...	...	...	...	2	...	...	2
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Abercromby .....	{ Below 5 years ...	...	2	...	1	...	...	1	1	3	4	4
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Parish Workhouses and Hospitals .....	{ Below 5 years ...	...	...	...	...	2	...	...	...	2	2	2
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Out Township Workhouses and Hospitals .....	{ Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Everton and Kirkdale .....	{ Below 5 years ...	4	4	3	2	3	2	3	4	12	12	24
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
West Derby.....	{ Below 5 years ...	...	1	...	2	2	2	1	3	3	8	11
	{ Above 5 years ...	...	...	...	...	...	...	1	...	1	1	1
North Toxteth .....	{ Below 5 years ...	...	1	...	1	...	1	...	2	1	1	3
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
South Toxteth .....	{ Below 5 years ...	5	5	3	...	1	1	1	9	7	16	16
	{ Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Parish .....	{ Below 5 years ...	9	7	4	7	8	6	4	13	25	33	58
	{ Above 5 years ...	1	...	...	1	...	...	...	1	1	1	2
Out Townships .....	{ Below 5 years ...	9	11	6	4	6	5	5	8	26	28	54
	{ Above 5 years ...	...	...	...	...	...	...	1	...	1	1	1
Borough .....	{ Below 5 years ...	18	18	10	11	14	11	9	21	51	61	112
	{ Above 5 years ...	1	...	...	1	...	...	1	1	2	3	3

## DIPHThERIA.

WARDS.		QUARTERS.								YEAR.		
		March.		June.		Sept.		Dec.				
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	TOTAL.
Scotland .....	Below 5 years ...	1	...	...	1	6	4	3	1	10	6	16
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Vauxhall .....	Below 5 years ...	1	...	...	...	...	...	...	...	1	...	1
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
St. Paul's .....	Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	Above 5 years ...	1	...	...	...	...	...	...	...	1	...	1
Exchange .....	Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
St. Anne's .....	Below 5 years ...	1	...	...	...	...	...	...	...	1	...	1
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Lime Street .....	Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Castle Street .....	Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
St. Peter's .....	Below 5 years ...	...	...	...	1	...	...	...	...	...	1	1
	Above 5 years ...	...	...	...	...	2	...	...	...	2	...	2
Pitt Street .....	Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Great George .....	Below 5 years ...	1	...	...	1	...	...	...	...	1	1	2
	Above 5 years ...	...	...	...	1	...	...	...	...	...	1	1
Rodney Street .....	Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Abercromby .....	Below 5 years ...	...	1	...	...	...	1	...	...	...	2	2
	Above 5 years ...	...	...	...	1	...	...	...	...	...	1	1
Parish Workhouses and Hospitals .....	Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Out Township Workhouses and Hospitals .....	Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Everton and Kirkdale .....	Below 5 years ...	3	...	...	1	3	2	1	...	7	3	10
	Above 5 years ...	...	1	...	...	...	1	...	...	...	3	3
West Derby .....	Below 5 years ...	...	1	1	2	...	...	...	...	1	3	4
	Above 5 years ...	...	...	...	2	...	...	...	1	...	3	3
North Toxteth .....	Below 5 years ...	...	2	...	...	...	...	...	2	...	4	4
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
South Toxteth .....	Below 5 years ...	...	...	...	...	...	...	1	...	1	...	1
	Above 5 years ...	...	1	1	...	...	...	...	...	1	1	2
Parish .....	Below 5 years ...	4	1	...	3	6	5	3	1	13	10	23
	Above 5 years ...	1	...	...	2	2	...	...	...	3	2	5
Out Townships .....	Below 5 years ...	3	3	1	3	3	2	2	2	9	10	19
	Above 5 years ...	...	2	1	2	...	1	...	2	1	7	8
Borough .....	Below 5 years ...	7	4	1	6	9	7	5	3	22	20	42
	Above 5 years ...	1	2	1	4	2	1	...	2	4	9	13

## OTHER ZYMOTICS.

Under the term of other Zymotics are included :—Chicken Pox, Dysentery, Cholera, Influenza, Erysipelas, Syphilis, Thrush, Puerperal Fever, Rheumatic Fever, Quinsy, Ague, Mumps, Purpura, and Scurvy.

WARDS.	QUARTERS.								YEAR.			
	March.		June.		Sept.		Dec.		M.	F.	TOTAL.	
	M.	F.	M.	F.	M.	F.	M.	F.				
Scotland .....	Below 5 years ...	2	6	2	3	5	6	3	3	12	18	30
	Above 5 years ...	1	4	...	3	1	1	2	7	4	15	19
Vauxhall .....	Below 5 years ...	...	...	...	1	3	2	2	1	5	4	9
	Above 5 years ...	...	...	1	...	1	...	...	1	2	1	3
St. Paul's .....	Below 5 years ...	...	...	...	...	...	...	...	1	...	1	1
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Exchange.....	Below 5 years ...	...	1	...	...	3	1	2	2	5	4	9
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
St. Anne's .....	Below 5 years ...	3	1	1	1	...	2	2	2	6	6	12
	Above 5 years ...	...	...	...	3	2	...	...	1	2	4	6
Lime Street.....	Below 5 years ...	...	1	3	...	...	1	...	...	3	2	5
	Above 5 years ...	...	...	...	...	1	...	...	...	1	...	1
Castle Street .....	Below 5 years ...	...	...	1	...	1	...	...	...	2	...	2
	Above 5 years ...	...	...	...	...	...	...	1	...	1	...	1
St. Peter's .....	Below 5 years ...	1	1	...	1	...	...	1	...	2	2	4
	Above 5 years ...	...	...	...	...	...	...	...	1	...	1	1
Pitt Street .....	Below 5 years ...	2	1	...	...	1	...	1	...	4	1	5
	Above 5 years ...	...	1	...	...	...	1	1	...	1	2	3
Great George .....	Below 5 years ...	1	2	...	1	1	1	1	1	3	5	8
	Above 5 years ...	...	...	...	...	1	...	3	...	4	...	4
Rodney Street.....	Below 5 years ...	...	1	...	...	...	1	1	...	1	2	3
	Above 5 years ...	...	1	...	...	...	1	...	...	...	2	2
Abercromby .....	Below 5 years ...	...	...	2	1	1	3	1	...	4	4	8
	Above 5 years ...	1	...	1	...	1	1	...	1	3	2	5
Parish Workhouses and Hospitals .....	Below 5 years ...	...	...	1	1	...	...	1	1	2	2	4
	Above 5 years ...	11	3	9	...	2	2	4	3	26	8	34
Out Township Workhouses and Hospitals .....	Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	Above 5 years ...	...	...	...	...	...	...	...	...	...	...	...
Everton and Kirkdale .....	Below 5 years ...	3	4	3	4	9	11	...	4	15	23	38
	Above 5 years ...	3	7	2	2	7	6	6	10	18	25	43
West Derby.....	Below 5 years ...	2	3	2	3	7	5	...	1	11	12	23
	Above 5 years ...	1	2	1	...	1	3	1	1	4	6	10
North Toxteth .....	Below 5 years ...	1	3	1	...	7	1	1	3	10	7	17
	Above 5 years ...	...	1	...	1	1	3	1	1	2	6	8
South Toxteth .....	Below 5 years ...	2	4	1	3	1	3	4	2	8	12	20
	Above 5 years ...	...	...	2	...	...	1	3	2	5	3	8
Parish .....	Below 5 years ...	9	14	10	9	15	17	15	11	49	51	100
	Above 5 years ...	13	9	11	6	9	6	11	14	44	35	79
Out Townships .....	Below 5 years ...	8	14	7	10	24	20	5	10	44	54	98
	Above 5 years ...	4	10	5	3	9	13	11	14	29	40	69
Borough .....	Below 5 years ...	17	28	17	19	39	37	20	21	93	105	198
	Above 5 years ...	17	19	16	9	18	19	22	28	73	75	148

