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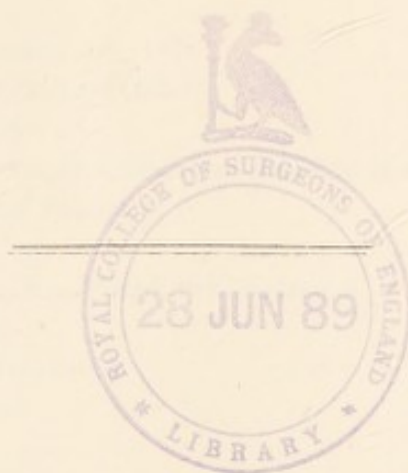
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REPORT
OF THE
HEALTH OF LIVERPOOL,
DURING THE YEAR 1888,

WITH MAP, SHOWING THE LOCALITIES OF THE FATAL
PREVALENCE OF FEVER.

BY J. STOPFORD TAYLOR, M.D.,

MEDICAL OFFICER OF HEALTH FOR THE CITY AND PORT.



LIVERPOOL:
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—
1889.

REPORT

HEALTH OF LIVERPOOL

During the Year 1888

WITH A VIEW TO SHOWING THE LOCALITIES OF THE FATAL
PREVALENCE OF CHOLERA

BY J. STOPFORD TAYLOR, M.D.

PHYSICIAN GENERAL OF HEALTH FOR THE CITY AND PORT

LIVERPOOL
J. A. HARRISON & CO. PRINTERS, 1, NEWBOLT LANE

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REPORT, 1888.

LIVERPOOL comprises an area of 5,210 acres, and an estimated population of 599,738, or 115 people per acre, being the most densely populated city in Great Britain.

The density of a population is one of the chief factors in its death rate, but Liverpool affords a striking example of what can be effected by good sanitary work in overcoming, or at least mitigating, the evils and disadvantages of crowding a large number of people on a limited area.

The gradual reduction of the death rate has proceeded with the steady progress of sanitary measures, and has now reached the low rate of 20·3 per 1,000 of the population, only one-half it was forty years ago when the Health Committee was first constituted.

The number of deaths during the year was 12,159, of which 178 were of residents outside the city, being 1,847 less than in 1887, and 2,400 below the average of the last ten years, notwithstanding the increase of population. Had the death rate of forty years ago prevailed last year the number of deaths would have been 24,318; but allowing one-half of the benefit to have been derived from the improved condition of the working classes by regular employment and the alterations effected in the town to meet business requirements, there would have still been a death rate of 30 per 1,000 and 18,238 persons would have died. As this number was not reached by 6,079, we may at least take this as the number of lives saved by sanitary measures, and estimating the value of each life at £159 on Dr. Farr's scale, the money value saved during the year was £966,561. To this might be added the saving in the cost of sickness, funerals, loss of work, and increased pauperism.

The number of deaths and rate per 1,000 for the year were in—

First quarter	3,334,	equal to	22·2	per 1,000.
Second	.. 2,703,	..	18·0	..
Third	.. 2,797	..	18·7	..
Fourth	.. 3,325	..	22·2	..

The rate for the whole year was 20·3, being 3·3 per 1,000 lower than the previous year (1887), which was the lowest ever recorded up to that date, and 5·6 less than the average rate for the last ten years (1878 to 1887), and 8·7 less than the average rate of the previous ten years (1868 to 1877).

BIRTH RATE.

The number of births during the year was 17,777, being 637 less than in the previous year, and giving a birth rate of 29·6 per 1,000 of the population, being the lowest rate ever recorded since the establishment of registration.

The natural increase of the population by excess of births over deaths was 5,618, being 1,206 less than the estimated increase, calculated on the rate of increase between the census years 1871 and 1881. The difference, however, may be accounted for by the migration of country people into the city, and the settlement of foreigners for business purposes. In addition to the large floating population which frequents this port, 240,566 emigrants passed through the city, and generally spent one or more nights in the lodging-houses prior to embarking, and contributed to the rate of sickness and mortality.

HOSPITAL ACCOMMODATION.

There is still a great want of hospital accommodation for infectious cases, and much difficulty has been experienced in consequence. The new hospital in Grafton Street has been opened with provision for 70 patients in two pavilions of four wards each, and an isolation block for doubtful cases. The alterations at Netherfield Road Hospital have now

been completed, and it is capable of receiving 80 patients. Parkhill Hospital is kept in reserve for Smallpox cases. To meet the requirements of a population of 600,000, there are only 150 beds for infectious cases, exclusive of Smallpox; and, to make matters still worse, the Select Vestry have decided to close their hospital with 160 beds, and not to admit any more patients sent by the Sanitary Authority.

If Liverpool is to be protected from recurring epidemics, proper and sufficient accommodation must be provided for the reception of the earliest cases of Zymotic disease, and not wait for its dissemination before any action is taken, when the work will not be satisfactorily done, and much money will be wasted in the hurry and confusion of a panic.

ZYMOTIC DISEASE.

The deaths from Zymotic causes amounted to 1,796, being 876 fewer than in 1887, and 1,037 below the average of the last ten years.

The deaths from the seven principal Zymotic diseases were in every instance lower than in 1887, and also below the average of the preceding ten years.

Diseases.	Deaths during 1888.	Deaths during 1887.	Average for preceding ten years.
Smallpox	1	1	25
Measles	331	661	523
Scarlatina	187	321	433
Whooping Cough...	313	429	408
Diarrhœa	431	619	669
Diphtheria	66	95	80
Fever	161	194	308

SMALLPOX.

There were not many cases of this disease, and fortunately the facilities afforded for isolating them at Parkhill Hospital prevented the disease from spreading in the city.

The great and fatal prevalence of the disease in Sheffield and Preston, and the frequent outbreaks in many Lancashire towns, necessitated much watchfulness on the part of the Sanitary Staff, owing to the constant and rapid intercourse between the different communities. This anxiety was much increased by the importation of cases by ships from Spain where the disease was very prevalent, and the passage being a short one the disease was not developed in some instances until after the arrival of the vessels in port.

During the year 46 cases of suspected Smallpox were reported, of which 33 were removed to hospital and 13 not removed. 27 of the cases turned out to be Smallpox, 14 Chicken Pox, one Measles, one Scarlatina, and three not infectious disease. Of the 27 cases, seven were traced to importation from Sheffield, one from Preston, four from tramps, eight from ships, and seven were supposed to have occurred from associating with seamen who came from infected ships.

MEASLES.

In the first seven months of the year comparatively few cases were notified, but in September the number reported was 174, in October 782, and in November 1,371, when the disease got beyond all control of the Sanitary Staff and became epidemic, gradually spreading from Kirkdale and Everton, where the first serious outbreak occurred, to other parts of the city. At the commencement of October nearly one-half of the infants attending Walton Lane Board Schools were absent from this disease, and the Management Committee, at the request of the Medical Officer of Health, closed the schools for a month. From the very contagious character of the disease there will always be a difficulty in dealing with it; yet in these days of compulsory attendance, when children from infected homes are being constantly sent to school without thought or care as to the possibility of conveying infection, it is quite time that notification of infectious diseases should be compulsory, and proper hospital accommodation provided to obviate the large amount of suffering inflicted upon children and the great waste of human life.

During the first three quarters of the year there were only 41 deaths,

but during the last quarter terminating in December, there were 290 deaths. The total number of cases coming under the notice of the Medical Officer was 3,818, and the rate of mortality 8·6 per cent.

SCARLATINA.

The number of cases reported was 1,316, of which 187 were deaths, being 134 fewer than in the preceding year, and 246 less than the average of the last ten years. The rate of mortality of reported cases was 14·2 per cent.

DIARRHŒA.

The number of deaths from this disease was 431, more than would have been expected from the low temperature, and heavy rainfall, which occurred during the months of July and August, the period when Infantile Diarrhœa is most prevalent. The mean average temperature of July was 4·0, and August 2·6 below the mean average of 20 years, and the amount of rain which fell during those months was 7,797 inches, nearly one-third of the total rainfall of the whole year.

FEVER.

Under the designation of Fever are included all deaths from Typhus, Typhoid, continued Fevers, and Febricula. The total number of deaths registered during the year was 161, the lowest number ever recorded, being 33 fewer than in the previous year, and 147 less than the average of the preceding ten years.

The decrease has taken principally in Typhus; the number of deaths from Typhoid, with slight variations, remaining about the same, though it is probable that, owing to more correct diagnosis, cases of Typhoid are not so frequently registered Typhus as formerly.

The supposition that the water-closet system had given rise to an increase in Typhoid is not borne out by the returns, commencing in the year 1871, when there were more than 30,000 privies within the City, and terminating in 1888, when all of them, excepting two or three hundred,

situated a considerable distance from dwelling-houses, have been converted into water-closets. Under the term Typhoid are included all deaths registered as occurring from Typhoid, Gastric, and Enteric Fevers, and under Typhus all deaths registered from Typhus, Fever, continued Fever and Febricula.

1871.

Deaths from Typhoid	...	...	...	133
„ „ Typhus	...	...	...	568
				<hr/>
Total Fever Deaths	...	...		701

1876.

Deaths from Typhoid	...	...	...	104
„ „ Typhus	...	...	...	294
				<hr/>
Total Fever Deaths	...	...		398

1881.

Deaths from Typhoid	...	...	...	120
„ „ Typhus	...	...	...	172
				<hr/>
Total Fever Deaths	...	...		292

1886.

Deaths from Typhoid	...	...	...	140
„ „ Typhus	...	...	...	58
				<hr/>
Total Fever Deaths	...	...		198

1888.

Deaths from Typhoid	...	...	...	125
„ „ Typhus	...	...	...	36
				<hr/>
Total Fever Deaths	...	...		161

The total number of fever cases coming under the notice of the Medical Officer was 679, of which 161 died, giving a mortality rate of 23·7 per cent.

The following table shows the death rate per 1,000 of the population, and the number of deaths from Fever and Diarrhoea during the last twenty-three years.

Year.	Death Rate per 1,000 of Population.	Deaths from Diarrhoea.	Deaths from Fever.	Deaths from Relapsing Fever.
1866	41.7	1,145	1,523	...
1867	29.4	796	656	...
1868	29.1	1,108	841	...
1869	28.9	1,001	783	...
1870	31.1	1,151	572	355
1871	35.1	1,127	701	207
1872	27.0	998	451	25
1873	25.8	906	335	...
1874	31.9	879	449	...
1875	27.5	842	490	...
1876	27.5	694	398	...
1877	26.4	605	382	...
1878	29.3	979	375	...
1879	26.9	402	248	...
1880	27.2	1,028	256	...
1881	26.6	508	292	...
1882	26.4	587	593	...
1883	26.6	518	540	...
1884	25.1	841	205	...
1885	23.7	422	182	...
1886	23.7	781	198	...
1887	23.6	619	194	...
1888	20.3	431	161	...

CANCER.

The following table will illustrate the apparent increase of deaths from malignant disease, whether it may arise from more correct diagnosis, or increased prevalence, our present returns cannot satisfactorily determine; but, however produced, there is, no doubt, a larger number of deaths from this disease registered than formerly. It is very desirable that the part of the body affected by it should be always specified in the medical certificate of the cause of death, so that comparative tables might be prepared to assist in the elucidation of the question. The statement that the patient died from Cancer or malignant disease is not sufficient, it is requisite to state the part first affected, should it be the tongue, breast, stomach, or other organ:—

Year.	Male.	Female.	Total.	Per Centage of Deaths from Cancer to Total Deaths.	Death Rate per 1,000 of the Population from Cancer.
1869	42	124	166	1.1	0.34
1874	63	146	209	1.3	0.40
1879	86	175	261	1.8	0.48
1884	100	163	263	1.8	0.45
1888	111	206	317	2.6	0.52

During the fifty-two weeks of the year 1888 (terminating on Saturday, December 29th, 1888), the Returns of the Local Registrars recorded 17,777 births and 12,159 deaths within the City; the numbers for the corresponding period of the previous year, 1887, were 18,414 births and 14,006 deaths.

Of the births 9,000 were males and 8,777 were females, making the total Birth-rate of the City equal to 29·6 per 1,000; the average of the previous ten years being 35·8.

The Distribution of the births in the different wards and districts of the City has been arranged in the following table:—

BIRTHS.

DISTRICTS AND WARDS.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Annual Births
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
Scotland	297	302	280	281	265	263	261	228	2177
Vauxhall	45	38	35	39	37	37	33	39	303
St. Paul's and Exchange....	50	67	61	53	45	51	56	39	422
St. Anne's and Lime Street..	107	113	105	105	98	111	81	76	796
Castle Street and St. Peter's..	13	10	12	13	7	8	12	14	89
Pitt Street and Gt. George..	57	60	51	61	51	61	53	44	438
Rodney St. & Abercromby..	141	159	153	157	137	143	150	165	1205
Everton	519	491	514	490	482	479	491	476	3942
Kirkdale.....	300	325	312	278	262	268	311	243	2299
West Derby	349	318	316	299	315	310	321	291	2519
The Toxteths.....	475	438	455	438	426	439	459	457	3587
City.....	2353	2321	2294	2214	2125	2170	2228	2072	17777

DEATHS.

Of the 12,159 deaths 6,190 were of males, and 5,969 of females.

The Death-rate of the City was equal to 20·3 per 1,000. The average of the previous ten years was 25·9 per 1,000.

The following table shows the actual number of deaths registered in the City previous to the transference to the districts from whence the patients were removed, of the deaths occurring in the Workhouses and Hospitals.

The deaths occurred in the following districts :—

DISTRICTS.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Annual.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Deaths.
Scotland	185	186	154	116	164	175	202	194	1376
Vauxhall	21	23	19	25	34	33	36	32	223
St. Paul's and Exchange	40	55	30	35	43	42	36	51	332
St. Anne's and Lime Street	74	85	58	55	74	78	90	85	599
Castle Street and St. Peter's	10	6	11	9	9	8	9	14	76
Pitt Street and Great George	43	50	44	48	44	32	40	29	330
Rodney Street and Abercromby	61	95	81	81	58	74	58	63	571
Everton	239	270	215	223	258	238	328	321	2092
Kirkdale	144	159	140	142	150	152	180	147	1214
West Derby	170	165	128	142	123	149	190	182	1249
The Toxteths	305	322	226	233	214	214	265	247	2026
Workhouses and Hospitals	355	271	299	189	249	182	284	242	2071
City	1647	1687	1405	1298	1420	1377	1718	1607	12159

From the returns made as to the residences of persons dying in the Workhouses and Hospitals of the town, we are able to classify 1,810 of the deaths in these establishments under the Wards from whence the patients were removed, viz. :—358 under Scotland Ward, 81 under Vauxhall Ward, 56 under St. Paul's Ward, 75 under Exchange Ward, 252 under St. Anne's Ward, 58 under Lime Street Ward, 2 under Castle Street Ward, 16 under St. Peter's Ward, 73 under Pitt Street Ward, 87 under Great George's Ward, 57 under Rodney Street Ward, 79 under Abercromby Ward, 216 under Everton, 71 under Kirkdale, 136 under West Derby Ward, 96 under North Toxteth Ward, and 97 under South Toxteth Ward. This will leave unclassified 83 deaths of persons whose previous residences were either unknown or not specified ; and these, in the absence of definite information, have been placed in the Wards in proportion to the number of total deaths ; and 178 who were residents outside the city.

The results of the alterations occasioned by this re-arrangement of the deaths in the wards and districts will be shown in the following table, from which a calculated rate of mortality per 1,000 of the estimated inhabitants has been made. The rates are calculated upon a population increasing or decreasing in the same ratio as between 1871 and 1881, and may not be correct as regards the Wards, but will approximate the true rate of the whole City.

WARDS.	Annual.	
	Deaths.	Rate per 1000
Scotland	1746	27.3
Vauxhall	306	24.0
St. Paul's	215	21.1
Exchange	251	35.1
St. Anne's	683	28.6
Lime Street	233	24.6
Castle Street	12	12.4
St. Peter's	83	17.8
Pitt Street	194	28.5
Great George	299	33.5
Rodney Street	333	20.3
Abercromby	379	17.3
Everton	2324	19.3
Kirkdale	1294	15.6
West Derby	1395	17.4
North Toxteth	1213	14.4
South Toxteth	1021	22.8
Hospitals (Residences outside City)	178	—
	12159	20.3

The following table shows the natural increase or decrease of population, and the number of births and deaths during the year 1888, in the several districts of the City :—

DISTRICTS AND WARDS.	Births.	Deaths.	Increase.	Decrease
Scotland	2177	1746	431	..
Vauxhall	303	306	..	3
St. Paul's and Exchange	422	466	..	44
St. Anne's and Lime Street	796	916	..	120
Castle Street and St. Peter's	89	95	..	6
Pitt Street and Gt. George	438	493	..	55
Rodney Street and Abercromby	1205	712	493	..
Everton	3942	2324	1618	..
Kirkdale	2299	1294	1005	..
West Derby	2519	1395	1124	..
The Toxteths	3587	2234	1353	..
City	17777	11981	5796	..
Hospitals (Residences outside City) .. .. .	..	178	..	..
Total	17777	12159	5618	..

