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COUNTY BOROUGH OF SALFORD.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH,

FOR THE YEAR

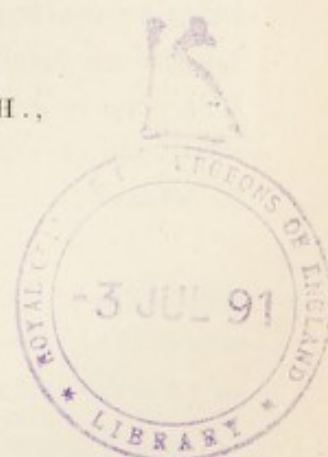
1890.

BY

CHARLES E. PAGET,

M.R.C.S. ENG., L.R.C.P. LOND., D.P.H.,

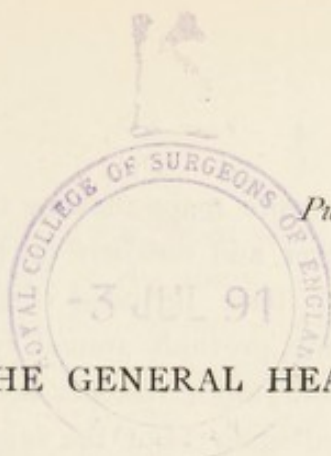
MEDICAL OFFICER OF HEALTH.



SALFORD:

W. F. JACKSON AND SONS, PRINTERS, STATIONERS, AND BOOKBINDERS, NEW BAILEY STREET

MDCCCXCI



Public Health Department,

Town Hall, Salford,

April 23rd, 1891.

TO THE GENERAL HEALTH COMMITTEE.

GENTLEMEN,

I have the honour to present to you my second Annual Report on the Health of the Borough of Salford, being the Annual Report of the Medical Officer of Health for the year 1890. It has been drawn up in accordance with the General Order of the Local Government Board, and on the plan of my former Report.

The General Death-rate of the Borough shows an increase on the rates for the past few years, being 25·1 per 1000 of the estimated population, as against 23·7 per 1000 for the quinquennial period 1886-90*. This increased mortality has, however, been due in principal measure to causes beyond the control of the Sanitary Authority, among which the chief have been acute lung diseases which the exceptionally inclement seasons of the year have encouraged, and to which such of the inhabitants of the borough as suffered from attacks of epidemic influenza, which extensively invaded the district, were rendered particularly liable.

The year 1890 was a notable one, as was its predecessor, for the extensive prevalence within the Borough of two chief zymotic diseases, namely scarlet-fever, and diphtheria; but while the former of these diseases showed a considerable reduction in the total number of cases, the latter showed no reduction, and gave no signs of its epidemic period coming to an end until quite towards the close of the year. I have, however, already reported to you specially on the subject of the diphtheria prevalence within the borough, and am glad to be able to state now, that the decline manifested by the end of the year 1890 has been steadily maintained down to the present time.

Having in my special report on the recent epidemic of diphtheria already presented a pictorial map showing the location of houses in which one or more cases of the disease occurred, I have not thought it necessary to

* While this Report was in the printers' hands, the results of the census enumeration in April last were ascertained with sufficient precision to show that the estimated population to the middle of the year 1891 should be about 198,717. Calculated on this basis, the general death-rate of the Borough of Salford in 1890 was 27·7 per 1,000 of the population, instead of 25·1 as above. The Registrar-General's estimate of population for Salford, in 1890, was 242,509, and that of the Health Department of the Borough was 216,830, in both cases, therefore, in excess of the actual increase, which was at the rate of 12·4 per cent. for the last decennial period. (June, 1891.)

repeat that illustration, but I have made maps showing the distribution of houses in which cases of scarlet-fever and enteric-fever have arisen in the borough during the year 1890, and have included them in this report. The map which I introduced in my previous annual report, and which showed the location of *all* the chief zymotic diseases occurring during the year, was very favourably commented upon ; but the suggestion has been made that it would have been better to have shown these diseases separately on similar maps, and, satisfied of the advantages of this method, I have adopted it on this occasion.

The matter of Hospital Accommodation for the isolation of cases of infectious sickness has been still further advanced, in the fact that the Ladywell Sanatorium is now being built, and may be expected to be ready for occupation by the end of this year. The Hospital is arranged to provide, in three large and two smaller pavilions, for 184 patients, with a space accommodation of 2,000 cubic feet for each patient. There is every reason to believe that when finished this Hospital will be found to be one of the finest and most complete of its kind in the country, and it certainly will mark an epoch in the sanitary history of the borough. An efficient sanitary station for the disinfection of the bedding and clothing of persons suffering from infectious sickness, and who are not isolated in the Hospital, is also being built adjoining the outbuildings of the establishment.

I have drawn attention to the want of a Common Lodging House Inspector, who shall keep the Registers of the Lodging Houses and of the Sub-let houses more efficiently than has been possible during past years while the Sanitary Staff has been so much undermanned, and who shall inspect these houses more frequently at night-time than they have hitherto been. I have, however, now to supplement my report by recording the appointment in this year of a special officer as described, and I have also to express my acknowledgements for the permanent appointment of two additional District Sanitary Inspectors, so that the work of systematic inspection of particular parts of the borough may be regularly undertaken. I have also commented on the fact that the eight men employed to disinfect houses in the borough have hitherto only held their appointment week by week according as there might be work enough for them to do, and that in my opinion they were deserving of permanent employment ; this alteration of their position has since been granted, and the men when not required for disinfection purposes are to be employed in the detection of nuisances.

Distinct progress has been made in the matter of dealing with the Insanitary Dwellings of the Borough on a comprehensive scale, and the action taken during the year was under the most recently conferred powers contained in the Housing of the Working Classes Act of 1890. Under the provision of Part I. of this Act, I made representations in respect of certain insanitary areas which could not be radically improved by any less drastic measure than that of their complete clearance. The average general death-rates of these areas had for some years been so heavy that the complete demolition of the houses thereon could scarcely be otherwise regarded than as a step of first magnitude in regard to the public welfare. The Council having adopted my representations, formulated a scheme for such demolition as indicated, and since the commencement of the present year an inquiry into the scheme proposed has been held by an Inspector of the Local Government Board. This procedure on the part of the Council is recognised, however, as only the first step in the carrying out of a comprehensive course of action, having for its object the complete removal of every grossly insanitary area within the Borough of Salford.

The desirability of the Corporation erecting a single Model Common Lodging House is dealt with in this report, and I have only now to say in regard to the matter that I earnestly hope that no unnecessary delay will be permitted in the carrying out of this scheme, since it has received the approval of the Council, and such a building is much needed in the borough.

In conclusion, I have to ask your special attention to certain recommendations which it is my duty to make, namely, that the erection of one or more public abattoirs may not be lost sight of; that the provision of a refuse destructor in the Pendleton District will not be long delayed; and that such effect may be given to the final recommendations of my Special Report on the Prevalence of Diphtheria, under the heading of Sewerage and Drainage, as may be practicable.

I am, Gentlemen,

Your Obedient Servant,

CHARLES E. PAGET,

MEDICAL OFFICER OF HEALTH.



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I.

STATISTICAL SUMMARY, 1890.

Population.—Estimated to the { **Males** 104,100 }
middle of the year { **Females** ... 112,730 } Persons 216,830

Marriages 1,773

Annual Rate of Persons Married per 1,000 of the Population. 16·0

Births { **Males** 3,606 }
..... { **Females** ... 3,492 } Persons 7,098

Annual Rate of Births per 1,000 of the Population..... 32·2

Deaths { **Males** 2,816 }
..... { **Females** ... 2,717 } Persons 5,533

Annual Rate of Mortality { **Males** 26·6 }
per 1,000 { **Females** ... 23·7 } Persons 25·1

Excess of Registered Births over Deaths 1,565

Estimated Increase of Population..... 4,800

Density.—The mean density of the Borough is equal to 41·9 persons per acre :—in Regent Road, 83·3; Greengate, 121·1; Pendleton, 22·9; Broughton, 28·6.

Area.—The Municipal Borough of Salford comprises the Townships of Salford, Pendleton, and Broughton, together with a detached portion of Pendlebury, and has a total area of 5,170 acres.

Elevation.—The mean elevation is 140 feet above sea-level, and varies between 85 feet and 250 feet.

II.

STATISTICS OF MORTALITY.

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POPULATION, DENSITY, ANNUAL RATES OF BIRTHS, MARRIAGES, AND DEATHS,
IN EACH OF THE TWENTY

Year.	POPULATION (estimated to the middle of each year).					DENSITY (persons per acre).				
	Borough.	Regent Road.	Green-gate.	Pendleton.	Broughton.	Boro'.	Regent Road.	Green-gate.	Pendleton.	Broughton.
1861	102,920	33,756	37,519	21,649	9,996	19'9	31'7	142'8	9'0	7'0
1862*	104,975	34,928	37,458	22,139	10,450	20'3	32'7	142'4	9'2	7'3
1863	107,075	36,134	37,389	22,636	10,916	20'7	33'9	142'2	9'4	7'7
1864	109,262	37,374	37,313	23,182	11,393	21'1	35'0	141'8	9'6	8'0
1865	111,393	38,646	37,231	23,633	11,883	21'6	36'2	141'5	9'8	8'3
1861-65	107,125	36,167	37,382	22,648	10,928	20'7	33'9	142'1	9'4	7'7
1866	113,614	39,949	37,144	24,136	12,385	22'0	37'4	141'2	10'0	8'7
1867	115,885	41,294	37,045	24,644	12,902	22'4	38'7	140'8	10'2	9'1
1868*	118,198	42,674	36,941	25,152	13,434	22'9	40'0	140'4	10'4	9'4
1869	120,526	44,087	36,823	25,658	13,968	23'3	41'3	140'0	10'6	9'8
1870	122,965	45,551	36,704	26,177	14,533	23'8	42'7	139'4	10'8	10'2
1866-70	118,238	42,711	36,931	25,153	13,444	22'9	40'0	140'4	10'4	9'4
1871	125,890	47,195	36,517	26,920	15,258	24'3	44'2	138'8	11'1	10'7
1872	130,301	49,301	36,145	28,357	16,498	25'2	46'3	137'4	11'7	11'6
1873*	134,883	51,463	35,747	29,847	17,826	26'1	48'3	135'7	12'4	12'5
1874	139,618	53,670	35,319	31,386	19,243	27'0	50'3	134'3	13'0	13'5
1875	144,518	55,921	34,868	32,977	20,752	27'9	52'4	132'6	13'6	14'6
1871-75	135,042	51,510	35,719	29,897	17,916	26'1	48'3	135'8	12'4	12'6
1876	149,591	58,219	34,393	34,617	22,362	28'9	54'7	130'6	14'3	15'7
1877	154,842	60,561	33,898	36,308	24,075	29'9	56'8	128'8	15'0	16'9
1878	160,277	62,945	33,379	38,054	25,899	31'0	59'1	126'9	15'8	18'2
1879*	165,899	65,371	32,843	39,848	27,837	32'1	61'4	124'9	16'5	19'5
1880	171,727	67,839	32,291	41,697	29,900	33'2	63'6	122'8	17'2	21'0
1876-80	160,467	62,987	33,361	38,105	26,014	31'0	59'1	126'8	15'8	18'3
1881	177,220	70,180	31,867	43,418	31,755	34'3	65'7	121'1	17'9	22'3
1882	181,247	72,084	31,867	44,627	32,669	35'1	67'9	121'1	18'5	22'9
1883	185,345	74,020	31,867	45,859	33,599	35'8	69'4	121'1	19'0	23'6
1884*	189,546	76,016	31,867	47,124	34,539	36'6	71'3	121'1	19'5	24'2
1885	193,843	78,022	31,867	48,413	35,541	37'5	73'1	121'1	20'0	24'9
1881-85	185,440	74,064	31,867	45,888	33,621	35'9	69'5	121'1	19'0	23'6
1886	198,232	80,107	31,867	49,737	36,521	38'3	75'1	121'1	20'6	25'6
1887	202,731	82,212	31,867	51,096	37,556	39'2	77'1	121'1	21'1	26'3
1888	207,326	84,378	31,867	52,472	38,609	40'1	79'1	121'1	21'7	27'1
1889	212,030	86,572	31,867	53,887	39,704	41'0	81'2	121'1	22'3	27'8
1890*	216,830	88,832	31,867	55,328	40,803	41'9	83'3	121'1	22'9	28'6
1886-90	207,430	84,420	31,867	52,504	38,639	40'1	79'2	121'1	21'7	27'1

* In the years 1862, 1868, 1873, 1879, 1884, and 1890 the facts are those registered in 53 instead of

IN THE BOROUGH OF SALFORD, AND IN ITS FOUR REGISTRATION SUB-DISTRICTS,
SEVEN YEARS, 1864-1890.

ANNUAL RATES PER 1,000 OF THE POPULATION.											Year.
MARRIAGES. Registration Districts.	BIRTHS.					DEATHS.					
	Boro'.	Regent Road.	Green-gate.	Pendle-ton.	Brough-ton.	Boro'.	Regent Road.	Green-gate.	Pendle-ton.	Brough-ton.	
11'9	39'7	40'0	43'9	38'0	26'9	24'6	27'8	26'1	21'8	13'8	1861
10'2	39'0	38'7	42'5	39'4	25'9	25'3	29'4	27'8	19'6	14'7	1862
11'7	38'0	37'9	42'0	37'0	26'9	26'0	28'3	29'1	22'5	15'0	1863
12'7	38'6	37'3	44'3	38'2	24'7	26'5	28'7	31'0	21'7	14'6	1864
12'9	37'8	37'3	42'8	36'2	26'4	29'1	32'3	32'8	25'2	14'8	1865
11'9	38'6	38'2	43'1	37'8	26'2	26'3	29'3	29'4	22'2	14'6	1861-65
13'4	37'9	38'5	42'8	35'6	25'9	28'8	32'2	33'9	23'0	13'6	1866
14'3	39'0	40'7	42'2	37'0	28'2	28'2	31'9	31'9	22'8	15'7	1867
13'3	39'3	38'5	43'5	40'4	27'9	30'5	34'3	33'0	28'7	14'9	1868
14'1	38'9	39'1	43'2	38'3	27'6	26'4	29'2	29'2	23'3	15'8	1869
14'1	39'6	41'7	43'1	36'3	30'3	25'8	30'4	27'3	21'3	15'3	1870
13'8	38'9	39'7	43'0	37'5	28'0	27'9	31'6	31'1	23'8	15'1	1866-70
14'6	40'7	43'6	44'2	39'4	26'2	30'3	34'9	32'4	27'2	16'2	1871
15'1	41'4	45'3	44'1	35'7	34'0	25'3	28'9	28'8	20'4	15'6	1872
14'3	41'5	43'7	43'0	40'5	34'1	28'3	32'2	30'1	26'6	16'7	1873
16'2	42'1	45'9	40'9	37'3	41'8	28'2	32'6	29'2	24'9	19'5	1874
17'5	44'4	48'9	41'0	40'9	43'5	29'5	34'8	32'0	23'7	20'6	1875
15'5	42'0	45'5	42'6	38'8	35'9	28'3	32'7	30'5	24'6	17'7	1871-75
20'5	45'5	47'7	43'3	44'1	45'3	29'5	34'5	30'2	24'9	22'4	1876
19'6	44'4	47'0	40'7	43'1	44'7	26'3	31'8	26'3	21'9	19'6	1877
17'9	44'7	46'5	42'5	42'9	45'6	27'1	29'8	28'8	23'6	23'2	1878
15'2	43'0	45'5	40'9	42'5	40'0	26'7	27'5	31'6	24'7	21'5	1879
16'6	41'4	41'3	41'6	42'7	39'5	27'9	31'5	33'2	23'3	20'6	1880
18'0	43'8	45'6	41'8	43'1	43'0	27'5	31'0	30'0	23'7	21'7	1876-80
16'3	38'8	40'2	39'0	39'2	35'0	22'6	24'8	24'8	21'6	16'7	1881
16'7	39'3	41'2	40'3	38'4	35'5	23'5	25'3	29'0	20'9	17'9	1882
15'7	36'5	38'9	38'1	34'5	32'7	23'1	25'1	28'3	20'9	16'8	1883
15'6	37'1	38'1	40'1	34'9	35'2	23'3	24'9	27'6	21'4	18'4	1884
15'5	36'1	38'1	36'1	34'8	33'3	22'1	23'8	27'6	19'9	16'4	1885
16'0	37'6	39'3	38'7	36'4	34'3	22'9	24'8	27'5	20'9	17'2	1881-85
14'6	36'5	36'8	39'5	35'4	33'6	23'6	25'0	29'8	21'0	18'1	1886
14'5	34'3	35'7	36'2	33'2	31'2	24'0	24'2	32'3	22'5	18'4	1887
14'2	34'4	34'2	37'6	34'7	31'9	23'0	25'1	27'5	21'8	16'6	1888
15'4	33'0	33'1	37'0	32'5	30'0	23'0	24'5	28'1	21'6	17'5	1889
16'0	32'2	33'0	36'2	31'9	27'7	25'1	25'4	35'3	22'6	19'8	1890
14'9	34'1	34'6	37'3	33'5	30'9	23'7	24'8	30'6	21'9	18'1	1886-90

52 weeks ; corrections have therefore been made in calculating the rates.

Population.

Estimated Population.—The estimated population of the County Borough of Salford to the middle of the year 1890 was 216,830, and comprised 104,100 males and 112,730 females. The estimated numbers of males and females at particular ages will be found in Table B of this report. The actual increase of the population—that is, the excess of births over deaths—amounted, however, to only 1,565, as against 2,111 in the year 1889. I am glad to record that there was a further decrease in the percentage of illegitimate births to the total births for the whole borough as compared with the numbers for the year 1889, and also as compared with the average numbers for the previous ten years, as may be seen in Table C of this report. This decrease has been most marked in the Pendleton and Broughton districts of the borough. The density of the population is as usual very variable, and, as may be seen on reference to Table A of this report, the range of density is between the limits of 22·9 persons in Pendleton and 121·1 persons per acre in the Greengate district.

General Mortality.

Annual Rate of Mortality.—The total deaths for the year 1890 numbered 5,533—2,816 being deaths of males and 2,717 being deaths of females. The death-rate for the borough was equal, therefore, to 25·1 per 1,000 of the estimated population, a rate unfortunately as much as 2·1 per 1,000 in excess of the mean rate for the quinquennial period 1881-85, and 1·4 per 1,000 more than the mean for the five-year period which it closes. It will be seen, however, further on in this report that this higher general mortality was due in chief degree to causes outside the control of the sanitary authority, among which causes acute lung diseases played the prominent part. In arriving at the correct general death-rate of the borough, account was taken of the deaths of persons belonging to the borough who died outside its boundaries, as well as of persons not belonging to Salford who died within its area. Of the former, there were 81 deaths; of the latter, 21 deaths. The deaths of Salford residents outside the borough were distributable as follows:—Children's Hospital, Pendlebury, 38; Manchester Royal Infirmary, 29; Monsall Hospital, 6; St. Mary's Hospital, 8.

General Mortality compared.

The year 1890 brings another quinquennial period to an end, and, as has been already observed, the general mortality rate for the borough has for this period been slightly raised by the exceptional mortality of the year 1890, as against the mean rate for the quinquennial period 1881-85. Table A shows the mean quinquennial death-rates for the whole borough in rates per 1,000 of the population from 1861 to 1890 inclusive, and these mean general mortality-rates for the borough are respectively 26·3, 27·9, 28·3, 27·5, 22·9, and 23·7. During the last period, however, there have been two special and widespread epidemics of scarlet-fever and diphtheria in the borough, which alone might have been

expected, apart from any other cause, to affect the general death-rate of the period in a very marked degree.

Compared with other large towns and cities of England the general death-rate of Salford is, according to the Registrar-General, slightly better than it has been in previous years, but this slight discrepancy between his figures and those already stated in this report is due to a higher calculation of population by him for Salford than has been made for the past few years in the Health Department of the borough. The results of the census of the year 1891 will of course enable any corrections to be made, which may be necessary, and if the Salford calculations have been faulty, the corrections will be made for the whole of the past decennial period. As in my last report, *I again draw attention to the real need that there is for a simple population enumeration in the large towns of the country once in every five years, instead of only once in each decennium.*

General Mortality compared with other large towns.

The annual rate of mortality in England and Wales during the year 1890 was equal to 19·19 per 1,000 of the population; less the 28 great English towns it was 18·19 per 1,000; and in London the general mortality-rate was 20·3.

District Mortality Rates.—The district distribution of deaths does not call for very special comment, the only district in which the proportion to the general death-rate was in marked excess being the Greengate district. The district mortality-rates per 1,000 of the population were as follows:—Regent-road, 25·4; Greengate, 35·3; Pendleton, 22·6; Broughton, 19·8.

District Mortality.

It was in the Greengate district that mortality arising from zymotic diseases, except diarrhoea, and from acute lung diseases was most notable; but in other respects the district mortalities bore their usual proportions to the general death-rate of the borough. The figures relating to the district distribution of mortalities from various causes may be found in Table D of this report.

Mortality in Age Groups.—The annual rates of mortality at all ages, and at the five chief groups of ages—under 5 years, from 5 to 20 years, from 20 to 40 years, from 40 to 60 years, and at 60 years and upwards, for both males and females—will be found in Table B of this report. These rates for the combined sexes are further compared with the like mean rates in the borough for the previous ten years, 1880 to 1889 inclusive, and they are also placed side by side with the rates of the new English Life-Table. The exceptional mortality of the year 1890, which has been to so large an extent due to non-preventible causes, such as acute lung diseases, has necessarily made the comparison with the standard life-table assume an unfavourable aspect, and this feature will doubtless be found to be the same in the large majority of the great towns of the country in respect of the year 1890, wherever

Mortality in Age-Classes.