## TUBERCULAR DISEASES.

The group termed Tubercular Diseases includes Scrofula, Phthisis, Tabes Mesenterica, and Hydrocephalus. The importance of the history and causation of these maladies may be judged of by the fact that they account, especially in towns, for a large proportion of the sickness and deaths of the people. They are dependent on a constitutional taint or diathesis, which may originate spontaneously in all persons at all periods of life, when the health is disordered by wasting or chronic disease, by the absence of proper food and clothing, by long confinement in impure atmosphere, by exposure to cold or damp, by the depression of mental anxieties, by undue labor at or the constrained position of sedentary trades, by the vices of intemperance and debauchery, by the evils of tight-lacing, and of other vanities of the modern toilet. The Diathesis, once established, becomes hereditary, and is transmitted from parents to children. There can be no doubt that our artificial civilisation, the massing of vast multitudes of population in cities, the claims of manufactures and of commerce, and the competitive struggles of industry in the hard battle of life, have increased both for the present and the future, the extent of Scrofula, and especially of that most melancholy and interesting form of it, Pulmonary Consumption.

The chief effort of sanitary science in combating the prevalence of Zymotics, is to remove their pythogenic and other proximate causes, and to destroy or arrest their infection and contagion; but the scope of its endeavours must be greater when the Tubercular Diathesis among the people is to be counteracted. Then, the chief desiderata are warmth, clothing, and food, which are within the province of individual or of family arrangements; and fresh air, exercise, and relaxation from daily toil, which must, for their indulgence, receive the help of municipal or of national policy. The early closing of shops and workrooms, the ventilation of manufactories, the regulation of the hours of labor, the Saturday half-holiday, the establishment of parks and playgrounds, the rigid enforcement of proper space for ventilation around buildings, and the absolute closing of all cellar habitations which the law has declared to be illegal, are some of the public sanitary measures, by which the alarming progress of Scrofula among the people of the large towns, can be even partially resisted.

The deaths from Tubercular diseases in the Borough of Liverpool, during the year 1868, amounted to 2,175; but probably a great number of the deaths of children which were registered as Inflammation of the Brain, Convulsions, and Atrophy, and also a great number of the deaths which are attributed to Bronchitis and Pneumonia, did really properly belong to Phthisis, Tabes Mesenterica, and to Hydrocephalus. The per-centage death-rate of Tubercular diseases relatively to that of deaths from all causes was 14.9.

## TUBERCULAR DISEASES.

WARDS.	QUARTERS.								YEAR.			
	March.		June.		Sept.		Dec.				TOTAL.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
Scotland .....	Below 5 years ...	14	11	15	4	18	12	8	14	55	41	96
	Above 5 years ...	32	28	31	23	23	22	21	20	107	93	200
Vauxhall .....	Below 5 years ...	1	1	...	2	2	4	5	6	8	13	21
	Above 5 years ...	7	7	7	10	8	6	3	6	25	29	54
St. Paul's .....	Below 5 years ...	2	2	1	2	4	5	...	1	7	10	17
	Above 5 years ...	8	6	2	2	2	1	5	2	17	11	28
Exchange.....	Below 5 years ...	2	2	2	3	...	1	2	3	6	9	15
	Above 5 years ...	3	2	2	4	2	2	6	4	13	12	25
St. Anne's .....	Below 5 years ...	...	5	4	4	6	2	3	2	13	13	26
	Above 5 years ...	9	8	8	6	10	4	9	10	36	28	64
Lime Street.....	Below 5 years ...	2	2	3	1	3	5	1	1	9	9	18
	Above 5 years ...	4	5	5	4	3	5	3	4	15	18	33
Castle Street .....	Below 5 years ...	...	...	...	...	1	...	...	...	1	...	1
	Above 5 years ...	3	...	...	...	...	...	2	1	5	1	6
St. Peter's .....	Below 5 years ...	2	1	...	...	...	...	1	1	3	2	5
	Above 5 years ...	...	4	3	5	1	2	3	2	7	13	20
Pitt Street .....	Below 5 years ...	1	2	1	...	...	3	1	...	3	5	8
	Above 5 years ...	4	4	4	2	2	2	4	...	14	8	22
Great George .....	Below 5 years ...	3	6	1	1	1	2	1	1	6	10	16
	Above 5 years ...	9	10	5	8	3	9	8	7	25	34	59
Rodney Street.....	Below 5 years ...	4	2	4	1	1	3	3	...	12	6	18
	Above 5 years ...	5	6	5	5	5	3	6	5	21	19	40
Abercromby .....	Below 5 years ...	5	3	2	4	4	6	...	3	11	16	27
	Above 5 years ...	10	11	5	8	4	5	6	5	25	29	54
Parish Workhouses and Hospitals .....	Below 5 years ...	3	3	4	4	...	...	2	3	9	10	19
	Above 5 years ...	58	43	62	39	51	35	46	34	217	151	368
Out Township Workhouses and Hospitals .....	Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	Above 5 years ...	...	...	...	...	1	...	...	...	1	...	1
Everton and Kirkdale .....	Below 5 years ...	14	9	17	13	26	17	10	9	67	48	115
	Above 5 years ...	46	35	39	41	36	31	30	35	151	142	293
West Derby.....	Below 5 years ...	10	10	8	3	11	9	8	4	37	26	63
	Above 5 years ...	20	20	18	17	12	13	17	13	67	63	130
North Toxteth .....	Below 5 years ...	3	8	8	8	7	6	6	5	24	27	51
	Above 5 years ...	10	7	12	16	11	14	10	12	43	49	92
South Toxteth .....	Below 5 years ...	6	6	12	10	12	17	5	7	35	40	75
	Above 5 years ...	13	10	16	20	6	12	6	12	41	54	95
Parish .....	Below 5 years ...	39	40	37	26	40	43	27	35	143	144	287
	Above 5 years ...	152	134	139	116	114	96	122	100	527	446	973
Out Townships .....	Below 5 years ...	33	33	45	34	56	49	29	25	163	141	304
	Above 5 years ...	89	72	85	94	66	70	63	72	303	308	611
Borough .....	Below 5 years ...	72	73	82	60	96	92	56	60	306	285	591
	Above 5 years ...	241	206	224	210	180	166	185	172	830	754	1584