The following table, taken from the Registrar-General's Reports, will enable us to compare the mortality of Liverpool with thirty of the large towns of the United Kingdom:—

TOWNS.	Estimated Population in the middle of the year 1888.	Births in 52 Weeks, ending 29th Dec., 1888.	Deaths in 52 Weeks, ending 29th Dec., 1888.	Annual Rate to 1,000 of Population.		Population on Acre.
				Births.	Deaths.	
London	4282921	131080	78848	30·7	18·5	57·3
Brighton	119983	2790	1928	23·3	16·1	47·7
Portsmouth	139575	4976	2610	35·8	18·8	32·3
Norwich	93675	3233	1883	34·6	20·2	12·5
Plymouth	77674	2451	1729	31·7	22·3	52·9
Bristol	226510	6614	3816	29·3	16·9	48·9
Wolverhampton	81691	2680	1684	32·9	20·7	24·1
Birmingham	447912	13728	7954	30·8	17·8	53·3
Leicester	146790	4786	2680	32·7	18·3	45·9
Nottingham	230921	6879	3976	29·9	17·3	23·2
Derby	96241	2825	1561	29·5	16·3	27·9
Birkenhead	100093	3060	1776	30·7	17·8	26·0
Bolton	113506	3700	2444	32·7	21·6	47·2
Manchester	378164	13318	9834	35·3	26·1	63·8
Salford	226336	7136	4770	31·6	21·1	43·8
Oldham	138220	4183	2800	30·4	20·3	29·2
Blackburn	119039	4046	2837	34·1	23·9	17·1
Preston	103234	3861	2460	37·5	23·9	27·7
Huddersfield	91419	2243	1687	24·6	18·5	8·7
Halifax	80138	2282	1546	28·6	19·4	21·3
Bradford	229721	6267	3924	27·4	17·1	21·3
Leeds	351210	11407	7209	32·6	20·6	16·3
Sheffield	321711	9861	6586	30·8	20·5	16·4
Hull	202359	6284	3313	31·2	16·4	25·6
Sunderland	131919	4566	2376	34·7	18·1	43·5
Newcastle-on-Tyne	159003	6010	3261	37·9	20·6	29·6
Cardiff	108570	4412	2214	40·8	20·5	14·7
Edinburgh	262733	7458	4709	28·5	18·0	44·5
Glasgow	526088	19213	11594	36·6	22·1	86·1
Dublin	357082	9884	8894	28·1	25·3	14·3
LIVERPOOL	599738	17777	12159	29·6	20·3	115·1

The deaths of Infants below five years of age amounted to 5,070, and thus comprised 41·7 per cent. of the whole deaths; the average number for the preceding ten years was 6,646, and the average percentage 45·6. The

deaths of Infants below one year of age amounted to 2,981, or 16·8 per cent. of all the children born within the city, died before attaining the age of twelve months.

The first of the following tables shows the districts where Infantile Mortality was relatively and absolutely greatest, the second table illustrates the influence of age on the death-rate of the city, and 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.	Per Cent- age of Deaths under 1 year to Total Births.
		March.	June.	Sept.	Dec.			
Scotland	{ Total Deaths..	371	270	339	396	1376	50·6	18·2
	{ Below 5 years..	157	127	186	226	696		
Vauxhall	{ Total Deaths..	44	44	67	68	223	48·9	20·5
	{ Below 5 years..	11	16	46	33	109		
St. Paul's	{ Total Deaths..	45	38	33	42	158	40·5	20·9
	{ Below 5 years..	19	14	10	21	64		
Exchange	{ Total Deaths..	50	27	52	45	174	41·4	
	{ Below 5 years..	17	8	25	22	72		
St. Anne's	{ Total Deaths..	117	73	113	123	426	50·9	22·1
	{ Below 5 years..	39	32	73	74	217		
Lime Street	{ Total Deaths..	42	40	39	52	173	42·2	
	{ Below 5 years..	17	10	20	27	74		
Castle Street	{ Total Deaths..	2	5	2	1	10	30·0	18·0
	{ Below 5 years..	1	..	1	1	3		
St. Peter's	{ Total Deaths..	14	15	15	22	66	36·4	
	{ Below 5 years..	4	5	6	9	24		
Pitt Street	{ Total Deaths..	41	33	29	17	120	45·0	20·1
	{ Below 5 years..	12	18	16	8	54		
Great George	{ Total Deaths..	52	59	47	52	210	39·0	
	{ Below 5 years..	20	22	23	17	82		
Rodney Street..	{ Total Deaths..	73	77	60	64	274	31·0	10·7
	{ Below 5 years..	15	28	21	21	85		
Abercromby....	{ Total Deaths..	83	85	72	57	297	36·7	
	{ Below 5 years..	28	26	31	26	109		
Everton..	{ Total Deaths..	509	438	496	649	2092	51·4	15·6
	{ Below 5 years..	193	207	276	399	1075		
Kirkdale	{ Total Deaths..	303	282	302	327	1214	50·3	16·6
	{ Below 5 years..	136	127	170	178	611		
West Derby	{ Total Deaths..	335	270	272	372	1249	49·2	14·1
	{ Below 5 years..	133	119	151	211	614		
North Toxteth..	{ Total Deaths..	329	260	242	278	1109	41·1	15·6
	{ Below 5 years..	117	102	119	118	456		
South Toxteth..	{ Total Deaths..	298	199	186	234	917	54·6	
	{ Below 5 years..	163	102	98	138	501		
Workhouses	{ Total Deaths..	626	488	431	526	2071	10·8	..
and Hospitals.	{ Below 5 years..	57	41	51	72	224		
City	{ Total Deaths..	3334	2703	2797	3325	12159	41·7	16·8
	{ Below 5 years..	1142	1004	1323	1601	5070		

AGES.	Quarters.				Annual.	
	March.	June.	Sept.	Dec.	Deaths.	Rate per 1000 of population.
Deaths below 1 year of age.. ..	694	588	905	794	2981	5.0
„ between 1 year and 5	448	416	418	807	2089	3.5
„ „ 5 „ 20	262	217	176	235	890	1.5
„ „ 20 „ 60	1242	1012	869	994	4117	6.8
„ above 60 years	687	470	428	495	2080	3.5
„ at ages unknown	1	..	1	..	2	..
„ at all ages	3334	2703	2797	3325	12159	20.3

The Registrars' Returns show that there were 13 deaths (9 of women and 4 of men) at the age of 90 and upwards, viz., 4 females and 1 male at 90, 1 male at 91, 3 females at 92, 1 female at 93, 1 female at 95, and 2 males at 97.

CLASSES.	QUARTERS.				YEAR 1888.
	March.	June.	Sept.	Dec.	
1. Zymotic Diseases.. ..	328	293	529	646	1796
2. Diseases of Uncertain Seat	89	97	98	118	402
3. Tubercular Diseases	453	438	348	374	1613
4. Diseases of Brain, &c.	445	334	361	386	1526
5. „ of Heart, &c.	210	189	177	180	756
6. „ of Lungs, &c.	984	629	396	786	2795
7. „ of Stomach, &c.	160	159	220	145	684
8. „ of Kidneys, &c.	74	72	51	81	278
9. Childbirth, Diseases of Uterus, &c.	24	35	20	30	109
10. Rheumatism, Diseases of the Joints, &c.	12	10	11	2	35
11. Diseases of the Skin, Cellular Tissue, &c.	15	11	13	16	55
12. Malformations	12	8	9	8	37
13. Premature Birth	67	58	59	71	255
14. Atrophy and Debility	160	136	237	188	721
15. Old Age	119	79	93	98	389
16. Privation, Cold, &c. .. ..	..	1	..	..	1
17. Inquests	164	143	168	186	661
Causes not specified	18	11	7	10	46
All Causes	3334	2703	2797	3325	12159
Total Zymotics	328	293	529	646	1796
Smallpox	1	..	..	..	1
Measles.. ..	9	7	25	290	331
Scarlatina	53	32	26	76	187
Hooping Cough	89	101	52	71	313
Diarrhœa	17	34	306	74	431
Fever { Typhus	8	6	7	11	32
Typhoid	30	22	39	34	125
Other, or Doubtful	2	1	..	1	4

ZYMOTICS.

This class of diseases occasioned 1,796 deaths during the year 1888, and accounted for 14·8 per cent. of the total mortality within the City during the same period. The average number of deaths from these diseases for the preceding ten years was 2,833, and the percentage death rate for 1888 was 4·6 per cent. less than the proportional rate of zymotic deaths to deaths from all causes during the preceding decennial period. The following table shows the localities and the periods of their fatal prevalence :—

WARDS, &c.	Deaths from all Causes.	ZYMOTICS.				
		Quarters.				Per Centage of Zymotic Deaths to Deaths from all Causes.
		March.	June.	Sept.	Dec.	
Scotland	1376	26	38	78	77	15·9
Vauxhall	223	5	1	5	5	7·2
St. Paul's	158	2	4	4	1	7·0
Exchange	174	6	3	10	4	13·2
St. Anne's	426	3	4	22	34	14·8
Lime Street	173	3	1	10	9	13·3
Castle Street	10	..	..	..	..	..
St. Peter's	66	..	3	4	4	16·7
Pitt Street	120	3	5	6	3	14·2
Great George	210	5	7	11	6	13·8
Rodney Street	274	4	7	8	10	10·6
Abercromby	297	6	6	14	8	11·4
Liverpool Workhouse Hospital	1076	14	16	7	14	4·7
Royal Infirmary	110	2	1	1	..	3·6
Children's Infirmary	79	2	3	2	5	15·2
Infants' Hospital	1	..	..	..	..	..
Lying-in Hospital	4	..	..	..	..	..
Hahnemann Hospital	13	..	..	..	..	..
Consumption Hospital	14	..	..	..	..	..
North Hospital	153	5	..	1	1	4·6
Hospital for Women	14	..	..	..	..	..
Stanley Hospital	63	2	..	..	..	3·2
Royal South Hospital	212	3	2	1	3	4·2
West Derby Union Hospital	247	1	1	2	2	2·4
City Hospital North, Netherfield Road	23	6	..	1	14	91·3
City Hospital South, Grafton Street	9	..	..	..	8	88·9
City Hospital, Park Hill	53	12	6	12	5	66·0
Everton	2092	49	54	91	171	17·4
Kirkdale	1214	34	26	86	62	17·1
West Derby	1249	37	37	60	92	18·1
North Toxteth	1109	38	34	55	58	16·7
South Toxteth	917	60	34	38	50	19·8
City	12159	328	293	529	646	14·8

FEVER.

Fever accounted for 161 deaths within the City of Liverpool, being a decrease of 33 on the previous year. (The average number of deaths for the preceding ten years was 308.) The rate of its mortality was equal to 0·3 per 1,000 of the estimated population. Its percentage rate relatively to deaths from all causes was 1·2 during the first, 1·1 during the second, 1·6 during the third, and 1·4 during the fourth quarter of the year. Its annual rate relatively to deaths from all causes was 1·3 per cent., and relatively to deaths from zymotic causes 9·0 per cent. Its deaths included 88 males and 73 females; 49 persons below the age of 15; 54 between the ages of 15 and 30; and 58 above the age of 30.

Under the term Fever every form of continued fever is included; but the registers of deaths attribute 3 cases to gastric fever, 88 to typhoid fever, 34 to enteric fever, 32 to typhus, 2 to fever, and under that of febricula 2 deaths.

The following tables are in themselves sufficiently explanatory. The first compares the averages of deaths from fever during the preceding ten years with those during 1888; the second and third tables show the districts of the town and the periods of the year in which all forms of continued fever were most fatally prevalent; the fourth marks in streets the habitats of the disease, and the remaining tables the occupations and positions of its victims.

WARDS.	Exact Average of Fever Deaths for Pre- ceding Ten Years.	Deaths from Fever during the Year 1888.			
		Typhus.	Typhoid.	Other, or Doubtful.	Total.
Scotland	25	1	13	..	14
Vauxhall	6	1	1	..	2
St. Paul's	5	1	..	..	1
Exchange	4	1	4	..	5
St. Anne's	9	..	2	1	3
Lime Street	2	..	1	..	1
Castle Street .. . . .	..	..	..	..	..
St. Peter's	1	..	..	..	..
Pitt Street	1	..	2	..	2
Great George	2	1	2	..	3
Rodney Street	3	..	1	..	1
Abercromby	4	..	2	..	2
Everton	31	4	21	2	27
Kirkdale	19	..	12	1	13
West Derby	15	2	10	..	12
North Toxteth	16	..	10	..	10
South Toxteth	17	..	4	..	4
Hospital Deaths	148	21	40	..	61
Total	308	32	125	4	161

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

List of Streets in the City wherein Deaths from Typhus occurred during the Year 1888.

STREETS.	HOUSES.		Total.	STREETS.	HOUSES.		Total.
	Front.	Court.			Front.	Court.	
Banastre	1	1	2	Luther	1	..	1
Bembridge	1	..	1	Maiden's Green, High- field Street .. ..	..	1	1
Bent	2	..	2	Penton	1	..	1
Dryden .. .. .	..	2	2	Prince Edwin	1	..	1
Duckinfield .. ..	..	1	1	Rhiwlas	1	..	1
Fitzroy	1	..	1	Richmond Fair	1	..	1
Freemason's Row ..	1	..	1	Richmond Row	1	..	1
Granton Road	1	..	1	Silvester .. .. .	..	2	2
Great George	1	..	1	Smithdown Lane .. ..	..	2	2
Hopwood	1	..	1	Stonewall	1	..	1
Idris	1	..	1	Sumner	1	..	1
Jefferson	1	..	1	Trueman	1	..	1
Kew	1	..	1				
Lake	1	..	1				

List of Streets in the City wherein Two or more Deaths from Typhoid Fever occurred during the Year 1888.

STREETS.	HOUSES.		Total.	STREETS.	HOUSES.		Total.
	Front.	Court.			Front.	Court.	
Burnet	1	1	2	Rosalind	2	..	2
Edinburgh	2	..	2	Titchfield	2	..	2
Hornby .. .. .	..	4	4	Upper Stanhope	2	..	2
Newsham .. .. .	..	2	2	Upper Warwick	2	..	2
Pugin	2	..	2				

Occupations of Persons who (either themselves or members of their family) have died from Fever in the Workhouses or Hospitals of the City, tabulated into Wards from whence they came, during the Year 1888.

LIVERPOOL PARISH WORKHOUSE.

OCCUPATIONS.	WARDS.		TOTAL.
	Scotland.	Exchange.	
Labourers	4	1	5
Servants	1	..	1
Males	2	..	2
Females	3	1	4
Total	5	1	6

CITY HOSPITAL, NORTH (NETHERFIELD ROAD).

OCCUPATIONS.	WARDS.				Residence Unknown.	TOTAL.
	Scotland.	St. Anne's.	Everton.	West Derby.		
Labourers	2	..	..	1	..	3
Tradesmen	1	1	1	..	..	3
Servants .. .. .	..	..	..	..	1	1
Unknown .. .. .	..	1	..	..	..	1
Males .. .. .	..	1	..	1	..	2
Females	3	1	1	..	1	6
Total	3	2	1	1	1	8

CITY HOSPITAL (PARK HILL).

OCCUPATIONS.						WARDS.											TOTAL	
						Scotland.	Vauxhall.	St. Paul's.	Exchange.	St. Anne's.	Pitt Street.	Abercromby.	Everton.	Kirkdale.	West Derby.	North Toxteth.		South Toxteth.
Labourers	..	..	..	..	..	2	2	1	1	1	1	1	4	2	3	1	3	22
Tradesmen	..	..	..	..	..	1	..	..	..	..	..	1	3	..	..	..	1	8
Servants	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	2
Seamen	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	2
Males	..	..	..	..	..	2	2	..	1	..	2	7	1	1	2	2	2	20
Females	..	..	..	..	..	2	..	1	1	..	1	..	2	2	2	..	3	14
Total	..	..	..	..	..	4	2	1	1	1	1	2	9	3	3	2	5	34

CITY HOSPITAL SOUTH (GRAFTON STREET).

OCCUPATIONS.						WARDS.		TOTAL.
						Scotland.	North Toxteth.	
Labourers	..	..	..	..	..	1	..	1
Servants	..	..	..	..	..	..	1	1
Males	..	..	..	..	..	1	..	1
Females	..	..	..	..	..	..	1	1
Total	..	..	..	..	..	1	1	2

*OTHER INSTITUTIONS.

OCCUPATIONS.	WARDS.					Residences outside the City.	TOTAL.
	Abercromby.	Everton.	Kirkdale.	West Derby.	North Toxteth.		
Labourers .. .. .	..	1	1	..	..	2	4
Tradesmen .. .. .	..	..	..	2	2	..	4
Mercantile	1	..	..	..	..	..	1
Servants .. .. .	..	..	..	..	..	1	1
Seamen .. .. .	..	..	..	..	..	1	1
Males .. .. .	..	..	..	2	1	4	7
Females	1	1	1	..	1	..	4
Total	1	1	1	2	2	4	11

*ROYAL INFIRMARY	2
CHILDREN'S INFIRMARY	3
NORTHERN HOSPITAL	1
STANLEY HOSPITAL	1
ROYAL SOUTHERN HOSPITAL	3
WEST DERBY UNION HOSPITAL	1
(MILL ROAD)	

Occupations of Persons who (either themselves or members of their family) have died from Fever in the different Wards of the City during the Year 1888. (Not included in the foregoing Tables of Deaths in Work-houses and Hospitals.)

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.	Kirkdale.	West Derby.	North Toxteth.	South Toxteth.	
Labourers	10	..	1	2	..	..	..	..	..	1	..	..	5	7	5	4	1	36
Tradesmen	2	2	..	3	3	1	..	..	1	2	..	..	15	3	7	2	..	41
Professions and Mercantile	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	1	1	5
Seamen	1	..	..	..	..	..	..	..	1	..	..	..	3	2	..	2	2	11
Servants	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Police Constables .. ..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	1	..	4
Unknown .. .. .	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	2
Males	7	..	1	5	2	1	..	..	1	2	..	1	14	6	7	7	2	56
Females	7	2	..	..	1	..	..	..	1	1	1	1	13	7	5	3	2	44
Total	14	2	1	5	3	1	..	..	2	3	1	2	27	13	12	10	4	100

SCARLATINA.

Scarlatina accounted during the year for 187 deaths. (The average number of deaths for the preceding ten years was 433). The rate of its mortality was equal to 0·3 per 1000 of the estimated population. Its rate relatively to deaths from all causes was 1·6 per cent. in the first quarter, 1·2 in the second, 0·9 in the third, and 2·3 in the fourth quarter of the year; its annual rate relatively to all deaths was 1·5 per cent., and relatively to deaths from zymotic causes 10·4 per cent.

The first of the following tables gives a statistical history of the mortality of Scarlatina during the year 1888; the second is a record of the streets of the City wherein two or more deaths occurred from that disease.