RECORDED AND CORRECTED DEATH-RATES PER 1,000 IN
28 GREAT TOWNS IN 1890 (REGISTRAR-GENERAL).

Towns in the order of their Corrected Death-rates.	Recorded Death-rate.	Corrected Death-rate.	Comparative Mortality Figure.
Columns	1	2	3
England and Wales	19'19	19'19	1000
England and Wales less the 28 Towns	18'19	17'79	927
28 Towns	21'35	22'75	1186
Nottingham	16'47	17'46	910
Brighton	17'76	18'29	953
Leicester	17'92	18'77	978
Derby	18'51	19'25	1003
Hull	19'25	19'86	1035
Bristol	19'21	19'88	1036
Norwich	21'06	20'14	1050
Portsmouth	19'59	20'18	1052
Huddersfield	18'98	20'84	1086
Birkenhead	19'69	21'06	1097
London	20'30	21'55	1123
Birmingham	20'74	22'12	1153
Plymouth	22'42	22'20	1157
Wolverhampton... ..	21'82	22'50	1172
Bradford.....	20'39	22'52	1174
Cardiff	20'76	22'53	1174
Oldham	21'23	23'56	1228
Sunderland	22'72	23'66	1233
Leeds	22'63	24'19	1261
Salford	22'36	24'34	1268
Halifax	22'46	24'40	1271
Blackburn	23'47	25'58	1333
Liverpool	23'55	25'84	1347
Sheffield	24'93	26'81	1397
Newcastle-upon-Tyne	25'87	27'38	1427
Bolton.....	25'78	28'25	1472
Preston	27'43	29'79	1552
Manchester	30'57	34'06	1775

TABLE B.

ESTIMATED POPULATION, AND ANNUAL RATES OF MORTALITY, AT ALL AGES, AND AT FIVE GROUPS OF AGES, IN THE FIFTY-TWO WEEKS OF THE YEAR 1890, AND IN EACH YEAR IN THE PRECEDING DECADE:—COMPARED WITH THE CORRESPONDING RATES OF THE NEW ENGLISH LIFE TABLE—FOR PERSONS, MALES AND FEMALES.

	PERSONS		MALES		FEMALES	
	Estimated Population, 1890.	Deaths 1890.	Estimated Population, 1890.	Deaths, 1890.	Estimated Population, 1890.	Deaths, 1890.
All Ages.....	216,830	5,533	104,100	2,816	112,730	2,717
Under 5 years.....	31,799	2,421	15,873	1,304	15,926	1,117
5-20 years	70,092	462	34,721	223	35,371	239
20-40 years	70,356	670	33,394	341	36,962	329
40-60 years	34,734	1,012	16,213	554	18,521	458
60 and upwards	9,849	968	3,895	394	5,954	574

ANNUAL DEATH-RATES, PER 1,000 LIVING IN 1890, AMONG

	PERSONS.		MALES.		FEMALES.	
	Salford.	New Engl. Life Table.	Salford.	New Engl. Life Table.	Salford.	New Engl. Life Table.
All Ages	25'1	19'5	26'7	20'5	23'7	18'5
Under 5 Years	75'0	61'0	80'8	65'6	69'0	56'3
5-20 years	6'5	4'8	6'3	4'9	6'7	4'7
20-40 years	9'4	8'5	10'5	9'0	8'8	8'1
40-60 years	28'7	18'3	33'6	20'4	24'3	16'4
60 and upwards	96'8	71'9	99'6	75'2	94'9	69'8

ANNUAL RATES OF MORTALITY, TEN YEARS, 1880-89, AND IN 1890.

	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	Mean 1880 to 1889.	1890.
PERSONS	All Ages,	27.9	22.6	23.5	23.1	23.3	22.1	23.6	24.0	23.0	23.6	25.1
	Under 5 Years,	102.9	69.6	80.1	73.1	78.2	70.2	77.4	79.6	72.6	77.8	75.0
	5-20 ...	7.0	5.0	4.5	5.8	5.5	5.0	5.6	5.5	5.6	5.6	6.5
	20-40 ...	9.7	9.4	9.5	8.9	9.2	9.1	8.6	8.3	8.7	8.9	9.4
	40-60 ...	24.3	24.5	23.8	24.2	22.4	22.5	24.4	24.3	24.0	23.8	28.7
	60 and upwards	77.4	83.8	75.9	82.7	79.7	79.8	82.0	86.3	85.9	81.3	96.8
MALES	All Ages,	30.0	24.1	24.4	25.0	24.6	23.5	24.4	25.0	23.6	24.9	26.7
	Under 5 Years,	109.5	74.9	83.3	77.8	85.2	75.6	81.8	83.1	74.4	85.2	80.8
	5-20 ...	7.3	5.9	4.4	6.0	5.9	5.4	5.7	5.6	5.6	5.9	6.3
	20-40 ...	10.8	9.8	9.5	9.9	9.0	9.9	8.4	8.9	8.9	9.4	10.5
	40-60 ...	27.3	27.4	26.7	29.2	23.1	24.1	26.5	27.1	26.3	26.4	33.6
	60 and upwards	86.1	89.6	81.0	89.2	84.7	87.3	84.8	89.8	91.3	87.7	99.6
FEMALES	All Ages,	26.0	21.1	22.7	21.5	22.2	20.8	22.8	23.0	22.5	22.4	23.7
	Under 5 Years,	96.4	63.7	77.0	68.3	71.1	64.7	73.0	76.0	70.9	73.0	69.0
	5-20 ...	6.7	4.2	4.6	5.6	5.2	4.6	5.6	5.4	5.6	5.4	6.7
	20-40 ...	8.8	9.1	9.4	8.0	9.4	8.4	8.7	7.8	8.5	8.5	8.8
	40-60 ...	21.7	22.0	21.3	19.9	21.8	21.1	22.6	21.8	22.1	21.5	24.3
	60 and upwards	73.2	79.9	72.4	78.6	72.5	75.0	80.3	84.1	82.4	76.9	94.9

in fact similarly inclement seasons as those of this part of the country were experienced. It is, therefore, all the more satisfactory to note that in Salford during the year 1890 the mortality of infants under five years of age was below the average of the ten preceding years, even though the mortality at every other age-group was above the like ten year averages. None the less, the high infant mortality of Salford, as compared with the standard life-table, must still seriously occupy the attention of the Sanitary Authority, and all the more so when it is remembered that as many as 1,415 infants died during the past year before reaching one year of age, as against 7,098 births in the same year.

Infantile
Mortality and
Births.

Infantile Mortality.—Births.—As has just been pointed out, there were 1,415 deaths of infants under one year of age during the year 1890, as against 7,098 births. Thus the proportion of deaths under one year of age per 1,000 births was 199, as compared with 181 in the year 1889, and as compared with 181 the average rate for the preceding ten years. The average rate for the 28 great English towns was 172 during the year 1890, the numbers varying from 135 at Portsmouth, to 241 at Preston, as may be seen in the accompanying table prepared from the Registrar-General's Annual Summary.

PROPORTION OF DEATHS UNDER ONE YEAR OF AGE PER 1,000
BIRTHS IN 28 GREAT TOWNS OF ENGLAND IN 1890.

The 28 Great Towns	172		
Portsmouth.....	135	Leeds	172
Bristol	151	Sunderland	173
Derby	157	Wolverhampton ...	175
Nottingham	159	Bolton	176
Hull	160	Norwich	180
Plymouth.....	161	Oldham	180
London.....	163	Birmingham.....	183
Brighton	164	Manchester	187
Birkenhead... ..	166	Blackburn	188
Huddersfield	168	Leicester	195
Cardiff.....	168	Liverpool	195
Bradford.....	169	Sheffield	195
Newcastle-on-Tyne.	169	Salford	199
Halifax.....	170	Preston	241

The total number of births were 7,098, of which 297 or 4·2 per cent. were illegitimate. The illegitimacy rate was 0·2 per cent. below the average of the previous ten years, and showed a

TABLE C.

BIRTHS IN THE BOROUGH OF SALFORD AND IN ITS REGISTRATION SUB-DISTRICTS, AND DISTINGUISHING DEATHS OF LEGITIMATE AND ILLEGITIMATE INFANTS UNDER ONE YEAR OLD.

IN 53 WEEKS OF THE YEAR 1890.

	Births.		Percentage of Illegitimate Births to Total Births.	Deaths under One Year.		Proportion of Deaths under One Year per 1,000 Births.		
	Total.	Illegit.		Total.	Illegit.	Total.	Legit.	Illegit.
Borough.....	7098	297	4.2	1415	109	198	192	367
Regent Road District ...	2982	147	4.9	649	43	218	214	286
Greengate ,,	1172	54	4.6	241	24	206	195	426
Pendleton ,,	1795	64	3.6	337	31	188	177	484
Broughton ,,	1149	32	2.8	188	13	164	157	406

CORRESPONDING DATA FOR THE TEN YEARS 1880-1889.

Borough.....	70332	3097	4.4	12829	1139	183	174	368
Regent Road District ...	29029	1369	4.7	5711	500	197	188	365
Greengate ,,	12320	613	5.0	2415	228	196	187	372
Pendleton ,,	17153	734	4.3	2935	265	171	163	361
Broughton ,,	11830	381	3.2	1768	146	149	142	383

diminution in each of the districts of the borough with the exception of the Regent Road district. The district illegitimacy rates per cent. of the births were as follows:—Regent Road, 4·9; Greengate, 4·6; Pendleton, 3·6; Broughton, 2·8. The proportion of deaths of illegitimates under one year of age per 1,000 births was 367, as against 368 the average rate for the preceding ten years. The total district mortality rates for legitimates and illegitimates under one year of age together, per 1,000 births, were:—Regent Road, 218; Greengate, 206; Pendleton, 188; Broughton, 164.

Old-Age
Mortality.

Senile Mortality.—Of the total of 5,533 deaths at all ages and from all causes, 968 or 17·5 per cent. were of persons who had attained or passed beyond 60 years of age, as against 15·7 per cent. in the year 1889. The death-rate of these aged persons, as per 1,000 of the estimated population of the borough, was 96·8, as against 71·9 per 1,000 for the New English Life-Table, and as against 81·3 per 1,000, the mean rate for the ten preceding years 1880-89 inclusive (see Table B.) As in the year 1889, the death-rate of aged males was greater than that of females, being in the former year 99·6 per 1,000, and in the latter 94·9 per 1,000.

That aged persons died to the large extent they did from acute lung diseases may be shown by the following short comparison:—

	1889. Deaths of persons 60 years and over.	1890. Deaths of persons 60 years and over.
Bronchitis	157	193
Pneumonia	34	113
Total	191	306

Thus rather more than half as many persons again died in old age from acute lung diseases in the year 1890 than died in the year 1889, and this fact sufficiently explains the increased death-rate for that period of life.

Causes of
Deaths.

Classification of Causes of Death.—The Tables of this report, specially constructed to illustrate this section of the mortality records, are lettered D and E. The former shows the annual rates of mortality at all ages, from all causes, and from five chief groups of diseases, viz., zymotic, constitutional, developmental, local, and other classes not named, in the four districts of the borough, as compared with the mean rates for the preceding five years 1885-89; it also shows in like manner deaths under one year of age per 1,000 births, senile mortality, and annual rates of mortality from zymotic and lung diseases, and under five years of age per 1,000 living at that age. The latter table shows comparisons of death-rates for 1890, with those for the two quinquennial periods 1876-80 and 1881-85, in respect of various specially named diseases and groups of diseases,

TABLE D.

ANALYSIS OF MORTALITY—ANNUAL RATES PER 1,000 LIVING IN EACH OF THE REGISTRATION SUB-DISTRICTS OF SALFORD IN THE 52 WEEKS OF THE YEAR 1889 AND THE AVERAGE ANNUAL RATES IN THE PREVIOUS QUINQUENNIUM.

REGISTRATION SUB-DISTRICTS	ANNUAL RATE OF MORTALITY AT ALL AGES FROM ALL CAUSES AND FROM FIVE CLASSES OF DISEASE.											
	All Causes		Zymotic		Constitutional		Developmental		Local.		Other Classes.	
	Five Years 1885-89.	1890	Five Years 1885-89.	1890	Five Years 1885-89.	1890	Five Years 1885-89.	1890	Five Years 1885-89.	1890	Five Years 1885-89.	1890
REGENT RD	24.5	25.4	5.2	4.5	3.9	3.9	1.7	2.0	11.2	11.9	2.5	3.1
GREENGATE	29.0	35.3	5.9	6.9	5.1	5.5	1.7	2.3	13.7	17.3	2.6	3.3
PENDLETON	21.3	22.6	4.1	4.7	4.4	4.8	1.5	1.4	9.7	9.3	1.7	2.4
BROUGHTON	17.5	19.8	3.6	3.4	3.2	3.2	1.2	1.5	8.3	9.7	1.4	2.1
BOROUGH...	23.2	25.1	4.7	4.7	4.1	4.2	1.8	1.8	10.7	11.6	2.1	2.8

REGISTRATION SUB-DISTRICTS	FROM ALL CAUSES				AT ALL AGES FROM							
	Under 1 Year per 1000 Births.		Over 60 years.		Six Zymotics		Diarrhoea.		*Acute Lung Diseases.		Phthisis	
	Five Years 1885-89.	1890	Five Years 1885-89.	1890	Five Years 1885-89.	1890	Five Years 1885-89.	1890	Five Years 1885-89.	1890	Five Years 1885-89.	1890
REGENT RD	202	218	82.5	92.9	3.1	2.9	1.8	1.4	5.4	7.2	2.1	1.9
GREENGATE	200	206	97.9	128.4	3.6	4.6	1.9	1.5	6.9	10.0	2.9	2.8
PENDLETON	176	188	80.1	79.0	2.7	3.4	1.1	1.1	4.2	4.9	2.2	1.9
BROUGHTON	150	164	72.1	102.5	2.2	2.5	1.1	0.5	3.4	5.4	1.6	1.4
BOROUGH...	186	198	82.8	96.8	2.9	3.2	1.5	1.2	5.0	6.7	2.2	1.9

REGISTRATION SUB-DISTRICTS	ANNUAL RATE OF MORTALITY UNDER FIVE YEARS PER 1000 LIVING AT THAT AGE.											
	All Causes.		Nervous Diseases.		Six Zymotics		Diarrhoea.		*Acute Lung Diseases.		Tubercular Disease.	
	Five Years 1885-89.	1890	Five Years 1885-89.	1890	Five Years 1885-89.	1890	Five Years 1885-89.	1890	Five Years 1885-89.	1890	Five Years 1885-89.	1890
REGENT RD	81.4	78.5	10.9	4.4	13.8	14.3	12.0	8.3	15.5	16.9	6.2	8.0
GREENGATE	115.2	100.6	16.6	6.1	20.0	25.0	12.7	9.9	20.5	20.6	14.9	12.9
PENDLETON	54.4	68.9	7.9	3.3	9.3	14.2	8.4	6.0	9.7	12.1	5.4	12.8
BROUGHTON	55.1	55.5	7.7	4.4	8.8	11.7	8.5	3.4	11.0	14.4	4.9	5.6
BOROUGH...	74.9	74.9	10.1	4.4	12.7	15.3	10.5	7.0	13.9	15.7	7.1	9.5

*True Croup is not included amongst "Acute Lung Diseases" in this table, although it forms part of the Sub-order "Respiratory diseases" of the Registrar General. It is however included in the "Local Class" of diseases at the head of the table.

Causes of Deaths.

Of the 5,533 deaths from all causes and at all ages, the following summary may be made:—There occurred of

Zymotic Diseases,	1,037	deaths,	or	18.7	%	of the total deaths.
Constitutional „	934	„	„	17.0	„	„
Developmental „	396	„	„	7.1	„	„
Local „	2,562	„	„	46.3	„	„
Other „	604	„	„	10.9	„	„

In further division of the zymotic class into the six ordinary zymotic diseases and diarrhoea, 700 deaths were referable to the former disease, or about 12.6 per cent. of the total deaths, and 256 deaths were referable to the latter disease, or about 4.6 per cent. of the total deaths. The diarrhoea mortality was, therefore, much less than in the year 1889, when the number of cases was 343, and this may be partially accounted for by the continuously lower average temperature during the summer months of the past year.

The mortality from the acute lung diseases was excessive, the total number of deaths having been 1,475, as against 940 in the year 1889. Not only were the spring and summer seasons particularly inclement, but there was a seriously predisposing cause to lung diseases in the prevalence of epidemic influenza within the borough during the early months of the year. Persons convalescing from this prostrating disease were especially prone to contract pneumonia and bronchitis, and, therefore, want of care during recovery from influenza may, I think, be set down as an indirect cause for much of the increased mortality from acute lung diseases. The actual number of deaths from epidemic influenza was not, however, very large, as the following tables show. The disease was first noticed in the month of December, 1889, in the Broughton district, and in that month a placard (App. I.) was issued by the Health Committee calling attention to the fact that the disease was prevalent, and to certain measures which should be at once taken on its appearance in any household. The actual number of cases of the disease which did occur in the borough could not be determined; but it was admittedly a very large one. The disease had practically run its course by the end of the month of April, at which time no further deaths had been recorded for more than three weeks.

EPIDEMIC INFLUENZA MORTALITY, 1890.

Week ending	Deaths.
January 18th	1
„ „ February 22nd	2
„ „ March 1st.....	6
„ „ „ 8th	5
„ „ „ 15th	4
„ „ „ 22nd	1
„ „ „ 29th	1
„ „ April 5th	1

TABLE E.

AVERAGE ANNUAL RATES OF MORTALITY PER 1,000 LIVING AT CERTAIN AGE-GROUPS IN TWO SUCCESSIVE QUINQUENNIA, AND THE ANNUAL RATES IN THE YEAR 1890.

CAUSES OF DEATH.	All Ages.			Under 5 years.			5-20 years.		
	Quinquennial means.		Year.	Quinquennial means.		Year.	Quinquennial means.		Year.
	1876-80.	1881-85.		1876-80.	1881-85.		1876-80.	1881-85.	
All Causes.....	27.6	22.9	25.1	95.4	74.2	74.9	6.4	5.2	6.5
Smallpox	0.5	...	...	1.0	0.1	...	0.5	...	...
Measles	0.8	0.7	0.5	5.1	4.5	3.0	0.1	0.1	0.1
Scarlatina	1.2	0.5	0.6	5.8	2.4	2.6	1.0	0.4	0.5
Diphtheria	0.1	0.1	0.9	0.5	0.5	4.1	0.1	0.1	1.0
Croup (not spasmodic)	0.2	0.2	0.1	1.5	1.4	0.6	0.1	0.1	0.1
Whooping Cough.....	0.9	0.7	0.8	6.2	4.8	5.4	0.1	0.1	0.1
Cont'd Fevers. { Typhus	0.1	0.1	...	...	...	...	...	...	...
{ Enteric	0.4	0.3	0.4	0.8	0.3	0.2	0.4	0.4	0.4
{ Continued	0.1	...	...	0.4	0.1	...	0.1	...	...
Diarrhœa and Dysentery	1.8	1.3	1.2	11.2	8.4	7.0	0.1	...	...
Puerperal Fever	0.1	0.1	0.1	...	...	...	...	...	...
Other Zymotics.....	0.6	0.4	0.2	3.0	1.9	1.1	0.1	0.1	0.1
Phthisis	2.7	2.5	1.9	0.7	1.0	0.2	1.2	1.1	0.9
Other Tubercular Diseases	1.2	1.1	1.6	6.9	6.2	9.3	0.3	0.4	0.6
Diseases of { Brain	3.4	3.0	1.8	13.9	10.9	4.4	0.5	0.6	0.2
{ Heart	1.0	1.1	1.2	0.2	0.2	0.1	0.2	0.3	0.3
{ Lungs	6.0	5.0	6.7	19.4	14.7	15.8	0.6	0.5	1.0
{ Digestive System	1.0	0.9	1.2	1.6	2.1	3.4	0.2	0.2	0.2
Other Diseases.....	5.5	4.9	5.9	17.2	14.7	17.7	0.8	0.8	0.9
CAUSES OF DEATH.	20-40 years.			40-60 years.			Over 60 years.		
	Quinquennial means.		Year.	Quinquennial means.		Year.	Quinquennial means.		Year.
	1876-80.	1881-85.		1876-80.	1881-85.		1876-80.	1881-85.	
All Causes.....	10.6	9.2	9.3	26.0	23.5	28.7	85.5	79.9	96.8
Smallpox	0.6	0.1	...	0.3	...	...	0.1	...	...
Measles	...	...	...	...	...	...	...	...	...
Scarlatina	0.1	...	...	...	...	...	...	...	...
Diphtheria.....	...	...	...	...	...	...	...	...	0.1
Croup (not spasmodic)	...	...	...	...	...	...	...	...	...
Whooping Cough.....	...	...	...	...	...	...	...	...	...
Cont'd Fevers. { Typhus	0.1	0.1	...	0.1	0.1	...	...	0.1	...
{ Enteric	0.3	0.3	0.5	0.3	0.3	0.4	0.5	0.1	...
{ Continued	...	...	...	0.1	...	...	0.3	0.1	...
Diarrhœa and Dysentery	0.1	...	...	0.2	0.1	0.2	1.7	1.4	2.3
Puerperal Fever	0.1	0.2	0.2	...	...	...	...	...	...
Other Zymotics.....	0.1	0.1	0.1	0.3	0.3	0.1	0.8	0.5	0.4
Phthisis	4.3	3.9	2.9	4.9	4.1	3.6	1.9	1.6	1.9
Other Tubercular Diseases	0.1	0.1	0.1	0.1	0.1	0.1	0.1	...	...
Diseases of { Brain	0.6	0.6	0.4	2.8	2.8	2.7	11.9	13.6	11.3
{ Heart	0.7	0.7	0.7	2.4	2.5	2.9	6.5	7.5	8.4
{ Lungs	1.3	1.1	2.6	7.5	6.8	11.2	29.5	26.4	31.4
{ Digestive System	0.6	0.4	0.4	1.8	1.5	1.8	4.3	3.9	4.1
Other Diseases	1.6	1.6	1.4	5.1	4.9	5.7	27.9	24.7	36.9

Causes of Deaths

EPIDEMIC INFLUENZA MORTALITY, 1890.