## PHTHISIS.

WARDS.	QUARTERS.								YEAR.				
	March.		June.		Sept.		Dec.				TOTAL		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
Scotland .....	{	Below 5 years ...	1	1	5	...	5	3	1	7	12	11	23
	{	Above 5 years ...	29	27	31	23	22	22	21	20	103	92	195
Vauxhall .....	{	Below 5 years ..	1	...	...	...	1	1	1	2	3	3	6
	{	Above 5 years ..	7	7	6	10	8	6	1	6	22	29	51
St. Paul's .....	{	Below 5 years ...	...	1	...	1	1	...	...	...	1	2	3
	{	Above 5 years ...	8	6	2	2	2	1	5	2	17	11	28
Exchange.....	{	Below 5 years ...	...	...	...	...	...	...	1	...	1	...	1
	{	Above 5 years ...	2	2	2	4	2	2	6	4	12	12	24
St. Anne's .....	{	Below 5 years ...	...	...	1	1	...	...	3	...	4	1	5
	{	Above 5 years ...	9	8	8	6	8	4	9	10	34	28	62
Lime Street.....	{	Below 5 years ...	...	...	1	...	...	...	...	...	1	...	1
	{	Above 5 years ...	4	5	5	4	3	5	3	4	15	18	33
Castle Street .....	{	Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	{	Above 5 years ...	3	...	...	...	...	...	2	1	5	1	6
St. Peter's .....	{	Below 5 years ...	...	...	...	...	...	...	...	1	...	1	1
	{	Above 5 years ...	...	3	3	5	...	2	3	2	6	12	18
Pitt Street .....	{	Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	{	Above 5 years ...	4	4	4	2	2	2	4	...	14	8	22
Great George .....	{	Below 5 years ...	...	2	...	...	...	...	...	...	...	2	2
	{	Above 5 years ...	8	10	5	7	3	9	8	7	24	33	57
Rodney Street.....	{	Below 5 years ...	...	...	1	...	...	1	...	...	1	1	2
	{	Above 5 years ...	5	6	5	5	5	3	6	5	21	19	40
Abercromby .....	{	Below 5 years ...	1	...	...	1	...	2	...	1	1	4	5
	{	Above 5 years ...	9	11	5	7	3	5	6	5	23	28	51
Parish Workhouses and Hospitals .....	{	Below 5 years ...	...	...	1	...	...	...	1	1	2	1	3
	{	Above 5 years ...	57	41	62	36	48	32	44	33	211	142	353
Out Township Workhouses and Hospitals .....	{	Below 5 years ...	...	...	...	...	...	...	...	...	...	...	...
	{	Above 5 years ...	...	...	...	...	1	...	...	...	1	...	1
Everton and Kirkdale .....	{	Below 5 years ...	2	1	3	5	3	3	...	2	8	11	19
	{	Above 5 years ...	44	34	37	38	34	30	29	34	144	136	280
West Derby.....	{	Below 5 years ...	1	...	2	...	2	1	1	1	6	2	8
	{	Above 5 years ...	20	19	18	17	11	13	17	13	66	62	128
North Toxteth .....	{	Below 5 years ...	1	3	3	2	1	1	...	1	5	7	12
	{	Above 5 years ...	10	7	12	16	10	13	10	12	42	48	90
South Toxteth .....	{	Below 5 years ...	1	1	...	1	1	...	1	1	3	3	6
	{	Above 5 years ...	13	9	15	20	6	12	6	12	40	53	93
Parish .....	{	Below 5 years ...	3	4	9	3	7	7	7	12	26	26	52
	{	Above 5 years ...	145	130	138	111	106	93	118	99	507	433	940
Out Townships .....	{	Below 5 years ...	5	5	8	8	7	5	2	5	22	23	45
	{	Above 5 years ...	87	69	82	91	62	68	62	71	293	299	592
Borough .....	{	Below 5 years ...	8	9	17	11	14	12	9	17	48	49	97
	{	Above 5 years ...	232	199	220	202	168	161	180	170	800	732	1532

## THE METEOROLOGY FOR THE YEAR 1868.

The rain-fall during the whole of 1868 was within the fraction of an inch equal to what is found to have been the yearly average during the preceding 22 years; while the mean temperature was only one degree greater than the average yearly mean of 20 years. But if we look at the climaterial history of separate months, we find that in 1868 there was excessive and almost complete drought in June, July, and September, when the fermentation of decomposing animal and vegetable matter is greatest, and when the sanitary advantages of abundant water supply are most marked; while the excessive rain-fall of December, which helped to equalise the yearly average, occurred when for health purposes a dry season is most to be desired.

The three following Tables (for two of which I am indebted to the kindness of Mr. Hartnup) are in themselves sufficiently explicit:—

### METEOROLOGICAL RESULTS FOR THE YEAR 1868.

	QUARTERS.				YEAR.
	March.	June.	Sept.	Dec.	
Mean Range of Barometer.....	29.954	30.019	29.976	29.183	29.933
Highest Temperature .....	57.9	81.2	88.8	63.0	88.8
Lowest       ".....	25.4	30.4	41.3	29.8	25.4
Mean         ".....	42.4	54.8	62.4	44.7	51.1
Duration of Rainfall in hours .....	132.5	81.7	78.4	199.3	491.9
"      "      in days.....	45	32	24	66	167
Amount of Rain collected (inches) .....	5.53	3.71	4.14	11.65	25.08
Mean Daily Velocity of Wind (miles)...	606	379	333	467	459
Prevailing Points of Wind.....	WSW	W	ENE	WSW	W

MONTH.	Mean Monthly Reading of Barometer for 1868.	Mean Monthly Temperature for 1868.	Mean Monthly Temperature for 20 years.	Average fall of Rain for 22 years.	Fall of Rain for each Month in 1868.
	Inches.	°	°	Inches.	Inches.
January .....	29.879	38.91	39.11	1.808	1.457
February.....	30.056	43.89	40.05	1.347	1.821
March .....	29.928	44.40	42.46	1.516	2.251
April .....	29.943	48.25	47.09	1.628	1.457
May .....	29.970	56.05	52.80	1.782	2.104
June .....	30.157	60.10	58.13	2.290	0.149
July .....	30.083	65.89	60.95	2.671	0.236
August .....	29.877	62.75	60.64	2.971	2.568
September .....	29.868	58.82	56.63	2.602	1.343
October .....	29.920	48.06	50.66	2.971	3.613
November .....	30.009	41.77	43.79	2.248	1.978
December .....	29.420	44.48	40.69	1.922	6.061

MEAN TEMPERATURE AND MEAN RANGE OF TEMPERATURE FOR 20 YEARS,  
ENDING DECEMBER 31st, 1865.

MONTH.	TEMPERATURE.			RANGE OF TEMPERATURE.		
	Liverpool.	Bidston.	Difference.	Liverpool.	Bidston.	Difference.
	°	°	°	°	°	°
January .....	40·59	39·11	1·48	6·59	8·17	1·58
February .....	41·47	40·05	1·42	7·44	9·29	1·85
March .....	43·63	42·46	1·17	8·70	10·84	2·14
April .....	48·25	47·09	1·16	11·00	14·21	3·21
May .....	54·37	52·80	1·57	12·02	15·53	3·51
June .....	59·90	58·13	1·77	11·39	15·07	3·68
July .....	62·61	60·95	1·66	10·85	15·25	4·40
August .....	61·83	60·64	1·19	10·38	13·66	3·28
September .....	58·01	56·63	1·38	9·97	13·05	3·08
October .....	52·09	50·66	1·43	8·47	10·59	2·12
November .....	45·13	43·79	1·34	7·30	8·81	1·51
December .....	42·17	40·69	1·48	6·73	8·37	1·64