WARDS.			QUARTERS.								YEAR.		
			March.		June.		Sept.		Dec.				
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Scotland	{	Below 5 years ..	..	1	..	2	..	1	..	2	..	6	6
	{	Above 5 years ..	1	..	1	..	..	..	1	..	3	..	3
Vauxhall	{	Below 5 years ..	..	..	..	1	..	..	..	..	..	1	1
	{	Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Paul's	{	Below 5 years ..	..	..	1	..	..	..	..	..	1	..	1
	{	Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Exchange	{	Below 5 years ..	..	..	..	..	..	1	..	1	..	..	1
	{	Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Anne's	{	Below 5 years ..	..	..	..	..	..	1	1	1	1	..	2
	{	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 ..	..	..	..	..	..	..	..	..	..	..	..
	{	Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Pitt Street	{	Below 5 years ..	..	..	..	..	..	..	1	..	1	..	1
	{	Above 5 years ..	..	..	..	1	..	..	..	..	1	..	1
Great George	{	Below 5 years ..	..	1	..	1	..	..	..	..	2	..	2
	{	Above 5 years ..	..	..	..	..	..	..	1	..	1	..	1
Rodney Street.. ..	{	Below 5 years ..	..	1	1	..	..	..	..	1	1	..	2
	{	Above 5 years ..	1	..	..	..	..	..	..	1	..	..	1
Abercromby	{	Below 5 years ..	..	..	..	1	1	..	..	1	1	..	2
	{	Above 5 years ..	..	1	..	1	..	..	..	..	2	..	2
Everton.. ..	{	Below 5 years ..	1	2	6	2	..	1	5	3	12	8	20
	{	Above 5 years ..	..	3	..	..	..	1	..	2	..	6	6
Kirkdale	{	Below 5 years ..	3	2	1	..	1	..	1	1	6	3	9
	{	Above 5 years ..	1	..	..	1	..	..	1	..	2	1	3
West Derby	{	Below 5 years ..	4	1	1	2	1	1	1	1	7	5	12
	{	Above 5 years ..	1	1	..	1	..	2	2	2	3	6	9
North Toxteth.. ..	{	Below 5 years ..	4	..	2	1	1	3	3	4	10	8	18
	{	Above 5 years ..	1	1	3	..	2	..	4	4	10	5	15
South Toxteth.. ..	{	Below 5 years ..	3	2	1	1	4	3	9	7	17	13	30
	{	Above 5 years ..	1	1	..	..	..	2	2	3	3	6	9
Workhouses and Hospitals	{	Below 5 years ..	2	2	..	1	..	..	3	6	5	9	14
	{	Above 5 years ..	6	5	..	..	..	1	..	4	6	10	16
City	{	Below 5 years ..	17	12	13	11	8	10	24	26	62	59	121
	{	Above 5 years ..	12	12	4	4	2	6	10	16	28	38	66

List of Streets in the City wherein Two or more Deaths from
Scarlatina occurred during the Year 1888.

STREETS.	HOUSES.		Total.		STREETS.	HOUSES.		Total
	Front	Court.				Front.	Court.	
Back Grafton	2		2		Loxdale	2		2
Beamish	3		3		Nicholson	2		2
Beaufort	3		3		Northbrook	2		2
Bedford	2		2		Northumberland ..	4	1	5
Binney	2		2		Peurith	2		2
Blair		3	3		Rectory	2		2
Burlington		3	3		Roache	2		2
Calder	2		2		Seacome	2		2
Cantsfield	2		2		Tavistock	3		3
Cartwright Place ..		2	2		Tees	2		2
Combermere	1	2	3		Upper Frederick ..	2		2
Copperfield	2		2		Walnut	4		4
Cromwell	2		2		Wolfe	5		5
Gelling	2		2					
Geraint	2		2					

MEASLES.

Measles occasioned 331 deaths. (The average number of deaths for the preceding ten years was 523.) Its percentage death-rate relatively to deaths from all causes was 0·3 in the first quarter of the year, 0·3 in the second, 0·9 in the third, and 8·7 in the fourth. Its annual percentage rate relatively to deaths from all causes was 2·7, and relatively to deaths from Zymotic causes 18·4.

WARDS.			QUARTERS.								YEAR.		
			March.		June.		Sept.		Dec.				
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Scotland	..	{ Below 5 years ..	..	..	..	..	2	..	27	20	29	20	49
		{ Above 5 years ..	..	..	..	..	..	..	1	1	1	1	2
Vauxhall	..	{ Below 5 years ..	..	..	..	..	..	..	1	1	1	1	2
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Paul's	..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Exchange	..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Anne's	..	{ Below 5 years ..	..	..	..	..	..	..	12	8	12	8	20
		{ Above 5 years ..	..	..	..	..	..	..	1	..	1	..	1
Lime Street	..	{ Below 5 years ..	..	..	..	..	..	..	5	1	5	1	6
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Castle Street	..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Peter's	..	{ Below 5 years ..	..	..	..	..	..	..	1	1	1	1	2
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Pitt Street	..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Great George	..	{ Below 5 years ..	..	..	2	..	..	..	..	..	2	..	2
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Rodney Street..	..	{ Below 5 years ..	..	..	..	..	..	1	1	1	1	2	3
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Abercromby	..	{ Below 5 years ..	..	..	..	..	..	..	1	2	1	2	3
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Everton	..	{ Below 5 years ..	..	..	3	..	6	5	49	39	58	44	102
		{ Above 5 years ..	..	..	..	..	..	..	8	7	8	7	15
Kirkdale	..	{ Below 5 years ..	..	2	..	1	3	3	21	11	24	17	41
		{ Above 5 years ..	..	..	..	..	..	..	..	1	..	1	1
West Derby	..	{ Below 5 years ..	2	1	..	..	..	..	26	17	28	18	46
		{ Above 5 years ..	..	1	..	..	..	..	2	2	2	3	5
North Toxteth	..	{ Below 5 years ..	2	..	..	..	2	1	3	2	7	3	10
		{ Above 5 years ..	..	..	1	..	..	..	..	1	1	1	2
South Toxteth	..	{ Below 5 years ..	1	..	..	..	..	..	4	2	5	2	7
		{ Above 5 years ..	..	..	..	..	..	1	1	..	1	1	2
Workhouses and Hospitals	..	{ Below 5 years ..	..	..	..	..	..	1	2	4	2	5	7
		{ Above 5 years ..	..	..	..	..	..	..	2	1	2	1	3
City	..	{ Below 5 years ..	5	3	5	1	13	11	153	109	176	124	300
		{ Above 5 years ..	..	1	1	..	..	1	15	13	16	15	31

DIARRHŒA.

Diarrhœa accounted for 431 deaths. (The average number of deaths for the preceding ten years was 669). Its percentage death-rate relatively to deaths from all causes was 0·5 in the first quarter of the year, 1·3 in the second, 10·9 in the third, and 2·2 in the fourth quarter. Its annual percentage rate relatively to deaths from all causes was 3·5, and relatively to deaths from Zymotic causes 24·0.

WARDS.			QUARTERS.								YEAR.		
			March.		June.		Sept.		Dec.				
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Scotland	..	{ Below 5 years ..	1	1	1	1	33	21	8	2	43	25	68
		{ Above 5 years ..	..	1	..	..	..	2	..	..	..	3	3
Vauxhall	..	{ Below 5 years ..	..	..	..	..	1	3	..	..	1	3	4
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Paul's	..	{ Below 5 years ..	..	..	..	..	1	1	..	..	1	1	2
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Exchange	..	{ Below 5 years ..	1	..	1	2	3	..	..	..	5	2	7
		{ Above 5 years ..	..	1	..	..	..	1	..	..	..	2	2
St. Anne's	..	{ Below 5 years ..	1	..	..	2	9	8	3	..	13	10	23
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Lime Street	..	{ Below 5 years ..	1	..	..	..	3	3	1	..	5	3	8
		{ Above 5 years ..	1	..	..	..	..	..	..	..	1	..	1
Castle Street	..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Peter's	..	{ Below 5 years ..	..	..	..	1	1	1	..	1	1	3	4
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Pitt Street	..	{ Below 5 years ..	..	..	..	..	2	1	..	..	2	1	3
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Great George	..	{ Below 5 years ..	..	..	..	..	6	1	2	..	8	1	9
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Rodney Street..	..	{ Below 5 years ..	..	..	..	..	2	2	1	2	3	4	7
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Abercromby	..	{ Below 5 years ..	..	..	..	..	5	3	3	..	8	3	11
		{ Above 5 years ..	..	1	..	..	..	..	..	..	..	1	1
Everton	..	{ Below 5 years ..	2	..	5	2	28	22	13	4	48	28	76
		{ Above 5 years ..	..	..	1	1	3	..	3	1	7	2	9
Kirkdale	..	{ Below 5 years ..	..	..	1	..	21	27	3	1	25	28	53
		{ Above 5 years ..	..	..	..	..	1	1	..	..	1	1	2
West Derby	..	{ Below 5 years ..	1	..	2	3	15	18	3	3	21	24	45
		{ Above 5 years ..	..	..	..	1	..	3	..	..	..	4	4
North Toxteth	..	{ Below 5 years ..	1	1	3	1	22	5	3	9	29	16	45
		{ Above 5 years ..	..	..	..	..	1	1	..	..	1	1	2
South Toxteth	..	{ Below 5 years ..	..	1	..	..	12	9	5	2	17	12	29
		{ Above 5 years ..	..	..	..	..	..	..	1	..	1	..	1
Workhouses and Hospitals	..	{ Below 5 years ..	..	..	..	..	1	1	..	..	1	1	2
		{ Above 5 years ..	1	1	4	2	..	2	..	..	5	5	10
City	..	{ Below 5 years ..	8	3	13	12	165	126	45	24	231	165	396
		{ Above 5 years ..	2	4	5	4	5	10	4	1	16	19	35

List of Streets in the City wherein Three or more Deaths from
Diarrhœa occurred during the Year 1888.

STREETS.	HOUSES.		Total.			STREETS.	HOUSES.		Total.
	Front.	Court.					Front.	Court.	
Arkwright	2	1	3			Mann	1	3	4
Arlington	4	..	4			Maynard .. ..	..	3	3
Beaufort	4	..	4			Newsham .. ..	..	3	3
Beau	1	3	4			Pakington	3	..	3
Cemaes	3	..	3			Robsart	3	..	3
Flinders	3	..	3			Smithdown Lane	2	1	3
Friar	3	..	3			Snowdon	3	..	3
Gerard	4	..	4			Tulloch	3	..	3
Great Homer	1	3	4			Upper Parliament	3	..	3
Hornby	2	5	7						
Kew	1	2	3						

DIARRHŒA IN DATES OF DEATH, 1888.

DATE. June.	No. of Deaths.	Mean Reading of Barometer.	Mean Tempe- rature.	RAIN.		Mean Daily Velocity in Miles	WIND. DIRECTION.
				Amount in Inches.	Hours.		
1	..	30.207	50.6	0.037	1.3	295	WNW
2	..	30.088	55.8	0.224	7.2	412	ESE
3	..	29.852	57.9	0.040	1.5	455	SW
4	..	30.048	50.8	0.018	1.8	302	WNW
5	2	30.139	49.6	0.087	3.1	481	E
6	..	29.926	52.2	0.048	2.5	399	E
7	..	29.757	57.9	0.096	4.5	255	SE
8	..	29.633	60.1	0.051	2.6	362	SE
9	1	29.621	54.7	0.040	1.2	421	W
10	..	30.005	54.1	..	..	579	W
11	..	29.991	60.9	..	..	237	SSE
12	1	29.638	53.3	0.060	2.3	499	SE & SW
13	..	29.758	52.6	0.106	3.0	220	SE & VAR
14	..	29.940	54.5	0.023	1.1	214	WNW & S
15	..	29.916	52.8	0.044	3.5	225	SSE & VAR
16	1	29.997	52.9	..	..	285	NNE
17	..	30.122	57.9	..	..	226	WNW & E
18	2	30.223	56.7	..	..	228	NE & NW
19	1	30.236	53.7	..	..	248	NW & E
20	..	30.090	56.3	0.020	1.7	293	NE & E
21	..	30.048	61.4	0.008	0.6	491	NE & E
22	..	30.128	55.3	0.187	1.6	407	E
23	..	30.235	61.5	..	..	341	ENE
24	..	30.076	63.8	..	..	385	E
25	1	30.014	70.8	0.129	1.7	265	E
26	1	29.860	65.9	..	..	234	E & W N W
27	1	29.659	62.3	0.753	13.8	230	SE
28	1	29.535	55.1	0.032	3.8	522	WSW
29	..	29.543	53.2	0.028	3.1	403	WSW
30	..	29.768	53.9	..	..	319	WNW

DIARRHŒA IN DATES OF DEATH, 1888.

DATE. July.	No. of Deaths.	Mean Reading of Barometer.	Mean Tempe- rature.	RAIN.		WIND.	
				Amount in Inches.	Hours.	Mean Daily Velocity in Miles.	DIRECTION.
1	1	30.001	57.5	0.233	6.2	169	WNW
2	2	29.658	56.0	0.756	10.1	505	SE
3	2	29.389	57.1	0.262	3.1	881	WSW
4	1	29.415	57.5	..	..	288	SW & W
5	3	29.454	58.2	0.149	1.3	243	ENE & VAR
6	2	29.738	51.1	0.074	2.6	325	ENE
7	3	29.991	59.3	..	..	197	ENE
8	1	30.059	57.4	0.006	0.5	223	WNW
9	1	29.908	54.5	0.067	1.4	552	SW & WNW
10	3	29.892	50.7	0.184	4.5	658	WNW
11	..	29.854	53.6	..	..	652	NW
12	..	30.061	54.1	..	..	524	NW & W
13	1	30.108	57.8	..	..	420	W
14	1	30.005	59.1	0.693	9.5	148	NW
15	1	29.795	54.1	0.107	6.1	289	ESE
16	2	29.482	57.6	0.025	1.6	338	E
17	..	29.455	58.5	0.532	12.2	188	ENE & NW
18	1	29.594	59.3	..	..	306	NE & E
19	2	29.853	60.7	..	..	123	NNE & VAR
20	1	29.841	61.2	0.065	1.9	204	SE
21	1	29.801	61.8	0.027	1.8	209	SW & S
22	3	29.701	61.7	0.066	2.1	350	SE & S
23	1	29.489	59.7	0.110	4.7	348	SW & SE
24	1	29.550	60.3	0.477	5.5	558	SW
25	3	29.523	61.5	0.061	1.7	423	SSE & SW
26	3	29.639	57.0	0.037	1.1	483	WSW
27	4	29.683	58.5	0.372	9.0	422	ESE
28	3	29.628	54.0	0.460	9.2	377	ENE
29	4	29.726	54.9	0.224	6.2	179	SE & E
30	4	29.587	52.6	..	..	416	ENE
31	2	29.848	54.3	..	..	117	NW & ENE

DIARRHOEA IN DATES OF DEATH, 1888.

DATE. August.	No. of Deaths.	Mean Reading of Barometer.	Mean Tempe- rature.	RAIN.		Mean Daily Velocity in Miles.	WIND. DIRECTION.
				Amount in Inches.	Hours.		
1	4	30·018	55·9	..	..	139	NW & VAR
2	5	30·147	55·7	..	..	248	WNW
3	2	30·175	59·1	0·005	0·5	337	SW
4	2	29·968	55·7	0·437	8·3	393	WSW
5	3	29·932	55·7	0·223	4·0	736	NW & W
6	7	30·100	58·8	0·087	5·8	248	W
7	3	30·041	63·6	0·087	2·9	489	SW & W
8	3	30·060	60·8	..	..	367	W
9	4	30·054	63·5	..	..	178	SE & W
10	8	30·000	67·0	..	..	212	WNW & SE
11	1	30·033	62·6	0·006	0·7	170	E & VAR
12	1	29·807	59·5	0·048	3·6	332	SE & SSW
13	2	29·753	55·7	0·060	1·7	877	WSW
14	5	30·160	56·2	..	..	356	WNW
15	5	30·153	54·9	..	..	199	S & VAR
16	2	30·208	52·7	..	..	288	NE & E
17	4	30·231	54·0	..	..	245	NE & N
18	5	30·287	53·4	..	..	128	NW & NE
19	6	30·125	59·5	0·151	5·5	266	SE & S
20	7	29·859	56·9	0·247	6·8	320	SE
21	3	29·623	60·3	0·126	2·3	132	WSW & SE
22	12	29·764	58·7	0·039	0·7	486	W
23	6	29·723	60·8	0·160	6·4	372	SE & S
24	5	29·532	57·9	0·164	4·1	316	SE & E
25	4	29·669	59·7	0·059	1·7	230	SE & S
26	5	29·814	61·2	0·050	1·6	380	SW
27	4	29·792	58·8	0·053	1·6	424	SW & W
28	4	29·667	53·7	0·716	12·3	345	S & VAR
29	1	29·760	53·2	0·084	3·5	603	WSW
30	7	29·929	55·4	0·008	0·8	437	WSW
31	5	30·249	54·3	..	..	480	WNW

DIARRHOEA IN DATES OF DEATH, 1888.

DATE. Sept.	No. of Deaths.	Mean Reading of Barometer	Mean Tempe- rature.	RAIN.		Mean Daily Velocity in Miles.	WIND. DIRECTION.
				Amount in Inches.	Hours.		
1	2	30.213	58.6	0.144	5.9	382	SW
2	3	29.947	56.9	0.007	0.5	336	W
3	9	29.939	57.4	0.032	1.0	170	WSW
4	7	29.878	59.6	0.034	1.9	254	WSW
5	5	29.960	56.0	0.107	6.5	253	WSW
6	7	29.948	56.9	0.106	2.4	595	WSW
7	7	30.078	55.6	0.126	2.0	523	NW & W
8	2	30.433	52.4	..	..	209	ENE
9	4	30.358	50.6	..	..	282	NE & N
10	1	30.187	55.1	.	..	313	WNW & NE
11	4	30.281	54.4	..	..	452	W
12	4	30.445	55.8	..	..	194	WSW
13	2	30.444	58.6	..	..	325	SE & E
14	..	30.269	58.6	..	..	355	SE & E
15	1	30.124	57.6	0.018	1.7	363	SE
16	1	30.241	52.7	..	..	303	NW
17	4	30.290	55.1	..	..	145	WNW
18	7	30.315	55.0	..	..	126	WNW
19	4	30.327	56.7	..	..	300	E
20	5	30.300	58.1	..	..	248	E
21	4	30.274	54.6	..	..	156	SE & E
22	6	30.248	52.7	..	..	259	SE
23	4	30.171	54.2	..	..	252	SE
24	5	30.013	52.9	..	..	174	SE & NE
25	3	30.163	48.4	..	..	487	E
26	4	30.294	52.3	..	..	305	ESE
27	7	30.190	55.8	0.041	1.0	383	SE & E
28	4	29.973	54.4	0.017	1.5	402	SE
29	4	29.733	51.2	0.021	1.5	454	W
30	2	29.788	45.7	0.029	1.5	494	NW

DIARRHŒA IN DATES OF DEATH, 1888.