	TOTAL.	0-5	5-20	20-40	40-60	60—
Regent Road.....	6	...	...	4	1	1
Greengate	4	...	...	3	...	1
Pendleton	7	1	1	1	4	...
Broughton	4	...	...	2	2	...
Borough	21	1	1	10	7	2

Diseases of the lungs, exclusive of phthisis, proved fatal to the extent of 6·7 per 1,000 of the population, as against 4·4 per 1,000 in the year 1889, and as against 5·0 per 1,000 the mean for the quinquennial period 1881-85. And again, the deaths of the same group of diseases were equal to a rate of 26·6 per cent. of the total deaths, as against 19·2 per cent. in the year 1889.

The deaths from phthisis numbered 425 as against 365 in the year 1889, and were equal to a rate of 1·9 per 1,000 of the population, as against 1·7 in the preceding year, and as against 2·5 per 1,000 the mean rate for the quinquennial period 1881-85.

From nervous diseases, 141 children under five years of age died, as against 229 deaths in the year 1889. The death-rate from these diseases was, therefore, 2·5 per cent. of the total deaths, as against 4·7 in the year preceding.

As has been pointed out, the diarrhoea mortality for the year 1890 was less than in 1889, and, as regards the mortality from this disease among children under five years of age, it appears that 227 deaths were recorded, as against 298 deaths at the same age in 1889. The child death-rate from diarrhoea was, therefore, during the year 4·1 per cent. of the total deaths, and 80·7 per cent. of the total deaths from this disease, as against 86·8 per cent. in 1889.

Deaths from
Special Diseases
and groups of
Diseases.

Mortality from Special Diseases.—Tables F1 and F2 both show the causes of deaths registered during the year, and the former shows besides the deaths from the same causes in the ten preceding years. In Table F2 the classification of deaths is made for the four chief sanitary districts of the borough, as well as for the borough as a whole, in six principal groups of ages. These tables are condensed from the larger and more detailed Table F3, and are more convenient for purposes of comparison with former

TABLE F1.

CAUSES OF DEATH REGISTERED IN EACH OF THE TEN YEARS 1880-89,
IN 1890, AND THE AVERAGE DECENNIAL NUMBER, CORRECTED FOR
INCREASE OF POPULATION.

	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	Corrected Average	1890
All Causes	4799	4000	4265	4287	4486	4283	4672	4856	4775	4877	5193	5533
Small Pox	...	7	18	...	...	1	...	...	8	...	3	...
Measles	134	38	167	156	100	178	47	320	132	220	171	103
Scarlet Fever	279	84	81	82	144	62	169	155	101	184	154	122
Typhus Fever	20	7	12	3	10	10	1	1	7	2	8	4
Whooping Cough	219	160	152	105	131	129	127	64	222	59	157	182
Diphtheria	22	20	18	24	22	17	12	21	61	206	48	206
Ill-defined Fever	26	9	5	6	8	5	5	2	3	2	8	...
Enteric Fever	84	42	46	64	81	48	61	82	90	112	83	83
Simple Cholera	3	4	3	...	3	2	8	1	1	3	3	5
Diarrhoea, Dysent:	477	160	237	210	374	244	393	339	184	340	339	256
Venereal Affections	33	21	38	56	53	41	35	27	41	34	44	30
Erysipelas	14	15	25	19	15	21	7	14	13	15	18	7
Pyæmia	...	4	7	9	6	1	3	8	7	7	6	16
Puerperal Fever	10	15	13	9	8	11	7	8	18	11	13	20
Other Zymotics	31	11	4	6	5	4	3	4	8	4	9	3
Parasitic Diseases	...	2	2	4	4	5	7	9	4	5	5	5
Dietic Dis: Intemp:	7	22	26	17	15	21	25	17	20	17	22	17
Rheumatic Fever	14	6	11	15	19	13	20	26	20	17	19	16
Cancer	74	89	77	73	93	96	90	94	103	109	104	100
Tabes Mesenterica	91	76	98	82	74	84	119	98	79	80	101	107
Tuberc: Mening:	90	75	82	96	93	95	95	60	75	115	100	171
Phthisis	459	451	437	489	477	487	489	433	446	365	519	425
Scrofula	33	16	19	27	31	41	70	49	35	50	42	78
Constit: Dis: (other) ...	17	27	23	33	40	28	23	35	39	60	37	37
Prem: Birth	85	117	106	97	121	115	144	124	113	105	129	128
Devel: Dis: & Cong: Def: ..	14	9	19	20	20	25	20	23	25	21	23	11
Old Age	143	108	132	144	119	123	145	175	203	216	173	257
Apoplexy and Paralysis ...	117	150	150	182	160	161	161	192	166	172	184	182
Epilepsy	22	18	18	27	16	18	16	27	18	27	24	11
Convulsions	246	197	269	171	178	190	189	203	217	182	234	143
Brain & Nerv: Dis: (other) ..	170	178	212	188	180	162	161	182	173	107	196	58
Heart Diseases	159	192	191	211	194	220	241	251	224	249	244	261
Croup	30	28	46	54	52	36	32	46	56	51	49	28
Bronchitis	583	636	495	544	524	559	629	556	569	502	642	660
Pneumonia	329	292	314	317	317	350	334	416	413	375	397	743
Lung & Respr: Dis: (other) ..	91	56	49	71	54	54	41	72	83	63	73	70
Teething	4	5	3	13	32	7	1	2	2	12	9	37
Diges: Org: Dis:	170	142	153	181	168	151	171	169	172	181	190	219
Urinary Org: Dis:	73	64	63	65	75	68	99	72	96	83	87	86
Parturition	19	39	48	12	30	33	33	35	36	39	37	25
Gener: Orgs: Dis:	11	7	7	11	6	6	7	13	18	7	10	3
Other Local Diseases	16	11	5	19	13	33	43	35	30	27	26	36
Accident	102	86	80	90	91	98	110	123	112	111	115	123
Homicide	3	3	3	3	2	1	1	3	9	2	3	2
Suicide	9	7	8	12	8	7	15	14	25	13	14	16
Atrophy	246	208	187	186	218	174	214	209	242	243	244	323
Ill-defined Causes	20	86	106	84	102	48	49	47	56	72	77	118

1890.	0-1 Years.					1-5 Years.					5-20 Years.				
	Regent Rd.	Greengate.	Pendleton.	Broughton.	Borough.	Regent Rd.	Greengate.	Pendleton.	Broughton.	Borough.	Regent Rd.	Greengate.	Pendleton.	Broughton.	Borough.
All Causes	649	241	337	188	1415	406	218	242	140	1006	177	94	120	71	462
Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	6	3	5	4	18	31	17	20	10	78	4	...	...	2	6
Scarlet Fever	3	1	1	...	5	29	16	21	13	79	14	4	11	7	36
Typhus	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Whooping Cough	40	15	6	12	73	46	33	11	13	103	1	4	...	1	6
Diphtheria	6	2	1	...	9	31	25	51	17	124	8	15	33	12	68
Ill-defined Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	...	...	...	...	...	...	2	3	...	5	13	4	8	4	29
Simple Cholera	...	1	...	1	2	...	...	1	...	1	...	...	...	...	...
Diarrhœa, Dysent :	87	29	33	17	166	25	15	16	2	58	...	1	2	...	3
Venereal Affections	8	9	6	1	24	1	2	1	...	4	...	...	...	...	...
Erysipelas	1	...	...	1	2	...	...	...	...	...	1	...	...	...	1
Pyæmia	...	2	1	...	3	1	...	...	...	1	1	...	1	1	3
Puerperal Fever	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Other Zymotics	...	...	...	...	...	3	...	...	...	3	...	...	...	...	...
Parasitic Diseases	1	1	3	...	5	...	...	...	...	...	...	...	...	...	...
Dietic Dis : Intemp :	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rheumatic Fever	...	...	...	...	...	1	...	1	...	2	5	3	1	2	11
Cancer	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...
Tabes Mesent :	22	14	24	7	67	13	9	10	5	37	1	...	...	2	3
Tubercul : Mening :	19	10	27	8	64	31	14	20	8	73	12	6	9	4	31
Phthisis	1	...	...	...	1	1	1	2	1	5	36	13	8	9	66
Scrofula	11	1	17	...	29	10	10	8	4	32	4	1	3	1	9
Constit : Dis : (other)	1	2	3	...	6	1	2	1	...	4	...	...	2	1	3
Prem : Birth	64	19	27	18	128	...	...	...	...	...	...	...	...	...	...
Devel Dis : & Cong : Def : ...	2	2	5	2	11	...	...	...	...	...	...	...	...	...	...
Old Age	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Apoplexy and Paralysis	...	...	...	...	...	...	...	1	...	1	...	1	...	1	2
Epilepsy	...	...	...	...	...	...	1	...	...	1	1	3	...	1	5
Convulsions	44	24	25	23	116	14	2	2	3	21	3	1	1	...	5
Brain & Nerv : Dis : (other)	1	1	...	...	2	...	...	...	...	...	3	...	1	...	4
Heart Diseases	3	...	...	1	4	...	...	...	...	...	8	5	7	4	24
Croup	...	1	2	...	3	10	2	4	1	17	6	1	...	1	8
Bronchitis	65	30	37	13	145	30	22	13	11	76	4	6	2	2	14
Pneumonia	56	12	17	20	105	72	29	28	36	165	25	9	11	7	52
Lung & Respir : Dis : (other)	3	...	2	1	6	1	1	5	4	11	1	2	2	1	6
Teething	9	8	4	2	23	5	1	4	4	14	...	...	...	...	...
Diges : Org : Dis : of	31	7	10	4	52	10	4	6	1	21	7	3	5	2	17
Urinary Org : Dis : of	...	...	...	1	1	5	3	4	...	12	2	2	1	1	6
Parturition, dis : of	3	...	...	...	3	...	...	...	...	...	...	...	1	...	1
Gener : Orgs : dis : of	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Local dis :	2	1	3	2	8	1	...	2	...	3	5	3	4	1	13
Accident	13	7	7	2	29	10	3	...	3	16	7	3	6	2	18
Homicide	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Suicide	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Atrophy	137	39	58	43	277	22	3	5	4	34	...	2	...	...	2
Ill-defined Causes	10	...	13	5	28	2	...	2	...	4	3	2	1	2	8

20—40 Years.					40—60 Years.					60 Years and Upwards.					Borough All Ages for year.
Regent Rd.	Greengate.	Pendleton.	Broughton.	Borough.	Regent Rd.	Greengate.	Pendleton.	Broughton.	Borough.	Regent Rd.	Greengate.	Pendleton.	Broughton.	Borough.	
264	145	154	107	670	426	137	214	136	1012	380	208	202	178	968	5533
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	103
1	...	...	...	1	1	...	...	...	1	...	...	...	...	...	122
1	1	...	...	2	...	1	...	...	1	...	...	...	...	...	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	182
...	1	2	...	3	...	...	...	1	1	...	...	1	...	1	206
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	4	7	4	36	3	1	7	2	13	...	...	...	...	...	83
1	...	...	...	1	...	...	...	...	...	...	1	...	...	1	5
...	...	1	...	1	3	2	1	...	6	10	3	7	2	22	256
...	...	...	...	...	...	...	...	2	2	...	...	...	...	...	30
...	...	1	1	2	...	...	...	1	1	1	...	...	...	1	7
1	1	1	1	4	...	2	...	...	2	3	...	...	...	3	16
2	5	4	7	18	...	...	1	...	1	...	...	...	...	...	20
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5
3	1	1	3	8	2	3	...	1	6	3	...	...	...	3	17
...	...	...	3	3	...	...	...	...	...	...	...	...	...	...	16
4	2	2	3	11	21	7	19	11	58	17	2	6	5	30	100
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	107
2	...	...	1	3	...	...	...	...	...	...	...	...	...	...	171
71	44	61	30	206	55	24	32	17	128	7	8	2	2	19	425
3	1	1	1	6	...	...	2	...	2	...	...	...	...	...	78
...	1	3	1	5	3	1	2	4	10	4	2	2	1	9	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	128
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11
...	...	...	...	...	1	...	...	...	1	115	52	47	42	256	257
3	3	4	1	11	31	19	11	10	71	26	22	26	23	97	182
1	...	...	2	3	1	...	...	1	2	...	...	...	...	...	11
...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	143
5	5	3	3	16	9	3	8	...	20	4	5	4	3	16	58
20	11	11	6	48	41	23	24	13	101	28	14	12	30	84	261
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	28
18	10	7	4	39	79	59	31	24	193	83	46	35	29	193	660
62	26	23	18	129	90	38	28	23	179	40	22	29	22	113	743
5	5	2	3	15	11	4	4	5	24	3	3	2	...	8	70
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
11	5	6	3	25	27	16	14	6	63	12	9	11	9	41	219
3	4	1	5	13	14	14	7	2	37	7	2	4	4	17	86
7	4	6	1	18	1	...	2	...	3	...	...	...	...	...	25
1	...	...	...	1	...	...	1	1	2	...	...	...	...	...	3
2	...	...	...	2	...	2	2	3	7	1	1	1	...	3	36
7	2	4	4	17	12	5	5	2	24	7	6	5	1	19	123
...	...	...	...	...	1	...	1	...	2	...	...	...	...	...	2
3	...	...	...	3	3	...	1	3	7	2	2	2	...	6	16
...	1	...	...	1	2	...	1	1	4	2	2	...	1	5	323
6	7	3	2	18	14	12	10	3	39	5	6	6	4	21	118

TABLE F3.

DEATHS REGISTERED IN SALFORD, FROM ALL CAUSES DURING THE YEAR 1890.

DISEASES.	AGES IN YEARS.																								Total.	1 to 5	5 to 20	20 to 40	40 to 60	60 and upwards
	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 65	65 to 70	70 to 75	75 to 80	80 to 85	85 and upwards								
I. SPECIFIC FEBRILE, OR ZYMOTIC DISEASES	302	215	97	80	64	111	26	17	23	22	11	13	9	7	7	5	8	12	4	3	1	...	1037	456	154	69	28	28		
II. PARASITIC DISEASES	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	...	...	...	...	...		
III. DIETIC DISEASES	167	84	38	21	11	43	31	49	61	51	59	63	53	65	44	36	29	17	9	2	1	...	17	...	...	8	6	3		
IV. CONSTITUTIONAL DISEASES	139	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	934	154	123	234	198	58		
V. DEVELOPMENTAL DIS:	468	198	71	49	24	75	33	49	52	56	86	126	142	179	193	189	222	169	118	42	17	...	396	...	...	...	...	...		
VI. LOCAL DISEASES	29	6	3	6	1	11	5	2	3	8	4	5	8	12	5	8	6	9	5	2	...	...	2562	342	157	320	703	572		
VII. DEATHS FROM VIOLENCE.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	141	16	18	20	33	25		
VIII. DEATHS FROM ILL-DEFINED & NOT SPECIFIED CAUSES.	305	31	4	2	1	4	2	4	2	2	10	5	9	11	10	13	7	6	10	2	...	1	441	38	10	19	43	26		
TOTALS	1415	534	213	158	101	244	97	121	141	141	172	216	223	275	263	251	288	257	227	116	53	27	5533	1006	462	670	1012	968		
I.-Zymotic Diseases.																														
1. MIASMATIC DISEASES.																														
Sm: Pox { Vaccinated	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Unvaccinated	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
No Statement	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Measles	18	47	16	9	6	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Scarlet Fever	5	32	18	16	13	25	10	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Whooping Cough	73	53	20	19	11	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Diphtheria	9	30	28	33	33	60	7	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Simp: Contd: Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Enteric Fever	...	2	2	1	...	11	6	12	15	10	6	5	4	4	3	2	...	...	...	...	...	...	...	...	...	...	...	...	...	
Miasm: Dis: (other)	...	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
2. DIARRHEAL DISEASES.																														
Simp: Cholera	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Diarrhoea, Dysentery	166	46	12	...	...	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
3. MALARIAL DISEASES.																														
Remittent Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Ague	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		

TABLE F3.—(Continued.)

DISEASES.	AGES IN YEARS.																				Total.	1 to 5	5 to 20	20 to 40	40 to 60	60 and upwards.		
	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 65	65 to 70	70 to 75	75 to 80							80 to 85	85 and upwards.
	VI.—Local Diseases.																											
1. Dis: OF NERVOUS SYSTEM.																												
Brain and Mem: Inflam:	...	...	...	...	...	...	...	1	2	1	1	...	...	...	2	1	1	2	2	...	...	...	13	...	1	4	3	5
Apoplexy and Paralysis.....	...	1	...	...	...	...	1	1	1	...	4	6	11	17	16	29	31	28	21	9	6	2	184	...	2	11	73	97
Insanity, Gen: Par: Insane.....	...	...	...	...	...	...	...	...	...	...	1	2	1	2	...	2	1	3	1	1	...	...	14	...	3	5	6	
Epilepsy	...	...	...	...	1	...	...	2	...	1	...	2	1	1	...	...	...	...	...	...	...	...	11	...	5	3	2	...
Convulsions	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	143	...	21	5	...	...
Laryng: Strid: (Spasm Glot:)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...
Sp: Crd: D: Parapl: Par: Agit:	...	...	...	...	...	1	2	...	1	2	1	2	1	2	2	2	2	2	1	...	...	...	19	...	3	6	5	5
Nervous Dis: (other)	...	...	...	...	...	...	...	...	2	...	1	...	3	1	1	...	...	...	...	...	...	...	8	...	...	3	...	...
2. Dis: OF ORG: SPECIAL SENSE.																												
Ear—Eye—Nose—Dis:	4	1	...	1	...	...	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9	2	3	...	...	...
3. Dis: OF CIRCULATORY SYS:																												
Pericarditis	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	2	...	...	2	...	...
Endocarditis (Acute)	...	...	...	...	...	2	...	2	...	...	...	...	1	...	...	...	1	...	...	...	...	...	6	...	4	...	1	1
Valvular Dis:	4	...	...	...	3	6	2	6	5	5	10	9	10	9	13	7	14	10	4	...	1	...	116	...	15	29	39	29
Heart Diseases (other)	...	...	...	...	...	2	2	3	3	3	5	5	7	17	10	16	15	13	17	3	2	...	121	...	5	16	50	50
Aneurism	...	...	...	...	...	...	...	...	...	...	1	...	3	...	2	...	...	...	...	...	...	...	6	...	...	1	5	...
Embolism, Thrombosis	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	1	...	...	...	...	4	...	...	1	2	1
Blood Vessels (other Dis: of).	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	...	1	1	...	1	...	6	...	...	1	2	3
4. Dis: OF RESPIRATORY SYS:																												
Laryngitis	4	...	2	4	1	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15	7	4	...	...	...
Croup	3	5	6	5	1	7	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	28	17	8	...	...	...
Asthma, Emphysema.....	...	...	...	...	...	...	...	...	...	...	...	...	5	3	4	2	1	1	...	1	...	...	17	...	...	...	14	3
Bronchitis	145	52	12	8	4	9	2	3	5	2	10	22	25	50	54	64	79	57	42	13	1	1	660	76	14	39	193	193
Pneumonia	105	97	36	20	12	24	9	19	21	23	37	48	42	40	57	40	51	28	21	8	4	1	743	165	52	129	179	113
Pleurisy	...	1	...	...	1	...	...	...	1	2	...	...	...	...	1	1	...	...	1	1	...	...	9	2	...	3	2	2
Respiratory Dis: (other)	2	2	...	...	...	2	...	...	2	3	1	6	1	4	3	...	1	2	...	...	...	29	2	2	2	12	8	3

SUMMARY OF TABLE F₃, 1889 AND 1890.