## PARISH OF LIVERPOOL.

## PERSONS IN RECEIPT OF RELIEF DURING THE YEAR 1868.

1868				1868.			
Week ending	Work-house.	Industrial Schools.	Out-Relief.	Week ending	Work-house.	Industrial Schools.	Out-Relief.
January 4...	4787	1402	15651	July 4...	3451	1340	11637
" 11...	4830	1435	16962	" 11...	3366	1324	11567
" 18...	4822	1439	17063	" 18...	3307	1316	11356
" 25...	4694	1426	17240	" 25...	3350	1311	11365
February 1...	4702	1422	17518	August 1...	3353	1308	11442
" 8...	4688	1413	18237	" 8...	3432	1300	11226
" 15...	4716	1421	17222	" 15...	3435	1276	11143
" 22...	4717	1418	16664	" 22...	3465	1263	11387
" 29...	4624	1406	16035	" 29...	3496	1258	11535
March 7...	4613	1422	15874	September 5...	3452	1258	11387
" 14...	4611	1412	15603	" 12...	3385	1263	11400
" 21...	4548	1426	15200	" 19...	3487	1201	11534
" 28...	4509	1431	15015	" 26...	3520	1204	11885
April 4...	4409	1426	13915	October 3...	3585	1194	11783
" 11...	4297	1403	13315	" 10...	3575	1191	11871
" 18...	4335	1402	12991	" 17...	3621	1227	11654
" 25...	4305	1413	12806	" 24...	3519	1331	11801
May 2...	4245	1401	12701	" 31...	3596	1338	11858
" 9...	4163	1395	12332	November 7...	3595	1320	11955
" 16...	4138	1400	12244	" 14...	3678	1355	11941
" 23...	4095	1402	12346	" 21...	3651	1360	11828
" 30...	4111	1393	12056	" 28...	3755	1353	11913
June 6...	3874	1405	11723	December 5...	3763	1340	11901
" 13...	3791	1390	11725	" 12...	3768	1349	11927
" 20...	3515	1378	11748	" 19...	3728	1343	11763
" 27...	3494	1355	11575	" 26...	3702	1358	11574

These Tables show that during the first six months of the year the average number of persons suffering from Typhus at one time in hospital was 72, and their per-centage death-rate 15·7; the average number of Measles at one time in hospital 14, and the per-centage death-rate 32·9; the average number of Scarlatina at one time in hospital 1, and the death-rate 11 per cent.; also that during the last six months, viz., from July the 4th to December the 26th, the average number of Typhus cases at one time in hospital was 125, and their per-centage death-rate 13·5; the average number of Measles at one time in hospital was 3, and their per-centage death-rate 26·6. Scarlet Fever had almost disappeared from the hospital during the last six months of the year; there were only 2 cases admitted, of which 1 terminated fatally.

The number of Paupers in receipt of relief on Saturday, the 27th June, was 16,864, or 504 more than at the same period of 1867, or 1660 more than at the same period of 1866. The number of Paupers in receipt of relief on December 26 was 16,634, being 230 less than in June, and 4575 less than at the end of 1867. The diminution in the numbers of those in the workhouse and those receiving external relief seems to have gone on in an equal degree, and amounted in both instances, as compared with the numbers in December

1867, to nearly 23 per cent. It is difficult to understand the statistics of Poor-law relief; thus the same local authority are the administrators in June and December, and the same conditions or claims for relief are required at both periods; and yet the number of recipients becomes less in the cold and short days of winter, when work is scarce; and, still more strange, becomes less when the statistics of the workhouse hospital and the death returns of the Registrars show that typhus fever, frequently the result and always the cause of pauperism, had largely prevailed as an epidemic among the labouring class.

### SANITARY WORK.

The two following Tables will show the extent of work which has been done under the orders of the Health Committee in respect of the conversion of privies into water-closets. The first Table carries it down to the termination of the year 1867; the second Table refers to the work done during the year 1868.

#### CLASSIFICATION OF PRIVIES CERTIFIED FOR CONVERSION INTO WATER-CLOSETS FROM JULY 1863, TO END OF DECEMBER 1867.

CAUSE OF CERTIFICATE.	DISTRICTS.										TOTAL.
	Saint Martin's.	Great Howard Street.	Dale Street.	Islington.	Saint George.	Saint Thomas.	Mount Pleasant.	Everton & Kirkdale.	West Derby.	The Toxteths.	
Privies situated inside Houses and beneath inhabited Apartments .....	199	26	41	132	28	50	56	36	28	81	677
Privies situated in close and confined positions and near inhabited Apartments ...	890	126	270	797	29	253	226	200	48	850	3689
Privies emptied through Houses	1	4	36	38	11	27	7	10	1	3	138
Privies emptied through Courts	16	14	42	41	...	44	23	10	23	58	271
Tunnel Middens .....	601	41	39	265	11	18	106	398	207	194	1880
No Privy accommodation .....	9	36	4	5	...	16	7	33	1	3	114
Court Privies.....	424	212	166	291	27	70	117	26	35	186	1554
<b>TOTAL.....</b>	<b>2140</b>	<b>459</b>	<b>598</b>	<b>1569</b>	<b>106</b>	<b>478</b>	<b>542</b>	<b>713</b>	<b>343</b>	<b>1375</b>	<b>8323</b>

CLASSIFICATION OF PRIVIES CERTIFIED FOR CONVERSION INTO WATER-CLOSETS  
FROM JANUARY TO DECEMBER, 1868, BOTH MONTHS INCLUSIVE.

CAUSE OF CERTIFICATE.	DISTRICTS.										TOTAL.
	Saint Martin's.	Great Howard Street.	Dale Street.	Islington.	Saint George.	Saint Thomas.	Mount Pleasant.	Everton and Kirkdale.	West Derby.	The Toxteths.	
Privies situated inside Houses and beneath inhabited Apartments .....	10	...	1	11	2	4	3	9	2	4	46
Privies situated in close and confined positions and near inhabited Apartments. ...)	1152	24	183	99	32	16	4	1385	504	396	3795
Privies emptied before Houses	...	...	...	...	...	...	...	3	...	...	3
Privies emptied through Houses	...	...	11	...	...	9	1	...	...	...	21
Privies emptied through Courts	63	15	63	22	41	51	37	26	26	151	495
Tunnel Middens .....	...	5	...	...	...	16	4	76	15	11	127
No Privy accommodation .....	...	...	...	3	2	...	...	...	...	...	5
Privies connected with Mid-denstead .....	1	...	1	4	...	3	2	9	...	...	20
Court Privies.....	101	38	62	36	32	59	35	45	23	125	556
<b>TOTAL.....</b>	<b>1327</b>	<b>82</b>	<b>321</b>	<b>175</b>	<b>109</b>	<b>158</b>	<b>86</b>	<b>1553</b>	<b>570</b>	<b>687</b>	<b>5068</b>

Under the term "Court Privies" are included all privies in the common areas of courts or alleys, and not placed within the separate yards of houses. In all such cases the conversion ordered by the Health Committee has been into trough water-closets.

It will be seen by the above Tables that before the termination of the year 1867, the great pressure of work had been mainly restricted to the central wards of the parish and to the Toxteths; but during the year 1868, the sickness and alarming extent of epidemic typhoid fever prevalent in Everton, Kirkdale, West Derby, and the northernmost portion of Scotland Ward, necessarily brought under the special notice of the Committee the sanitary defects of those districts.