DATE. October	No. of Deaths.	Mean Reading of Barometer.	Mean Tempera- ture.	RAIN.		Mean Daily Velocity in Miles.	WIND. DIRECTION.
				Amount in Inches.	Hours.		
1	6	29.636	41.7	0.230	2.1	323	NNE
2	2	29.334	41.2	0.178	3.4	275	SW & W
3	2	29.443	44.5	0.031	0.9	253	N & SE
4	1	29.558	43.6	0.200	2.8	627	WNW
5	1	29.634	44.5	0.187	5.0	861	NW & W
6	4	29.928	42.6	0.036	1.3	254	NNE
7	2	30.158	46.9	0.033	1.1	236	NW & N
8	1	30.198	49.3	..	..	111	SSE & WNW
9	2	30.142	50.1	..	..	155	W & SE
10	4	30.105	49.4	0.023	0.5	219	W
11	2	30.111	50.1	..	..	357	W
12	2	29.948	50.5	0.021	0.5	823	W
13	1	29.964	44.6	..	..	477	NW & N
14	3	30.202	46.9	..	..	222	NE & WNW
15	1	30.323	48.0	..	..	402	WNW
16	..	30.342	47.9	..	..	133	SE & S
17	1	30.283	48.9	..	..	194	SE
18	..	30.203	49.5	..	..	347	SE
19	2	30.239	46.4	..	..	415	SE
20	..	30.342	45.7	..	..	402	SE & S
21	1	30.446	46.1	..	..	270	SE & E
22	3	30.442	41.4	..	..	337	SE
23	1	30.262	46.0	..	..	131	SE & SW
24	1	30.043	48.9	0.007	0.7	245	SSE & SSW
25	2	29.840	55.6	0.006	0.9	331	SSE
26	2	29.876	62.1	0.032	2.0	441	SSW
27	..	30.010	62.0	0.154	2.5	573	SSW
28	2	29.949	55.8	0.113	3.1	558	SSW
29	..	30.083	51.4	0.078	1.6	325	SW
30	1	29.906	50.1	0.263	4.8	334	SW & SSE
31	..	29.795	49.0	0.071	1.9	396	SW & W

WHOOPIING COUGH.

Whooping Cough occasioned 313 deaths. (The average number of deaths for the preceding ten years was 408). Its percentage death-rate relatively to deaths from all causes was 2·7 in the first quarter of the year, 3·7 in the second, 1·9 in the third, and 2·1 in the fourth; its percentage rate relatively to deaths from all causes was 2·6, and relatively to deaths from Zymotic causes 17·4.

DEATHS FROM WHOOPING COUGH.

WARDS.			QUARTERS.								YEAR.		
			March.		June.		Sept.		Dec.				Total.
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Scotland	..	{ Below 5 years	4	4	10	4	3	3	1	3	18	14	32
		{ Above 5 years	..	..	..	..	..	..	..	..	..	..	..
Vauxhall	..	{ Below 5 years	..	..	..	..	..	..	1	1	1	1	2
		{ Above 5 years	..	..	..	..	..	..	..	..	..	..	..
St. Paul's	..	{ Below 5 years	..	..	..	1	..	..	1	..	1	1	2
		{ Above 5 years	..	..	..	..	..	..	..	..	..	..	..
Exchange	..	{ Below 5 years	1	1	..	..	1	..	1	1	3	2	5
		{ Above 5 years	..	..	..	..	..	..	..	..	..	..	..
St. Anne's	..	{ Below 5 years	..	..	..	..	1	2	2	2	3	4	7
		{ Above 5 years	..	..	..	..	1	..	..	..	1	..	1
Line Street	..	{ Below 5 years	..	..	..	..	..	..	..	..	..	..	..
		{ 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	..	..	2	1	..	..	1	..	3	1	4
		{ Above 5 years	..	..	..	..	..	..	..	..	..	..	..
Great George	..	{ Below 5 years	..	1	1	2	..	1	..	..	1	4	5
		{ Above 5 years	..	..	..	..	..	..	..	..	..	..	..
Rodney Street..	..	{ Below 5 years	1	..	2	2	2	..	1	1	6	3	9
		{ Above 5 years	..	..	..	..	..	..	..	..	..	..	..
Abercromby	..	{ Below 5 years	1	..	1	1	1	1	2	..	5	2	7
		{ Above 5 years	..	..	..	..	..	..	..	..	..	..	..
Everton	..	{ Below 5 years	3	5	4	10	3	5	7	8	17	28	45
		{ Above 5 years	..	2	..	..	..	..	1	1	1	3	4
Kirkdale	..	{ Below 5 years	5	5	3	7	5	5	4	4	17	21	38
		{ Above 5 years	..	1	..	..	..	..	1	..	1	1	2
West Derby	..	{ Below 5 years	2	5	4	6	4	6	4	12	14	29	43
		{ Above 5 years	..	1	1	..	..	1	..	..	1	2	3
North Toxteth	..	{ Below 5 years	5	5	7	3	2	3	3	2	17	13	30
		{ Above 5 years	..	..	..	..	..	..	..	..	..	..	..
South Toxteth	..	{ Below 5 years	16	19	12	10	1	..	4	..	33	29	62
		{ Above 5 years	1	1	..	3	..	..	..	..	1	4	5
Workhouses and Hospitals	..	{ Below 5 years	..	..	4	..	..	1	1	1	5	2	7
		{ Above 5 years	..	..	..	..	..	..	..	..	..	..	..
City	..	{ Below 5 years	38	45	50	47	23	27	33	35	144	154	298
		{ Above 5 years	1	5	1	3	1	1	2	1	5	10	15

CROUP.

The deaths (108) from this disease were 56 below the average of the preceding ten years (1878 to 1887) and 60 lower than the average for the ten years 1868 to 1877.

DEATHS FROM CROUP.

WARDS.			QUARTERS.								YEAR.				
			March.		June.		Sept.		Dec.						
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total		
Scotland	..	{	Below 5 years	..	2	2	1	3	..	..	2	..	5	5	10
		{	Above 5 years	..	..	..	..	..	1	..	..	..	1	1	1
Vauxhall	..	{	Below 5 years	..	..	..	..	..	..	1	..	..	1	1	1
		{	Above 5 years	..	..	..	..	..	..	..	..	..	..	..	..
St. Paul's	..	{	Below 5 years	..	1	..	..	..	1	..	..	1	1	1	2
		{	Above 5 years	..	..	..	..	..	..	..	..	..	..	..	..
Exchange	..	{	Below 5 years	..	..	..	..	..	..	..	..	..	..	..	..
		{	Above 5 years	..	..	..	..	..	..	..	..	..	..	..	..
St. Anne's	..	{	Below 5 years	..	1	..	..	..	1	..	..	1	1	1	2
		{	Above 5 years	..	..	..	..	..	..	..	..	..	..	..	..
Lime Street	..	{	Below 5 years	..	..	..	1	..	1	..	..	..	2	2	2
		{	Above 5 years	..	..	..	..	..	1	..	..	1	1	1	1
Castle Street	..	{	Below 5 years	..	..	..	..	..	..	..	..	..	..	..	..
		{	Above 5 years	..	..	..	..	..	..	..	..	..	..	..	..
St. Peter's	..	{	Below 5 years	..	..	..	..	1	..	1	..	2	..	2	2
		{	Above 5 years	..	..	..	..	..	..	..	..	..	..	..	..
Pitt Street	..	{	Below 5 years	..	..	1	..	..	..	..	..	..	1	1	1
		{	Above 5 years	..	..	..	..	..	..	..	..	..	..	..	..
Great George	..	{	Below 5 years	..	..	..	..	..	..	..	..	..	..	..	..
		{	Above 5 years	..	..	..	..	..	..	..	..	..	..	..	..
Rodney Street	..	{	Below 5 years	..	..	..	1	..	..	..	..	1	..	1	1
		{	Above 5 years	..	..	..	..	..	..	..	..	..	..	..	..
Abercromby	..	{	Below 5 years	..	..	..	1	..	..	..	..	1	..	1	1
		{	Above 5 years	..	..	..	..	..	..	..	..	..	..	..	..
Everton	..	{	Below 5 years	..	5	3	6	2	4	1	1	1	16	7	23
		{	Above 5 years	..	..	1	..	..	..	..	1	..	2	2	2
Kirkdale	..	{	Below 5 years	..	3	3	1	4	1	3	2	3	7	13	20
		{	Above 5 years	..	..	..	..	..	..	..	..	..	..	..	..
West Derby	..	{	Below 5 years	..	5	3	1	2	..	..	1	4	7	9	16
		{	Above 5 years	..	..	..	..	..	..	1	2	1	2	3	3
North Toxteth	..	{	Below 5 years	..	1	..	2	1	1	1	2	1	6	3	9
		{	Above 5 years	..	..	..	..	..	..	..	..	..	..	..	..
South Toxteth	..	{	Below 5 years	..	..	1	2	..	1	..	3	1	6	2	8
		{	Above 5 years	..	1	..	..	1	..	..	..	1	1	1	2
Workhouses and Hospitals	..	{	Below 5 years	..	..	..	1	..	..	..	..	1	..	1	1
		{	Above 5 years	..	..	..	..	..	..	..	..	..	..	..	..
City	..	{	Below 5 years	..	18	13	16	13	8	8	12	11	54	45	99
		{	Above 5 years	..	1	1	..	1	..	2	1	3	2	7	9

DIPHTHERIA.

The number of deaths (66) from this disease was 14 below the average of the preceding ten years (1878 to 1887), and 16 above the average for the ten years 1868 to 1877.

DEATHS FROM 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	..	1
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..	..
Vauxhall ..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..	..
St. Paul's ..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..	..
Exchange ..	{ Below 5 years ..	..	..	1	..	..	..	..	..	..	..	1	1
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..	..
St. Anne's ..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..	..
Lime Street ..	{ Below 5 years ..	..	..	..	..	..	1	..	..	..	..	1	1
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..	..
Castle Street ..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..	..
St. Peter's ..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Above 5 years ..	..	..	..	1	..	..	..	..	..	..	1	1
Pitt Street ..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Above 5 years ..	..	..	1	..	..	..	..	..	..	..	1	1
Great George ..	{ Below 5 years ..	..	1	..	..	1	..	..	..	..	1	1	2
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..	..
Rodney Street..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..	..
Abercromby ..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..	..
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..	..
Everton ..	{ Below 5 years ..	..	..	1	..	..	..	2	..	2	2	1	3
	{ Above 5 years ..	..	1	1	..	..	..	..	4	1	5	6	6
Kirkdale ..	{ Below 5 years ..	..	..	1	..	1	..	..	..	1	1	2	2
	{ Above 5 years ..	..	..	..	1	..	..	..	..	..	1	1	1
West Derby ..	{ Below 5 years ..	..	..	2	2	2	1	..	2	3	6	9	9
	{ Above 5 years ..	..	..	..	1	1	..	1	..	2	1	3	3
North Toxteth..	{ Below 5 years ..	..	1	3	2	1	1	1	3	7	5	12	12
	{ Above 5 years ..	..	2	2	..	2	..	1	..	3	4	7	7
South Toxteth..	{ Below 5 years ..	..	1	1	..	..	..	2	..	3	1	4	4
	{ Above 5 years ..	..	1	1	..	..	..	..	..	1	1	2	2
Workhouses and Hospitals ..	{ Below 5 years ..	..	1	1	..	2	1	2	..	1	2	6	8
	{ Above 5 years ..	..	..	1	..	1	..	..	..	..	2	2	2
City ..	{ Below 5 years ..	..	4	10	5	6	4	4	7	3	20	23	43
	{ Above 5 years ..	..	4	6	..	6	1	..	2	4	7	16	23

OTHER ZYMOTICS.

Under the term of other Zymotics are included:—Small Pox, Chicken Pox, Cholera, Dysentery, Infantile Remittent Fever, Erysipelas, Syphilis, Thrush, Puerperal Fever, Rheumatic Fever, Quinsy, Mumps, Ague, 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	3	5	2	1	..	2	2	10	7	17
		{ Above 5 years ..	1	1	4	1	2	1	2	1	9	4	13
Vauxhall	..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
		{ Above 5 years ..	3	..	..	..	..	1	..	..	3	1	4
St. Paul's	..	{ Below 5 years ..	..	..	..	1	..	1	..	..	..	2	2
		{ Above 5 years ..	..	1	..	..	..	..	..	..	..	1	1
Exchange	..	{ Below 5 years ..	..	..	..	..	..	1	..	..	..	1	1
		{ Above 5 years ..	..	..	..	..	..	1	..	..	1	..	1
St. Anne's	..	{ Below 5 years ..	..	..	..	1	..	..	1	..	1	1	2
		{ Above 5 years ..	..	1	..	..	..	1	..	1	1	1	2
Lime Street	..	{ Below 5 years ..	1	..	..	..	..	1	..	..	1	1	2
		{ Above 5 years ..	..	..	..	..	..	..	1	..	1	..	1
Castle Street	..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Peter's	..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
		{ Above 5 years ..	..	..	..	1	..	1	..	..	..	2	2
Pitt Street	..	{ Below 5 years ..	..	..	..	..	..	1	..	..	..	1	1
		{ Above 5 years ..	..	..	..	1	2	..	..	..	2	1	3
Great George	..	{ Below 5 years ..	1	..	..	..	2	..	1	..	4	..	4
		{ Above 5 years ..	1	..	..	..	..	..	..	1	..	1	1
Rodney Street	..	{ Below 5 years ..	..	..	..	..	..	1	..	1	..	2	2
		{ Above 5 years ..	1	..	1	..	..	..	1	..	2	1	3
Abercromby	..	{ Below 5 years ..	1	2	..	..	1	..	..	..	2	2	4
		{ Above 5 years ..	..	..	..	1	..	..	..	..	..	1	1
Everton	..	{ Below 5 years ..	1	3	1	3	1	2	1	1	4	9	13
		{ Above 5 years ..	3	3	1	1	2	2	2	..	8	6	14
Kirkdale	..	{ Below 5 years ..	2	1	..	1	3	3	1	..	6	5	11
		{ Above 5 years ..	1	1	1	1	3	1	2	2	7	5	12
West Derby	..	{ Below 5 years ..	1	2	2	1	1	..	..	2	4	5	9
		{ Above 5 years ..	2	..	..	1	1	1	2	..	5	2	7
North Toxteth	..	{ Below 5 years ..	1	..	1	1	..	3	3	1	5	5	10
		{ Above 5 years ..	2	3	2	1	1	2	4	..	9	6	15
South Toxteth	..	{ Below 5 years ..	1	3	..	2	1	2	..	3	2	10	12
		{ Above 5 years ..	1	2	..	1	..	1	..	..	1	4	5
Workhouses and Hospitals	..	{ Below 5 years ..	1	1	..	..	1	..	1	..	3	1	4
		{ Above 5 years ..	4	5	3	1	..	..	4	3	11	9	20
City	..	{ Below 5 years ..	12	15	9	12	11	15	10	10	42	52	94
		{ Above 5 years ..	19	17	12	10	11	10	18	8	60	45	105

TUBERCULAR DISEASES.

This group of diseases includes Phthisis, Scrofula, Tabes Mesenterica, and Hydrocephalus. They occasioned 1,613 deaths in the City of Liverpool during the year 1888. (The average number of deaths for the preceding ten years was 1,895). The death-rate was 2·7 per 1,000 of the estimated population; their percentage death-rate relatively to deaths from all causes was 13·3.

PHTHISIS.

The deaths from Phthisis amounted to 1,145, the average number for the preceding ten years being 1,334.