	No. of Deaths, 1889.	No. of Deaths, 1890.
I.—Specific Febrile, or Zymotic Diseases:		
1. Ordinary Zymotic Diseases	788	703
2. Diarrhœal Diseases	343	261
3. Malarial „	...	...
4. Zoogenous „	...	...
5. Venereal „	34	30
6. Septic „	34	43
II.—Parasitic Diseases	5	5
III.—Dietic Diseases	17	17
IV.—Constitutional Diseases	796	934
V.—Developmental Diseases	342	396
VI.—Local Diseases:		
1. Diseases of Nervous System	488	394
2. Diseases of Organs of Special Sense	5	9
3. Diseases of Circulatory System	249	261
4. Diseases of Respiratory System	991	1501
5. Diseases of Digestive System	193	256
6. Diseases of Lymphatic System	...	...
7. Diseases of Gland-like Organs of uncertain use	3	1
8. Diseases of Urinary System	83	86
9. Diseases of Reproductive System:		
(a) Diseases of Organs of Generation	7	3
(b) Diseases of Parturition	39	25
10. Diseases of Bones and Joints	14	20
11. Diseases of Integumentary System	5	6
VII.—Violence:		
1. Accident or Negligence	111	123
2. Homicide	2	2
3. Suicide	13	16
4. Execution	...	...
VIII.—Ill-defined and not specified causes	315	441
TOTAL	4877	5533

Deaths from special diseases and groups of diseases. years. The following deduction from these tables shows the greater or less fatality of diseases in 1890 as compared with their corrected decennial average numbers:—

Cause of Death.	Diminution in 1890.	Excess in 1890.
Small-pox	3	—
Measles	68	—
Scarlet fever	32	—
Typhus fever.....	4	—
Whooping cough	—	25
Diphtheria	—	158
Ill-defined fever	8	—
Enteric fever.....	—	—
Diarrhœal diseases	81	—
Phthisis and other tuberc: diseases.....	—	19
Premature birth	1	—
Brain and nervous diseases	244	—
Heart diseases	—	17
Respiratory diseases.....	—	340
Urinary diseases	1	—
Atrophy and other ill-defined causes ...	—	120
All other causes	—	103
	442	782
Balance of excess.....		340

Zymotic
Mortality.

Mortality from certain Zymotic Diseases.—The succeeding short tables are constructed to show the annual rates of mortality per 1,000 living in respect of certain zymotic diseases in Salford, their comparison with the annual rates and the means of the preceding five years, and, as far as possible, with the corresponding rates for England and Wales, the 28 great English towns, and for London. The advantage of such comparisons is obvious, pointing, as they must do, to improvement or to retrogression in the abatement of causes of death, to a considerable extent classified as preventible.

Of the diseases which have been thus tabulated, those which show a smaller death-rate for the year 1890, as against the mean rate for the five preceding years in Salford, are scarlet-fever, measles, diarrhœa, and the continued fevers; those which show a higher death-rate than the quinquennial mean are diphtheria and whooping-cough. Of these two latter diseases diphtheria gives evidence of a slightly reduced proportional mortality on the preceding year, while whooping-cough was manifestly a very

prevalent and fatal disease, and gave a mortality rate higher than in any of the preceding five years, with the exception of the year 1888. Zymotic Mortality.

SCARLET FEVER MORTALITY. RATES PER 1,000 OF THE POPULATION.

	1885.	1886.	1887.	1888.	1889.	Mean.	1890.
England and Wales...	0·23	0·21	0·27	0·22	0·23	0·23	0·23
28 Great English Towns	0·24	0·25	0·39	0·29	0·30	0·29	0·31
London	0·17	0·17	0·34	0·28	0·18	0·23	0·19
Salford	0·32	0·85	0·76	0·49	0·87	0·66	0·56

DIPHTHERIA MORTALITY. RATES PER 1,000 OF THE POPULATION.

	1885.	1886.	1887.	1888.	1889.	Mean.	1890.
England and Wales ...	0·15	0·14	0·15	0·17	0·19	0·16	0·18
28 Great English Towns	0·17	0·16	0·18	0·21	0·26	0·20	0·24
London ...	0·22	0·20	0·23	0·30	0·37	0·26	0·31
Salford	0·09	0·06	0·10	0·29	0·97	0·30	0·93

WHOOPING COUGH MORTALITY. RATES PER 1,000 OF THE POPULATION.

	1885.	1886.	1887.	1888.	1889.	Mean.	1890.
England and Wales ...	0·44	0·44	0·38	0·40	0·40	0·41	0·45
28 Great English Towns	0·60	0·54	0·62	0·58	0·48	0·56	0·59
London	0·61	0·68	0·70	0·70	0·40	0·62	0·73
Salford	0·67	0·64	0·32	1·06	0·28	0·59	0·83

MEASLES MORTALITY. RATES PER 1,000 OF THE POPULATION.

	1885.	1886.	1887.	1888.	1889.	Mean.	1890.
England and Wales ...	0·51	0·41	0·58	0·33	0·49	0·46	0·42
28 Great English Towns	0·69	0·54	0·79	0·47	0·67	0·63	0·63
London	0·72	0·50	0·69	0·56	0·53	0·60	0·73
Salford	0·92	0·24	1·58	0·64	1·04	0·88	0·47

DIARRHŒA MORTALITY. RATES PER 1,000 OF THE POPULATION.

	1885.	1886.	1887.	1888.	1889.	Mean.	1890.
England and Wales ...	0·46	0·84	0·69	0·43	0·61	0·61	0·56
28 Great English Towns	0·69	1·16	0·97	0·60	0·82	0·85	0·77
London	0·66	0·95	0·90	0·52	0·62	0·73	0·61
Salford	1·27	2·02	1·67	0·89	1·62	1·49	1·19

Zymotic
Mortality.TYPHUS FEVER MORTALITY. RATES PER 1,000 OF THE
POPULATION.

1885. 1886. 1887. 1888. 1889. Mean. 1890.

London ... 0·01 0·00 0·00 0·00 0·00 0·00 0·00

Salford 0·05 0·00 0·00 0·03 0·01 0·02 0·02ENTERIC FEVER MORTALITY. RATES PER 1,000 OF THE
POPULATION.

1885. 1886. 1887. 1888. 1889. Mean. 1890.

London 0·14 0·15 0·15 0·16 0·12 0·14 0·13

Salford 0·25 0·31 0·40 0·44 0·53 0·39 0·38TOTAL CONTINUED FEVER MORTALITY. RATES PER 1,000
OF THE POPULATION.

1885. 1886. 1887. 1888. 1889. Mean. 1890.

England and Wales ... 0·21 0·21 0·20 0·18 0·18 0·20 0·18

28 Great English Towns 0·22 0·23 0·22 0·20 0·20 0·21 0·19

London 0·17 0·17 0·16 0·17 0·14 0·16 0·14

Salford 0·33 0·34 0·42 0·48 0·55 0·42 0·40Uncertified
Deaths.

Uncertified Deaths.—Of the 5,533 deaths of Salford persons during the year 1890, 5,150 were certified by registered medical practitioners, 234 by the Coroner, and 149 deaths were uncertified by either medical practitioners or the coroner. As compared with similar uncertified deaths during the preceding year, those for the year 1890 were fewer by 11, and the proportion per cent. of uncertified deaths to the total deaths was lower by 0·6. This reduction in the number of unaccounted-for-deaths is a satisfactory feature of the year, especially as the total number of deaths in 1890 was 746 more than in 1889. As compared, moreover, with the mean corresponding rate of the ten years 1880-89, the rate for 1890 is 1·7 per cent. better, and it is very gratifying to note this gradual but decided advance towards complete mortality registration, and the greater accuracy for statistical purposes which such must ensure. Besides, non-certification of deaths cannot but produce an uneasy sense as to the real causes of death at certain ages, and public opinion is rightly exercised when a large number of deaths have not been properly and officially accounted for. The following table shows the figures relating to this subject for the year 1890, and for the preceding ten years, 1880-89.

TABLE G.

CERTIFICATION OF THE CAUSES OF DEATH IN THE BOROUGH OF
SALFORD, AND ITS FOUR REGISTRATION SUB-DISTRICTS,
IN THE YEAR 1890.

	Total Deaths.	Certified by		Not Certified.	Proportion per cent. of Total Deaths.		
		Registered Medical Practitioners.	Coroner.		Certified by		Not Certified.
					Registered Medical Practitioners.	Coroner.	
Borough	5533	5150	234	149	93·0	4·2	2·7
Regent Road District	2302	2133	97	72	92·6	4·2	3·1
Greengate	1142	1059	52	31	92·7	4·5	2·7
Pendleton	1269	1186	55	28	93·4	4·3	2·2
Broughton	820	772	30	18	94·1	3·6	2·2

CORRESPONDING DATA FOR THE TEN YEARS 1880-89.

Borough	45074	41116	1984	1974	91·2	4·4	4·4
Regent Road District	19446	17724	835	887	91·3	4·3	4·6
Greengate	9194	8214	532	448	89·5	5·8	4·9
Pendleton	10257	9397	416	444	91·8	4·1	4·3
Broughton	6177	5781	201	195	93·7	3·3	3·2

**TABLE OF DEATHS DURING THE YEAR 1890, IN THE URBAN SANITARY
AND SHOWING ALSO THE POPULATION OF SUCH LOCALITIES,**

Localities.		Population at all ages.		Registered Births.	Mortality from all causes at subjoined ages.						
		Census, 1881.	Estimated to the middle of 1890		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.
Total for Borough, exclusive of Public Institutions }		174403	...	...	4711	1362	877	252	208	1240	772
Deaths in Salford Institutions.	Union Infirmary	Beds. * 800	Beds. 800	...	432	27	13	6	20	198	168
	Workhouse	1369	1369	...	30	11	1	...	1	5	12
	Wilton Fever Hospital .	60	100	...	154	1	64	45	19	25	...
	Hope Sheds	...	...	...	27	...	18	9	...	...	...
	Royal Hospital and Dispensary	60	...	...	119	3	11	14	16	61	14
The subjoined numbers have also to be taken into account											
Deaths occurring outside Salford among persons belonging thereto.	Children's Hospital, Pendlebury	Beds. 160	Beds. ...	...	38	9	17	12	...	...	...
	Manchester Royal Infirmary	315	...	...	29	...	2	...	1	22	4
	Monsal Hospital.....	192	...	...	6	...	3	3	...	...	..
	St. Mary's Hospital...	...	...	...	8	2	...	...	...	6	...
	Cheetham Hospital...	...	...	...	...	...	...	...	...	...	...
Deaths occurring in Salford among persons not belonging to the town					21	...	...	...	4	15	2
The subjoined numbers are the Corrected Deaths in the											
Borough of Salford		Pop. 1881 176233	Pop. 1890 216830	7098	5533	1415	1006	341	261	1542	968
Registration Sub-Districts.	Regent Road	69716	88832	2982	2302	649	406	123	113	631	380
	Greengate	31867	31867	1172	1142	241	218	68	52	355	208
	Pendleton	43117	55328	1795	1269	337	242	91	63	334	202
	Broughton	31533	40803	1149	820	188	140	59	33	222	178

**DISTRICT OF SALFORD, CLASSIFIED ACCORDING TO DISEASES, AGES, AND LOCALITIES,
AND THE BIRTHS THEREIN DURING THE YEAR.**

Mortality from subjoined causes, distinguishing deaths of children under five years of age.																				
	Small-pox.	Measles.	Scarlatina.	Diphtheria.	Croup.	Whooping Cough.	Typhus.	Enteric or Typh'd Other or Doubtful.	Diarrhoea and Dysentery.	Engl. Cholera.	Rheumatic Fev.	Erysipelas.	Pyæmia.	Puerperal Fever.	Ague.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	Other Diseases.
Under 5		94	37	94	19	176		4	211	3	2	2	4	...	...	4	494	3	37	1055
5 upwards	..	7	16	43	7	6	245	..	24	2	11	4	9	18	...	323	827	207	51	870
Under 5...	...	...	...	...	...	...	...	...	9	...	...	...	...	...	...	1	5	...	...	25
5 upwards	...	...	...	...	...	...	...	...	8	...	...	1	2	1	...	87	90	30	2	171
Under 5...	...	...	...	...	1	...	...	...	2	...	...	...	...	...	...	...	1	1	...	7
5 upwards	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9	...	1	8
Under 5...	...	2	29	33	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
5 upwards	...	...	13	28	1	...	230	...	...	...	...	...	...	...	...	1	12	...	...	2
Under 5...	...	...	17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
5 upwards	...	...	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Under 5...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	8	3
5 upwards	...	...	...	...	...	...	1	...	...	...	4	...	...	...	...	7	27	15	20	13

in judging of the mortality of the Sanitary District.

Under 5...	...	...	3	...	...	...	...	2	...	...	...	...	...	...	1	5	...	...	15
5 upwards	...	...	...	...	...	...	1	...	...	...	...	1	...	...	3	...	1	...	6
Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
5 upwards	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	5	8	12
Under 5...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5 upwards	...	...	2	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Under 5...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
5 upwards	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	5
Under 5...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5 upwards	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Under 5...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5 upwards	...	...	...	...	...	...	...	...	...	1	...	...	...	...	2	2	1	4	11

Borough, and in the four Sub-Registration Districts thereof.

Under 5	...	9684	13320	176	...	5	...	224	3	2	2	4	...	...	6	508	4	45	1109
5 upwards	...	738	73	8	6	478	...	32	2	14	5	12	20	...	419	965	257	78	1094
Under 5...	...	3732	3710	86	...	...	...	112	...	1	1	1	...	...	2	227	3	23	483
5 upwards	...	416	8	6	1	237	...	13	1	5	2	5	3	...	169	421	97	33	424
Under 5...	...	2017	273	48	...	2	...	44	1	...	...	2	...	...	1	94	...	10	190
5 upwards	...	14	16	1	4	29	...	6	1	3	...	3	5	...	89	230	53	16	240
Under 5...	...	2522	526	17	...	3	...	49	1	1	...	1	...	...	2	102	...	7	291
5 upwards	...	...	36	...	...	22	...	11	...	1	1	2	5	...	103	176	54	20	248
Under 5...	...	1413	171	25	...	...	...	19	1	...	1	...	...	...	1	85	1	5	145
5 upwards	...	27	13	1	1	10	...	2	...	5	2	2	7	...	58	138	53	9	182

YEAR 1890.

METEOROLOGY, AND REGISTERED DEATHS FROM ALL CAUSES, AND FROM CERTAIN PREVALENT DISEASES IN EACH WEEK OF THE YEAR.

Week.	Temperature of the Air.			Air Pres- sure.	Horizontal Movement of Air in Miles p. hour.	Mean Humidity. Complete Saturation. =100	Rainfall in Inches.	*Deaths registered from										
Date of ending.	Highest during the Week.	Lowest during the Week.	Mean Temperature.	Extreme range of Barometric changes.				All Causes.	Smallpox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Typhus Fever.	Enteric Fever.	Diarrhoea.	Respiratory Diseases.	Phthisis.
1890.																		
Jan. 4	50.4	24.0	34.7	0.803	1.7	95	.140	105	...	2	5	7	...	1	3	28	7	
11	56.2	38.7	47.5	0.610	4.2	85	.490	92	...	1	3	4	...	...	4	36	4	
18	54.3	37.0	46.3	0.659	4.1	90	.167	97	...	1	2	1	4	1	3	27	6	
25	55.0	32.9	41.6	1.027	3.8	84	1.445	88	...	...	1	4	3	1	2	14	6	
Feb. 1	51.7	32.0	42.3	0.654	1.6	93	.760	99	...	...	4	4	6	...	1	1	29	2
8	46.8	31.8	39.8	0.330	0.4	86	.020	107	...	...	2	5	4	...	...	3	39	7
15	46.2	32.9	37.2	0.619	1.3	88	.060	121	...	1	3	4	6	...	3	3	40	11
22	47.7	35.1	40.3	1.078	1.4	92	...	130	...	1	3	5	7	...	2	5	39	15
Mar. 1	50.2	29.0	38.1	0.791	1.5	86	.052	134	...	1	...	3	4	...	...	2	59	16
8	51.7	26.0	38.6	1.113	3.3	88	.560	153	...	1	2	...	8	...	2	2	55	15
15	58.3	32.0	46.8	0.769	3.4	85	.932	104	...	...	1	1	1	...	2	2	39	12
22	58.8	37.0	44.2	0.552	2.0	87	.430	106	...	...	3	3	9	...	3	4	31	6
29	60.3	37.9	48.2	0.804	1.8	86	.740	124	...	1	6	6	8	...	1	1	34	9
April. 5	60.7	32.0	43.7	0.249	0.2	77	.020	84	...	...	1	5	6	...	1	...	19	7
12	58.0	33.0	43.0	0.542	1.6	72	.375	104	...	...	2	1	9	...	1	4	27	6
19	54.8	37.0	44.2	0.510	2.4	77	.047	95	...	...	1	4	9	...	1	...	33	8
26	58.1	36.7	47.8	0.762	2.2	74	.288	126	...	...	1	6	8	...	2	2	42	8
May 3	66.4	40.9	52.3	0.163	0.9	64	.167	120	...	...	2	10	9	...	...	2	31	9
10	68.3	46.2	54.1	0.258	0.6	69	.200	106	...	...	4	8	4	...	...	2	34	11
17	65.7	44.0	52.9	0.501	1.6	75	1.032	97	...	1	1	8	2	...	...	1	33	12
24	77.9	48.8	59.8	0.573	1.8	63	.090	94	...	...	2	4	6	...	1	3	25	5
31	75.9	41.0	52.5	0.183	1.5	58	.200	87	...	1	3	4	3	...	1	4	27	5
June 7	68.8	44.8	55.7	0.559	2.1	72	.395	103	...	1	...	2	2	...	1	4	25	17
14	71.8	45.2	57.5	0.798	1.0	73	.763	86	...	1	3	2	3	...	1	1	30	6
21	70.5	49.3	58.1	0.444	1.7	74	.790	90	...	...	1	3	3	1	1	2	27	11
28	68.9	50.7	58.0	0.455	1.1	75	1.142	95	...	2	2	2	...	...	1	3	25	10
July 5	64.9	47.2	55.5	0.630	1.5	72	1.232	83	...	...	3	2	1	...	1	4	21	1
12	66.7	46.2	54.3	0.511	1.8	71	.600	93	...	1	1	4	7	...	3	1	23	8
19	71.0	52.8	59.9	0.403	1.9	78	.570	67	...	1	4	2	1	...	...	1	13	5
26	70.0	50.2	59.5	0.345	2.4	77	.962	108	...	1	2	4	4	...	...	6	26	2
Aug. 2	73.6	51.0	61.0	0.193	2.2	73	.726	113	...	1	6	5	1	...	2	9	24	5
9	76.4	52.5	62.4	0.093	0.8	72	...	83	...	1	3	2	2	...	...	8	13	7
16	70.4	51.3	59.1	0.405	2.2	73	1.228	87	...	3	1	3	2	...	2	19	13	6
23	66.1	50.7	57.8	0.181	1.9	73	.840	128	...	2	2	6	2	...	1	27	19	10
30	64.2	43.0	52.9	0.789	1.2	72	1.240	110	...	1	4	1	2	...	3	14	15	4
Sep. 6	70.2	41.8	59.1	0.287	0.6	80	.353	104	...	...	2	2	1	...	2	12	19	8
13	79.2	47.8	60.6	0.328	0.6	78	.022	91	...	1	2	5	1	1	1	7	19	3
20	77.0	53.7	62.5	0.771	2.2	67	.222	97	...	3	1	8	2	...	...	11	17	2
27	68.8	51.6	59.2	0.819	2.1	71	.108	99	...	2	2	3	...	...	2	16	17	8
Oct. 4	66.0	42.0	55.8	0.775	3.0	81	.433	93	...	1	2	4	...	1	4	13	19	6
11	64.7	40.0	54.4	0.551	1.1	84	.240	106	...	4	3	7	1	...	4	10	21	4
18	65.8	39.2	49.7	0.776	2.4	80	1.035	100	...	2	1	3	...	...	1	12	18	7
25	59.2	39.8	48.8	0.819	1.0	85	.566	100	...	1	3	8	...	...	1	9	14	12
Nov. 1	57.6	28.0	43.7	0.727	2.6	89	.980	112	...	2	1	5	1	...	5	4	27	9
8	53.0	38.8	45.1	0.733	2.7	88	1.660	86	...	1	3	5	...	...	4	3	23	9
15	56.7	37.0	43.8	0.828	1.5	87	.665	110	...	1	5	4	1	...	3	4	38	11
22	59.1	40.0	50.1	0.361	1.5	93	1.744	116	...	3	1	2	2	...	5	1	30	11
29	56.0	27.2	37.4	0.872	1.7	90	1.195	72	...	3	5	1	...	...	...	1	19	6
Dec. 6	48.6	29.8	40.1	0.527	1.2	86	.040	106	...	8	3	5	2	...	1	1	21	8
13	40.1	25.8	33.9	0.187	0.4	91	...	88	...	6	2	...	...	...	2	2	20	8
20	40.1	18.6	30.0	0.782	1.1	83	...	117	...	15	2	5	1	...	3	1	40	7
27	41.8	15.8	31.0	0.434	0.6	82	.280	141	...	12	2	1	3	...	1	...	48	16
Jan. 3	41.8	26.0	34.9	0.190	1.2	86	...	154	...	12	3	1	10	...	2	2	47	13

III.

RECORD OF INFECTIOUS DISEASES AND MEASURES TAKEN TO PREVENT THEIR SPREAD.

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RECORD OF INFECTIOUS DISEASES

AND MEASURES TAKEN TO PREVENT

THEIR SPREAD.

Disease
Notification
under Local
Act, 1882.

Notification of Infectious Diseases.—Following the plan of my last Annual Report, I have to record the occurrence of 2,177 cases of zymotic diseases, exclusive of diarrhoea, during the whole year. This number is not, however, properly comparable with the figures of notified cases since the year 1882, inasmuch as those cases were notified under a Local Salford Act which did not include all the diseases now notifiable within the borough.

Adoption of
General Act of
1889.