#### LODGING HOUSES.

In former years, it was the desire of the Committee that all houses not immorally occupied, but used as Common Lodging Houses, should be placed

on the register, because they became thereby under the night surveillance of the Inspectors. One result of this desire to enrol all under the register, was that the required accommodation for lodgers during the day by means of kitchen or sitting-room, had to be dispensed with in a great proportion of the small houses, in the central parts of the Parish. The passing of the Act of 1866, by which all houses occupied by members of more than one family can be registered and inspected as sub-let, enables the Committee now to draw this distinction, viz., that the Lodging Houses in which only 300 cubical feet are required for a night lodger, must have a day apartment; and that mere bedrooms, occupied by day and night, must be registered as sub-let, and have 350 feet of space for each adult. The gradual effect of this arrangement is to transfer many inferior tenements to the sub-let register, and to lessen the number of common Lodging Houses. There were on the register 1,226 Lodging Houses at the end of 1867, and 1,161 at the end of 1868. This difference was occasioned by the removal of 412 old licenses, and the addition of 347 new ones. The visits to Lodging Houses are both by day and night. The Lodging Houses of the better class, and especially those provided only with single beds for each person, and only with the number of beds equivalent to the lodgers allowed, are not visited at night, except on very grave suspicion or on complaint, or in foreign Lodging Houses, where there is an apprehension of epidemic sickness, or a large influx of emigrants. The night visits are pretty nearly restricted to the low districts, and to tramp houses. The number of day visits paid during last year was 33,894, and the number of night visits 5,861. The number of Lodging Houses found overcrowded on the night visits was 29. The number of informations laid for breach of by-laws was 132, with the result of fines in 101 cases to the extent of £29 3s. 6d., in sums varying from one shilling to five pounds and costs. The large fine of five pounds was for harbouring lodgers in unlicensed rooms, after previous convictions for a similar offence. It is necessary frequently to visit houses which are not licensed, especially when emigration is brisk, or at race times. There were 1,557 such visits paid during the day; and when suspicion was confirmed, the day visit was followed up in 58 cases by night visits. A tenant harbouring lodgers is not taken before the magistrate for a first offence, but he is noticed to apply to have his rooms measured and licensed. There were 353 such notices issued during the year; in only six cases did the tenants refuse to comply. A by-law requires that every case of infectious sickness should be at once reported to the Medical Officer of Health. There has been no breach of this law, and indeed the tenants are very prompt in having their lodgers removed to the hospital. Whenever infectious sickness shows itself, the license is temporarily removed, the house purified, and the bedding and clothes sent to the disinfecting apparatus. Two deaths from fever of the wives of the keepers occurred during the year. No lodger died from fever, or any other infectious disease, in a registered Lodging House. In the case of emigrant Lodging Houses, the keepers are required to purify the rooms daily with chlorine gas during the summer.

SUB-LET HOUSES REGISTERED UNDER THE SANITARY  
ACT OF 1866.

The number of sub-let houses on the Register at the termination of 1867 was 2523 ; the number registered during 1868, 3744 ; making a total on the Register, on the 31st December, of 6267. The frequency of day or night visits to these houses depends on the suspicions occasioned by the character of the neighbourhood ; and it is seldom that rooms not found overcrowded on a first visit are again subjected to any night inspections. The number of visits paid during the night was 6658, and during the day 51,760, with the result of finding 676 rooms overcrowded. The average extent of the overcrowding may be estimated by the fact, that 1949 adults and 1038 children were found sleeping in rooms the cubical area of which was 534,857 feet ; so that the cubical space for each individual was only 179 feet. But if two children under fifteen years of age be reckoned as one adult, the cubical space for each would be 216, or 134 feet less than the very restricted amount which on account of the smallness of the rooms we are constrained to demand. Of course, an average of overcrowding gives little or no idea of the extent or intensity of the evil in individual cases. In addition to overcrowding, the offence, (though not punishable in sub-let houses) of permitting adult males and females, not married, to occupy the same room, comes under the notice of and is entered in the books of the Inspectors. There were 213 rooms thus indecently occupied by 334 males and 384 females. No action was taken in a considerable number of the cases of overcrowding, because they were first offences, immediately abated by the tenants. Informations were, however, laid before the Justices against 245 chief tenants, with the following results, viz.—217 were fined 1s. and 1s. costs ; 1 fined 2s. 6d. ; 19 were fined 2s. 6d. and 2s. 6d. costs ; 4 were fined 5s. and 4s. 6d. costs ; 3 were fined 10s. and 4s. 6d. costs ; and 1 fined 20s. and 4s. 6d. costs ; making a total of fines levied during the year of £31 17s. 6d.

30 & 31 VICTORIA, CAP. 146.

The Workshop Regulation Act of 1867 came into operation on the 1st of January, 1868. It is meant to be supplementary to the various Factory Acts then and now in force, and it extends protection, so far as respects the regulation of the hours of labour, to children, young persons, and women working in smaller establishments. After having specified with distinctness the periods during which labour might be continued, and the precautions to be observed where grinding, glazing, or polishing on a wheel, or any other process carried on by which dust is generated ; and having specified the penalties incurred by any breach of the regulations, it thus gives power in its 9th clause to the officers of the local authority :—

“ If, on the complaint of any Officer of Health, Inspector of Nuisances, or other officer appointed by a local authority, or of any Superintendent of Police, it appears to any Justice of the Peace that there is

reasonable cause for believing that any of the provisions of this Act or of the Sanitary Act, 1866, are contravened in any workshop, it shall be lawful for such Justice, by order under his hand, to empower the Complainant to enter into such workshop at any time within forty-eight hours from the date of such order, and to examine such workshop; and any person so empowered may examine touching any matter within the provisions of this Act or of the Sanitary Act, 1866, so far as relates to such workshop any person whom he finds in such workshop. Any person refusing admission to any person so empowered, or obstructing him in the discharge of his duty, shall for each offence incur a penalty of not exceeding Twenty Pounds."

It will be seen by the above clause that the law did not give power to the local authority to exercise any systematic or periodical visitation and inspection of workshops; and also, that the local authority had no power of interference even by entrance into a workshop, except upon reasonable cause shown to the satisfaction of a Justice of the Peace. It was, therefore, perfectly unnecessary and useless to appoint special Inspectors of Workshops; but the Council, desirous to put in force the provisions of the Act, directed the publication in the local newspapers, and the extensive circulation by hand-bills, of the requirements of the Act, and also the publication of the 19th section of the Sanitary Act of 1866, by which it is enacted that the word nuisances shall include, amongst other things—"Any factory, workshop, or workplace not already under the operation of any general Act for the regulation of factories or bakehouses, or not kept in a cleanly state, or not ventilated in such a manner as to render harmless, as far as practicable, any gases, vapors, dust, or other impurities generated in the course of the work carried on therein, that are a nuisance or injurious or dangerous to health, or so overcrowded while work is carried on as to be dangerous or prejudicial to the health of those employed therein."

It was also publicly mentioned that any complaint would at once receive attention, and that every secrecy would be maintained by the Medical Officer as to the identity of the person complaining. It was thus, therefore, reasonably presumed that, either through the jealousy of rivals, or the hardships of the workpeople, facts and complaints sufficient to justify an appeal to the Justice of the Peace for an order of entrance might be obtained in all cases of the suspected breach of the provisions of the Act. The result has so far answered expectations that, since the publication, eight complaints have been made; four of them having reference to a breach of the regulations respecting time of work, and four to nuisances occasioned by overcrowding and insufficient ventilation. In none of the eight cases was there any necessity to bring the matter before the Justices, as the complaints were at once admitted and rectified.

The only machinery by which a surveillance could be maintained over workshops or workrooms where women and children are employed, is as follows:—

*1st.*—Let it be provided, under a penalty, that no persons whatsoever, male or female, beyond the number of five persons, shall be employed in any handicraft in any place, premises, room, or house not included in the Factory Act, without a license, obtainable free of expense, from the local authority of the town or borough.