WARDS.			QUARTERS.								YEAR.					
			March.		June.		Sept.		Dec.							
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total			
Scotland	{	Below 5 years	..	..	..	1	1	..	2	..	3	1	4	
			{	Above 5 years	..	9	8	12	9	5	12	11	11	37	40	77
Vauxhall	{	Below 5 years	..	..	..	..	..	..	..	1	..	1	..	1
			{	Above 5 years	..	2	1	1	2	2	1	2	1	7	5	12
St. Paul's	{	Below 5 years	..	..	..	..	..	..	..	..	..	..	..	..
			{	Above 5 years	..	2	2	1	4	4	4	3	..	10	10	20
Exchange	{	Below 5 years	..	..	..	..	..	..	..	..	..	..	..	..
			{	Above 5 years	..	1	2	2	..	2	4	1	2	6	8	14
St. Anne's	{	Below 5 years	..	1	..	..	..	1	..	..	..	1	1	2
			{	Above 5 years	..	6	6	9	1	1	3	3	1	19	11	30
Lime Street	{	Below 5 years	..	..	..	..	..	..	..	..	..	..	..	..
			{	Above 5 years	..	2	1	1	5	..	..	2	2	5	8	13
Castle Street	{	Below 5 years	..	..	..	..	..	..	..	..	..	..	..	..
			{	Above 5 years	..	..	..	..	..	1	..	..	..	1	..	1
St. Peter's	{	Below 5 years	..	..	..	..	..	..	..	2	..	2	..	2
			{	Above 5 years	..	1	..	1	..	1	1	2	3	3	3	6
Pitt Street	{	Below 5 years	..	..	..	..	..	..	..	..	..	..	..	..
			{	Above 5 years	..	..	2	1	1	1	..	..	1	2	4	6
Great George	{	Below 5 years	..	1	..	..	..	..	..	..	..	1	..	1
			{	Above 5 years	..	3	3	2	3	1	2	2	2	8	10	18
Rodney Street..	{	Below 5 years	..	..	..	..	..	..	..	..	..	..	..	..
			{	Above 5 years	..	2	1	2	4	3	2	4	5	11	12	23
Abercromby	{	Below 5 years	..	..	..	..	..	..	..	..	..	..	..	..
			{	Above 5 years	..	4	4	7	3	2	5	1	3	14	15	29
Everton..	{	Below 5 years	..	1	..	2	1	..	1	..	1	3	3	6
			{	Above 5 years	..	23	26	18	19	19	17	16	24	76	86	162
Kirkdale	{	Below 5 years	..	2	..	1	..	1	..	1	..	5	..	5
			{	Above 5 years	..	9	17	15	9	6	11	12	9	42	46	88
West Derby	{	Below 5 years	..	1	..	2	..	2	..	..	1	5	1	6
			{	Above 5 years	..	22	13	18	16	8	13	14	15	62	57	119
North Toxteth	{	Below 5 years	..	3	..	1	1	..	..	1	..	5	1	6
			{	Above 5 years	..	13	22	12	18	11	10	9	6	45	56	101
South Toxteth..	{	Below 5 years	..	1	1	2	..	..	2	..	..	3	3	6
			{	Above 5 years	..	11	15	6	9	10	7	3	2	30	33	63
Workhouses and Hospitals	{	Below 5 years	..	1	..	..	..	..	..	..	1	1	1	2
			{	Above 5 years	..	49	42	53	21	39	24	53	41	194	128	322
City	{	Below 5 years	..	11	1	8	3	4	4	4	6	27	14	41
			{	Above 5 years	..	159	165	161	124	115	116	137	127	572	532	1104

DEATHS FROM THE OTHER TUBERCULAR DISEASES.

WARDS.			QUARTERS.								YEAR.			
			March.		June.		Sept.		Dec.					
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total	
Scotland	..	{	Below 5 years	10	8	7	5	1	6	9	4	27	23	50
	..	{	Above 5 years	6	1	4	1	3	2	..	1	13	5	18
Vauxhall	..	{	Below 5 years	1	1	1	..	1	..	..	..	3	1	4
	..	{	Above 5 years	..	..	2	..	..	..	..	..	2	..	2
St. Paul's	..	{	Below 5 years	2	1	..	1	..	..	1	1	3	3	6
	..	{	Above 5 years	..	..	..	..	..	..	..	..	..	..	..
Exchange	..	{	Below 5 years	..	..	..	..	1	..	..	..	1	..	1
	..	{	Above 5 years	..	..	..	..	..	..	..	..	..	..	..
St. Anne's	..	{	Below 5 years	1	2	3	..	1	..	2	1	7	3	10
	..	{	Above 5 years	..	..	..	..	..	..	..	..	..	..	..
Lime Street	..	{	Below 5 years	3	..	..	1	..	..	2	1	5	2	7
	..	{	Above 5 years	..	..	..	..	..	..	1	..	1	..	1
Castle Street	..	{	Below 5 years	..	..	..	..	..	..	..	..	..	..	..
	..	{	Above 5 years	..	..	..	..	..	..	..	..	..	..	..
St. Peter's	..	{	Below 5 years	..	..	1	..	..	..	..	..	1	..	1
	..	{	Above 5 years	..	..	..	..	..	..	..	..	..	..	..
Pitt Street	..	{	Below 5 years	..	..	..	2	1	1	..	..	1	3	4
	..	{	Above 5 years	..	1	..	1	..	..	..	..	2	..	2
Great George	..	{	Below 5 years	1	1	2	1	2	1	1	..	6	3	9
	..	{	Above 5 years	..	2	1	..	1	..	..	..	2	2	4
Rodney Street..	..	{	Below 5 years	2	..	2	2	1	1	..	..	5	3	8
	..	{	Above 5 years	..	3	1	..	..	..	..	..	1	3	4
Abercromby	..	{	Below 5 years	1	..	4	1	1	1	1	1	7	3	10
	..	{	Above 5 years	..	..	1	..	..	..	..	..	1	..	1
Everton..	..	{	Below 5 years	10	6	16	10	19	9	8	7	53	32	85
	..	{	Above 5 years	2	3	3	4	..	1	2	3	7	11	18
Kirkdale	..	{	Below 5 years	6	2	9	9	3	6	4	4	22	21	43
	..	{	Above 5 years	..	2	1	3	2	2	..	3	3	10	13
West Derby	..	{	Below 5 years	4	7	6	9	8	7	9	4	27	27	54
	..	{	Above 5 years	1	..	1	2	2	1	..	..	4	3	7
North Toxteth..	..	{	Below 5 years	4	4	5	3	1	5	8	6	18	18	36
	..	{	Above 5 years	..	1	1	1	3	1	..	..	4	3	7
South Toxteth..	..	{	Below 5 years	3	4	5	1	5	3	4	2	17	10	27
	..	{	Above 5 years	..	1	1	..	..	..	1	..	2	1	3
Workhouses and Hospitals	..	{	Below 5 years	3	2	2	1	..	2	1	..	6	5	11
	..	{	Above 5 years	4	1	4	1	3	1	5	3	16	6	22
City	..	{	Below 5 years	51	38	63	46	45	42	50	31	209	157	366
	..	{	Above 5 years	13	15	20	13	14	8	9	10	56	46	102

Mr. Hartnup has kindly supplied the following Meteorological Table.

LIVERPOOL OBSERVATORY.

DATE—1888.	Mean Barometer.	Mean Temperature.	Rainfall on Ground.
	Inches.	o	Inches.
January	30.194	39.3	1.264
February	30.044	36.2	1.081
March	29.618	38.4	2.057
April	29.897	44.2	1.104
May	30.003	52.3	0.547
June	29.935	56.6	2.031
July	29.733	57.0	4.987
August	29.956	57.9	2.810
September	30.161	54.8	0.682
October	30.023	48.4	1.663
November	29.718	46.6	4.481
December	29.890	42.0	1.383
YEAR 1888	29.931	47.8	24.090
„ 1887	29.996	48.0	20.821

The following tables have been kindly supplied by Mr. Hagger, the Vestry Clerk, as showing the amount of infectious disease treated in the Brownlow Hill Hospital, and not to be taken as a statement of the pauperism in the Parish, for the two following reasons:—

The Industrial Schools receive children from West Derby, Toxteth Park, and Prescott: the average number of such children for the year was 421.

The fever cases in hospital include patients sent in by the Medical Officer of Health from every part of the City, and from ships, and are paid for by the Hospital Committee and Port Sanitary Authority: the average number for the year was 27.

PARISH OF LIVERPOOL.

Return of Infectious Diseases, &c., in Workhouse Hospital.

DATE, 1888. — WEEK ENDING				MEASLES.					SCARLATINA.					TYPHOID.				
				No. at commence- ment of Week.	Admitted.	Discharged.	Died.	Remaining at end of Week.	No. at commence- ment of Week.	Admitted.	Discharged.	Died.	Remaining at end of Week.	No. at commence- ment of Week.	Admitted.	Discharged.	Died.	Remaining at end of Week.
Jan.	7	..	..	1	1	1	..	1	40	5	20	..	25	6	2	..	..	8
"	14	..	..	1	2	..	..	3	25	..	7	..	18	8	3	1	1	9
"	21	..	..	3	..	1	..	2	18	3	6	..	15	9	..	4	..	5
"	28	..	..	2	..	..	..	2	15	3	1	..	17	5	1	1	..	5
Feb.	4	..	..	2	..	2	..	..	17	5	..	..	22	5	..	..	..	5
"	11	..	..	..	..	..	..	..	22	7	5	1	23	5	..	..	..	5
"	18	..	..	..	..	..	..	..	23	9	5	2	25	5	..	1	..	4
"	25	..	..	..	..	..	..	..	25	..	2	1	22	4	..	1	..	3
March	3	..	..	..	..	..	..	..	22	3	2	2	21	3	..	..	..	3
"	10	..	..	..	1	..	..	1	21	3	2	1	21	3	1	1	1	2
"	17	..	..	1	..	..	..	1	21	3	..	..	24	2	..	..	..	2
"	24	..	..	1	..	..	..	1	24	2	..	..	26	2	1	1	..	2
"	31	..	..	1	..	..	..	1	26	10	3	2	31	2	..	1	..	1
April	7	..	..	1	..	..	..	1	31	3	6	..	28	1	1	..	..	2
"	14	..	..	1	2	1	..	2	28	1	4	..	25	2	..	..	..	2
"	21	..	..	2	..	..	..	2	25	3	1	..	27	2	..	..	..	2
"	28	..	..	2	..	..	..	2	27	10	8	..	29	2	2	..	..	4
May	5	..	..	2	4	..	..	6	29	..	1	..	28	4	..	..	1	3
"	12	..	..	6	1	..	..	7	28	..	1	..	27	3	..	..	..	3
"	19	..	..	7	2	..	..	9	27	..	11	..	16	3	2	1	..	4
"	26	..	..	9	7	2	..	14	16	..	1	..	15	4	..	1	..	3
June	2	..	..	14	2	3	..	13	15	1	8	..	8	3	..	..	..	3
"	9	..	..	13	2	6	..	9	8	1	9	..	..	3	..	..	..	3
"	16	..	..	9	2	4	..	7	..	6	..	..	6	3	..	..	..	3
"	23	..	..	7	5	3	..	9	6	..	..	..	6	3	..	2	..	1
"	30	..	..	9	2	1	1	9	6	..	2	..	4	1	..	..	..	1
July	7	..	..	9	1	2	..	8	4	1	..	..	5	1	..	..	..	1
"	14	..	..	8	4	4	..	8	5	..	..	..	5	1	..	..	..	1
"	21	..	..	8	1	2	..	7	5	..	5	..	..	1	..	..	..	1
"	28	..	..	7	4	2	..	9	..	..	..	..	..	1	..	..	..	1
Aug.	4	..	..	9	1	1	..	9	..	..	..	..	..	1	2	1	..	2
"	11	..	..	9	..	4	..	5	..	..	..	..	..	2	1	..	1	2
"	18	..	..	5	1	4	..	2	..	..	..	..	..	2	..	..	..	2
"	25	..	..	2	1	..	..	3	..	..	..	..	..	2	..	..	..	2
Sept.	1	..	..	3	6	2	..	7	..	..	..	..	..	2	1	..	..	3
"	8	..	..	7	3	3	1	6	..	..	..	..	..	3	..	..	..	3
"	15	..	..	6	3	..	..	9	..	1	..	..	1	3	..	..	..	3
"	22	..	..	9	3	5	1	6	1	..	..	..	1	3	..	..	..	3
"	29	..	..	6	1	4	..	3	1	1	..	..	2	3	2	1	1	3
Oct.	6	..	..	3	7	4	..	6	2	..	..	..	2	3	1	..	..	4
"	13	..	..	6	7	..	..	13	2	..	..	..	2	4	..	..	1	3
"	20	..	..	13	14	..	3	24	2	1	..	..	3	3	..	..	..	3
"	27	..	..	24	6	5	1	24	3	8	..	..	11	3	..	2	..	1
Nov.	3	..	..	24	2	4	..	22	11	12	..	2	21	1	..	..	..	1
"	10	..	..	22	5	9	..	18	21	3	..	..	24	1	..	..	..	1
"	17	..	..	18	5	6	..	17	24	8	1	1	30	1	..	..	1	..
"	24	..	..	17	11	2	..	26	30	2	2	..	30	..	1	..	..	1
Dec.	1	..	..	26	14	8	2	30	30	1	4	..	27	1	..	..	..	1
"	8	..	..	30	7	2	2	33	27	..	..	..	27	1	..	..	..	1
"	15	..	..	33	8	7	..	34	27	..	5	1	21	1	..	..	..	1
"	22	..	..	34	11	15	..	30	21	..	3	..	18	1	1	1	..	1
"	29	..	..	30	9	11	1	27	18	..	5	..	13	1	..	1	..	..

PARISH OF LIVERPOOL.

Return of Infectious Diseases, &c., in Workhouse Hospital—(Continued)

DATE, 1888. — WEEK ENDING	TYPHUS.					SIMPLE CONTINUED FEVER.				
	No. at commence- ment of Week.	Admitted.	Discharged.	Died.	Remaining at end of Week.	No. at commence- ment of Week.	Admitted.	Discharged.	Died.	Remaining at end of Week.
Jan. 7	1	7	..	3	..	4
" 14	..	1	1	..	..	4	6	2	..	8
" 21	8	1	2	1	6
" 28	6	7	2	1	10
Feb. 4	10	..	5	..	5
" 11	5	3	1	..	7
" 18	7	1	2	..	6
" 25	6	..	1	..	5
March 3	5	3	..	..	8
" 10	8	2	3	..	7
" 17	7	..	2	..	5
" 24	5	1	..	..	6
" 31	..	3	1	..	2	6	..	1	..	5
April 7	2	..	..	1	1	5	..	4	..	1
" 14	1	..	1	..	..	1	8	1	..	8
" 21	1	..	..	8	..	..	..	8
" 28	..	1	1	..	..	8	4	6	..	6
May 5	6	1	..	..	7
" 12	7	3	2	..	8
" 19	8	..	..	..	8
" 26	8	5	5	..	8
June 2	8	3	3	..	8
" 9	8	7	5	..	10
" 16	10	12	10	1	11
" 23	11	1	3	..	9
" 30	9	1	5	..	5
July 7	5	..	1	..	4
" 14	4	4	3	..	5
" 21	..	1	1	..	..	5	5	1	..	9
" 28	9	3	4	1	7
Aug. 4	7	3	4	..	6
" 11	..	1	1	..	..	6	1	1	..	6
" 18	6	..	1	..	5
" 25	5	4	..	..	9
Sept. 1	9	6	2	..	13
" 8	13	..	6	..	7
" 15	7	2	1	..	8
" 22	8	5	2	..	11
" 29	..	1	1	..	..	11	..	6	1	4
Oct. 6	..	1	1	..	..	4	2	4	..	2
" 13	2	..	..	..	2
" 20	..	2	2	..	..	2	2	2	..	2
" 27	..	1	1	..	..	2	..	..	..	2
Nov. 3	2	3	..	..	5
" 10	5	5	1	..	9
" 17	9	2	2	..	9
" 24	9	1	5	..	5
Dec. 1	5	1	3	..	3
" 8	..	1	1	..	..	3	..	..	..	3
" 15	3	3	1	..	5
" 22	5	..	..	..	5
" 29	5	4	1	..	8

These show that the average number of persons suffering from Continued Fever (including therein Typhus, Typhoid, and simple Continued Fever) at one time in Hospital during the year 1888 was 9, and their percentage Death-rate was 8.1. The average number of cases of Scarlatina at one time in Hospital during the year was 15, and the percentage Death-rate was 11.2. The average number of cases of Measles at one time in Hospital during the year was 9, and the percentage Death-rate was 7.1. All Small Pox cases belonging to the Parish were treated in the City Hospital, Park Hill.

PARISH OF LIVERPOOL.

RETURN OF PERSONS IN RECEIPT OF RELIEF DURING THE YEAR 1888.

Week ending.	Work-house.	Industrial Schools.	Out-Relief.	Week ending.	Work-house.	Industrial Schools.	Out-Relief.
January 7..	3452	1023	2564	July 7..	2889	815	2323
" 14..	3414	1051	2565	" 14..	2927	831	2294
" 21..	3470	1026	2575	" 21..	2943	820	2305
" 28..	3474	1033	2545	" 28..	2902	818	2298
February 4..	3531	1030	2508	August 4..	2914	802	2307
" 11..	3469	1048	2521	" 11..	2909	847	2269
" 18..	3510	1024	2507	" 18..	2956	825	2299
" 25..	3525	1048	2494	" 25..	2985	835	2314
March 3..	3567	1018	2470	September 1..	3015	811	2334
" 10..	3459	1033	2445	" 8..	3023	856	2324
" 17..	3445	997	2514	" 15..	3038	837	2332
" 24..	3426	1044	2534	" 22..	3040	844	2310
" 31..	3394	1012	2525	" 29..	3025	816	2285
April 7..	3277	1022	2458	October 6..	3044	799	2244
" 14..	3295	962	2435	" 13..	3060	856	2264
" 21..	3214	951	2395	" 20..	3124	842	2211
" 28..	3207	924	2351	" 27..	3197	879	2186
May 5..	3114	930	2306	November 3..	3227	865	2186
" 12..	3108	868	2322	" 10..	3277	908	2234
" 19..	3043	872	2322	" 17..	3383	902	2211
" 26..	2963	845	2299	" 24..	3372	942	2182
June 2..	2940	858	2289	December 1..	3432	932	2209
" 9..	2930	836	2274	" 8..	3442	957	2185
" 16..	2868	870	2286	" 15..	3473	928	2188
" 23..	2895	825	2270	" 22..	3385	945	2142
" 30..	2861	844	2275	" 29..	3400	932	2142

The number of persons in receipt of Parochial Relief on Saturday, 30th of June, 1888, was 5,980, or 516 less than at the corresponding period of 1887; and the number on Saturday, the 29th December, 1888, was 6,474, or 529 less than at the same period of 1887.

SANITARY WORK.

Privies Certified for Conversion into Water Closets during the year 1888.

WARDS.										No. of Privies Certified.
Scotland .. .. .	..	..	..	..	..	..	..	..	..	3
Vauxhall .. .. .	..	..	..	..	..	..	..	..	..	3
St. Anne's .. .. .	..	..	..	..	..	..	..	..	..	4
Lime Street .. .. .	..	..	..	..	..	..	..	..	..	1
Rodney Street .. .. .	..	..	..	..	..	..	..	..	..	7
Abercromby .. .. .	..	..	..	..	..	..	..	..	..	7
Everton .. .. .	..	..	..	..	..	..	..	..	..	6
Kirkdale .. .. .	..	..	..	..	..	..	..	..	..	1
West Derby .. .. .	..	..	..	..	..	..	..	..	..	14
North Toxteth .. .. .	..	..	..	..	..	..	..	..	..	9
South Toxteth .. .. .	..	..	..	..	..	..	..	..	..	4
TOTAL .. .. .	..	..	..	..	..	..	..	..	..	59

OFFENSIVE TRADES.