In my report for the second quarter of the year, I reported that "The Infectious Disease (Notification) Act, 1889, came into operation within the County Borough of Salford on April 1st, 1890. This Act contains several extended powers beyond those possessed by the Salford Notification Clauses of 1882, and includes two diseases not named in the Local Act." These two diseases are Erysipelas and Membranous Croup, of which during the last three quarters of the year 76 and 7 cases respectively were notified, so that the corrected number of the total cases for purposes of comparison should be 2,094.

The highest weekly incidence of the following principal notifiable zymotic diseases—namely, small-pox, scarlet-fever, diphtheria, typhus-fever, and enteric-fever—was as follows:—

1890.		Fresh Cases.
Week.		
38th	Highest number	60
53rd	Lowest	19

The mean weekly incidence of *these particular zymotic diseases*, which number 2,068, was 39, which is less than in the year 1889, as will be seen from the following table:—

The mean weekly incidence of fresh cases in 1883 was					23
"	"	"	"	"	1884 " 33
"	"	"	"	"	1885 " 18
"	"	"	"	"	1886 " 36
"	"	"	"	"	1887 " 36
"	"	"	"	"	1888 " 35
"	"	"	"	"	1889 " 47
"	"	"	"	"	1890 " 39

CASES NOTIFIED DURING 1890.

Weeks.	Total.	Small-pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Typhus Fever.	Continued Fever.	Puerperal Fever.	Erysipelas.*	Membranous Group.*
1	31	...	19	9	3	...	...	...	...	...
2	32	...	17	7	6	2	...	...	...	...
3	32	...	18	5	9	...	...	...	...	...
4	58	...	31	20	7	...	...	...	...	...
5	47	...	31	10	6	...	...	...	...	...
6	42	...	24	10	8	...	...	...	...	...
7	52	...	28	18	6	...	...	...	...	...
8	40	...	26	6	8	...	...	...	...	...
9	31	...	19	5	7	...	...	...	...	...
10	31	...	15	5	10	1	...	...	...	...
11	36	...	13	14	9	...	...	...	...	...
12	36	...	19	10	6	1	...	...	...	...
13	50	...	31	13	6	...	...	...	...	...
14	24	...	14	7	...	...	...	1	2	...
15	43	...	26	9	5	...	...	1	1	1
16	35	...	15	9	8	...	...	1	1	1
17	56	...	30	18	5	...	1	1	1	...
18	58	...	29	21	3	...	...	1	3	1
19	50	...	19	18	8	...	...	2	3	...
20	31	...	12	12	4	...	...	1	2	...
21	44	...	18	19	2	...	...	1	3	1
22	34	...	17	13	3	...	...	...	1	...
23	33	...	13	14	4	...	...	...	2	...
24	32	...	14	11	2	1	...	...	4	...
25	46	...	19	13	7	...	2	1	4	...
26	20	...	7	5	2	...	...	...	5	1
27	41	...	21	17	2	...	...	...	1	...
28	39	...	20	10	7	...	...	...	2	...
29	39	...	21	15	3	...	...	...	...	...
30	41	...	22	16	1	...	...	...	1	1
31	32	...	18	9	4	...	...	...	1	...
32	41	...	13	17	8	...	...	1	2	...
33	34	...	13	12	6	...	...	1	2	...
34	27	...	14	8	5	...	...	...	...	...
35	42	...	19	16	3	...	...	2	2	...
36	48	...	21	19	6	...	...	...	2	...
37	62	...	18	28	13	1	...	...	2	...
38	64	...	19	29	12	...	...	1	3	...
39	42	...	13	13	14	...	...	1	1	...
40	55	...	22	18	14	...	...	...	1	...
41	57	...	24	17	14	...	...	1	1	...
42	57	...	15	11	26	...	1	...	4	...
43	43	...	8	14	19	...	...	...	2	...
44	58	...	17	22	14	...	...	2	3	...
45	57	...	17	25	12	...	...	...	2	1
46	57	...	26	19	9	...	...	...	3	...
47	42	...	18	13	7	...	...	1	3	...
48	34	...	18	11	4	...	...	...	1	...
49	38	...	19	11	7	...	...	...	1	...
50	33	...	14	9	7	...	...	1	2	...
51	29	...	11	7	8	...	...	1	2	...
52	22	...	12	4	6	...	...	...	...	...
53	19	...	8	3	8	...	...	...	...	...
	2177	...	985	694	383	6	4	22	76	7

* Notifiable diseases on and after April 1, 1890, under the Infectious Disease (Notification) Act, 1889.

Disease
Notification.

The total numbers of cases of notifiable infectious sickness, exclusive of erysipelas and membranous croup, during each year since notification has been in force in the borough were for

1883	1,195, or	6.4 per 1,000 of population.
1884	1,694, or	8.9 „ „
1885	960, or	5.0 „ „
1886	1,902, or	9.6 „ „
1887	1,889, or	9.3 „ „
1888	1,971, or	9.5 „ „
1889	2,476, or	11.7 „ „
1890	2,068, or	9.5 „ „

The following tables show the actual weekly occurrence of cases for the year 1890, inclusive of erysipelas and membranous croup during the last three quarters of the year, and the total numbers for the four quarters of the year :—

CASES NOTIFIED DURING THE YEAR 1890.

	Total Cases.	Small-pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Typhus Fever.	Puerperal Fever.	Continued Fever.*	Erysipelas.*	Membranous Croup.*
1st Quarter	518	0	291	132	91	4	0	...	...	...
2nd „	506	0	233	169	53	1	10	3	32	5
3rd „	552	0	232	209	84	1	6	0	19	1
4th „	601	0	229	184	155	0	6	1	25	1
	2177	0	985	694	383	6	22	4	76	7

* Notification only commenced in April, 1890.

Infectious
Disease
(Prevention)
Act, 1890.

The Infectious Disease (Prevention) Act, 1890.—This Act, which was promoted by Mr. Lees Knowles, M.P. for West Salford, and comes into operation within a district by resolution of the local sanitary authority, is likely to prove an extremely useful one. The statutory notice of motion for its adoption, less sections 14 and 19, within the Urban Sanitary District of the County Borough of Salford, was given during the year 1890, and the Act, with these omissions, was adopted by resolution of the Council to come into operation on and after February 11th, 1891.

The omission of the two aforementioned sections practically prevents any unnecessary interference with provisions already in force under local acts of the borough, and the Act is in effect a strengthening of and a supplement to powers which have been in useful operation for several years past in this district.

It was, however, I suppose, not possible to incorporate in this Act certain rather obviously desirable provisions, in consequence of opposition, which proved to be stronger than interest in the public health and its protection.

In connection with section 4 of the Act it does not appear, in spite of its intended protection of the public from an infected milk-supply, that provision is made to prevent milk from a dairy which has been condemned as infected for one district being sold elsewhere. We have also to regret the abandonment of the clause which proposed to enable sanitary authorities to obtain the list of customers at a suspected dairy. In this matter it has been contended that notification of infectious diseases would supply information of the existence of all cases occurring in a district, and that the milk-supply of each case could then be learnt; but notification will not supply the information by which the *percentage of customers* of a particular dairy are affected, and without that, while a dairy may be easily suspected of spreading disease, the facts in its *favour* cannot be arrived at officially or certainly. This is probably a loss which milk dealers have under-estimated.

Amount of Hospital Isolation.—Of the 2,177 notified cases of infectious sickness, and which had been correctly diagnosed, 850, or 39·0 per cent. were isolated by the Corporation for the year ending December 31st, 1890, as against 42·7 per cent. in the year 1889. The following table shows the district proportions of isolations of cases occurring in them during the year 1890:—

District.	Total No. of Cases.	Number Isolated.	Percentage Isolated.
Regent Road.....	832	327	39·3
Greengate	344	187	54·4
Pendleton	637	216	33·9
Broughton	364	120	33·0
Borough.....	2,177	850	39·0

There were thus 207 fewer patients isolated at the expense of the Corporation than in the year 1889, and about 80 fewer than if they had been isolated at the same rate as in that year. This I believe to be largely owing to cases of diphtheria having occurred in houses of a better class, in which isolation could be well

secured ; but, no doubt, if the splendid Ladywell Sanatorium, now being built, had been completed, some proportion of these cases would have been removed there, and treated at the expense of their relatives or friends. It is much to be desired that the new hospital, with all its great advantages, shall be utilised to the fullest extent by all the ratepayers of the borough

Disinfection of
Premises.

Disinfection of Premises.—There were 2,932 houses disinfected and cleansed by the Health Department during the year, and the disinfection and cleansing were carried out in accordance with the new printed instructions issued to the disinfecting staff, which appeared as Appendix III. of my Annual Report for 1889.

The following table shows the distribution of the houses thus dealt with :—

Houses.	Regent Road.	Greengate.	Pendleton.	Broughton	Boro.
Stoved with Sulphur, and paper stripped off walls	482	352	299	220	1353
Stoved with Sulphur only	602	386	333	258	1579
Totals.....	1084	738	632	478	2932

The work was very well done by the staff of disinfectors, and I think that they are deserving of some alteration in the terms of their appointment. Their work is not free from considerable risks, and hitherto they have been engaged by the week, as the stress of work may require. Since my appointment I have endeavoured to make a staff of eight disinfectors, including a foreman of the staff, suffice for the requirements of the borough, and in this I have secured success, even during the recent severe epidemics of scarlet-fever and diphtheria from which the district has suffered, by the men constantly working overtime. It seems to me that now there is likely to be less disinfecting to do, it would be to the advantage of the borough for these men, with their special knowledge of all parts of the district, to be employed during such times as they are not required for their first duty, to seek for and report the existence of nuisances, which the district inspectors would not in the ordinary course discover till later. In this manner the disinfectors might be made a permanent staff, at fixed wages, and in non-epidemic

BOROUGH OF SALFORD.

*Pictorial Map shewing the distribution of
Scarlet Fever in Salford for the year 1890
arranged in Order of the Census Enumeration
Districts .—*

*The figures indicate the numbers of the Enumeration
Districts thus —157—*

*The coloured dots indicate the houses where cases
occurred .—*





BOROUGH OF SALFORD.

*Pictorial Map shewing the distribution of
Enteric Fever in Salford for the year 1890
arranged in Order of the Census Enumeration
Districts. —
The figures indicate the numbers of the Enumeration
Districts thus —157—
The coloured dots indicate the houses where cases
occurred. —*





times add materially to the efficiency of the sanitary inspection of the borough, which is so much to be desired.

Amount of Disinfection of Bedding and Clothing by the Corporation.—During the year 1890, 1,249 parcels of infected bedding and clothing were disinfected by means of high pressure steam, at the sanitary station attached to the Wilton Hospital, as against 1,324 parcels in the year 1889. They were distributed as follows:—Regent Road, 489; Greengate, 371; Pendleton, 197; Broughton, 192. There were, besides, 23 lots of bedding destroyed in the Regent Road District, 22 in the Greengate District, 6 in Pendleton, and 1 in Broughton.

Disinfection of
Bedding, &c.

Preventive Measures in Public Elementary Schools.—I felt compelled, on September 11th, to write requesting the closure of the Wellington Street school for a week, for the purpose of disinfection, in consequence of a considerable incidence of diphtheria among pupils attending that school. The closure of the school and its disinfection appeared to have a satisfactory influence in diminishing the number of cases, but there was no good reason for closing it for a longer time than was necessary for the purpose named. In like manner the St. Andrew's School, Hough Lane, Broughton, was closed for disinfection about the same date, owing to the number of pupils attending it who were shortly before reported as suffering from scarlet-fever and diphtheria. I had reason in this case, as in the other, to be satisfied of the utility of this procedure.

Protection of
Schools.

Prevalence and Distribution of Zymotic Diseases.—Of notifiable zymotic diseases there were, as already reported, 2,177 cases, distributed to particular localities as shown in the succeeding table. But, besides, there was some considerable prevalence of whooping cough and measles, which are not notifiable diseases, and the amount of their prevalence can only be estimated by the extent of their fatality, as may be seen on reference to Table F2, on page 24. That table further shows the fatality from whooping cough to have been greatest in the Regent Road and Greengate Districts, and from measles in the Regent Road and Pendleton Districts.

Disease
Prevalence.

With reference to the notifiable zymotic diseases, I again submit maps showing, by means of coloured dots, the location of the houses where some of them occurred. The distribution of diphtheria during the year 1890 has already been shown in my recent special report upon the prevalence of that disease in recent years within the borough, and I, therefore, content myself now with representing the distribution of scarlet-fever and enteric-fever cases. But, inasmuch as the general criticism on the map in my last annual report was in the direction of the desirability of showing only one disease at a time on a map, I have ventured to meet this suggestion, and have shown the two diseases on separate maps.

The greater clearness thus arrived at may, it is to be hoped, be of benefit to those who are interested in the public health of the borough.

THE FOLLOWING TABLE SHOWS THE DISTRICT DISTRIBUTION OF NOTIFIED CASES OF INFECTIOUS DISEASES DURING 1890.

	Small-pox.	Scarlet-fever.	Diphtheria.	Typhus-fever.	Enteric-fever.	Continued-fever.	Cholera	Erysipelas.	Membranous Croup.	Relapsing-fever.	Puerperal-fever.	Total.
Regent Road	...	368	241	3	185	2	...	28	2	...	3	832
Greengate ...	...	161	114	2	45	2	...	17	...	...	3	344
Pendleton ...	...	235	258	1	108	...	...	23	4	...	8	637
Broughton ...	...	221	81	...	45	...	...	8	1	...	8	364
Borough ...	...	985	694	6	383	4	...	76	7	...	22	2177

Scarlet-fever.

Scarlet-fever.—There were 985 cases of this disease notified during the year, as against 1,283 cases in the year 1889, 1,128 cases in 1888, 1,427 cases in 1887, and 1,536 cases in 1886. There was, therefore, a distinct diminution in the number of cases of this disease on those for several preceding years, although the numbers for 1890 must still be considered high. The disease may, however, be fairly thought to be on the decline in the borough, for its greatest incidence was in the first quarter of the year, and in the succeeding three quarters it remained at about the same level. Moreover, the decrease has been general throughout the borough, and not particularly marked in any one district more than in another. Of the total 985 cases of the disease during the year, 400 or 40·2 per cent. were of children under five years of age, and the proportion of cases at the same age in the several districts of the borough was as follows:—Regent Road, 70·3 per cent.; Greengate, 71·2 per cent.; Pendleton, 64·3 per cent.; and Broughton, 67·4 per cent.

SCARLET-FEVER SICKNESS.—RATES PER 1,000 OF THE POPULATION.

	1885.	1886.	1887.	1888.	1889.	Mean.	1890.
Salford (Borough) ...	3·26	7·75	7·04	5·44	6·05	5·91	4·54
SALFORD DISTRICTS. { Regent Road ...	3·46	8·58	6·64	4·59	5·53	5·76	4·14
{ Greengate	4·01	9·38	7·03	4·04	8·56	6·60	5·05
{ Pendleton	3·30	3·70	6·77	6·42	4·94	5·03	4·25
{ Broughton	2·08	10·02	8·28	7·12	6·67	6·83	5·42

Diphtheria.—There were 694 cases of this disease during the year, as against 691 cases in 1889, 176 cases in 1888, 83 cases in 1887, and 42 cases in 1886. These figures indicate a remarkable increase in the prevalence of this disease within the borough during recent years, and have been made the subject of a recent special report by me to the Health Committee. As this report has been printed and circulated, it is unnecessary for me to enter into further detail on the subject; but I am glad to report that the number of notifications of the disease were much reduced in the last two months of the year, and that such diminution has continued since the beginning of 1891. At the same time, I cannot but think that the decline of the disease will be gradual rather than abrupt, and that the most rigorous disinfection of all premises where the disease occurs must be enforced in the hope of narrowing the limits of its prevalence.

DIPHTHERIA SICKNESS. RATES PER 1,000 OF THE POPULATION.

	1885.	1886.	1887.	1888.	1889.	Mean.	1890.
Salford (Borough) ...	0·28	0·21	0·41	0·84	3·26	1·00	3·20
SALFORD DISTRICTS. { Regent Road ...	0·19	0·15	0·32	0·64	2·82	0·82	2·70
{ Greengate.....	0·28	0·16	0·09	0·63	3·77	0·99	3·61
{ Pendleton.....	0·14	0·22	0·40	1·05	3·79	1·12	4·64
{ Broughton.....	0·65	0·36	0·88	1·09	3·10	1·22	2·01

Enteric-fever.—There were 383 cases of this disease in 1890, as against 485 cases in 1889, 572 cases in 1888, 368 cases in 1887, and 258 cases in 1886. The greatest prevalence of this disease has been in the Pendleton and Regent Road districts. Of the total number of cases 363 were persons over five years of age, and only 20 cases were notified of infants under that age. An important point to be noted in connection with the prevalence of enteric-fever in the Regent Road district, which has during the past few years been gaining an unenviable notoriety from the prevalence of this disease within it, is that 28 cases, or slightly over 15 per cent. of the total cases in that district, were workers on the Ship Canal, and that two other cases occurred among men employed at the Manchester Sewage Works. These cases are not, of course, sufficient to reduce the number of cases of the disease occurring in the district to within reasonable limits, but they may, I think, be properly termed special cases. I can only repeat what I stated last year that this is a preventible disease, one that is always associated with filth, and therefore one which must be controlled by efficient sanitary measures. These measures are chiefly the prevention of sewer gas from entering the dwelling, the abolition of all means by which putrescible animal and vegetable matters can foul the atmosphere of the open spaces about the dwelling, and the prevention of soakage of human excreta into the foundations of the dwelling—measures, in fact, which must aim at the improvement of the sanitary condition, and the surroundings

of the homes of the people, seeing that sewer air infected by the excreta of some previous case, or undisinfected specific excreta cast into open privies and ashpits are among the commonest causes of the spread of the disease in large towns.

ENTERIC-FEVER SICKNESS. RATES PER 1,000 OF THE POPULATION.

	1885.	1886.	1887.	1888.	1889.	Mean.	1890.
Salford (Borough) ...	1.06	1.46	1.81	2.76	2.29	1.88	1.77
SALFORD DISTRICTS. { Regent Road ...	1.04	1.94	1.81	2.57	2.76	2.02	2.08
{ Greengate	1.19	1.41	2.04	2.45	1.32	1.68	1.41
{ Pendleton	1.14	1.17	2.25	3.83	2.93	2.26	1.95
{ Broughton	0.87	0.82	1.04	1.97	1.16	1.17	1.10

Typhus-fever.

Typhus-fever.—There were six cases of this disease, as against three in 1889, 31 cases in 1888, seven cases in 1887, and five cases in 1886. Four cases occurred in the first quarter of the year, one each in the two succeeding quarters, and none in the fourth quarter of the year. Three of the cases occurred in the Regent Road district, two in the Greengate district, and one in Pendleton. Three of the cases were removed to the Wilton Hospital, two were nursed at their homes, and one died at the Salford Royal Hospital, having been sent in there as a doubtful case of rheumatic fever. In three cases there was no traceable source of infection, in two it was probable that infection was got from suspicious rags, and the sixth probably caught the disease, as did two of her sisters in Manchester, from relations who suffered from and died of the disease in Liverpool. In no case was there any spread of the disease in the borough, every precaution having been taken in respect of the cases not sent to Wilton Hospital. It is satisfactory to find that this special disease of filth and want has not prevailed to even one-half the mean average prevalence of the preceding five years.

TYPHUS-FEVER SICKNESS. RATES PER 1,000 OF THE POPULATION.

	1885.	1886.	1887.	1888.	1889.	Mean.	1890.
Salford (Borough) ...	0.16	0.02	0.03	0.15	0.01	0.07	0.03
SALFORD DISTRICTS. { Regent Road ...	0.27	0.04	0.05	0.33	0.02	0.14	0.03
{ Greengate	0.19	...	0.06	...	...	0.05	0.06
{ Pendleton	0.08	0.04	0.02	0.06	...	0.04	0.02
{ Broughton.....	0.03	...	...	...	0.02	0.01	...

Puerperal-fever.

Puerperal-Fever.—22 cases of this disease were reported, as against 14 cases in the year 1889. Of the whole number 20 proved fatal. In one case the disease was unfortunately associated with diphtheria, but this infection was not in any way transmitted by the medical attendant. In each instance inquiries were made as to recent confinements attended by the midwife in the case,

and, where circumstances appeared to warrant the course, the midwife was advised to undertake no other case for one month, and, at the same time, to seek change of air and residence. Such advice was always adopted, and with excellent results.

Erysipelas.—This disease is now notifiable in Salford, and in the last three quarters of the year 1890, 76 cases were reported. Of these cases nine were children under five years of age, and 67 were persons over five years of age. It appeared that of the whole number of cases 12 were attributed to colds, 9 to injury, 14 were cases of facial erysipelas, 1 was a case of recurrence of the disease, and 40 were returned as occurring without being dependent on any special cause.

The distribution of the cases was as follows :—In the Regent Road district, 27 cases ; in the Greengate district, 18 cases ; in the Pendleton district, 23 cases ; and in the Broughton district, 8 cases.

IV.

ORDINARY SANITARY WORK OF THE HEALTH DEPARTMENT.

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WORK OF THE HEALTH DEPARTMENT.

Staff.