*2nd.*—Let it be an instruction to the Medical Officer, the Local Surveyor, or a person duly appointed for the purpose, to measure all places to be licensed, and keep a record of all such licenses and measurements, and of the number of persons licensed for each room used as a workshop.

*3rd.*—Let it be a part of the conditions of the license that the number of persons for which the room is licensed shall be put up in a conspicuous place within the room.

*4th.*—That printed regulations in respect to the employment of children, young persons, and women, shall also be put up, and permanently kept, in a conspicuous place within the room.

I believe if such licenses were granted that no further inspection of the premises would be required, except upon special complaint, because no sane master or mistress would incur the risks of penalties, or put themselves within the power of their own servants, or their rivals in trade. It might also be an instruction to the Medical Officer to investigate all complaints which there was reason to believe well founded, although the complaints which reached him came from anonymous correspondents.

The Council have taken no action in respect of those regulations which relate to the education of children employed in workshops, and I believe that they have not taken action because in Liverpool there are really no children under the age of 13 years employed in workshops. One—and the most melancholy—feature in the condition of the children of the poor of Liverpool is, that they are without occupation, without instruction, and mere vagabonds in the street. In no town of the kingdom is a compulsory education law, if practicable, more required.

#### THE LIVERPOOL SANITARY AMENDMENT ACT, 1864, (27 & 28 V., c. 73.)

A fourth report of the Medical Officer of Health, made under the provisions of the above Act, was accepted by the Grand Jury of the Quarter Sessions, after they had, by a deputation of their body, carefully examined the various places and localities declared by him to be in a condition, state, or situation prejudicial to health. Their presentment, founded on this report and upon the plans by which the sanitary defects could in his opinion be remedied, directs the total demolition of 73 houses. The removal of these tenements will directly benefit the ventilation and sanitary condition of 402 houses; besides removing what was a menace to the health of the neighbourhood and the town. The Grand Jury thought it right to go beyond the recommendation of

the Medical Officer, and they further ordered the demolition of the house No. 57, Warwick Street. This will be a great, though probably a somewhat expensive, improvement. It will throw open to thorough ventilation, north and south, the whole of Prince William Street and Mar Street, and it will remove a most obnoxious *cul-de-sac*. The value of the property included in the presentment of the Grand Jury is estimated by the Borough Engineer to be £4445; leaving the sites of the present buildings in possession of the owners, according to the terms and conditions of the Act.

### THE LIVERPOOL IMPROVEMENT ACT, 1867.—LICENSES FOR CATTLE.

The sections of the above Act, so far as they relate to the keeping of Cattle within the Borough, were put in force by the Council in January, 1868. The several shippons then existing in the town were carefully inspected; and plans, sections, and measurements, showing position, construction, and ventilation of the premises, were likewise made. The Council also adopted the following requirements, with regard to the keeping of Cattle, on all premises licensed for the purpose:—

#### Cows.

The floors of all shippons must be of brick, stone, or other non-absorbent material, and sewered. The walls must be lime-washed once yearly, and the light and ventilation of the shippon regulated to the satisfaction of the Health Committee. There shall be as superficial space for each Cow not less than  $3\frac{1}{2}$  feet by 7 feet, but if two Cows are kept together then the space may be 6 feet by 7 feet. The passage of the shippon shall for each Cow be of the width of 3 feet, but if the Cows are arranged as in a double shippon, then the partition passage may be 4 feet wide. The floors of the shippons must be cleansed daily. The manure heaps of the shippons must be kept in a sewered middenstead, and removed once during every fortnight.

#### Pigs.

The floors of all pigstyes must be of brick, stone, or other non-absorbent material, and sewered. The floors shall (as provided for by the 150th sec. of the 5th and 6th Vic., cap. 106,) be cleansed, and the contents removed, between the hours of twelve o'clock at night and six o'clock in the morning, and at no other time. If one or two Pigs are kept, then the place shall be at least 10 yards from any street or inhabited house, not being a farm house, and the contents of the pigstye shall be removed not less frequently than every fourth day. If more than two and less than six Pigs are kept, then the place shall be at least 20 yards distant from any street or inhabited house, not being a farm house, and the contents of

the pigstye removed not less frequently than every second day. If more than six Pigs are kept, then the place shall be 40 yards from any street or inhabited house, not being a farm house, and the contents shall be removed daily. No Pigs shall be kept in any distret where there are objections from residents within 60 yards of the styes, without due inquiry into the nature and reasonableness of such objections.

These requirements are not in a strictly legal sense by-laws, because no copy of the same, sealed with the seal of the Mayor, Aldermen, and Burgesses, has been sent for the approval of the Home Secretary; but they were published and widely circulated by order of the Town Council, and are incorporated with and form part of each license.

During the year 1868, 434 applications were made for licenses to keep Cows; in several instances it was necessary to restrict the number of Cows below what was asked for, but in only four cases was it found necessary to refuse them altogether. In the 430 shippens now licensed, 4,300 Cows are allowed to be kept. In 36 of the above shippens, where the distance from houses and streets permitted, licenses to keep Pigs were likewise granted; but in only four cases were more than two Pigs allowed to be kept in the shippen, or on the premises of any cowkeeper. The greatest nuisance had been occasioned before the passing of the Act, by the ill-placed and ill-kept pigstyes. It therefore became necessary to refuse 339 applicants for licenses for the keeping of Pigs. The number of Pigs now allowed to be kept in Liverpool is 594 in 181 licensed styes, but these numbers will necessarily diminish as the population increases, and the built-up area of the Borough is enlarged.

### THE DISINFECTING APPARATUS.

The advantages derived from the two establishments—the one in New Bird Street in the South, and the other in Ford Street in the North of the town—where clothes and bedding are gratuitously disinfected, have, as will be seen by the following table, become more generally known to and appreciated by the people. The number of articles sent to them during the year amounted to 16,639, or 12036 more than during 1867; but I have still to express my regret that there seems to exist a lukewarmness in the matter on the part of those who generally interest themselves in the well-being of society and in the care and protection of the poor and sick. Under the term clergymen in the following table, are included the ministers of all religious denominations:—