Applications for permission to carry on the following offensive trades were made during the year, and a report by the Medical Officer of Health on each application was submitted to the Health Committee.

Premises.	Business.	Granted.	Refused.	Date.
19, St. Andrew Street..	Bladder Dressing	—	1	21st April
Corner of Jamaica and New Bird Streets..	Tripe Boiling	—	1	8th Nov.
Corner of Vauxhall Road and Charters Street.	Tripe Boiling	—	1	22nd Nov.
12, Yard, Pumpfields ..	Tripe Boiling	1	—	20th Dec.

Transfer of the business of Tallow Melting, Gut Scraping and Albumen manufacture from Carruthers Street to Fletcher's Yard, granted 5th January.

SLAUGHTERHOUSE TRANSFERS.

Premises.	Granted.	Date.
Back Commutation Row	1	23rd June
41, Upper Milk Street	1	23rd June
Norfolk Street.. ..	1	23rd June

LIVERPOOL SANITARY AMENDMENT ACT, 1864.

The following premises were reported by the Medical Officer to be insanitary and that they ought to be demolished. The City Council, on the report being laid before them by the Town Clerk in compliance with the Act, referred them to the Insanitary Property Committee to be dealt with.

Darnley Street.—The house No. 12 in the said street, and the houses Nos. 1, 3, and 5, in No. 2 Court, in the said street, ought to be demolished.

Darnley Street.—The houses Nos. 14, 16 and 18 in the said street, and the houses Nos. 1, 2, 3, 4, 5 and 6, in No. 4 Court, in the said street, ought to be demolished.

Darnley Street.—The houses Nos. 34 and 36 in the said street, and the houses Nos. 1, 3 and 5, in No. 12 Court, and Nos. 2, 4, and 6, in No. 14 Court, in the said street, ought to be demolished.

Darnley Street.—The houses Nos. 54 and 56 in the said street, and the houses Nos. 1, 3 and 5, in No. 22 Court, and the houses No. 2, 4 and 6, in No. 24 Court, in the said street ought to be demolished.

Midghall Street.—The house No. 14 in the said street, and the house No. 2, in No. 6 Court, in the said street, ought to be demolished.

Midghall Street.—The house No. 16 in the said street, and the house No. 1, in No. 6 Court, in the said street, ought to be demolished.

Midghall Street.—The houses Nos. 26 and 28 in the said street, and the houses Nos. 1, 2 and 4, in No. 12 Court, in the said street, ought to be demolished.

Midghall Lane.—The houses Nos. 4 and 5 in the said street, ought to be demolished.

Stockdale Street.—The house No. 2 in the said street, ought to be demolished.

The City Engineer has kindly supplied the following tables :—

INSANITARY PROPERTY.

Insanitary Property purchased 1888.				Insanitary Property demolished 1888.			
No. of houses included in seventh presentment.	No. of houses included in eighth presentment.	No. of houses purchased by Insanitary Property Committee included in presentments referred by Council to Committee.	Total.	No. of houses included in seventh presentment.	No. of houses included in eighth presentment.	No. of houses demolished by Insanitary Property Committee included in presentments referred by Council to Committee.	Total.
—	—	52	52	4	18	36	58

NUMBER OF HOUSES ERECTED AND NUMBER OF HOUSES TAKEN DOWN DURING THE YEAR 1888.

	WARDS.	Houses Erected.	Houses taken down.
1	Everton and Kirkdale.. .. .	112	3
2	Scotland	59	21
3	Vauxhall .. .. .	....	21
4	St. Paul's	3	9
5	Exchange .. .. .	....	8
6	Castle Street .. .. .	....	5
7	St. Peter's	1	....
8	Pitt Street .. .. .	....	....
9	Great George	1	21
10	Rodney .. .. .	....	....
11	Abercromby .. .. .	....	....
12	Lime Street .. .. .	....	3
13	St. Anne's .. .. .	....	23
14	West Derby	393	15
15	South Toxteth	8	26
16	North Toxteth	9	25
	TOTALS	586	180

SEWER VENTILATION TO END OF 1888.

No. of 6-inch Iron Pipe Ventilating Shafts	933
No. of Street Ventilating Gratings	4,411
The length of Old Sewers Ventilated	180 miles

NOTE.—All New Sewers are ventilated as constructed.

LODGING-HOUSES.

The Health Committee have, since the passing of the Sanitary Act, 1866, ruled that, as far as possible, all registered lodging-houses should have a day apartment for the accommodation of their lodgers, and that all houses where single rooms were occupied by day and night should be registered as sub-let. The space required for a night lodger in a registered lodging-house is 300 cubical feet, while the space in a sub-let house for each adult is 350 feet.

There were on the register 885 lodging-houses at the end of 1887, and 854 at the end of 1888. This difference was occasioned by the removal of 293 old licences, and the addition of 262 new ones. The visits to lodging-houses are both by day and night. The lodging-houses of the better class, and especially those provided with only single beds for each person, and only with the number of beds equivalent to the number of lodgers allowed, are not visited at night except on grave suspicion or on complaint, or in the case of foreign emigrant lodging-houses. The night visits are pretty nearly restricted to the low districts and tramp houses. The number of day visits paid during the year was 37,483, and the night visits 5,836. The number of lodging-houses found overcrowded on the night visits was 25, the number of informations laid for breaches of the bye-laws was 120, with the results of fines in 118 cases to the extent of £22 18s. 6d., in sums varying from 1s. to 20s. and costs. The number of lodging-houses found dirty was 188; notices were served to lime-wash and cleanse.

It is necessary frequently to visit houses which are not licensed either as lodging or sub-let houses, especially when emigration is brisk or at race times. There were 1,387 such visits paid during the day, and in 53 of the cases where suspicion was confirmed they were followed up by night visits. A tenant harbouring lodgers is not taken before the Justices for the first offence, but is noticed to apply to have his rooms measured and licensed. There were 171 such notices issued during the year, but in only 18 cases did the tenants refuse to comply; they were brought before the Justices and fined. A bye-law requires that every case of infectious sickness in a lodging-house should be at once reported to the Medical Officer of Health. 15 cases of fever and 1 case of small-pox occurred in lodging-houses; in 15 of the cases the patients were at once sent to hospital, the remaining case, being a member of the keepers' family, was not removed; this latter case died. In all cases of fever or infectious disease the bedding was removed to the disinfecting apparatus, and the rooms purified and cleansed; in the cases where the patients remained, the licenses to receive lodgers were suspended by the Medical

Officer. No lodger died from fever or small-pox in a registered lodging-house; but not including the case of fever, there were 78 deaths from non-contagious diseases in lodging-houses, of which 48 belonged to the keepers' families and 30 were lodgers.

SEAMEN'S LICENSED LODGING HOUSES.

The Corporation have made bye-laws, with the sanction of the President of the Board of Trade, for the licensing of Seamen's Lodging Houses, under the Merchant Shipping (Fishing Boats) Act, 1883, section 48, which enacts that "The Sanitary Authority within whose district any seaport town is situate may, with the sanction of the President of the Board of Trade, from time to time, make, revoke, alter, and amend bye-laws and regulations relating to Seamen's Lodging Houses in such town, which shall be binding upon all persons and bodies keeping houses in which seamen are lodged, and the owners thereof, and persons employed therein. Such bye-laws and regulations shall, amongst other things, provide for the licensing of Seamen's Lodging Houses, the inspection of the same, the sanitary conditions of the same, the publication of the fact of a house being licensed, the due execution of the bye-laws and regulations, and the non-obstruction of persons engaged in securing such execution, the preventing of persons not duly licensed holding themselves out as keeping or purporting to keep licensed houses, and the exclusion from licensed houses of persons of improper character, and sufficient penalties for the breach of such bye-laws and regulations not exceeding in any case the sum of fifty pounds. All offences under such bye-laws and regulations shall be deemed to be offences within the Merchant Shipping Acts, 1854 to 1883, and be punishable accordingly."—And on the written application of the keeper of any registered common lodging house or registered lodging house, made in such form and stating such particulars as the Council require, the Council will, if they see fit, grant to such keeper a license authorizing him to designate his registered house a Seamen's Licensed Lodging House.

During the year 7 applications were received, all of which were granted; 5 of the licenses granted during 1887 were renewed, making the number on the Register 12.

SUB-LET HOUSES.

The number registered during 1888 was 765, making the total on the Register on the 31st December, 18,967. The number of visits paid during the night was 17,250, and during the day 106,676, with the result of finding 1,731 rooms overcrowded. In addition to overcrowding, the offence (though not punishable in sub-let houses) of permitting males and females not married to occupy the same room comes under the notice and is entered in the books of the Inspectors. There were 764 rooms thus indecently occupied by 1,096 males and 1,325 females, besides having also in these rooms 523 children between the ages of 3 and 12 years. The character of the indecent occupation may be judged of from the following facts:—In 421 instances one man and two women were found in the same bedroom; in 240 instances two men and one woman; in forty instances two men and two women; in thirty instances one man and three women; in sixteen instances three men and one woman; in four instances two men and three women; in three instances one man and four women; in one instance one man and six women; in six instances three men and two women; in two instances two men and six women; and in one instance three men and three women.

Informations were laid against 2,108 chief tenants for breach of the bye-laws, with the following results:—1,992 fined 1s. and 1s. costs; 1 fined 1s. 6d. and 1s. 6d. costs; 3 fined 2s. and 2s. costs; 64 fined 2s. 6d. and 2s. 6d. costs; 7 fined 5s. and 4s. 6d. costs; 2 fined 20s. and 4s. 6d. costs; making a total of fines levied during the year of £221 14s. 6d. Of the remaining 39 cases, 14 informations were withdrawn and 25 acquitted, the tenants having complied with the bye-laws.

BAKEHOUSES.

7,300 visits have been made to Bakehouses during the year. 609 Bakehouses were found dirty, and notices were served to limewash and cleanse them. 1 notice was served to remove stagnant water, and 9 to remedy defective drains. All notices were complied with.

CANAL BOATS.

The following Report on the execution of the Canal Boats Acts, 1877 and 1884, by the Liverpool Sanitary Authority during the year 1888, was sent to the Local Government Board.

The Leeds and Liverpool Canal Company are proprietors of the only Canal having direct communication with Liverpool, and the length of the waterway within the City, exclusive of the locks which lead to the Docks, is about three miles.

The duties of measuring and inspecting the boats are discharged by Mr. Wilson, Chief Lodging-house Inspector, and Mr. Thornthwaite, Lodging-house Inspector. No salary is paid them beyond that of Lodging-house Inspectors.

The number of visits and inspections of Canal Boats during the year was 4,500.

50 Boats were found to be used as dwellings, and not registered.	} all abated.
16 Notices were sent to the owners	
3 Informations were laid	

30 were found without Certificates on board	} 27 abated, 2 not seen since by the Inspectors and 1 notice not expired.
22 Notices were sent to the owners	

22 were found not having the registered number painted on both sides of the boat; 7 Notices were sent, 18 abated, 3 not seen since by the Inspectors, and 1 notice not expired.

2 not having the distinctive mark "The Liver" painted on the outside of the cabins.	} abated.
2 Notices sent to the owners.	

12 cabins, used as dwellings, were found in a dilapidated and insanitary condition, caused by leaky decks, broken floors, and bilge water not removed from beneath cabin floors; 12 Notices sent to the owners—all abated.

20 were found without proper accommodation provided for the separation of the sexes; 7 Notices sent to owners, but only four were altered,

and proper accommodation made ; several were found to have discontinued the practice of carrying both sexes. In 11 cases the Inspectors, on visiting the boats between 6 and 8 a.m., found the sexes mixed, and summoned the masters.

8 boats had defective ventilation of cabins ; 8 Notices were sent—all abated.

5 had defective ventilation between the bulkheads ; 5 Notices were sent—all abated.

26 had defective second bulkheads ; 21 Notices were sent—all abated.

5 found carrying offensive cargoes, and not having a second bulkhead—3 were summoned, and 2 have not been seen since by the Inspectors.

35 required the cabins painting ; 35 Notices were sent to owners—32 abated, 2 notices not expired, and 1 discontinued as a dwelling.

14 had cabins dirty and required cleaning ; verbal Notices given to masters—all abated.

2 found overcrowded—masters summoned.

Informations were laid in 23 cases, and in 22 instance fines were inflicted varying from 1s. and 1s. costs to 5s. and 4s. 6d. costs, and 1 was acquitted.

There was no infectious sickness on the boats during the year.

Forty-nine Notices were sent to the School Board of children living on Canal Boats and not attending school.

The number of boats on the register is 440, of which 131 have been re-registered, viz. :—5 in 1884, 60 in 1885, 21 in 1886, 25 in 1887, and 20 in 1888.

During the year twenty-one new boats were registered, and twenty were re-registered on account of change of owner.

There were eighty changes of masters on the boats, and the necessary records made on the register.

CASES OF INFECTIOUS DISEASE COMING UNDER THE NOTICE
OF THE MEDICAL OFFICER OF HEALTH DURING 1888.

Year—1888.	Small Pox.	Fever.	Scarlatina.	Measles.	Diphtheria	TOTAL.
January	3	52	133	28	11	227
February	8	27	112	16	22	185
March	1	60	120	26	9	216
April	10	40	102	52	9	213
May .. .. .	..	32	78	137	13	260
June	3	30	77	153	10	273
July	2	57	73	86	8	226
August .. .. .	..	76	86	124	18	304
September .. .. .	..	78	100	174	7	359
October .. .. .	..	107	135	782	14	1038
November .. .. .	..	64	162	1371	7	1604
December .. .. .	..	56	138	869	19	1082
TOTAL.....	27	679	1,316	3,818	147	5,987
Removed to Hospital.....	19	469	380	108	27	1,003

Of the patients removed to Hospital the following were conveyed by the Sanitary Officers:—400 cases of Fever, 337 cases of Scarlatina, 19 cases of Small Pox, 51 cases of Measles, 19 cases of Diphtheria, 9 cases of Chicken Pox, and 3 cases of Non-infectious disease, making a total of 838 persons. 302 were taken to Netherfield Road Hospital, 150 to the Parish Workhouse Hospital, 320 to the City Hospital, Park Hill, and 66 to the City Hospital, Grafton Street.

In accordance with the arrangements made with the School Board, 2,474 post cards were sent to the Head Masters of the various schools, informing them that children from infected houses attended their schools. Similar information was sent to the School Board.

THE DISINFECTING APPARATUS.

The number of articles disinfected at the Apparatus during the year amounted to 25,454.

DATE. 1888.	Number of Beds.	Number of Mattresses.	Number of Pieces of Bedding.	Number of Pieces of Wearing Apparel, &c.	Total Number of Articles.
Week ending—					
January 7 ..	45	80	343	351	819
„ 14 ..	73	74	487	106	740
„ 21 ..	42	39	237	107	425
„ 28 ..	31	35	194	242	502
February 4 ..	39	68	251	78	436
„ 11 ..	35	49	257	186	527
„ 18 ..	44	58	220	84	406
„ 25 ..	42	63	382	235	722
March 3 ..	28	57	238	192	515
„ 10 ..	31	50	243	107	431
„ 17 ..	41	58	229	215	543
„ 24 ..	36	42	211	259	548
„ 31 ..	33	51	226	178	488
April 7 ..	50	69	311	532	962
„ 14 ..	71	61	545	184	861
„ 21 ..	31	41	190	134	396
„ 28 ..	70	63	320	71	524
May 5 ..	27	50	225	146	448
„ 12 ..	21	30	155	94	300
„ 19 ..	20	38	173	362	593
„ 26 ..	39	74	319	231	683
June 2 ..	26	44	163	72	305
„ 9 ..	21	43	167	74	305
„ 16 ..	34	58	214	111	417
„ 23 ..	43	59	286	214	602
„ 30 ..	28	46	175	66	315
July 7 ..	20	24	125	129	298
„ 14 ..	31	35	153	255	474
„ 21 ..	33	45	186	217	481
„ 28 ..	37	50	205	98	390
August 4 ..	33	43	187	99	362
„ 11 ..	22	15	130	11	178
„ 18 ..	17	47	135	69	268
„ 25 ..	33	48	188	82	351
September 1 ..	44	47	189	234	504
„ 8 ..	31	47	175	152	405
„ 15 ..	43	38	205	95	381
„ 22 ..	42	51	283	50	426
„ 29 ..	34	42	201	114	391
October 6 ..	33	46	157	94	330
„ 13 ..	43	46	217	97	403
„ 20 ..	37	44	189	68	338
„ 27 ..	39	46	277	48	410
November 3 ..	65	73	342	229	709
„ 10 ..	59	76	328	123	586
„ 17 ..	41	46	228	37	332
„ 24 ..	55	68	320	273	716
December 1 ..	61	79	354	258	752
„ 8 ..	50	64	294	89	497
„ 15 ..	53	54	281	135	523
„ 22 ..	49	85	385	182	701
„ 29 ..	32	39	198	156	425
Totals . . .	2,038	2,698	12,693	8,025	25,454

The number of articles destroyed at the Apparatus during the year amounted to 1131.