Increase of the Staff of Sanitary Inspectors.—In the early part of the year, the Health Committee increased the number of district sanitary inspectors by appointing two for a period of six months each. The work was well done by these probationary inspectors, and they have now been permanently added to the staff. The staff now consists of one chief inspector of nuisances, one assistant inspector, and six district sanitary inspectors; this body of officers, though by no means too large a one, is now doing the work which had to be attempted two years ago by one chief inspector, and four district inspectors. As a consequence, the work of the inspecting portion of the Health Department is much better done than it was formerly; but with the future growth of the borough, even this staff will, in time, be found to be insufficient for that sanitary supervision which is due to a great community.

Inspections

Systematic Inspection.—There has been a very considerably increased amount of regular and detailed inspection of the several districts of the borough, for the abatement of nuisances, as may be gathered from the tabular statement of the work done by the Salford Health Department (page 71). There have been as many as 39,938 visits paid to premises for sanitary purposes; but of these a considerable proportion were specially occasioned by the Health Committee, in their proceedings, with regard to certain "infected areas," under the Housing of the Working Classes Act of 1890. The homes, moreover, of all cases of infectious sickness were visited, and reported upon during the year; and special inspections of localities were also made by the Health Committee, leading, in consequence, to structural alterations of property of a useful kind.

Nuisances

Abatement of Nuisances under the Public Health Act.—The number of nuisances dealt with under the general Public Health Act, was very considerable, and, as in former years, comprised houses or premises kept in a filthy or unwholesome condition; house-drains out of repair, untrapped, or of waste pipes found to be connected directly with them; ashpits and privies in a filthy condition, adjoining house walls, or situated under bedrooms; accumulations of manure; animals kept in improper situa-

tions ; passages and yards with broken flags, or with defective drainage ; overcrowding of dwellings, and houses out of repair. These are the various nuisances which keep the department in constant and regular work from one year's end to another, irrespective of other special work which may be undertaken, and the amount of labour required to procure their abatement is not unfrequently out of all sense or reason. In the first place, they are very often the result of wilful carelessness, or gross ignorance on the part of the tenants of cottage property ; but, even beyond that, there is a disposition on the part of many owners of property to delay their removal until discovered by the Health Department. I am not sure that this latter condition is not largely dependant upon the first, for a careless or ignorant tenant is not given to preventing the recurrence of a nuisance which has been removed, and there is in such a case no incentive to a landlord to be perpetually removing it, unless obliged to by a legally constituted authority.

There is certainly, in Salford, a fine and large field of useful work for the well-intentioned amateur sanitarian, if he will make it his business to teach the people in their homes how to be cleanly, and how not to abuse sanitary improvements made by their landlords at the instance of the sanitary authority. The Corporation is capable and determined enough, as I can testify, to enforce the removal of nuisances, and the betterment of cottage property, but there is a lack of sanitary self-help among those on whose behalf action is taken.

For the removal of 9,802 nuisances, of all kinds, during the year, it was necessary to issue 4,475 notices, and to write 2,753 letters.

Supervision of Common Lodging-Houses.—Chief Sanitary Inspector Wilkinson reports that, at the end of the year, there were fifty-eight houses on the register, containing two hundred and thirty-four rooms, as against fifty-eight houses and two hundred and thirty-three rooms in 1889, being an increase of one room, and of accommodation for fifteen more persons. The total amount of bed-accommodation in these houses is now for fourteen hundred and thirty-seven persons. Two persons ceased, during the year, to keep lodging-houses, and they were replaced by two fresh registrations, and there were several changes of tenants through deaths. Three hundred and seventy-three night inspections of lodging-houses were made, and, as a result, it was only necessary to give eight verbal cautions to the keepers of eight houses ; there were one hundred and sixty-one inspections made in the Greengate District, two hundred and six in the Regent Road, and six in Pendleton, the cautions being seven in Greengate, and one in Regent Road. These inspections are, however, altogether inadequate for the proper supervision by day and by night of the common lodging-houses, and an inspector for the purpose is urgently needed. The average night visits by the inspectors, who work all day, have been about once in every two

Nuisances.

Common
Lodging-Houses

Common
Lodging-Houses

months for each house; this fact, while fairly satisfactory in itself, is not a good record of night inspections for such a borough as Salford, and night inspections, if made by the ordinary inspectors, are apt to interfere with the due performance of day work. Twenty notices were served for the removal of nuisances upon lodging-house premises, but in no case was it necessary to issue a summons for abatement, and on the whole, the houses have been, so far as could be seen, fairly well conducted.

Three cases of infectious sickness occurred, namely, one of epidemic influenza, one of erysipelas, and one of enteric fever, which were promptly reported and then removed to the hospital; two other cases came under notice, one being a case of bronchitis, and the other of paralysis. The average weekly accommodation during the year was 2,312 persons.

The following is a summary table respecting the common lodging-houses of the borough.

District.	No. of Houses.	No of Rooms	Bed Accommodation.	Complaints.	Diseases.	Notices.
Regent Road ...	29	116	604	1	1 Influenza ... 1 Paralysis ...	4
Greengate	20	90	730	7	1 Enteric-fever 1 Bronchitis...	9
Pendleton	9	28	103	...	1 Erysipelas...	7
Broughton	...	...	...	...		...
Borough ...	58	234	1437	8	5	20

Sub-let houses

Houses Sub-let in Lodgings.—At the beginning of the year 1890, there were five hundred and thirty sub-let houses on the register. In consequence of many changes having taken place, during the year, in the occupancy of these houses, the revision of the register has been begun, and up to December 31st, 1890, the following changes were found to have taken place. Sixty-six houses have been discontinued for lodging purposes; thirteen houses on the register have changed hands, and are still sub-let as before. During the year, three houses in Pendleton, and thirty-eight in Regent Road, which were visited in connection with the occurrence in them of some infectious disease, were found to be sub-let; of these, three were on the register, and thirty-eight were

not ; of the latter, four have since been registered on application, and the remaining thirty-four have been discontinued for lodging purposes. The work of keeping a correct record of the sub-let houses of the borough is exceedingly onerous and perplexing, and when the inspecting staff was under-manned was practically impossible, and even now, can only be achieved by extreme care and constant inspection.

The following table shows the number of sub-let houses becoming infected, together with particulars of the cases occurring therein.

DISTRICT	Number of Infected Houses.	Number of Cases of Sickness.						Houses	
		Class of Houses.		Small-pox	Scarlet Fever.	Enteric Fever	Diphtheria.	Since registered.	Discontinued.
		Registered.	Un-registered.						
Regent Road	38	4	45	...	10	21	18	4	34
Greengate	...	...	...	...	...	...	...	...	...
Pendleton	3	...	3	...	1	...	2	...	3
Broughton	...	...	...	...	...	...	...	...	...
Borough Total	41	4	48	...	11	21	20	4	37

Of the total fifty-two cases, as against fifty-four in 1889, twenty-nine, or 53·7 per cent., were removed to hospital, and the houses, bedding, and clothing of the patients were disinfected.

The following table shows the distribution of the cases nursed at home or sent to hospital.

CASES OF INFECTIOUS DISEASES OCCURRING IN SUB-LET HOUSES

District.	Nursed at Home.			Removed to Hospital		
	Scarlet Fever.	Enteric Fever	Diphtheria.	Scarlet Fever.	Enteric Fever	Diphtheria.
Regent Road ...	6	6	10	4	15	8
Greengate ...	...	...	...	...	...	...
Pendleton	...	...	1	1	...	1
Broughton	...	...	...	...	...	...
Totals for Borough	6	6	11	5	15	9
	23			29		

There are now four hundred and sixty-four sub-let houses remaining on the register, which were regularly inspected by night as well as by day. There were fifty-eight inspections made at night. Twenty-nine notices were issued during the year for the cleansing and limewashing of dirty houses, namely: nineteen in Regent Road and ten in Greengate. In addition to these notices, two summonses were issued, and came on for hearing, a small penalty in each case being inflicted.

Small houses
under Local Act,
1875.

Registration of Small Dwelling-Houses under Sec. 90 of the Salford Tramways and Improvement Act. 1875.—

Originally there were seventy-three of these houses specially registered. There has been no change in their number since the date of my last annual report, there being now only sixty-two small dwellings of this description. They are inspected from time to time during the day-time, and during the year there were sixty inspections made at night. Four cases of infectious diseases have occurred during the year in as many dwellings, namely: one of typhus-fever, and three of enteric-fever. Eighteen notices were issued during 1890, for the removal of nuisances, and for the re-numbering of doors.

Vans, Tents, &c.

Vans, Tents, Sheds, &c., used as Dwellings.—The inspection of these, under Section 9 of the Housing of the Working Classes Act, 1885, has been regularly carried on during the past year. The places where vans are generally located in the borough, are similar to those mentioned in my last report, namely: St. Simon's Street, Trinity Market, New Blackfriars Street, Ordsall Lane, Trafford Road, Glasshouse Street, Liverpool Street, Cross Lane, and Cromwell Road. During the year, there were located in the borough, at various times, 148 travelling dwellings, as against 185 in the year 1889, and these were regularly inspected. Of the whole number, 140 were occupied by persons having travelling shows or businesses, and eight were occupied by gypsies. The cleansing and improved ventilation of these dwellings has been sought, and satisfactorily accomplished, and on the whole there has been an absence of serious overcrowding. In two cases, notices were issued to discontinue the use of vans for sleeping purposes, on account of the smallness of their cubical contents, and of the want of sufficient ventilation,—the structures being not much else than boxes on wheels.

No. of Vans. Definite Business.	Gypsies.	Notices Issued.	Total No. of Vans.
140	8	2	148

Canal Boats Act.—The Canal Boats Inspector, Mr. H. Rider, Canal Boats. reports that, during the year, he has inspected 1,396 Canal boats, as against 1,280 in the year 1889. The inspected boats were found to be inhabited by 2,325 men, 474 women, and 287 children, making a total of 3,086 persons of all ages: this is equal to an average occupancy of 2·21 persons per boat. Of the children, 16 were of school-age and not attending school; in each case, the School Board authorities were communicated with.

The Inspector further reports that many of the captains of boats and their wives complain of not being able to get a plentiful supply of fresh water on their trips between Runcorn and Salford, and Radcliffe and Pendleton, and *vice versa*; the lock-keepers are not allowed to supply them with drinking-water from the private taps in their own houses, and there appears to be no other available supply. This state of things is manifestly unsatisfactory, but does not, of course, occur within the Salford jurisdiction; still it appears to me to be the duty of the owners of the boats to render it possible for their employes to replenish their water-tanks at fixed stations along the different routes, from hydrants or some other satisfactory source of supply.

Two cases of infectious diseases were discovered on board boats, namely: one of scarlet-fever, and one of diphtheria. Both patients were promptly removed to the hospital, the bedding and clothing disinfected, and the cabins stoved and thoroughly cleansed. There was no spread of the disease in either case.

The following is a classified list of defects found in various canal boats.

Boats out of repair.	Cabins in want of repair.	Boats working without certificates.	Boats of which the names or numbers were defective.	Cabins found in a dirty condition.	Cabin with defective ventilation.	Cabins with bilge water under floors causing nuisance.
45	28	7	43	70	1	6

No case of overcrowding was discovered during the year in any of the boats.

Dairies and Milkshops.—There has been an increase of Dairies, &c. thirteen of these on the register during the year 1890. The total increase for the past two years has been 33. There is danger in having very many small milkshops, owing to the increased risks thus afforded for the contamination of milk; but I am happy to say that the requirements as to suitability are being stringently adhered to, and the class of shop is being quietly but steadily improved. There were no cases of infectious disease at any of

Dairies, &c.

these establishments, though five cases of diphtheria occurred at a farm within the boundaries of the borough ; still, even in the latter case, such precautions were taken as to ensure the safety of the milk-supply from it.

During the year, fifteen shops have been registered, and business has been discontinued in two others. Fourteen notices have been served, namely : one for the shop being dirty, eight for dirty papered walls, and five for want of proper signs over the doors, in accordance with the local regulations.

The following is a summary table respecting the dairies and milkshops.

District.	No. on Register 1889.	Discontinued.	Registered in 1890.	Remaining in 1890.	Notices Served.	Cases of Sickness.				
						Scarlet Fever.	Enteric Fever.	Diphtheria.	Removed to Hospital.	Nursed at Home.
Regent Road...	257	2	11	266	...	...	...	...	...	...
Greengate	83	...	1	84	...	...	...	...	...	...
Pendleton	95	...	...	95	1	...	...	...	...	...
Broughton	123	...	3	126	13	...	...	...	...	...
Borough	558	2	15	571	14	...	...	...	...	...

Bakehouses.

Supervision of Bakehouses.—There has been a decrease of five bakehouses during the year, leaving a total of 108 at the end of the year 1890. The number of persons employed in them are 222 men, 44 females, and 13 boys, or a total of 279 persons, as against 291 in the year 1889.

During the year, notice was issued to secure limewashing in only one instance where it had not been done at the proper time, and in one case I sent a written caution against the employer permitting his workmen to sleep in the bakehouse. In other respects, the regulations appear to have been satisfactorily adhered to.

The following table is a summary in respect of bakehouses for the year 1890.

District.	No. of Houses.	No. of Ovens.	Kind of Ovens.			Employees.			Notices Served.	Summonses Issued.
			Waggon.	Flue.	Iron.	Men.	Women.	Boys.		
Regent Rd.	59	73	43	17	13	120	24	5	1	...
Greengate ..	10	15	14	1	...	25	...	5	1	...
Pendleton...	22	35	24	10	1	46	9	3	...	...
Broughton..	17	21	13	6	2	31	11	...	...	...
Borough...	108	144	94	34	16	222	44	13	2	...

Noxious Trades.—There has been a decrease of one during the year on the total number of these trades, namely, one of tripe dressing; three others were discontinued, and two fresh places registered, all in the Regent Road and Pendleton districts. Three notices were issued under the Public Health Act, and were properly complied with. Complaints were received in respect of two establishments,—a rubber and a tripe-dressing,—and in the case of the former it was found that experiments were being made in a temporary shed, which is to be replaced by a permanent building fitted with proper appliances for the diffusion of fumes if the experiments prove successful; in the second case, a numerously signed petition was presented to the Health Committee, declaring it to be a nuisance, together with another, as numerously signed, declaring it to be otherwise. After numerous inspections and watchings at various times by myself and the inspectors, I was unable to find any ground for declaring the tripe-dressing establishment, as at present conducted, to be a nuisance or injurious to health. It is worthy of note, that one resident in the neighbourhood manifested his impartiality for the contending parties by signing both petitions.

Noxious Trades. The following is a list of the trades herein referred to, and the districts in which they are carried on:—

Nature of Works.	No. of Trades in the Districts and Borough.					Discontinued.	Newly Registered.
	Regent Road.	Green-gate.	Pendle-ton.	Brough-ton.	Borough.		
Soap Boiling ...	1	1	1	...	3	...	...
Tripe Dressing ..	12	4	5	...	21	3	2
Oil and Tallow...	2	4	1	...	7	...	...
Tanneries, &c...	1	1	1	...	3	...	...
Varnish and Tar.	1	3	1	...	5	...	...
Chemical.....	3	2	2	...	7	...	...
Telegraph Cable	...	2	..	...	2	...	...
Rop Cleaning .	4	1	...	...	5	...	...
Floor Cloth.....	1	2	...	...	3	...	...
Rubber	1	2	1	1	5	...	...
Paper	1	...	1	1	3	...	...
Totals	27	22	13	2	64	3	2

Brick Burning.—There has been a discontinuance of two brick-burning establishments, and one new one has been started. This latter is situated about 100 yards from the Reservoir in the Pendleton district; the first kiln is about formed, and at present there is no nuisance from it. There have been no serious complaints of any of these establishments during the year; their distribution throughout the borough is as follows:—

District.	No. in 1889.	Discontinued in 1890.	Newly Established.	Still under Supervision.
Regent Road.....	2	...	...	2
Greengate	...	..	...	...
Pendleton	7	1	1	7
Broughton	1	1	...	...
Borough	10	2	1	9

Prevalence of Epizootic Diseases.—Inspector Fordham, M.R.C.V.S, reports that during the year 1890 no case of foot-and-mouth disease, nor of pleuro-pneumonia, occurred within the borough of Salford. On the 26th of March a horse in a building in West High Street, Salford, was found to be suffering from glanders. The horse was slaughtered, and destroyed in the furnace at the manure depôt. The premises and manure were thoroughly disinfected with quicklime. Diseases of Animals.

On the 27th April, Inspector Fordham found swine-fever existing on premises in Hodge Lane. There were six diseased swine, and eight healthy which had been in contact with them; all were killed and buried in quicklime at a depth of six feet. The premises and manure were thoroughly disinfected.

Mr. Fordham made post mortem examination of the bodies of four dogs which were captured by the police, and in one instance he found distinct evidence of rabies.

Unwholesome Meat.—Over thirteen tons of meat unfit for human food were seized during the year. In accordance with the resolution of the Health Committee, come to during the latter portion of the year 1889, it was all destroyed in the furnace at the manure depôt, and was not sold for dogs' meat. Meat unfit for Human Food.

Subjoined is the monthly seizure of unwholesome meat, and the amount:—

Month.	No. of Seizures.	Weight.			
		Tons.	Cwts.	Qrs.	Lbs.
January	17	0	18	3	26
February	15	0	15	3	6
March	15	1	4	0	4
April	10	0	18	3	26
May	20	1	8	3	27
June	14	1	0	1	18
July	15	1	16	2	18
August	24	1	15	0	21
September	21	0	13	1	19
October	18	0	18	0	11
November	16	0	10	1	14
December	21	1	3	0	2
Year 1890	206	13	3	3	24

TABLE SHOWING THE KIND OF UNWHOLESOME MEAT SEIZED,
AND THE WEIGHT:—

Kind.	No. of Seizures.	Weight.			
		Tons.	Cwts.	Qrs.	Lbs.
Beef	24	6	1	3	24
Mutton	144	4	10	3	5
Veal	25	0	16	1	15
Horseflesh	1	0	5	1	12
Pork and Bacon	8	1	9	0	16
Rabbits	3	0	0	0	10
Fish	1	0	0	0	26
Totals.....	206	13	3	3	24

Cowsheds and Shippens.—At the end of the year 1890 there were 24 cowsheds and shippens on the register, as compared with the same number at the beginning of the year. Inspector Fordham has kept all carefully under his supervision, and no occasion has arisen for action in respect of them by the Health Department of the borough at any time of the year. Cowsheds, &c.

Private Slaughter-houses.—There were 41 private slaughter-houses at the end of the year, as against 46 in 1889, and 51 in 1888. The number during 1890 was reduced by the Health Committee refusing, on my recommendation, to renew the yearly license in two cases, and by three houses not being now in use as slaughter-houses. Slaughter-houses.

Proceedings under the Adulteration Acts.—During the year 874 samples of foods and drugs have been sent for analysis by the Borough Analyst, Mr. J. C. Bell, F.I.C., as against 832 samples in the year 1889. Of these samples 45, or 5·1 per cent., were found to be adulterated, as against 10·09 per cent. in 1889, and 10·0 per cent., the average for the preceding ten years. This lower rate is very satisfactory, and I would advert to the fact that while Salford was quoted in the Annual Report of the Local Adulterations.

SAMPLES COLLECTED BY THE INSPECTOR UNDER THE "SALE OF FOOD
AND DRUGS ACT," FROM 1875 TO 1890.

	Total.	Milk.	Butter.	Bread and Flour.	Drugs.	Gro- ceries.	Beer and Porter.	Wines and Spirits.	S'ndries
1875...	60	37	1	1	1	...	7	4	9
1876...	119	43	2	18	34	17	...	...	5
1877...	390	114	7	159	22	30	18	37	3
1878...	418	197	10	35	31	25	24	70	26
1879...	518	306	16	130	15	28	10	13	...
1880...	506	269	12	48	5	52	71	18	31
1881...	478	376	11	1	...	61	...	8	21
1882...	465	300	7	47	13	3	58	20	17
1883...	497	436	1	29	1	12	...	2	16
1884...	507	359	10	35	7	...	64	11	21
1885...	478	399	21	14	4	13	21	...	6
1886...	483	361	6	21	...	36	1	22	36
1887...	472	355	2	...	...	25	42	43	5
1888...	883	701	6	...	30	83	...	9	54
1889...	832	652	35	...	21	85	15	17	7
1890...	874	591	41	38	24	64	12	49	55

PERCENTAGE OF ARTICLES RETURNED AS ADULTERATED.

	Total.	Milk.	Butter.	Bread and Flour.	Drugs.	Gro- ceries.	Beer and Porter.	Wines and Spirits.	S'ndries
1875..	66.6	62.1	100.0	0.0	0.0	...	100.0	75.0	66.6
1876...	40.3	55.8	50.0	27.8	35.3	17.6	...	...	60.0
1877...	27.4	40.3	28.6	11.3	13.6	6.7	0.0	97.3	0.0
1878...	29.9	29.4	10.0	2.9	51.6	4.0	4.2	67.1	0.0
1879...	12.0	13.1	25.0	5.4	26.6	10.7	10.0	2.3	...
1880...	20.2	25.2	75.0	6.3	0.0	17.3	11.3	11.1	9.7
1881...	16.3	18.1	9.1	0.0	...	1.6	...	37.5	23.8
1882...	15.5	19.0	14.3	2.1	53.8	0.0	1.7	10.0	17.6
1883...	6.6	6.7	0.0	3.4	0.0	8.3	...	50.0	6.3
1884...	7.1	2.8	40.0	5.7	57.1	...	0.0	27.3	61.9
1885...	5.2	4.8	4.8	7.1	0.0	15.4	0.0	...	33.2
1886...	3.9	1.1	50.0	0.0	...	25.0	0.0	0.0	8.3
1887...	8.7	9.9	0.0	...	...	8.0	2.4	7.0	0.0
1888...	6.3	2.8	100.0	...	26.6	13.3	...	0.0	20.4
1889...	10.09	7.3	22.8	...	28.5	24.7	0.0	0.0	14.2
Average, 1880-89	10.0	9.8	31.6	3.5	23.7	12.6	2.2	15.9	19.5
1890...	5.1	1.9	50	0.0	0.0	15.6	0.0	30.6	12.7

List of samples of Milk taken from Farmers' Cans during the year 1809, AT THE PLACE OF DELIVERY, by the Food Inspectors, and the results of the Analyses.