DATE.	NUMBER OF ORDERS SIGNED BY				NUMBER OF ARTICLES DISINFECTED IN THE APPARATUS.							
	Medical Gentlemen	Clergymen of the Corporation.	Officers of the Corporation.	Others.	Ford Street.	New Bird Street.	Medical Gentlemen	Clergymen of the Corporation.	Officers of the Corporation.	Others.	Ford Street.	New Bird Street.
1868.												
January	2...	6	3	...	163	23	...	...	...	...	223	89
	9...	3	...	...	60	32	...	...	...	...	100	50
	16...	1	...	...	13	...	...	...	...	...	136	44
	23...	7	...	...	132	...	...	...	...	...	61	34
	30...	5	...	...	89	...	...	...	...	...	3	59
February	6...	3	...	...	203	27	...	...	...	...	359	98
	13...	2	...	...	33	...	...	...	...	...	120	66
	20...	7	...	...	263	...	...	...	...	...	74	48
	27...	11	...	...	221	90	...	...	...	...	166	98
March	5...	4	...	...	276	...	...	...	...	...	117	276
	12...	6	...	...	110	65	...	...	...	...	206	36
	19...	7	...	...	182	20	...	...	...	...	300	98
	26...	8	...	...	94	93	...	...	...	...	291	198
Total for Quarter ...}		70	1	26	15	1839	644			188	2156	1194
April	2...	8	...	...	254	49	...	...	...	...	237	152
	9...	2	...	...	144	53	...	...	...	...	476	148
	16...	5	...	...	182	144	...	...	...	...	377	128
	23...	2	...	...	180	94	...	...	...	...	368	123
	30...	4	...	...	107	149	...	...	...	...	328	233
May	7...	3	...	...	164	42	...	...	...	...	283	205
	14...	1	...	...	173	175	...	...	...	...	380	111
	21...	2	...	...	280	18	...	...	...	...	329	206
	28...	4	...	...	255	259	...	...	...	...	296	202
June	4...	2	...	...	161	96	...	...	...	...	249	190
	11...	3	...	...	171	112	...	...	...	...	309	307
	18...	6	...	...	193	84	...	...	...	...	257	194
	25...	3	...	...	290	121	...	...	...	...	534	234
Total for Quarter ...}		45	1	192	12	2554	1396			323	4423	2433
1868.												
July	2...	4	...	...	...	...	...	...	...	...	...	...
	9...	4	...	...	...	...	...	...	...	...	...	...
	16...	3	...	...	...	...	...	...	...	...	...	...
	23...	5	...	...	...	...	...	...	...	...	...	...
	30...	1	...	...	...	...	...	...	...	...	...	...
August	6...	3	...	...	...	...	...	...	...	...	...	...
	13...	3	...	...	...	...	...	...	...	...	...	...
	20...	3	...	...	...	...	...	...	...	...	...	...
	27...	4	...	...	...	...	...	...	...	...	...	...
September	3...	4	...	...	...	...	...	...	...	...	...	...
	10...	5	...	...	...	...	...	...	...	...	...	...
	17...	6	...	...	...	...	...	...	...	...	...	...
	24...	7	...	...	...	...	...	...	...	...	...	...
Total for Quarter ...}		52	...	...	...	...	...	...	...	...	...	...
October	1...	9	...	...	...	...	...	...	...	...	...	...
	8...	11	...	...	...	...	...	...	...	...	...	...
	15...	10	...	...	...	...	...	...	...	...	...	...
	22...	7	...	...	...	...	...	...	...	...	...	...
	29...	10	...	...	...	...	...	...	...	...	...	...
November	5...	11	...	...	...	...	...	...	...	...	...	...
	12...	2	...	...	...	...	...	...	...	...	...	...
	19...	6	...	...	...	...	...	...	...	...	...	...
	26...	7	...	...	...	...	...	...	...	...	...	...
December	3...	4	...	...	...	...	...	...	...	...	...	...
	10...	11	...	...	...	...	...	...	...	...	...	...
	17...	3	...	...	...	...	...	...	...	...	...	...
	24...	4	...	...	...	...	...	...	...	...	...	...
Total for Quarter ...}		95	1	323	36	4423	2433			7	2156	1194

### WORKMEN'S DWELLINGS.

The Corporation, availing themselves of the provisions of the 29th Vict., cap. 28., have erected on land, purchased for the purpose, six blocks of tenements, containing in all 146 Dwellings for the Labouring Class. It will be seen by the following statement, for which I am indebted to the Treasurer, that the rents at which it is proposed to let the houses are extremely moderate, and also that the rent charge includes Sanitary and Parish Rates, and the water and gas used in the households.

#### ST. MARTIN'S COTTAGES.—THE FOLLOWING IS A STATEMENT OF ACTUAL COST AND PROBABLE RECEIPTS OF THE ABOVE COTTAGES.

<p>Gross Rents :—</p> <p>84 two-roomed Houses, at rents from 3s. 0d. to 4s. 3d.... £819 0 0</p> <p>42 three-roomed ditto, ditto 4s. 0d. to 5s. 3d.... 516 14 0</p> <p>20 four-roomed ditto, ditto 5s. 6d. to 6s. 6d.... 312 0 0</p> <p style="text-align: right;">£1647 14 0</p> <p>Deduct for Sanitary Rates, Parish Rates, Property Tax, Gas, Repairs, Property void, Expense of Collection, &amp;c.—about 47 per cent. .... 775 0 0</p> <p style="text-align: right;">Net probable Income ..... £872 14 0</p>	<p>Interest, at 4 per cent., upon £16,151, the cost of the site and buildings..... 646 0 0</p> <hr/> <p>Probable Surplus for the year ..... 226 14 0</p> <hr/> <p style="text-align: right;">£872 14 0</p>
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## SLAUGHTER-HOUSE RETURNS OF CATTLE KILLED IN THE BOROUGH, 1868.

SLAUGHTER HOUSES.	Beasts.	Sheep.	Lambs.	Calves.	Pigs.	Goats.	
Public Abattoir .....	27582	199237	...	10681	9233	41	
PRIVATE SLAUGHTER HOUSES.	Corlett Street .....	503	4297	967	8	189	...
	Crown Street .....	240	1112	345	6	22	...
	Peel Street.....	104	853	256	...	7	...
	Byles Street .....	302	1901	448	1	1	...
	Gelling Street .....	796	5090	1513	56	24	...
	Darnley Street.....	...	...	...	...	2744	...
	Cotter Street.....	...	613	99	...	2895	...
	Head Street (1).....	206	1709	580	1	1	...
	Ditto (2).....	...	...	...	...	2701	...
	Parliament Street.....	958	5725	1654	115	284	...
	Grinfield Street.....	49	350	97	1	13	...
	Wavertree Road .....	59	281	3	...	1	...
	Castle Street.....	414	2491	584	...	43	...
	Back Castle Street .....	325	2202	486	1	16	...
	Knight Street .....	83	456	144	...	...	...
	Browside .....	114	711	135	...	...	...
	Railway Arches, Sandhills	671	...	...	...	...	...
	Norfolk Street.....	1508	1819	532	...	...	...
	Frederick Street .....	383	1731	539	9	13	...
	St. James Street .....	299	777	214	...	...	...
	Lydia Ann Street.....	12	41	...	...	...	...
	Price Street .....	463	1318	296	10	10	...
	Duke Street Lane .....	530	1374	402	2	...	...
	Brownlow Hill .....	102	519	251	15	...	...
	Lawton Street .....	275	969	324	70	...	...
	Bolton Street .....	1022	3126	1092	79	...	...
	Silver Street .....	831	2148	683	7	...	...
	Finch Place .....	1061	5405	1646	111	...	...
	Bayhorse Lane.....	250	1632	442	184	...	...
	Norman Street .....	...	...	...	...	676	...
	Back Commutation Row } Parry's... )	315	1889	463	4	...	...
	Do.      Wilson's.....	596	2014	481	67	...	...
	Whitechapel .....	9	...	...	...	...	...
	Hood Street .....	1352	7386	2338	236	...	...
	Regent Street .....	150	643	140	...	...	...
	Regent Road.....	758	1151	66	11	...	...
	Dundee Street .....	...	...	...	...	...	...
	Batchelor Street .....	256	1427	423	214	...	...
	Plumbe Street .....	...	...	...	...	1937	...
	Upper Milk Street .....	981	3646	336	...	4998	...
Lower Milk Street .....	...	...	...	...	4598	...	
Benledi Street .....	422	1732	442	...	...	...	
Stanley Road .....	961	4519	702	13	121	...	
Hodson Street .....	356	1600	301	...	...	...	
Byrom Street.....	...	...	...	...	888	...	
Arley Street .....	787	1471	294	...	1088	...	
Scotland Road .....	799	1718	127	1021	21	...	
Bevington Hill.....	2447	3932	1044	758	...	...	
Total in Private Slaughter Houses .....	21749	81778	20889	3000	23241	...	
Total in Borough.....	49331	281015	20889	13681	32474	41	