DATE. 1888.	Number of Beds.	Number of Mattresses.	Number of Pieces of Bedding.	Number of Pieces of Wearing Apparel, &c	Total Number of Articles.
Week ending—					
January 7 ..	3	7	5	20	35
" 14 ..	..	6	..	..	6
" 21 ..	2	4	2	..	8
" 28 ..	1	4	5	14	24
February 4 ..	2	..	..	..	2
" 11 ..	..	..	..	..	..
" 18 ..	..	2	1	..	3
" 25 ..	3	5	..	17	25
March 3 ..	1	4	4	4	13
" 10 ..	2	6	3	26	37
" 17 ..	4	12	2	10	28
" 24 ..	2	2	4	2	10
" 31 ..	..	12	..	5	17
April 7 ..	3	12	..	109	124
" 14 ..	..	2	..	..	2
" 21 ..	..	2	..	..	2
" 28 ..	29	3	47	1	80
May 5 ..	..	..	..	..	..
" 12 ..	3	2	13	9	27
" 19 ..	..	..	..	..	..
" 26 ..	2	4	1	..	7
June 2 ..	..	..	..	..	..
" 9 ..	..	2	..	..	2
" 16 ..	..	2	..	..	2
" 23 ..	4	8	9	4	25
" 30 ..	..	3	..	..	3
July 7 ..	..	..	..	..	..
" 14 ..	2	..	4	..	6
" 21 ..	10	8	38	149	205
" 28 ..	4	4	11	17	36
August 4 ..	3	4	2	6	15
" 11 ..	3	2	3	4	12
" 18 ..	1	2	..	..	3
" 25 ..	2	7	5	..	14
September 1 ..	1	6	2	17	26
" 8 ..	1	5	..	..	6
" 15 ..	1	2	..	..	3
" 22 ..	2	2	2	..	6
" 29 ..	1	6	2	..	9
October 6 ..	4	12	6	1	23
" 13 ..	3	1	1	17	22
" 20 ..	..	4	..	..	4
" 27 ..	9	16	11	37	73
November 3 ..	1	2	..	..	3
" 10 ..	..	..	..	..	..
" 17 ..	..	2	..	..	2
" 24 ..	1	8	3	44	56
December 1 ..	5	4	4	43	56
" 8 ..	2	4	..	..	6
" 15 ..	3	15	9	..	27
" 22 ..	5	9	8	14	36
" 29 ..	..	..	..	..	..
Totals	125	229	207	570	1131

DISINFECTION OF HOUSES.

In all cases of infectious disease the houses were disinfected, free of cost, with sulphurous gas, by Officers appointed by the Health Committee; but whenever there was sickness in any room of the house, so as to endanger health by the use of sulphurous gas, carbolic acid powder was freely sprinkled in the rooms and passages of the house until the sulphurous gas could be used safely. No house is considered properly disinfected until sulphurous gas has been used. The existence of sickness, and the consequent employment of carbolic acid powder, necessitate many visits by the persons in charge of disinfection. There were in all 4,109 visits paid during the year to houses for the purpose of disinfection, the number of houses properly disinfected being 1,713.

MORTUARIES.

During the year 20 bodies were, by order of the Justices on the certificate of the Medical Officer, removed to the Mortuaries provided by the Council under Section 142 of the Public Health Act, 1875.

LICENSES FOR CATTLE.

During the year 1888, 10 applications were made to the Health Committee for licenses to keep cows; 6 of the applications for keeping 21 cows were granted. There are at present 410 shippens licensed to keep 5,293 cows. 64 of the shippens previously licensed have been transferred to fresh tenants.

9 applications were made during the year to keep pigs in styres separate from and unconnected with shippens; 2 of the applications for keeping 4 pigs were granted. The total number of premises or styres now licensed in the City is 48 for keeping 161 pigs.

CONTAGIOUS DISEASES (ANIMALS) ACT, 1878.

This Act and the Orders issued under it by the Privy Council were referred to the Medical Officer to carry out, in conjunction with the Veterinary Inspector, the Inspector of Nuisances, and the Meat Inspectors.

CONTAGIOUS DISEASES (ANIMALS) ACT, 1878.—*Continued.*

PLEURO PNEUMONIA.

The Meat Inspectors found in the slaughter-houses the carcasses of 5 cows which the Veterinary Inspector certified, on examination of the lungs, to have suffered from pleuro pneumonia. These cows were brought to the slaughter-houses from places outside the City. The Privy Council was immediately informed of the circumstances. No case of pleuro pneumonia occurred within the City.

SWINE TYPHOID.

Swine typhoid was detected in 8 pigs in the slaughter-houses, the diseased animals having been imported from Ireland.

RABIES.

25 cases of suspected Rabies were reported and post-mortem examinations made by the Veterinary Superintendent, who certified that 1 was rabies, 3 were suspicious, and 20 not affected. One live dog was submitted for examination and certified not to be rabid.

GLANDERS.

On the 31st of May a horse suffering from this disease was found in the streets, and taken to the green yard, Marble Street. The owner was prosecuted and fined, and the animal destroyed.

DAIRIES, COWSHEDS, AND MILKSHOPS ORDER.

Number of applications for registration during the year	380
Of which transfers were	205
Number of applications granted	321
" " refused	59
Number on the register at the end of 1887	2043
" " " 1888	2157
	<hr/>
An increase of	114
	<hr/>

SUMMARY of Veterinary Inspections, under the Contagious Diseases (Animals) Act, for year 1888,
by Richard S. Reynolds, M.R.C.V.S., Veterinary Inspector for the Corporation of Liverpool.

TABLE No. 1.
PLEURO-PNEUMONIA.

Post-Mortem Examinations of Lungs or Carcases.	Number of Infected Places.	PRIMARY INSPECTIONS.		Subsequent Examinations of Animals in infected places for Slaughter.		Animals examined for re-entry into infected places after disinfection.	Inspection of infected places cleansed and disinfected.
		No. of Animals Examined.	No. found Affected.	Healthy.	Diseased.		
6	—	—	—	—	—	—	—

TABLE No. 2.
SWINE TYPHOID.

No. of Pigs examined.	No. of Carcases examined.	Examination of Animals for removal for Slaughter.	Inspection of infected places cleansed and disinfected.
—	1	—	1

SUMMARY of Veterinary Inspections under the Contagious Diseases (Animals) Act—Continued.

TABLE No. 3.
FOOT AND MOUTH DISEASE.

	Post-Mortem Examinations.	Number of Infected Places.	Number of Animals in infected places on Outbreak.		Inspection of Animals in infected places for Slaughter.		Inspection of Animals after convalescence.	Inspection of infected place s cleansed and disinfected.
			Healthy.	Diseased.	Healthy Animals removed for Slaughter.	Diseased Animals Killed on Premises.		
Cattle ..	—	—	—	—	—	—	—	—
Swine ..	—	—	—	—	—	—	—	—
Other Animals ..	—	—	—	—	—	—	—	—
Total ..	—	—	—	—	—	—	—	—

TABLE No. 4.
GENERAL.

EXAMINATION OF ANIMALS IN TRANSIT.				
	FOR EXPORT.		LANDED COASTWISE.	
	Healthy.	Diseased.	Healthy.	Diseased.
Cattle ..	125	—	—	—
Sheep ..	—	—	—	—
Swine ..	—	—	—	—

SUMMARY of Veterinary Inspections under the Contagious Diseases (Animals)
Act.—*Continued.*

TABLE No. 5.
GLANDERS AND FARCY.

Post-Mortem Examinations.	Animals Examined.	Affected.	Not Affected.	Inspection of infected places cleansed and disinfected.
—	6	1	5	1

TABLE No. 6.
RABIES.

Animals Examined.	Affected.	Not Affected.	Post-Mortem Examinations.	Affected.	Not Affected.
1	—	1	25	1	*24

* 3 of this number were suspicious cases.

TABLE No. 7.
ANTHRAX.

Animals Examined.	Affected.	Not Affected.	Post-Mortem Examinations.	Affected.	Not Affected.
—	—	—	—	—	—

PROCEEDINGS UNDER THE CONTAGIOUS DISEASES (ANIMALS) ACT, 1878.

Number of Visits to Railway Stations	3,902
„ Inspections of pens	125,323
„ found clean	102,040
„ „ dirty and cleansed before being used	23,277
„ Informations for dirty pens used before being cleansed	6
„ Inspections of Trucks	29,467
„ found clean	25,760
„ „ dirty and cleansed before being used, or leaving the City dirty	3,707
„ Informations for dirty trucks used before being cleansed	—
„ Inspections of Horse Boxes	408
„ found clean	162
„ „ dirty and cleansed before being used, or leaving the City dirty	246
„ Informations for dirty horse boxes used before being cleansed	—
Number of Inspections of Vessels	9,703
„ found clean	5,967
„ „ dirty and cleansed before being used, or going to Sea without cattle or cargo	3,726
„ Informations for dirty vessels used before being cleansed	10
„ Inspections of Gangways	8,118
„ found clean	6,810
„ „ dirty and cleansed before being used	1,308
„ Informations for dirty gangways used before being cleansed	—
„ Informations for not disinfecting scrapings and sweepings	3
Number of Inspections of Lairage and Sale Yards	3,395
„ found clean	2,561
„ „ dirty and cleansed before being used	834
„ Informations for dirty Lairages used before being cleansed	—
„ „ „ landing dung of Foreign animals without consent in writing of the Local Authority	3
Total Number of Informations	22
„ Fined	20
„ Withdrawn	2
Amount of Fines and Costs	£24 11 6

UNWHOLESOME MEAT, FISH, &c., SEIZED AND DESTROYED.

DATE.—1888.		Beef.	Veal.	Mutton.	Lamb.	Pork.	Poultry	Rabbits	Fish.	Shell-fish	Oysters.
		Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Head		Lbs.	Bags.	
SLAUGHTER HOUSES.	Abattoir ..	77555	7200	7838	..	9620	..	..	..	..	..
	Back Castle Street ..	6255	44	98	..	..	..	..	..	..	..
	Bevington Hill ..	30878	3919	106	..	240	..	..	..	..	..
	Bolton Street ..	..	35	85	..	..	..	..	..	..	..
	Copperas Hill ..	..	..	..	..	1812	..	..	..	..	..
	Cotter Street ..	..	..	53	..	550	..	..	..	..	..
	Darnley Street ..	..	..	..	..	340	..	..	..	..	..
	Embleton Street ..	520	..	..	..	..	..	..	..	..	..
	Foley Street ..	..	..	..	..	165	..	..	..	..	..
	Gelling Street ..	..	..	..	..	..	..	..	..	..	..
	Leeds Street ..	..	..	..	..	..	..	..	..	..	..
	Peel Street ..	..	..	..	..	..	..	..	..	..	..
	Soho Street ..	..	..	..	..	333	..	..	..	..	..
	Upper Milk Street ..	..	..	..	..	455	..	..	..	..	..
	Scotland Road ..	1387	310	..	..	42	..	..	..	..	..
	Finch Place ..	..	..	..	..	..	..	..	..	..	..
	Norman Street ..	..	..	..	..	803	..	..	..	..	..
	Hodson Street ..	2250	92	..	62	..	..	..	..	..	..
MARKETS.	St. James' ..	73	..	..	..	..	..	..	..	..	..
	St. John's ..	20	150	693	..	..	1061	572	74361	141½	..
	St. Martin's ..	150	..	..	..	..	..	..	..	..	..
	Shell Fish Market ..	..	..	..	..	..	..	..	..	72	..
OTHER PARTS.	Benledi Street ..	..	..	..	..	302	..	..	..	..	..
	Byrom Street ..	..	..	..	..	160	..	..	..	..	..
	Dale Street ..	60	..	..	..	..	..	..	..	..	..
	Frederick Street ..	..	70	..	..	..	..	..	..	..	..
	Gt. Charlotte Street ..	..	..	..	..	..	..	..	11163	11	..
	Great Homer Street ..	..	..	..	..	..	..	..	70	..	..
	Gill Street ..	..	..	..	..	650	..	..	..	..	..
	Kensington ..	..	..	..	..	..	..	..	5	..	..
	Mill Street ..	..	..	..	..	400	..	..	200	..	..
	Norfolk Street ..	460	..	..	..	..	..	..	..	..	..
	Park Road ..	..	..	..	..	..	..	..	10	..	..
	Pitt Street ..	25	..	..	..	55	..	..	..	..	..
	Rose Street ..	..	..	..	..	..	494	492	26994	..	..
	Rose Vale ..	..	50	..	..	..	..	27	..	..	..
	Roe Street ..	..	..	..	..	..	..	..	..	..	..
	Warwick Street ..	..	..	..	..	13	..	..	50	..	..
	Wm. Henry Street ..	..	..	..	..	..	..	..	25	..	..
Total		119633	11870	8873	62	15940	1555	1091	112878	224½	..

In two instances unwholesome horses flesh was seized amounting to 97 lbs., and both cases were dealt with by the Magistrate.

				Tons.	cwts.	qrs.	lbs.
Meat—Equal to ..	..	..	..	69	16	0	26
Fish ..	..	..	..	50	7	3	10

Number of Visits to Slaughterhouses made by Meat Inspectors	..	..	..	13,854
„ Informations for Diseased Meat and Fish	..	..	..	31
„ Fined	..	..	..	24
„ Sent to Gaol	..	..	..	--
Amount of Fines and Costs	..	..	..	£41 17 6

SMOTHERED AND INJURED CATTLE.

Beasts.	Sheep.	Pigs.	Number found good.	Number found bad.	Weight of Bad in pounds.
21	41	123	161	24	5,135

KNACKERS' YARDS RETURNS.

Horses Destroyed.	Asses Destroyed.	Other Animals Destroyed.
1,784	30	16

SHIPPON AND PIGGERY INSPECTION.

Number of Inspections of Shippons and Piggeries	1,021
„ Informations	4
„ Fined	4
Amount of Fines and Costs	£1 13 6

DAIRIES AND MILK SHOPS.

Number of Inspections of Dairies and Milk Shops	1,844
„ found Incorrect	287
„ of Informations	64
„ Fined	52
„ Acquitted and Withdrawn	12
Amount of Fines and Costs	£7 0 0

NUISANCES AND CONDITIONS PREJUDICIAL TO HEALTH.

Nuisances inspected, complained of by Inhabitants	4835
„ Reported by District Officers	57931
„ Notices issued	37229
Number of Informations	2356
„ Fined	196
„ Magistrates' Orders to abate	1355
„ Withdrawn and acquitted, the work being done	1807
Amount of Fines and Costs	£73 14 0

REFERENCES TO OTHER DEPARTMENTS.

Referred to the Medical Officer	*7771
„ City Engineer	1029
„ Building Surveyor	1091
„ Water Engineer	5731
„ Superintendent of Scavengers	1716

* Chiefly school children from infected houses.

HOUSE TO HOUSE VISITATION.

Number of Inspections of Street Houses	24883
„ Street Houses found Clean	25226
„ „ „ Dirty	657
„ Apartments in Street Houses Examined	83609
„ Inspections of Court Houses	7460
„ Court Houses found Clean	6751
„ „ „ Dirty	709
„ Apartments in Court Houses Examined	20805
„ Re-inspections of Dirty Houses	6392
„ Total Number of Houses Examined	38735

COURT AND PRIVY EXAMINATIONS.

Number of Visits to Courts and Alleys	106,817
„ Closets found Dirty, but Cleansed by Officer's Instruction .. .	79,444
„ Informations	128
„ Fined	106
Amount of Fines and Costs	£18 17 0

Certain changes in the method of dealing with the courts and alleys were adopted during the year, and have been attended with very satisfactory results, both in ensuring constant cleanliness in the courts and alleys, and also economising the time of the inspector by employing it in the most efficient manner. The aim has been to keep the courts and alleys uniformly clean throughout the week, and with this view the district inspectors are instructed that every tenant in each court is in turn to be held responsible for the cleanliness of the court for a period of one week; the inspector records in his visiting book whose turn it is, and duly informs that tenant. Failing compliance with his requirements, an information is laid under a bye-law of the Local Sanitary Act.

The magistrate has rendered great help to the department by imposing a small fine in each case in which this action has become necessary. As a consequence there is a marked improvement in the condition of the courts, and also in the apparent willingness of the people to cleanse them.

CELLAR EXAMINATIONS.

Number of Inspections of Street Cellars	8216
„ Cellars used for Lumber, Coals, &c.	3196
„ „ Found Empty	366
„ „ Illegally Occupied	141
„ „ Legally	4513
„ Inspections of Court Cellars	2026
„ Court Cellars used for Lumber, Coals, &c.	1175
„ „ „ Found Empty	145
„ „ „ Illegally Occupied	77
„ „ „ Legally	629
„ Cellars found Dirty	43
„ Cellar Notices Issued	184
„ „ Informations	51
„ Fined	43
„ Withdrawn	8
Amount of Fines and Costs	£4 4 0

WATER CLOSET CONVERSIONS.

Number of Notices	47
„ Certified	59
„ Constructed	78
„ under Notices not expired, and Empty Houses	24
„ of Informations	13
„ withdrawn, work being done	13

INFECTED AND DIRTY HOUSES.

1290	Infected Street Houses Inspected, containing	.. .. .	1761	cases.
214	„ Court „ „ „	.. .. .	257	„
19	„ Cellars „ „	.. .. .	22	„
Number of Notices to Owners to Cleanse Infected Houses			1349	
„	„ „ „ „ „ Dirty Houses	.. .. .	1518	
„	„ Occupiers to Whitewash Dirty Houses	.. .. .	484	
„	„ Owners to Whitewash Exterior of Courts	.. .. .	1994	
„	„ Informations against Infected and Dirty Houses	.. .. .	309	
„	„ Fined	.. .. .	34	
„	„ Acquitted and Withdrawn	.. .. .	275	
Amount of Fines and Costs			£11 18 6	

REMOVALS TO MORTUARIES.

Bodies Removed to Mortuaries.		
Smithdown Road.	St. Martin's.	Fazakerley.
1	19	..

PROCEEDINGS FOR EXCESSIVE SMOKE.

Number of Town Notices	.. .. .	234
„ River „	.. .. .	213
„ Informations against Manufactories	.. .. .	228
„ „ Steamers	.. .. .	195
„ Fined	.. .. .	407
„ Acquitted or Withdrawn	.. .. .	16
Amount of Fines and Costs	.. .. .	£349 15 6

MARGARINE ACT.

Number of Visits to Shops	.. .. .	2,521
„ Samples obtained	.. .. .	127
„ „ Analysed	.. .. .	48
„ Informations	.. .. .	103
„ Fined	.. .. .	83
Amount of Fines and Costs	.. .. .	£67 9 6

PROCEEDINGS UNDER THE SALE OF FOOD AND DRUGS ACT.