No.	Names and Addresses.	Places of Delivery.	Results of Analyses.
1	T. T., Hill's Green, Siddington...	London Road Station ...	Pure
2	C. T., Fan House, Congleton.....	" "	Do.
3	K. G., North Rode	" "	Do.
4	S. T., Siddington	" "	Do.
5	K. G., Bank Farm, North Rode ..	" "	Do.
6	K. G., " " " " " " " "	" "	Do.
7	C. J., Highfield Hall	" "	Do.
8	C. J., " " " " " " " "	" "	Do.
9	W. W. Wenbury	" "	Do.
10	W. W., Broomhill Nantwich	" "	Do.
11	C. J., Whitechurch	" "	Do.
12	C. J., " " " " " " " "	" "	Do.
13	C. J., " " " " " " " "	" "	Do.
14	L. R., Plumbley	Old Trafford Station.....	Poor
15	L. R., " " " " " " " "	" "	Do.
16	H. J., Mickle Trafford	Central Station.....	Pure
17	H. J., " " " " " " " "	" "	Do.
18	D. T., Hartford	" "	Do.
19	D. T., Broughton Hall	Exchange Station	Do.
20	F. J., Delamare	Central Station.....	Do.
21	S. P., Delamere	" "	Do.
22	S. W., Cimmon's Farm, Kelsall ..	Old Trafford Station...	4% w'ter ad. 30% c'm
23	W. C. T., Barron for Tarvin	" "	Pure [gone.
24	S. W., Mouldsworth	" "	25% cream gone.....
25	S. W., Mouldsworth	" "	Pure
26	P. L. T., Knutsford.....	" "	Do.
27	S. W., Kelsall	" "	Do.
28	S. W., Kelsall	" "	Do.
29	S. W., Kelsall	" "	Do.
30	S. W., Kelsall	" "	Do.
31	N. P., Mouldsworth	" "	4% water added
32	N. P., Mouldsworth	" "	8% w'ter ad. 30% c'm
33	N. P., Mouldsworth	" "	Very Poor..... [gone.
34	N. P., Mouldsworth	" "	Pure
35	N. P., Mouldsworth	" "	Do.
36	N. P., Mouldsworth	" "	Do.
37	N. P., Mouldsworth	" "	Do.
38	N. P., Mouldsworth	" "	Do.
39	H. A., Lostock.....	Pendleton Station.....	Do.
40	H. A., Lostock.....	" "	Do.
41	H. A., Lostock.....	" "	Do.
42	H. A., Lostock.....	" "	Do.
43	H. A., Lostock.....	Central Station	Do.
44	H. A., Lostock.....	" "	Do.
45	H. A., Lostock.....	" "	Do.
46	S. W., Kelsall	Old Trafford Station...	Do.
47	S. W., Kelsall	" "	Do.
48	W. J., Thelwall	" "	Do.
49	W. J., Grapenhall	" "	Do.
50	W. J., Grapenhall	" "	Do.
51	W. J., Grapenhall	" "	Do.

List of samples of Milk taken from Farmers' Cans during the year 1890, AT THE PLACE OF DELIVERY, by the Food Inspectors, and the results of the Analyses.—Continued.

No.	Names and Addresses.	Places of Delivery.	Results of Analyses.
52	B. A., Mobberley	Old Trafford Station	Pure
53	S. W., Mouldsworth	" "	Do.
54	S. W., "	" "	Do.
55	S. W., "	" "	Do.
56	S. W., Kelsall	" "	Do.
57	S. W., "	" "	Do.
58	F. J., Delamere	" "	Do.
59	H. R., Rossett	Exchange Station	Do.
60	H. A., Lostock	Pendleton Station	Do.
61	H. J., Mickle Trafford	Ordsall Lane Station	Do.
62	H. A., Lostock	Pendleton Station	Do.
63	B. W., Mobberley	Old Trafford Station	Do.
64	H. G., Chatburn	Pendleton Station	Do.
65	C. W., Rowsley	Central Station	Do.
66	A. H., Preston Brook	Exchange Station	Do.
67	R. R., Chapman	Pendleton Station	Do.
68	T. B., Plumbly	Central Station	Do.
69	T. A., Gisburn	Pendleton Station	Do.
70	K. T., Langho	" "	Do.
71	W. W., Gisburn	" "	Do.
72	T. A., Langho	" "	Do.
73	H. J., Chatburn	" "	Do.
74	T. T., Gisburn	" "	Do.
75	P. J., Langho	" "	Do.
76	S. T., Whalley	" "	Do.
77	R. R., Chatburn ..	" "	Do.
78	R. R., "	" "	Do.
79	W. T., Remmington	" "	Do.
80	J. H., Gisburn	" "	Do.
81	T. A., "	" "	Do.
82	P. H., Langho	" "	Do.
83	L. E., Dunham	Ordsall Lane Station ..	Do.
84	J. S., Dunham Hill	" "	Do.
85	J. T., "	" "	Do.
86	J. T., "	" "	Do.
87	D. P., Norton	" "	Do.
88	G. A., Helsby	" "	Do.
89	D. P. Norton	" "	Do.
90	G. W., Ince	" "	Do.
91	G. A., Helsby	" "	Do.
92	K. J., Langho	Victoria Station	Do.
93	F. J., Taxton Hall	London Road Station ..	Do.
94	F. T., Whalley	" "	Do.
95	D. A. Whitcurnch	" "	Do.
96	C. E. A., North Rode	" "	Do.
97	H. E., Mickle Trafford	Ordsall Lane Station ..	Do.
98	D. P., Norton	" "	Do.
99	H. E., Mickle Trafford ..	" "	Do.
100	H. E., "	" "	Do.
101	J. T., Dunham Hill	" "	Do.
102	J. T., "	" "	Do.

List of samples of Milk taken from Farmers' Cans during the year 1890, AT THE PLACE OF DELIVERY, by the Food Inspectors, and the results of the Analyses.—Continued.

No.	Names and Addresses.	Place of Delivery.	Results of Analyses.
103	L. T., Dunham Hill.....	Ordsall Lane Station ...	Pure
104	B. R., Frodsham	" "	Do.
105	J. T., Dunham Hill.....	" "	Do.
106	L. T., "	" "	Do.
107	J. T., "	" "	Do.
108	W. P., Thelwall	Old Trafford Station.....	Do.
109	R. T., "	" "	Do.
110	W. J., Latchford	" "	Do.
111	W. J., Tarperley	" "	Do.
112	C. J., Thelwall.....	" "	Do.
113	T. T., "	" "	Do.
114	B. C., Lochdennis	" "	Do.
115	T. T., Thelwall	" "	Do.
116	S. J., Adderley	London Road Station ...	Do.
117	S. J., "	" "	Do.
118	B. G., Market Drayton	" "	Do.
119	P. J. G., Parkside	Exchange Station.....	Do.
120	W. H., Preston Brook	" "	Do.
121	B. W. R., Grange Park	" "	Do.
122	W. H., Beeston Castle	" "	Do.
123	A. W., Rednall.....	" "	Do.
124	R. W., Broughton Hall	" "	Do.
125	D. T., "	" "	Do.
126	P. C., "	" "	Do.
127	C. E., Beeston	" "	Do.
128	P. T., "	" "	Do.
129	C. R., Lime	Central Station	Do.
130	C. R., "	" "	Do.
131	S. P., Delamere	Old Trafford Station ...	Do.
132	S. P., "	" "	Do.
133	S. P., "	" "	Do.
134	L. R., Langho	Seedley Station.....	Do.
135	R. R., Chatburn	" "	Do.
136	R. R., Chatburn	" "	Do.
137	P. J., Langho	" "	Do.
138	W. J., Clitheroe	" "	Do.
139	R. R., Chatburn	" "	Do.
140	T. J., Turton	" "	Do.
141	J. T., Langho	" "	Do.
142	J. H., Gisburn	" "	Do.
143	J. H., "	" "	Do.
144	F. T., "	" "	Do.
145	G. J., Newsholme	" "	Do.
146	C. J., Crewe	" "	Do.
147	F. T., "	" "	Do.
148	H. G., Nantwich	" "	Do.
149	E. T., "	" "	Do.
150	F. S., Willaston	" "	Do.
151	B. J., "	" "	Do.
152	G. A. J. Nantwich	" "	Do.

Government Board for 1889-90 as having had only 5·6 per cent. of milk adulteration in 1889 as compared with 8·2 per cent. in Manchester, and 21·1 per cent. in London, for the year 1890 the number of adulterated samples of milk in Salford were only 11 out of 591, or 1·9 per cent. Of groceries, 15·6 per cent. were adulterated; of spirits, 30·6; and of butter, 5·0 per cent. The total amount of adulteration was 5·1 per cent. of all articles analysed.

The following is a statement of cases in which legal proceedings were taken, under the Sale of Food and Drugs Act, during the year 1890 :—

Articles.	No. of Cases.	Amount of Fines.	£ s. d.
Milk	2	4os. and costs.	4 0 0
Total	2	£4 os. od.	4 0 0

In addition to the above cases, six persons received written cautions.

Smoke from
Factory
Chimneys.

Smoke Nuisance.—Inspector Thompstone, the Smoke Inspector, reports that he has made 1,270 observations during 1890 of smoke issuing from the chimneys of factories within the jurisdiction of the borough. As a result, 24 firms or their employees were summoned for using furnaces which were not constructed to consume their own smoke, or for using furnaces in a negligent manner; of the 24 cases in which legal proceedings were thus taken, 20 were fined in sums which amounted altogether to £45 7s. 6d., exclusive of costs, and the remaining 4 were either dismissed or withdrawn.

The number of properly-constructed furnaces and steam-boilers in use in the factories within the borough are 519, as against 503 in the year 1889, being an increase of 16—eight in the Regent Road district, six in Greengate, and two in Pendleton. Several firms have, moreover, replaced old and worn-out boilers with powerful new ones to work at high pressure; there has also been improvement in the erection of chimneys capable of giving better facilities for the consumption of smoke. There seems further to be a desire on the part of manufacturers to fit their boilers with the best and most reliable appliances for smoke-prevention.

List of Cases, other than Adulteration Cases, taken before the Magistrates during the Year 1890.

Particulars of Offence.	No. of Cases.	How Disposed of	Amount of Penalties imposed.
			£ s. d.
Using furnaces not constructed } to consume their own smoke }	5	Five fined, in all £19	19 0 0
Negligently using furnaces } constructed to consume their } own smoke	19	{ Fifteen fined, in all £25 7s. 6d., } { one not served, two with- } { drawn, and one dismissed }	25 7 6
Permitting Smoke Nuisance } from Bakehouse	1	One "Order to abate" made ...	
Being in possession of diseased } meat	3	{ Two fined, in aggregate } { £16 16s.; one dismissed.. }	16 16 0
Exposing diseased sheep for } sale	1	Fined £1	1 0 0
Premises in such a state as to } be a nuisance	15	{ Five "Orders to abate" made, } { Eight withdrawn (work } { having been done), two } { dismissed	
Letting houses in lodgings } without being registered ... }	2	Fined 3s. 6d.	0 3 6
Overcrowding lodging houses ...	2	Dismissed	
Totals.....	48		£ 62 7 0

Sixty-four stokers have been personally cautioned for negligently using furnaces, and thirteen owners or occupiers of bakehouses, &c., were served with notices under the Public Health Act, 1875, which were complied with.

NUMBER OF BLACKSMITHS' FORGES IN SALFORD AT THE
END OF 1890.

	Borough Total.	Regent Road.	Greengate.	Pendleton.	Broughton
Blacksmiths' Forges	71	24	20	16	11

NUMBER OF BOILERS AND FURNACES IN USE WITHIN THE FOUR
DISTRICTS OF THE BOROUGH AT THE END OF 1890.

Registration Sub-Districts.	Boilers and Furnaces in use.		Notices issued by the Health Committee.	
	Properly Constructed.	Improperly Constructed.	Number Served.	Number complied with.
Regent Road ...	141	90	113	47
Greengate.....	149	62	78	51
Pendleton.....	200	49	95	56
Broughton	29	17	27	13
Borough Total	519	218	313	167

PARTICULARS OF WORK DONE BY THE HEALTH DEPARTMENT
DURING THE YEAR 1890

	Borough.	Regent Road.	Greengate.	Pendleton.	Broughton	
No. of Complaints lodged at Health Office	4166	1766	956	658	786	
Inspections made.	Of Dwelling-houses	16599	7367	3647	3043	2542
	„ Lodging-houses	784	406	254	124	...
	„ Slaughter-houses	1625	772	149	524	180
	„ Shippons	505	...	...	232	273
	„ Dairies and Milkshops	222	41	53	78	50
	„ Bakehouses	38	23	5	2	8
	By Smoke Inspector—Observations taken	1270	275	395	447	153
	Under Adulteration Act—Samples collected for Analysis	874	312	216	170	176
	By Meat Inspector—Seizures made	196	186	4	6	...
	Miscellaneous Sanitary Inspections	2587	1030	566	621	370
	Re-inspections after Notice	15238	6702	4247	2548	1741
	Total Inspections made by Staff...	39938	17114	9536	7795	5493
Orders issued for Abatement of Nuisances	4475	2030	873	989	583	
Letters written for ditto.....	2753	1049	534	745	425	
Nuisances abated pursuant to order.	Houses and Premises cleansed, repaired, or limewashed	1331	213	713	231	174
	Houses disinfected after infectious disease	2932	1084	738	632	478
	House Drains repaired, trapped, or disconnected	2484	860	1036	328	260
	Ashpits and Privies repaired or re-constructed	1073	329	493	121	130
	Accumulations of Manure removed	190	37	45	95	13
	Ashpits attended to after complaint	2179	846	515	330	488
	Improperly kept Animals removed	48	30	4	12	2
	Overcrowding of Dwellings abated	62	6	35	20	1
	Passages and Yards repaired, drained, or flagged.....	2435	1416	458	267	294
	Total number of Nuisances abated	12734	4821	4037	2036	1840
Regularly Inspected.	Lodging-houses { Common	58	29	20	9	...
	„ { Sublet in Ap'ts	464	255	155	154	...
	Slaughter-houses	41	19	14	4	4
	Dairies and Milkshops	558	257	83	95	123
	Shippons	25	...	11	14	...
	Bakehouses	108	59	10	22	17
	Marine and Second-hand Stores	...	...	...	...	...
Patients removed to Fever Hospitals...	...	...	...	...	...	
Infected bedding & clothing disinfected	1249	489	371	197	192	
Infected bedding destroyed.....	52	23	22	6	1	
Legal proceedings taken (see p. 68 & 69)	...	...	...	...	...	

V.

SPECIAL SANITARY MATTERS.

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SPECIAL SANITARY MATTERS.

Insanitary Dwellings

Insanitary Dwellings of the Working Classes.—The progress which has been made during the past year in this department of hygiene has been considerable, and may be classified under three headings:—

- (i.)—The closure of dwellings unfit for human habitation ;
- (ii.)—The alteration of groups of cottages so as to render the areas they comprise more healthy ; and—
- (iii.)—The condemnation of areas, the demolition and subsequent re-arrangement and re-construction of which are necessary in the interests of the public health of the borough.

I am satisfied that much of the work of securing healthy dwellings for the working classes must for some time yet to come be carried out on these lines, other subsidiary lines of procedure not, however, being lost sight of or neglected.

(i.)—With respect to this form of procedure I have to report that, in accordance with my report for the year 1889, “that the gradual abolition of cellar-dwellings will be of much benefit to the general sanitary status of the borough ; and that it is a measure that ought to be steadily persevered with, although it is undoubtedly politic that it should be gradually effected, in the absence of a scheme for the housing of all cellar inmates, who would be dislodged by a universal closure of their dwellings,” some 22 cellars used as dwellings have been closed by the Corporation during the year under the Local Improvement Act of 1870. There are now, therefore, 233 cellars in use as dwellings, and their gradual closure will be steadily proceeded with. But, besides, 16 houses were closed as unfit for human habitation, under the same local Act, making a total of 38 dwellings closed during the year.

(ii.)—In respect to the alteration of groups of cottages, I have to report the progress of an initial procedure, which I am hopeful will prove productive of much good. It has reference to a series of rows of back-to-back cottages forming small courts off Regent

Street, each row consisting of from seven to eight cottages, containing one room upstairs and one downstairs, with the exception of single back-to-back cottages, mostly in the centre of the rows, having each an extra bedroom over a passage, to be further described, and therefore larger cottages than the rest.

Insanitary
Dwellings.

I reported briefly that these courts were formed by 142 dwellings, and were named—

Heap's Buildings	No. 2
Griffiths' Buildings.....	„ 1
„ „	„ 2
„ „	„ 3
„ „	„ 4
„ „	„ 5
Wilkinson's Buildings	„ 2
Edinburgh Place	
Wilkinson's Buildings	„ 1
Tarback's Street	
Canavin's Court	
Kay's Court.	

They all presented nearly similar conditions, in that namely, the cottages were back-to-back, the courts were severally connected by a narrow passage of the average width of three feet through each block of cottages, and that on the same side, but at each end, of the passages was a small scullery belonging to the larger back-to-back cottages. Between these sculleries, but opening into the passages, were two closets on the tub system, and there was a space between the latter to hold an ash-barrel. In every case the passage with its closets and ash-barrel was covered over by the second bedrooms of the larger cottages referred to, the passages were dark, narrow, and filthy, and in no case was there a cottage bounding the passages in which there was not a serious complaint of a sickening smell.

To summarise, there were as follows :—

Number of Dwellings.....	142
Population, about	560
Number of Tub Closets	20
Average number of persons to each closet...	28
Average number of houses to each closet...	7

Moreover, the average general death-rate of the enumeration district, of which these cottages formed nearly the whole, was for the five years 1879 to 1883, about 44·1 per 1,000, and for the five years 1884 to 1888 it was 41·7 per 1,000.

The recommendation for the alteration of the state of things here described was to call upon the landlords, under a Local Improvement Act of 1875, to remove the sculleries and the old tub-closets, to replace them with twice the number of water-closets, to remove the floors of the bedrooms over the passages, and to

Insanitary
Dwellings.

open out the back-to-back bedrooms into one through open space, leaving only the roofs as a covering over the passage. In this manner it was proposed to make the passages from six to seven feet wide above the closets, to have free light and air throughout them, and to give them a chance of being kept clean and decent.

The recommendation met with considerable opposition from the landlords in the first instance; but the work was subsequently proceeded with in good spirit later, and though not completed in all the properties by the end of the year, it yet had made considerable progress, as the following summary indicates:—

Heap's Buildings	No. 2—work done.
Griffiths' Buildings	" 1 "
" "	" 2 "
" "	" 3 "
" "	" 4 "
" "	" 5 "
Wilkinson's Buildings	" 2 "
Edinburgh Place	" "
Wilkinson's Buildings	" 1—in progress.
Tarback Street	—work done.
Canavin's Court	" "
Kay's Court	—not completed.

Without doubt there are many other blocks of property in the borough which may be similarly dealt with, and be rendered far more healthy than they are at present. Such blocks of cottages will from time to time be severally dealt with. In this particular instance, so far as the work of alteration has been completed, the amount of closet accommodation has been doubled, it has been put on an improved system, and is not confined and dark as it formerly was.

(iii.) Of the condemnation of areas, their demolition, and subsequent re-arrangement and re-construction, it may be said that the year 1890 signalises the commencement of operations on a comprehensive scale, and that one-tenth of the grossly insanitary areas have been taken in hand. The proceedings in respect of these areas have been taken under the Housing of Working Classes Act, 1890, Part I., and for the purpose required I made formal representations concerning three areas in the Greengate and Regent Road districts, under date September 25th, 1890 (Appendix II.) I made a further representation on two more areas in the same districts on October 22nd, 1890, and these two representations having been fully considered by the Health Committee, it was decided to include certain adjacent properties so that the areas demolished might be made more serviceable for the purpose of re-arrangement. The Improvement Scheme was finally adopted by the Council of the borough on November 14th, 1890. As the Act only came into operation on August 18th, 1890, it cannot be said that the County Borough of Salford has lost much time in taking advantage of the provisions of the Act.

The following figures and tables will give a more accurate notion of the class of properties proposed to be demolished than any words can :—

Insanitary
Dwellings.

HOUSES AND POPULATIONS.

Medical Officer of Health's Representations. 1890.

Areas.	HOUSES.		POPULATIONS.		
	Total Number of Houses.	Empty.	Adults.	Children.	Total.
No. 3...	149	17	461	154	615
„ 6...	84	16	168	72	240
„ 7...	82	5	74	36	110
„ 9...	42	21	42	48	90
„ 10...	21	2	44	24	68
Totals..	378	61	789	334	1123

1. Number of occupied houses equals 317.
2. Average number of persons per occupied house 3'54.

DENSITY OF POPULATION ON CONDEMNED AREAS.