## UNWHOLESOME MEAT CONDEMNED DURING 1868.

	Beef.	Veal.	Mutton.	Lamb.	Pork.	Poultry.	Rabbits.	Fish.	Shell Fish.	Oysters.
	lbs.	lbs.	lbs.	lbs.	lbs.	Head	Head	lbs.	Bags.	Number
AT SLAUGHTER HOUSES.	Abattoir .....	30746	3764	9171	541	1862	...	...	...	...
	Bevington Hill .....	18340	7580	343	...	587	...	...	...	...
	Scotland Road .....	12402	7516	496	...	480	...	...	...	...
	Arley Street.....	1770	...	53	39	...	...	...	...	...
	R'lway Arches, Sandhills	510	...	...	...	...	...	...	...	...
	Hodson Street .....	...	...	...	...	...	...	...	...	...
	Upper Milk Street .....	1608	...	...	...	...	...	...	...	...
	Corlett Street .....	526	...	...	...	...	...	...	...	...
	St. James Street.....	...	...	...	...	...	...	...	...	...
	Hood Street.....	...	286	73	...	...	...	...	...	...
	Brownlow Hill.....	896	271	144	...	...	...	...	...	...
	Gelling Street .....	1775	..	...	...	...	...	...	...	...
	Parliament Street .....	2248	646	340	...	...	...	...	...	...
	Silver Street .....	...	113	42	...	...	...	...	...	...
	Bolton Street .....	...	102	123	41	...	...	...	...	...
	Finch Place.....	409	62	60	...	...	...	...	...	...
	MARKETS.	Gill Street Market .....	...	...	...	...	2162	...	...	...
St. James's „ .....		521	268	657	...	30	...	193	...	...
St. John's „ .....		442	306	1247	45	...	1360	1406	2030	15124
St. Martin's „ .....		...	...	39	...	...	...	...	1207	...
OTHER PARTS.	Scotland Road.....	...	...	...	...	...	...	3691	...	...
	Paddington .....	...	50	377	...	170	...	...	...	...
	Soho Street .....	2053	...	...	...	...	...	...	...	...
	Pembroke Street.....	2630	214	157	...	..	...	...	...	...
	Prescot Street .....	426	...	345	...	...	...	...	...	...
	Rose Street .....	...	...	...	...	...	...	74	12576	1
	Manesty's Lane .....	...	...	...	...	...	...	...	2962	...
	Park Road .....	64	...	...	...	...	...	...	...	...
	Pitt Street .....	...	...	...	40	...	...	...	2809	...
	Northumberland Street	1680	..	121	...	...	...	...	...	...
	Midghall Street .....	...	...	...	...	...	...	...	1167	...
	St. John's Lane .....	...	162	...	...	...	...	...	...	...
	Blundell Street .....	...	...	...	...	...	...	...	678	...
	Great Charlotte Street.	...	...	...	...	...	...	...	3085	...
	Lydiat Street.....	...	...	...	...	94	...	...	...	...
	Lonsdale Street .....	...	86	...	...	...	...	...	...	...
	Byrom Street .....	...	...	...	...	...	...	...	9759	...
	Limekiln Lane .....	370	...	...	...	...	...	...	4676	...
	Hill Street .....	361	...	120	...	...	...	...	...	...
	R'lway Station, Lime St.	...	...	...	...	...	...	...	5990	...
	Clarence Dock .....	...	...	...	...	...	...	...	989	223
	Prince's Landing Stage	...	...	...	...	...	...	...	1183	12
	Smithdown Lane .....	392	...	82	...	...	...	...	...	...
	George's Dock.....	...	...	...	...	...	...	...	850	...
	Trafalgar „ .....	...	...	...	...	...	...	...	2249	...
	Windsor Street .....	...	125	...	...	...	...	...	...	...
	Athol Street.....	150	...	...	...	...	...	...	...	...
Great Homer Street ...	120	...	...	...	...	...	...	...	...	
Low Hill .....	...	...	354	...	...	...	...	...	...	
Florist Street .....	488	...	...	...	...	...	...	...	...	
Back Roe Street .....	...	...	...	...	...	...	...	300	...	
Roe Street .....	...	...	...	...	...	...	...	1118	...	
Jordan Street .....	...	...	122	...	...	...	...	...	...	
Hood Street.....	...	...	...	...	...	...	156	...	...	
TOTAL .....	80927	21551	14466	706	5385	1360	1636	375626	348	22100

## SMOTHERED CATTLE.

Beasts.	Sheep.	Pigs.	No. found Good.	Bad.	Weight of Fad in Lbs.
146	164	54	161	203	63,969

## INSPECTOR OF NUISANCES' REPORTS.

## INSPECTION AND PROCEDURE FOR THE YEAR 1868.

Complaints of Nuisances made by inhabitants	...	...	...	...	...	1,953
Total Number of Nuisances Reported by District Officers	...	...	...	...	...	40,601
Total Nuisance Notices	...	...	...	...	...	27,799
Number of Informations...	...	...	...	...	...	818
Number Fined	...	...	...	...	...	165
Number withdrawn and Acquitted	...	...	...	...	...	623
Magistrates' Order	...	...	...	...	...	29

## FEVER IN HOUSES.

1,283 Street Houses Examined, contained 2,172 cases of Fever.

667 Court " " " 1,216 "

76 Cellars Examined, contained ... 80 "

## EXAMINATION OF CELLARS FOR THE YEAR 1868.

Number of Streets Examined	...	...	...	...	...	3,008
" Cellars Examined	...	...	...	...	...	37,429
" Cellars Exempt from the Operation of the Act	...	...	...	...	...	4,688
" Cellars Found Empty	...	...	...	...	...	14,553
" Cellars Occupied with Beds...	...	...	...	...	...	2,467
" Cellars Occupied without Beds	...	...	...	...	...	15,721
Number of Courts Examined	...	...	...	...	...	5,609
" Court-Cellars Examined	...	...	...	...	...	28,855
" Court-Cellars Found Empty	...	...	...	...	...	14,459
" Court-Cellars Occupied with Beds...	...	...	...	...	...	898
" Court-Cellars Occupied without Beds	...	...	...	...	...	13,498
Total Number of Cellars Inspected	...	...	...	...	...	66,284
" Cellars Found Empty...	...	...	...	...	...	29,012
" Cellars Occupied with Beds...	...	...	...	...	...	3,365
" Cellars Occupied without Beds	...	...	...	...	...	29,219
" " Exempt from operation of Act	...	...	...	...	...	4,688

## PROCEEDINGS.

Number of Cellar Notices	...	...	...	...	...	3,068
" Cellar Informations	...	...	...	...	...	361
" Cellar Fines	...	...	...	...	...	258
" Cellar Fines Acquitted and Withdrawn	...	...	...	...	...	103



STATE OF NEW YORK

IN SENATE  
January 15, 1903

REPORT  
OF THE  
COMMISSIONERS OF THE LAND OFFICE  
IN RESPONSE TO A RESOLUTION PASSED BY THE SENATE  
MAY 15, 1902

ALBANY:  
J. B. LIPPINCOTT & COMPANY, PRINTERS,  
1903

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J. B. LIPPINCOTT & COMPANY, PRINTERS,  
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DEATHS

1881

1881

1  
8

1