No. of Samples.	Description of Samples.	Results of Analysis.
389	New Milk...	29 were found adulterated.
125	Skimmed Milk ..	14 " " "
62	Lard ..	19 " " "
29	Yeast ..	14 " " "
17	Mustard ..	3 " " "
13	Butter ..	3 " " "
6	Whiskey ..	1 was " "
1	Butter Milk ..	1 " " "
1	Port Wine ..	1 " " "
48	Pepper ..	" Genuine.
11	Preserves ..	" "
7	Coffee ..	" "
7	Ground Ginger ..	" "
6	Cheese ..	" "
4	Arrowroot ..	" "
4	Cayenne Pepper ..	" "
3	Rum ..	" "
3	Preserved Peas ..	" "
3	Chewing Gum ..	" "
3	Flour ..	" "
3	Corn Flour ..	" "
3	Olive Oil ..	" "
3	Medicine by Prescription ..	" "
3	Honey ..	" "
2	Condensed Milk ..	" "
2	Bread ..	" "
2	Marmalade ..	" "
1	Cream ..	" "
1	Gin ..	" "
1	Ale ..	" "
1	Nitrous Ether ..	" "
1	Ground Lump Sugar ..	" "
1	Preserved Beans ..	" "
1	Capers ..	" "
1	Vinegar ..	" "
1	Trisnitrate of Bismuth ..	" "
4	Tea ..	" "
Total 773		

The number of prosecutions was 77, the result being that 3 cases were dismissed with a caution or withdrawn, and in 74 cases penalties were inflicted, varying from 5s. and costs to £10 and costs, amounting in all to £177 17s. 6d. Five informations were laid for refusing to sell samples of milk; a fine of 10s. and costs was inflicted in three instances; 20s. and costs in one case; and the other case was dismissed. One information was laid for refusing to sell a sample of butter, and a fine of 20s. and costs was inflicted.

SCAVENGING OPERATIONS.

Mr. Richard S. Reynolds, M.R.C.V.S., the Veterinary Superintendent, has charge of the Scavenging Staff, and has kindly supplied the following tables.

The necessity for the quick removal of all refuse from the proximity of dwelling-houses is universally conceded, but the difficulty lies not so much in the way it could be effected, but in the increased cost. To cart away the material from a house once a week, instead of once in three or four months, would require a larger staff, and consequently an increased expenditure.

It is the old question, which is the most valuable, money or health. When a man and his family are enjoying good health the necessity for an increased outlay cannot be understood, but when sickness comes, and perhaps death, what then is the value of his money?

Well as the work is now done, it ought to be done better, and it is essential that further facilities should be provided for the Scavenging Department to remove more frequently the contents of the ashpits, and not permit offensive matters to accumulate for three or four months, poisoning the atmosphere and all who breathe it. If it was not for filth, our death roll would be slight. Many thanks are due to Mr. Reynolds and his staff for making the most of their means, for without the energy and perseverance they devote to their work, it would not be possible to continue the improvement in the health and comfort of the people.

Year 1888.

TABLE No. 1.

NIGHT SERVICE FOR EMPTYING MIDDENS, COURT ASHPITS, AND SOME OFFICE ASHPITS.

Notices Received.	Middens, &c., Emptied.	Loads of Nightsoil and Ashes.					Nightly average Working Staff.				Analysis of Work.		Average contents of each Midden.	
		Number Removed.			Where Deposited.		Midden Men.	Wharf Men.	Carts.	Horses.	Loads per Man per Night.	Loads per Cart per Night.		
		Manure.	Ashes.	Total.	Chisen- hale Street.	Sandhills.							River Craft Dock.	
647	3,289	..	4,275	4,275	3,798	..	477	4.9	1.8	3.3	3.3	2.6	4.	1.3

TABLE No. 2.

SERVICE FOR THE COLLECTION AND REMOVAL OF DRY ASHPIT ASHES.

Notices Received	Ashpits Emptied.	Loads of Dry Ashes.					Average Daily Working Staff.				Analysis of Work.		Average contents of each Ashpit. Cart Loads.
		Number Removed.	Where Deposited.				Ashpit Men.	Carts and Wagons.	Horses.	Loads per Man per Day.	Loads per Cart per Day.		
			Chisen- hale Street	Sandhills.	River Craft Dock.	Waver- tree.						Rubbish Tips, &c.	
1,808	426,370	75,669	19,918	21,113	28,592	882	5,164	82.7	62.	62.8	2.8	3.8	.17

TABLE No. 3.

SERVICE FOR THE COLLECTION AND REMOVAL OF BELL
CART ASHES.

Loads Removed	Where Deposited.				Carts Employed.
	Chisenhale Street.	Sandhills.	River Craft Dock.	Rubbish Tips	
16,778	8,732	2,272	5,774	..	15·3

TABLE No. 4.

SERVICE FOR FLUSHING AND CLEANSING TROUGH WATER
CLOSETS.

Number of Urinals.	Number of Trough Water Closets.	Average Working Staff.	
		Trough W. C. Men.	Urinal Men.
235—618 Stalls.	3,031	43·2	11·

TABLE No. 5.

SERVICE FOR CLEANSING, COLLECTION, AND REMOVAL OF REFUSE FROM STREETS, COURTS, PASSAGES, &c.

Loads of Street Sweepings Removed.						Average Daily Staff.				Average Number of Loads Removed Daily per Cart.
Total Number Removed.	Where Deposited.					Scavengers.	Sweeping Machines.	Carts.	Horses.	
	Chisenhale Street.	Sandhills.	Wavertree.	River Craft Dock.	Refuse on Tips and New Macadam.					
84,274	49,563	12,796	4,711	17,070	134	246·	15·	64·	64·	4·2

TABLE No. 6.

CLEANSING AND REMOVAL OF REFUSE FROM STREETS, COURTS, AND PASSAGES ON SUNDAYS.

Loads of Street Sweepings.									
Removed.			Where Deposited.				Average Daily Staff.		
Manure.	Ashes.	Refuse.	Total.	Chisenhale St.		Sandhills.		River Craft Dock.	
				Manure.	Refuse.	Manure.	Refuse.	Manure.	Refuse.
2,086	...	1,225	3,311	1,677	136	219	411	190	678
								Men.	Horses.
								141	23

TABLE No. 7.

SERVICE FOR STREET WATERING.

FRESH WATER.

SALT WATER.

Number of Days on which Carts were out.	Total Number of Loads Distributed.				Average Daily Staff employed during the Season.		Average No. of Loads Distributed Daily per Cart.						
	Large.		Small.	Carts and Horses.	Watermen.	Carts and Horses.							
	Day.	Night.											
								Day.	Night.				
79	..	3,888	..	5.5	39.5	8.9	99	35,087	20,57	4,485	20.	34.5	10.8

TABLE No. 8.
DESPATCHES OF MANURE AND REFUSE.

	Saleable Manure.				Unsaleable Refuse.					Average Daily Staff.		
	Night Soll.	Sweepings.	Mixture.	Total.	Contractors.	Farmers.	Depôts.	Sea	Total.	Grand Total in Tons.	Inspectors and Foremen.	Labourers.
Chisenhale St., by Flats..	..	2,888	8,448	11,336	..	51,408	3,168	..	54,576	65,912	}	23 8
Sandhills, do.	8,640	9,024	..	17,664	17,664		
Do., by Rail	5,920	..	5,920	..	9,971	..	..	9,971	15,891	..	2·
Wavertree do.	2,400	..	2,400	..	1,304	..	..	1,304	3,704		
Chisenhale Street and Sandhills, <i>via</i> Stanley D'k	1,950	1,950	1,950	}	12·
per "Alpha"	60,110	60,110	60,110		
per "Beta"	3,664	11,532	}	48·
River Craft Dock	1,910	5,958	7,868	..	3,664	..	..	3,664	11,532		
Do., per "Alpha"	53,280	53,280	53,280	}	48·
Do., per "Beta"	8,650	8,650	8,650		
	..	13,118	14,406	27,524	..	74,987	12,192	123,990	211,169	238,693	2·	85·8

TABLE No. 9.
HORSES.—DAILY AVERAGE NUMBER.

Hired.	Corporation Horses.				Supplied for various Works.																			
	Number.	Effective for Work.	Percentage of Ineffectives.	At Work every Sunday.	Scavenging.												City Engineer.				Sundry Places.	Disinfecting Vans, &c.	Not Ordered.	
Number.	243.	234.	4.4	23.2	Night Soil Removal.	Dry Ash Removal.	Bell Ash Removal.	Street Scavenging.	Yards, Stables, Stores, &c.	Market.	Superintendent.	Watering.	Watering before Street Machines.	Carr Hall.	Messenger.	Wharf.	Abattoir.	Paving.	Sewers Cleansing.	Brownlow Street.	Watering before Steam Roller.			
25	243.	234.	4.4	23.2	3.3	62.8	15.3	79.	4.2	1.1	2.	11.	2.6	5.	2.	2.	1.6	15.4	10.3	1.	2.2	3.2	7.7	6.6

New Horses.		Number Disposed of		
Purchased.	Bred.	Died.	Destroyed.	Sold.
35	2	9	..	26

TABLE No. II.

Daily Consumption of Provender and Weekly Cost per Horse per Week.
Food and Litter.

Days Keep.	Total Consumption of Food.		Daily Average Consumption per Horse.	Weekly Cost of each Horse's Keep.
90,793 Horses of Health Committee.	Corn	10,254 cents.	Lbs. 11 30	
	Beans and Peas ..	3,264 "	3 60	
	Oats	397 "	42	
	Bran	2,497 "	2 75	Gross weekly cost .. 11s. 5½d.
	Meal and Linseed..	292 "	32	Credit value of
	Roots			Manure 11½d.
	Grass.....	3,011 cwts.	3 70	
	Hay	7,679 "	9 47	
	Straw	4,844 "	6 0	
	Peat Moss	1,433 "	1 76	
	Sawdust	1,520 Sacks	0 17	
				<u>10s. 6½d.</u>

DURING THE YEAR 1888, IN THE URBAN SANITARY DISTRICT OF LIVERPOOL,
ALSO THE POPULATION OF SUCH LOCALITIES.

(I.) NAMES OF LOCALITIES adopted for the purpose of these Statistics; public institutions being shown as separate localities.	POPULATION AT ALL AGES.			MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.						
WARDS.	Census 1881.	Estimated to middle of 1888.	Registered Births.	At all Ages.	Under 1 Year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 60.	60 and upwards.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
Scotland	70606	64049	2177	1376	396	300	73	36	406	11
Vauxhall	15382	12773	303	223	62	47	8	11	63	1
St. Paul's and Exchange	19937	17033	422	332	88	48	10	7	119	1
St. Anne's and Lime Street	36688	33340	796	599	176	115	25	22	184	1
Castle Street and St. Peter's	6644	5627	89	76	16	11	3	2	28	1
Pitt Street and Great George	18910	15755	438	330	88	48	18	12	106	1
Rodney Street and Abercromby	41997	38266	1205	571	129	65	25	21	177	1
Everton	109812	120619	3942	2092	616	459	127	73	496	33
Kirkdale	58145	83075	2299	1214	382	229	69	37	312	1
West Derby	67727	80057	2519	1249	356	258	69	39	332	1
The Toxteths	106660	129144	3587	2026	559	398	119	85	488	33
(II.) Public Institutions. { Workhouses & Hospitals .. .. .	..	..	..	2071	113	111	128	188	1091	4
Totals	552508	599738	17777	12159	2981	2089	674	533	3802	200

Deaths occurring outside the division or district among persons belonging thereto	194	13	2	3	6	92	7
Deaths occurring within the division or district among persons not belonging thereto	178	5	7	15	25	101	2

OF DEATHS

CLASSIFIED ACCORDING TO DISEASES, AGES, AND LOCALITIES, AND SHOWING AND THE BIRTHS THEREIN DURING THE YEAR.

MORTALITY FROM SURJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.

12.	Smallpox. 13.	Measles. 14.	Scarlatina. 15.	Diphtheria. 16.	Croup (not 'spasmodic'). 17.	Whooping Cough. 18.	Continued Fevers.				Diarrhoea and Dysentery. 22.	Cholera. 23.	Rheumatic Fever. 24.	Erysipelas 25.	Pyæmia. 26.	Puerperal fever. 27.	Ague. 28.	Phthisis. 29.	Bronchitis, Pneumonia, and Pleurisy. 30.	Heart Disease. 31.	Injuries. 32.	All Other Diseases. 33.
							Typhus. 19.	Enteric or Typhoid 20.	Other or Doubt- ful. 21.													
Under 5	..	49	6	1	10	32	..	5	..	68	..	..	..	1	..	..	..	4	128	..	37	355
5 upwards	..	2	3	..	1	..	1	8	..	4	..	8	3	..	..	..	..	77	221	71	26	255
Under 5	..	2	1	..	1	2	..	..	..	4	..	..	..	..	..	..	..	1	20	1	8	69
5 upwards	1	1	..	1	..	3	..	..	..	..	..	12	32	13	8	43
Under 5	2	1	2	7	1	..	..	9	..	..	1	..	..	..	..	..	22	..	7	84
5 upwards	1	4	..	2	..	2	..	..	..	..	..	34	58	20	11	64
Under 5	..	26	2	1	4	7	..	..	..	31	..	..	1	..	..	..	..	2	59	..	12	146
5 upwards	..	1	..	..	1	1	..	3	1	1	..	3	..	..	..	..	..	43	69	35	9	141
Under 5	..	2	..	..	2	..	..	..	..	4	..	..	..	..	..	..	..	2	5	..	1	11
5 upwards	1	..	..	..	..	..	..	..	1	1	..	..	..	..	7	11	4	3	21
Under 5	..	2	3	2	1	9	..	..	..	12	..	..	..	..	..	..	..	1	41	1	1	63
5 upwards	2	1	..	..	1	4	..	..	..	3	..	..	..	..	..	24	44	19	6	90
Under 5	..	6	4	..	2	16	..	..	..	18	..	..	1	1	..	..	..	..	28	..	3	115
5 upwards	3	..	..	..	..	3	..	1	..	2	2	..	..	..	..	52	67	33	7	207
Under 5	..	102	20	3	23	45	..	..	2	76	2	..	..	..	..	..	..	6	233	..	42	521
5 upwards	..	15	6	6	2	4	4	21	..	9	..	4	4	1	2	..	..	162	218	101	28	430
Under 5	..	41	9	2	20	38	..	1	..	54	2	..	..	..	..	..	..	5	100	..	27	312
5 upwards	..	1	3	1	..	2	..	11	1	4	..	5	1	..	2	2	..	88	143	66	21	252
Under 5	..	46	12	9	16	43	..	1	..	46	1	..	..	..	..	..	..	6	114	1	13	306
5 upwards	..	5	9	3	3	3	2	9	..	4	..	5	2	..	..	..	..	119	129	65	13	264
Under 5	..	17	48	16	17	92	..	..	..	74	..	..	3	..	..	..	..	12	170	1	25	482
5 upwards	..	4	24	9	2	5	..	14	..	3	..	8	4	2	2	2	2	164	227	136	28	435
Under 5	..	7	14	8	1	7	..	1	..	2	..	..	..	..	..	..	..	2	37	1	20	124
5 upwards	1	3	16	2	..	..	21	39	..	12	..	4	4	6	..	3	3	322	469	137	158	650
Under 5	..	300	121	43	99	298	1	8	2	398	5	..	6	2	..	..	..	41	957	5196	2588	
5 upwards	1	31	66	23	9	15	31	117	2	41	..	48	21	9	6	7	1104	1688	700318	2852		
Under 5	1	..	..	..	..	..	..	..	..	..	..	..	..	6	..	..	8
5 upwards	2	..	1	1	1	..	..	..	38	52	18	1	65
Under 5	1	..	2	9
5 upwards	1	..	..	..	..	4	..	1	..	1	..	2	..	..	..	25	15	11	20	86

TABLE OF NEW CASES OF SICKNESS,

Coming to the knowledge of the Medical Officer of Health during the year 1888,

in the Urban Sanitary District of Liverpool, classified according to

LOCALITIES and DISEASES.

NAMES OF LOCALITIES. WARDS.	NEW CASES OF SICKNESS IN PERSONS BELONGING TO THE DISTRICT.				
	Small Pox.	Measles.	Scarlatina.	Diphtheria.	Continued Fevers.
Scotland.....	..	386	37	1	113
Vauxhall .....	..	54	5	2	29
St. Paul's and Exchange.....	..	63	8	2	27
St. Anne's and Lime Street .....	..	170	25	4	46
Castle Street and St. Peter's.....	..	13	4	3	3
Pitt Street and Great George.....	..	46	31	4	12
Rodney Street and Abercromby	2	135	113	4	30
Everton .....	..	1256	236	25	137
Kirkdale.....	3	767	145	8	98
West Derby	7	656	264	34	62
The Toxteths.....	7	229	429	60	109
Emigrants, Seamen, and others ad- mitted to Hospital whose resi- dences were unknown.....	8	43	19	..	13
TOTALS.....	27	3818	1316	147	679

PHILIP'S PLAN OF LIVERPOOL

MORTALITY MAP OF FEVER IN 1888.

The RED Dots Mark the Number of Deaths from Typhoid, and the
BLACK Dots the Number from Typhus.
(The Deaths occurring in Hospitals have been transferred to the streets from whence
the Patients were removed.)

SCALE OF MILES
1/4 1/2 3/4 1 1 1/2 2 2 1/2 3 4 5 6 7 8 9 10



REFERENCE to the WARDS

- 1 Everton & Kirkdale
- 2 Scotland
- 3 Vauxhall
- 4 St. Paul's
- 5 Exchange
- 6 Castle street
- 7 St. Peter's
- 8 Pitt street
- 9 Great George
- 10 Rodney street
- 11 Abchurch
- 12 Lime street
- 13 St. Ann's street
- 14 West Derby
- 15 South Trench
- 16 North Trench



DURING THE YEAR ENDING SATURDAY, 31ST DECEMBER, 1888

1847

DEATH