Medical Officer of Health's Representations.

Area		Square yards.	Density per acre.
3.....	Buildings	5135	
	Courts	481	
	Total.....	5616	530
	Intervening Streets.....	2672	
	Total	8288	360
„ 6.....	Buildings	1970	
	Courts	485	
	Total.....	2455	473
	Half-width of adjacent streets	627	
	Total.....	3082	377

MORTALITY TABLE I.

No. of Area.	Houses.		Population.	People per acre, including area of streets and courts.	Average death-rate per 1,000 persons living for the five years 1884 to 1888 inclusive.			
	Inhabited.	Uninhabited.			From all Causes.	From the six principal Zymotic diseases (excluding Diarrhoea.)	From Pulmonary diseases (including Phthisis.)	
3	132	17	615	360	57.9	5.9	25.4	
6	68	16	240	377	40.8	5.8	19.2	
7	77	5	110	468	78.2	14.5	21.8	
9	21	21	97	233	41.2	4.1	14.4	
10	19	2	68	319	52.9	8.8	14.7	
In the same localities, and with the same population in the years					1889	64.6	12.4	22.1
					1890	64.6	6.2	31.0
In the whole of the estimated Urban Sanitary District of Salford at the middle of 1888, 1889, and 1890					1888	23.0	3.0	7.3
					1889	23.0	3.7	6.1
					1890	25.1	3.2	8.6

MORTALITY TABLE II.

DEATHS IN INSANITARY BLOCKS DURING THE FIVE YEARS 1884
TO 1888, WITH THE SAME FOR 1889-90. DEATHS AND RATES
PER 1,000 LIVING, FROM

No. of Area.	Years.	Population.	All Causes.		6 Zymotics.		Lung Diseases and Phthisis.	
			Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
3	1884-8	3075	178	57·9	18	5·9	78	25·4
	1889	615	34	55·3	4	6·5	11	17·9
	1890	615	44	71·6	4	6·5	23	37·4
6	1884-8	1200	49	40·8	7	5·8	23	19·2
	1889	240	22	91·7	5	20·8	10	41·6
	1890	240	6	25·0	0	...	3	12·5
7	1884-8	550	43	78·2	8	14·5	12	21·8
	1889	110	10	90·9	1	9·1	3	27·3
	1890	110	12	109·1	1	9·1	6	54·5
9	1884-8	485	20	41·2	2	4·1	7	14·4
	1889	97	3	30·9	1	10·3	1	10·3
	1890	97	8	82·5	2	20·6	2	20·6
10	1884-8	340	18	52·9	3	8·8	5	14·7
	1889	68	4	58·8	3	44·1	0	...
	1890	68	3	44·1	0	...	1	14·7

Insanitary Dwellings.	Area 7.....	Buildings	810	
		Courts	327	
		Total.....	1137.....	468
	„ 9.....	Buildings	928.....	469
		Intervening Street	352	
		Half-width of adjacent Streets	593	
		Total	1873.....	233
	„ 10.....	Buildings	671	
		Passages and Courts	361	
		Total	1032.....	319

The chief characters of the properties were that they were old and much dilapidated, damp, and confined; that they were overcrowded, obstructing light, and impeding ventilation; that the rooms were low—from 6-ft. 10-in. to an extreme height of 8-ft.—dark, and filthy; and that they were altogether inimical to healthy life.

The rentals ranged from 1s. to 7s. 6d. per week, and about 80 per cent. of the whole number of cottages were rented at from 2s. to 3s. 6d. per week.

The determination of the Council to deal with these properties was the practical outcome of my report to the Insanitary Dwellings Committee on October 8th, 1889, when I referred to several areas which had “insanitary conditions of such a nature that mere alterations of privy accommodation and the like will not give to them the characters of sanitary property. The remedies must include the demolition of the whole or parts of each area.”

Demolition of
Dwellings for
Railway
Schemes.

Demolition of Dwellings by Railway Extension.—In my last report I referred to the possibility of cottages being pulled down, for the purposes of the Lancashire and Yorkshire Railway Company, between Windsor Bridge and Victoria Station, and to the advantage that their demolition would be to the borough. I have now to report that only two small cottages, a marine store warehouse, and a mill have as yet been demolished; but, I believe, that further demolition may be expected before very long.

Model Common
Lodging Houses.

Model Common Lodging-Houses.—There can be no doubt that model common lodging-houses are much needed in almost every borough, and not less in the borough of Salford than in others. This view has long been held by many members of the Health Committee, but a feeling has prevailed, with which I am in almost complete agreement, that it is very undesirable for a Corporation to be the landlord of such model lodging-houses. But, at the same time, when no effort is made by the general public to supply an obvious want of the borough in this respect, it

does seem to me desirable that a single house of the kind named should be erected, registered, and conducted by the Corporation as an example of the manner in which such accommodation should be provided. There are plenty of common lodging-houses in the borough which, while they comply in themselves and in their management with the minimum requirements of the local bye-laws, are models of much that ought not to exist, and it is for the improvement of those houses that are now in use that action is required. Alteration and improvement will, however, hardly be secured so rapidly by any means as by competition, and it is with this intention that I urge the Corporation to take the first step in initiating a new and better class of lodging-houses for the borough. It is, in my opinion, very important that there should be as little delay in proceeding in this direction as is consistent with the carrying out of the work in a completely satisfactory manner.

Hospital Accommodation.—In my last report I stated that the Corporation had decided to build a new infectious diseases hospital—The Ladywell Sanatorium—which would provide accommodation for 184 patients, with full 2,000 cubic feet of space for each patient. The foundation stone of this new hospital was laid by the Chairman of the Health Committee, Mr. Alderman A. L. Dickins, on May 22nd, 1890, and since that date the building operations have been continued with interruption only during the severe winter weather. In the meantime, the Wilton Hospital being unable to accommodate the full number of patients sent for isolation and treatment, it has been necessary for the Council to continue its arrangement with the Salford Guardians, by which it has the use of certain sheds on the Union Infirmary land at Hope, and is thus enabled to treat the bulk of the patients within the borough, instead of being obliged to send many of them to the Monsall Hospital. These sheds will, of course, be given up when the new Sanatorium comes into full use, which will, I am hopeful, be before the close of the year 1891.

Hospital
Accommodation

The following table shows the distribution of cases isolated at the expense of the Council since 1883:—

Year.	Wilton.	Pendlebury.	Monsall.	Total.
1883	342	...	1	343
1884	645	31	30	706
1885	482	14	14	510
1886	910	18	45	973
1887	892	33	37	962
1888	753	16	102	871
*1889	888	5	239	1132
*1890	914	4	25	943

* Under the heading of Wilton Hospital must be included the sheds at Hope, in temporary use as an annexe of the Wilton Hospital.

The percentages of these isolations, to the total number of notified cases in the three hospitals, will appear as follows:—

Year.	Percentage of cases in the Wilton Hospital.	Total percentage of cases in all three Hospitals.
1883	28·6	28·7
1884	38·0	41·6
1885	50·2	53·1
Mean for 3 years	38·9	41·1
1886	47·8	51·1
1887	47·2	50·9
1888	38·2	44·1
Mean for 3 years	44·4	48·7
1889	35·8	45·7
1890	42·0	43·3

The apparent discrepancy between the figures for the year 1890 in these tables, and in the table showing the amount of isolation of infectious cases (p. 43), arises from the fact that in the latter table only isolations of cases of notified diseases, which were subsequently proved to have been correctly diagnosed, are represented, while those tables now under review show the total number of cases admitted to hospital. Of the total number of cases isolated it appeared that 64 proved, after they had been under treatment and had been watched, to be cases of that doubtful class which in their early stages may easily be suspected to be cases of zymotic diseases, and which cannot at once be proved to be otherwise. It is for such cases that provision must always be made in an infectious diseases hospital, and is being very properly made in the new Ladywell Sanatorium.

Excrement and Refuse Disposal.—Considerable improvements have been effected in each of the districts of the borough in respect of the methods of excrement disposal, especially in the case of cottage property. It will be remembered that the Broughton district led the way in the year 1889, by passing a resolution that no new house built in that district should have a closet on the open privy system, but that it should be furnished with a water-closet. In the Salford districts, the substitution of water-closets for privies, and ash barrels for ashpits, has been necessitated in a large number of instances by the grossly insanitary conditions occasioned by the old-fashioned midden system, which so admirably supplies all the conditions requisite to obtain complete and foul soil-pollution. Where there is one water-closet provided to each house, the experience is that the change is vastly appreciated by the tenant, and that care is taken of the mechanical apparatus of the closet, and the landlord naturally benefits in the improved sanitary condition of his property. The present difficulty in the case of old property, is where one closet is common to two or more tenements; the only solution of which difficulty must be

in the gradual substitution of a closet for each tenement, even though such alterations may necessitate the demolition of a cottage to make room for them. This procedure has been effected satisfactorily in some few instances in Salford during the past year. In the Pendleton district, the tub-closet and cinder-sifter closet is still in use, but I hope that neither of these systems will be extended further.

There have been the following numbers of water-closets put in during the year, mostly in place of old privies, viz. :—Regent Road district, 233; Greengate district, 314; Pendleton, 5; Broughton, 101: making a total of 653 new water-closets put in during the year. I was anxious to discover to what extent these new closets had withstood the very severe test of the winter of 1890-91, which, it will be remembered, was exceptional. I instituted an inquiry in the Salford district towards the close of the prolonged frost, and found that of the 233 new closets in the Regent Road district, all of which were situated out-of-doors, 173, or 74·2 per cent. were in good working order, and that in the Greengate district, 151 outside closets, and 19 inside closets, or a total of 54·4 per cent. were in good working order. In neither district of Salford, therefore, can it be held that the new water-closets had proved failures, under the exceptionally severe circumstances in which they were placed, and these figures should do something to disprove the oft-repeated statement that the water-closet system for cottage property is a mistake. The temporary discomfort of a frozen up water-closet in the winter, is as nothing in comparison with the abominations connected with the retention of faecal matter in small confined yards of a town during the summer and autumn months, and, if sanitation in a town is to be forwarded in the slightest degree, one of the very first steps must be in securing the greatest possible amount of purity of the atmosphere.

The condition of the Whit Lane tip in the Pendleton district compelled me to bring it before the notice of the Health Committee, with a very strong representation that while the Salford and Broughton districts of the borough had provided themselves with Destructors for the prevention of improper tipping, the Pendleton district was still without anything of the kind. It is unnecessary to capitulate the matters which ought not to be tipped, except to say that destructible matters ought not to be heaped up, to decompose in the neighbourhood of dwellings, and I am glad, therefore, to report that the Pendleton District Committee has taken the matter in hand, with the object of erecting a suitable Destructor. It is, however, to be hoped that this matter will not be delayed by any questions arising out of the amalgamation of the three districts on a common basis, but that such a serious deficiency as the want of a Destructor will be made good forthwith.

River Irwell Flood.—In the month of November there was heavy rain, and the volume of the river Irwell was swollen to such an extent, that on November 23rd, 1890, certain dwellings in Salford, and in Broughton, were flooded. I visited the district, and found that the premises which had suffered most from flooding were in the neighbourhood of Silk Street, Arlington Street, Flax Street, and the Adelphi in the Salford district, and Sunnyside, in the Broughton district. The flooding of these premises was occasioned by the flooding of the sewers, and the consequent backing up of their contents. On the subsidence of the waters, the tenants were directed to clear away the sludge as quickly as possible, and dry their houses by means of fires, and they were furnished with disinfectants from the Health Department. In some instances, the tenants were assisted by men sent to them by their landlord.

Salford Cattle Market.—Considerable improvement has been effected during the year, in the available means for cleansing the Cattle Market. The inspector reports to me that the market is swept once every week, after market-day, and that it is also now washed out completely, whenever desirable. There are now 37 hydrants in the market, which enable the operation of cleansing to be carried out efficiently, and such cleansing must be a matter of no small concern in a market, even if only one-half the size of the Salford one. It would be a serious difficulty if a case of pleuro-pneumonia or other contagious disease of cattle were to be discovered in a market, and the means for complete and thorough cleansing and disinfection of the same were not ready for immediate application, and it is, therefore, very satisfactory to be able to record that such means do exist in the Salford Market at the present time.

APPENDICES.

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APPENDICES.

APPENDIX I.

COUNTY BOROUGH OF SALFORD.

EPIDEMIC INFLUENZA.

PRECAUTIONARY NOTICE.

The Epidemic of Influenza which is passing through Europe, and has already visited several towns in this country, has now reached the County Borough of Salford, and the Health Committee deem it desirable to offer advice as to the general measures which should be adopted in any household where a case occurs.

1. Where a case occurs in a house, isolate it at once, and as effectually as possible.
2. Call in a medical man.
3. Keep all children of a family in which a case occurs from School.

EARLY PROMINENT SYMPTOMS IN ADDITION TO THOSE OF ORDINARY INFLUENZA.

Intense headache.

Shivering.

Pains in the back and joints.

Occasional vomiting.

Great prostration and depression of spirits.

ALBERT L. DICKINS,

CHAIRMAN OF HEALTH COMMITTEE.

CHARLES E. PAGET,

MEDICAL OFFICER OF HEALTH.

APPENDIX II.

THE HOUSING OF THE WORKING CLASSES ACT, 1890.

OFFICIAL REPRESENTATIONS OF THE MEDICAL OFFICER OF HEALTH UNDER
THE ABOVE ACT:

RESOLUTIONS OF THE GENERAL HEALTH COMMITTEE AND COUNCIL
THEREON: AND
IMPROVEMENT SCHEME.

OFFICIAL REPRESENTATION OF THE MEDICAL OFFICER OF HEALTH.

TO THE GENERAL HEALTH COMMITTEE OF THE COUNTY BOROUGH
OF SALFORD.

GENTLEMEN,

I beg to make the following representation, that, for the purpose of the preparation of a comprehensive scheme under the Housing of the Working Classes Act, 1890, that, as stated in my report to this Committee on the 17th July last, in respect of the locality lying between Collier Street, Rolla Street, Starkey Street, and Queen Street, the arrangements of the cottages and courts within the area named is such that I do not think mere closure of some houses and the demolition of others will effect such general sanitary improvements as the area requires.

The property has not been improved since my former inspections last year, except in parts by whitewashing, and superficial repairs. I am certain that if partial demolition were effected the walls of adjoining houses would give way. General ventilation would be only moderately improved by taking out a few houses in the present area, and lastly, the area itself is shockingly overcrowded. As a result of my inspection, I am very strongly of opinion that the area is one, the alleys and courts of which are so irregularly arranged and the houses of such poor quality, that mere alterations would

not suffice to render it a sanitary area, and that nothing short of complete demolition of the whole of the cottages on the area, for the purpose of a re-arrangement of the area, and the construction of sanitary dwellings, can be properly recommended.

I have further to report that Weatherall's Court, Wood's Court, Hulme's Court, Moverley's Court, and Cooper's Court should be abolished by the demolition of the dwellings within them, and the open space then left unoccupied; also that Lord's Passage, Lord's Buildings, and Lord's Court should be demolished, and improved dwellings erected in their place; and—

That their being, in respect of these houses, an absolute want of proper through ventilation; such universal damp, and general want of repair, in addition to insufficient or improper privy accommodation; that the blocks are peculiarly suitable for demolition.

These several areas are, in my opinion, very suitable for forming the first section of a comprehensive scheme as required by resolution of the Council passed on August 29th last; and would be best dealt with under the Housing of the Working Classes Act, 1890, which, I understand, received the royal assent on the 18th August last.

CHARLES E. PAGET,

MEDICAL OFFICER OF HEALTH.

Town Hall, Salford,

25th September, 1890.

EXTRACT FROM THE MINUTES OF THE PROCEEDINGS OF
THE GENERAL HEALTH COMMITTEE OF THE
COUNTY BOROUGH OF SALFORD,

HELD ON THE 15TH OCTOBER, 1890.

Resolved—

That a scheme be prepared under the Housing of the Working Classes Act, 1890, with reference to the properties referred to in the official representation of the Medical Officer of Health, read to this Committee on the 25th September last.

Truly extracted,

SAMUEL BROWN,

TOWN CLERK.

Town Hall, Salford.

OFFICIAL REPRESENTATION OF THE MEDICAL OFFICER OF HEALTH.

TO THE GENERAL HEALTH COMMITTEE OF THE COUNTY BOROUGH OF
SALFORD.

GENTLEMEN,

I have to make the following representation under the Housing of the Working Classes Act, 1890, that within the area bounded by the Bonding Warehouse, off Chapel Street, Salford, by dwellings numbered alternately, from 121 to 149, Chapel Street, Salford, by Worsley Street, Wood Street, and Back Garden Street, Salford, are houses, courts, and alleys, the narrowness, closeness, and bad arrangement of which, together with want of sufficient light, air, and ventilation, are dangerous or injurious to the health of the inhabitants of the buildings in the said area; and also, that within the area bounded by Pink Street and Brougham Street, by Wheathill and by the Manufactory between Sandford Street and Wheathill Street, Salford, are two blocks of back-to-back houses, the condition and ventilation of which are so bad, as to be dangerous or injurious to the health of the inhabitants of the buildings in the said area; and that the evils connected with the houses, courts, or alleys upon these two areas are such that they cannot be effectually remedied otherwise than by an improvement scheme for the re-arrangement and re-construction of some or all of such streets or houses.

CHARLES E. PAGET,

MEDICAL OFFICER OF HEALTH.

Town Hall, Salford,

22nd October, 1890.

EXTRACT FROM THE MINUTES OF THE PROCEEDINGS OF THE GENERAL HEALTH COMMITTEE OF THE COUNTY BOROUGH OF SALFORD,

HELD ON THE 23RD OCTOBER, 1890.

The Medical Officer of Health submitted a representation under the Housing of the Working Classes Act, 1890, for the purposes of the scheme to be submitted to the Council for the demolition of insanitary dwellings.

Resolved—

That a scheme be prepared under the Housing of the Working Classes Act, 1890, with reference to the properties referred to in the official representation of the Medical Officer of Health now read.

Resolved—

That in addition to the properties mentioned in the official representations of the Medical Officer of Health, the following properties be included in the scheme to be submitted to the Council, namely—

Block No. 3.—The three rows of shops fronting Chapel Street, between the Bonding Warehouse and Quay Street.

Block No. 6.—The public house at the corner of Rolla Street and Collier Street, and the Calendering Works at the corner of Starkey Street and Queen Street.

Block No. 7.—The row of houses and the public house fronting Queen Street, and the row of houses fronting King Street.

Block No. 9.—The row of houses between Pink Street and Sandford Street.

Truly extracted,

SAML. BROWN,

TOWN CLERK.

Town Hall, Salford.

EXTRACT FROM THE MINUTES OF THE PROCEEDINGS
OF THE COUNCIL OF THE COUNTY BOROUGH
OF SALFORD,

HELD ON THE 30TH OCTOBER, 1890.

Resolved—

That the proceedings of the General Health Committee, under dates the 15th and 23rd October instant, with reference to the demolition of properties, referred to in the official representations of the Medical Officer of Health, of the 25th September last and the 23rd October instant respec-

tively, and also as to the properties added thereto, and shown as Blocks Nos. 3, 6, 7, and 9, on the plans submitted, be approved and adopted, and that a scheme be prepared, under the Housing of the Working Classes Act, 1890, to be submitted to the Local Government Board, with the requisite maps, particulars, and estimates, in accordance with the provisions of the aforesaid Act, and that the Town Clerk be instructed to take all the requisite steps to carry this resolution into effect. This scheme being adopted without prejudice to the question as to which fund shall ultimately bear the costs thereof.

Truly extracted,

SAML. BROWN,

TOWN CLERK.

Town Hall, Salford.

EXTRACT FROM THE MINUTES OF THE PROCEEDINGS
OF THE COUNCIL OF THE COUNTY BOROUGH
OF SALFORD,

HELD ON THE 14TH NOVEMBER, 1890.

The following scheme, prepared by the General Health Committee under the Housing of the Working Classes Act, 1890, was submitted, namely :—

“HOUSING OF THE WORKING CLASSES ACT, 1890.

“Improvement Scheme of the Mayor, Aldermen, and Burgesses
“of the County Borough of Salford, being the Sanitary Authority
“for the Urban Sanitary District of the County Borough of Salford,
“in respect of the areas delineated by red and dotted red lines
“upon the plan annexed hereto, and numbered in the said plan
“3, 6, 7, 9, and 10 respectively, made in pursuance of the resolution
“of the Council of the said county Borough, passed at a meeting
“held on the 30th October, 1890.

“1.—The land and dwelling-houses within the limits of all the
“said areas shall be taken and purchased compulsorily
“under the provisions of the said Act in that behalf.

“2 —All the dwelling-houses and buildings within the limits
“of the said areas shall be pulled down, and the sites
“thereof cleared.

“3.—That the whole of the said areas shown upon the said
“plan be utilized—in part for the laying out of convenient
“streets and approaches ; in other part in the laying out
“of spaces, to be kept open and unenclosed for ever ; and
“in other part for the erection of dwelling-houses for the
“working classes, or other purposes.”

Resolved—

That the Improvement Scheme under the Housing of the Working
Classes Act, 1890, made in pursuance of the resolution of the Council of
the 30th October, 1890, now submitted, be and is hereby approved ; and it
is further Resolved that the Town Clerk take all steps necessary for carrying
the same into effect.

Truly extracted,

SAML. BROWN,

TOWN CLERK.

Town Hall, Salford.



